

**Municipal Class Environmental Assessment Study (EA)
Schedule “B”**

**Improvements on Gordon Street
Between Edinburgh Road South and Lowes Road**

WELCOME

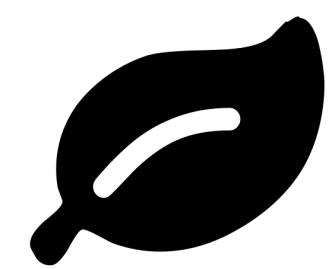
Tuesday, October 1, 2019

6pm to 8pm

Please Sign In and Complete a Comment Sheet

Study Purpose

Investigate the needs for safety and operational improvements to Gordon Street between Lowes Road and Edinburgh Road taking into consideration:



Social, economic and environmental impacts



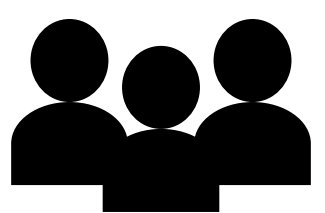
Transportation needs for all users, including drivers, pedestrians, cyclists and transit users



Adjacent land uses and community growth



Traffic management needs for access and intersection turning provisions



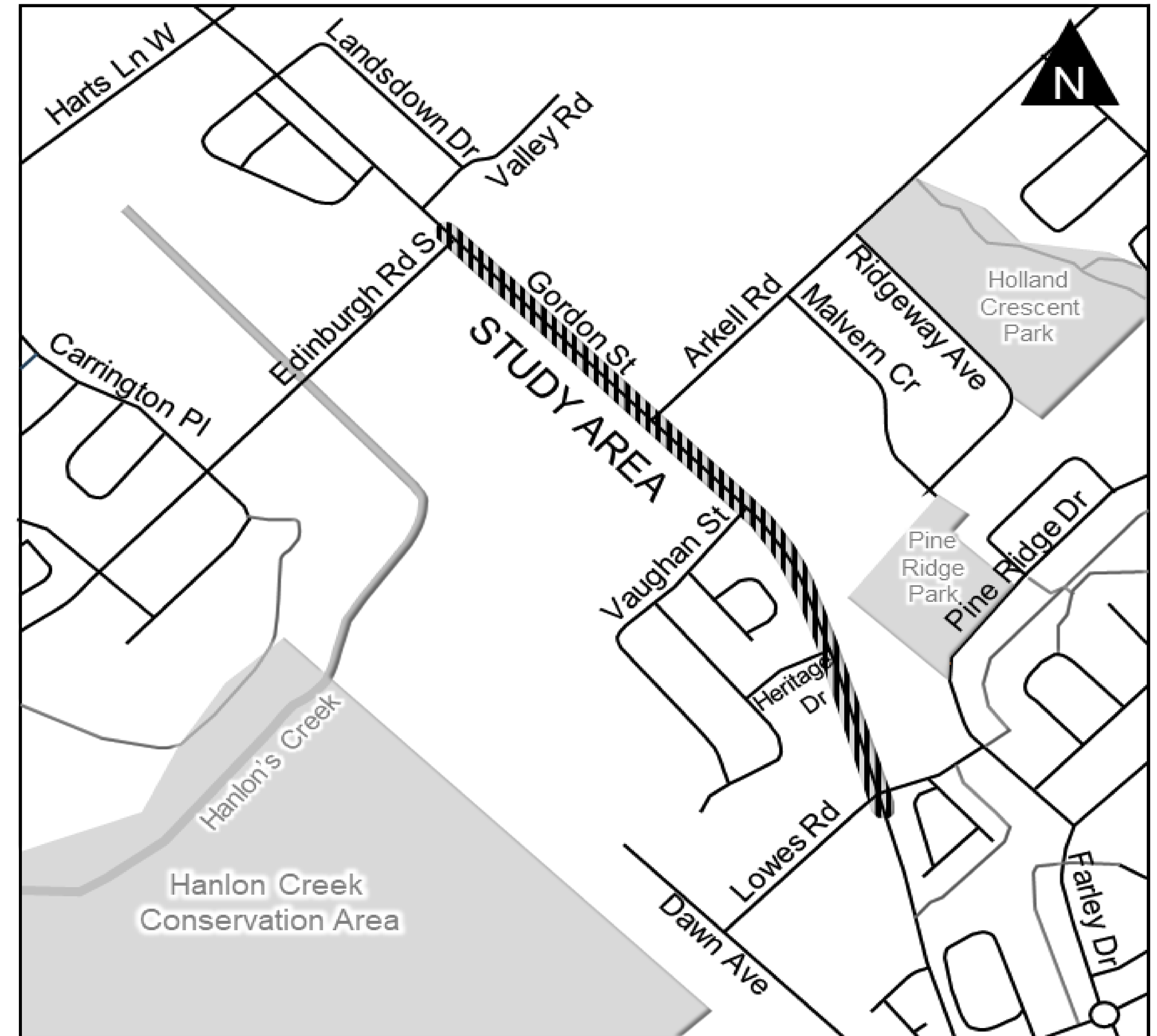
Local public interests



Study Area

Gordon Street and immediately adjacent lands between Edinburgh Road and Lowes Road

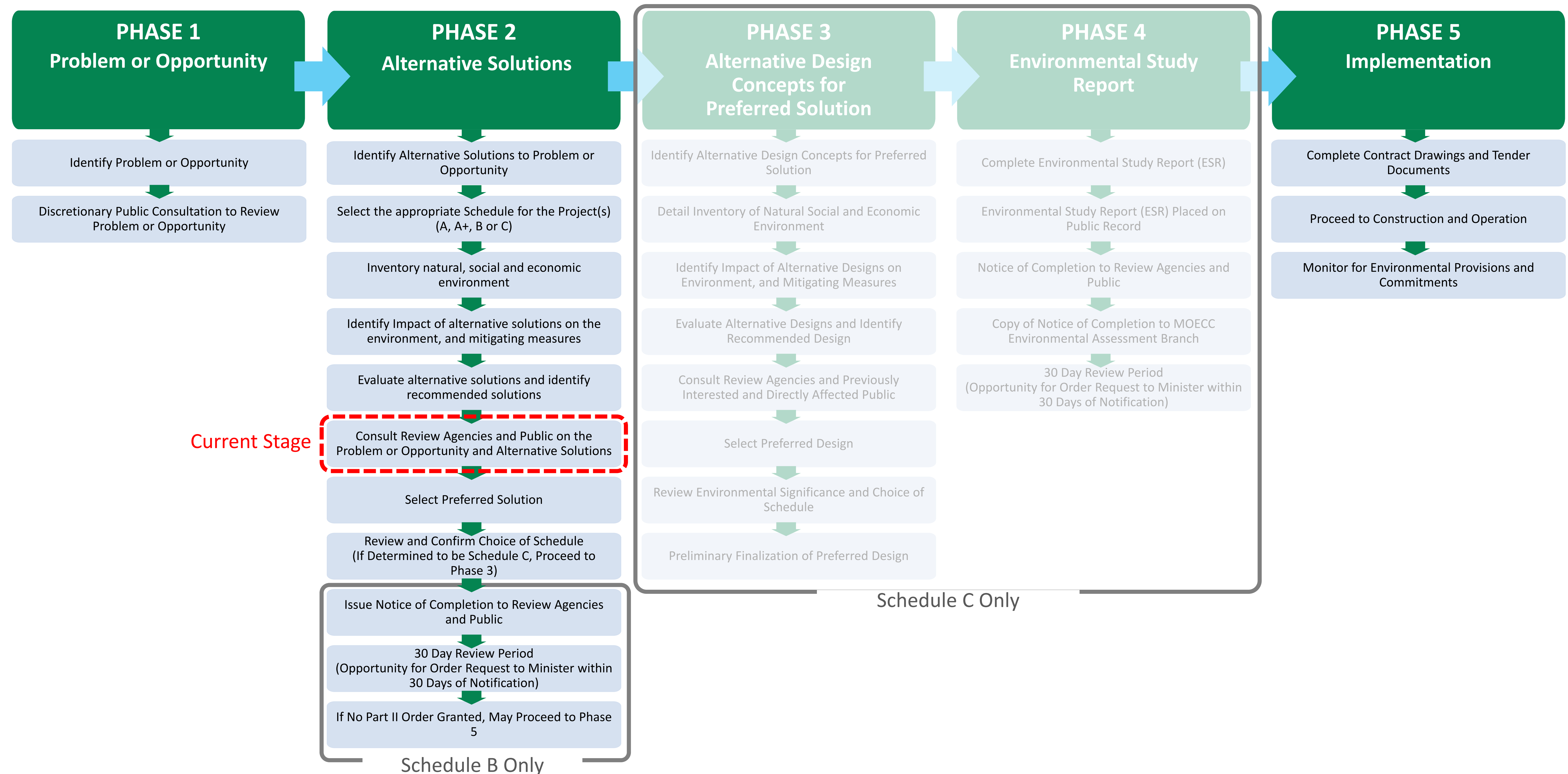
- Important arterial road
- 30 metre right-of-way with 4 travel lanes (two in each direction)
- Posted speed (km/h)
 - 50 (north of Hands Drive)
 - 60 (Hands Drive to Clair Road)
 - 70 (south of Clair Road)
- Average daily traffic (vehicles per day)*
 - 27,000 (north of Arkell Road)
 - 23,000 (south of Arkell Road)



* Data from 2016

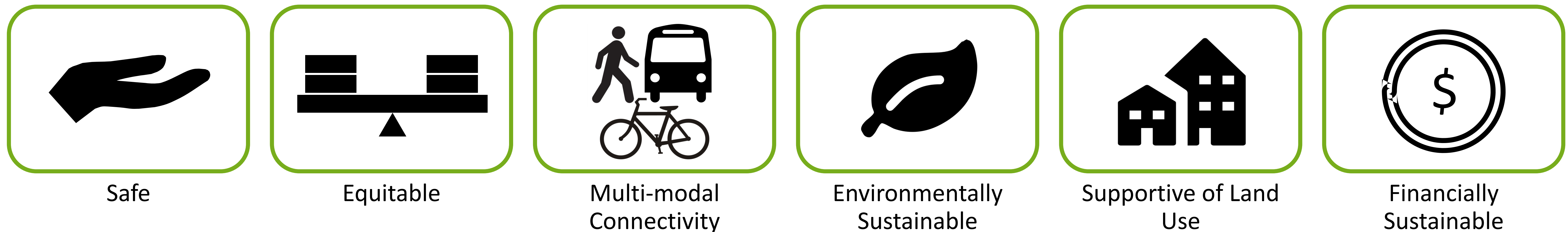
Study Process

This study will follow the Municipal Engineers Association Class EA process, as illustrated below. This study is a Schedule “B” project, which concludes at the end of Phase 2.

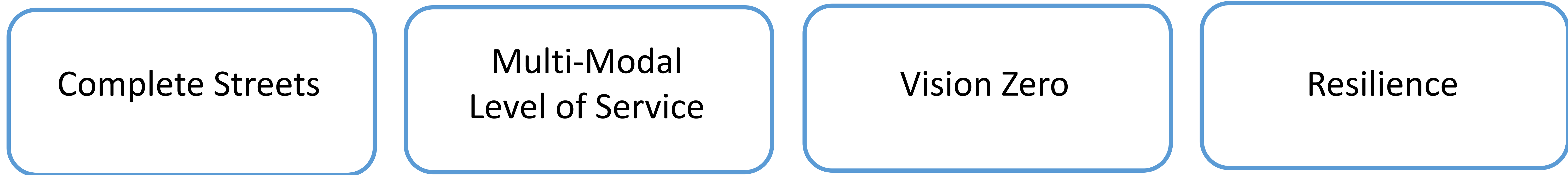


How this Project fits with the Transportation Master Plan?

The City of Guelph has established 6 core values for transportation:



The City of Guelph is exploring transportation options and philosophies to achieve these core values, including:



Existing Transportation Challenges

- Traffic volumes have increased, and will continue to increase with new development in this area and other parts of the City.
- The lack of dedicated left turn lanes causes significant traffic delays during rush hours, and access to private driveways may also be impacted by traffic.
- Limited opportunity to physically separate on-street cyclists from motorists due to the constraint of existing pavement width.

Existing PM Traffic Conditions



Level of Service (LOS) is a letter designation that describes a range of operating conditions on a road experienced by road users.

*No critical movements identified for a.m. peak hour

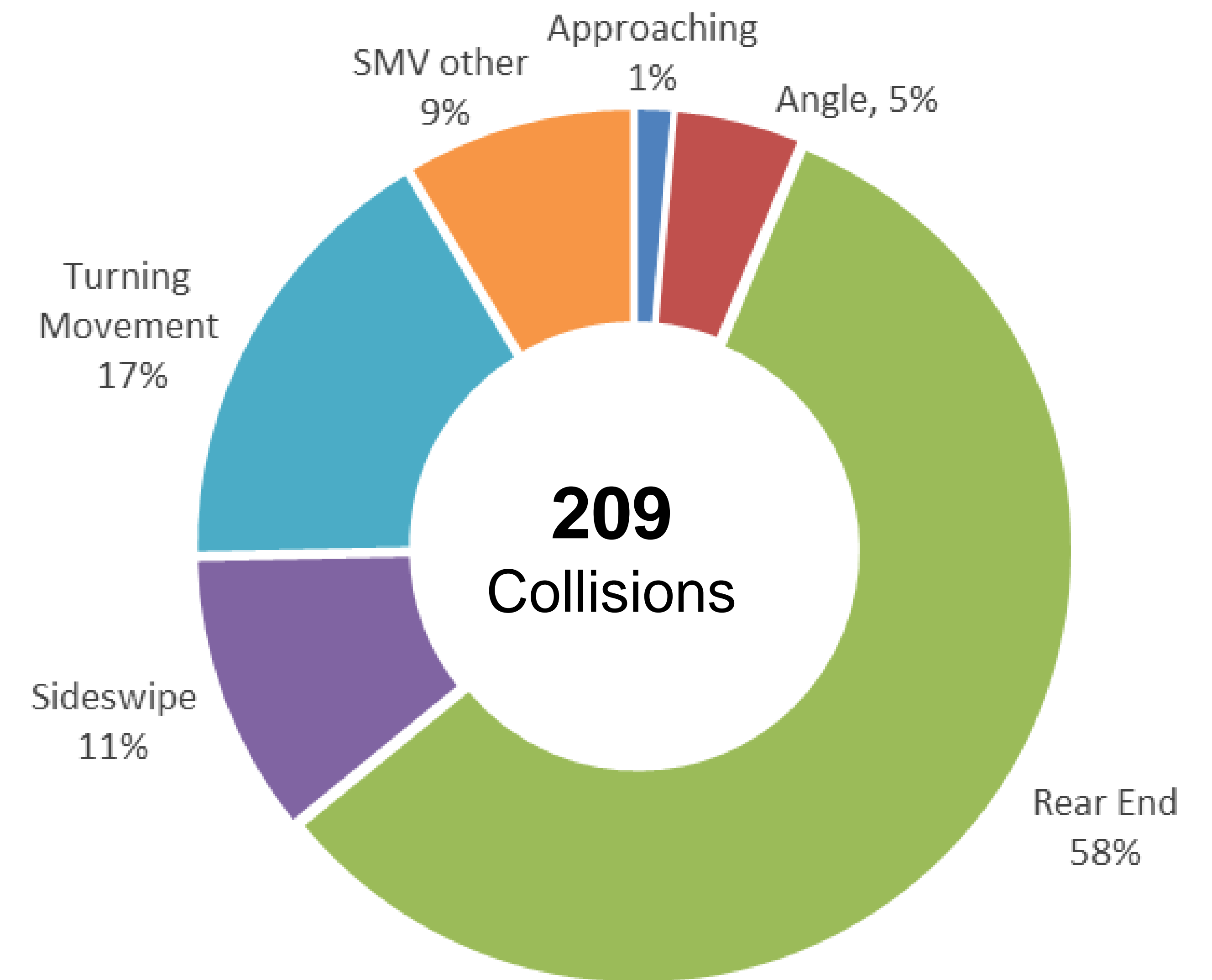
- A= Free flow
- B= Reasonably free flow
- C= Stable flow
- D= Approaching unstable flow
- E= Unstable flow
- F= Forced or breakdown flow

Lane Configuration Recommendation			
Intersection	Movement	Existing Length	Recommended Length
Gordon Street & Edinburgh Road	NBL	65m	160m
	EBR	-	160m
Gordon St & Arkell Rd	SBL	70m	120m

Collision Data (Year 2014 - 2019)

- 135 collisions at intersections
- 74 collisions at mid-block locations
- 57% of rear-end collisions occur at signalized intersections
- Most collisions occurred at Gordon St and Edinburgh Rd
- Data suggests that rear-end and turning collisions may be reduced with the use of a two-way left-turn lane

Intersection	Collision Frequency	Midblock	Collision Frequency
Landsdown Drive	3	Landsdown Road to Valley Road	9
Valley Road	4	Valley Road to Edinburgh Road	20
Edinburgh Road	49	Edinburgh Road to Arkell Road	11
Arkell Road	39	Arkell Road to Vaughan Street	9
Vaughan Street	6	Vaughan Street to Heritage Drive	12
Heritage Drive	17	Heritage Drive to Lowes Road	13
Lowes Road	17		
Total	135		74



Opportunity Statement

- Traffic delays and collisions at intersections could be reduced by creating a continuous two-way left-turn lane between Edinburgh Road and Lowes Road.
- Transit mobility on Gordon Street could be improved by making changes to help traffic move more smoothly.
- Cycling infrastructure can be improved by further separating cyclists and motorists.

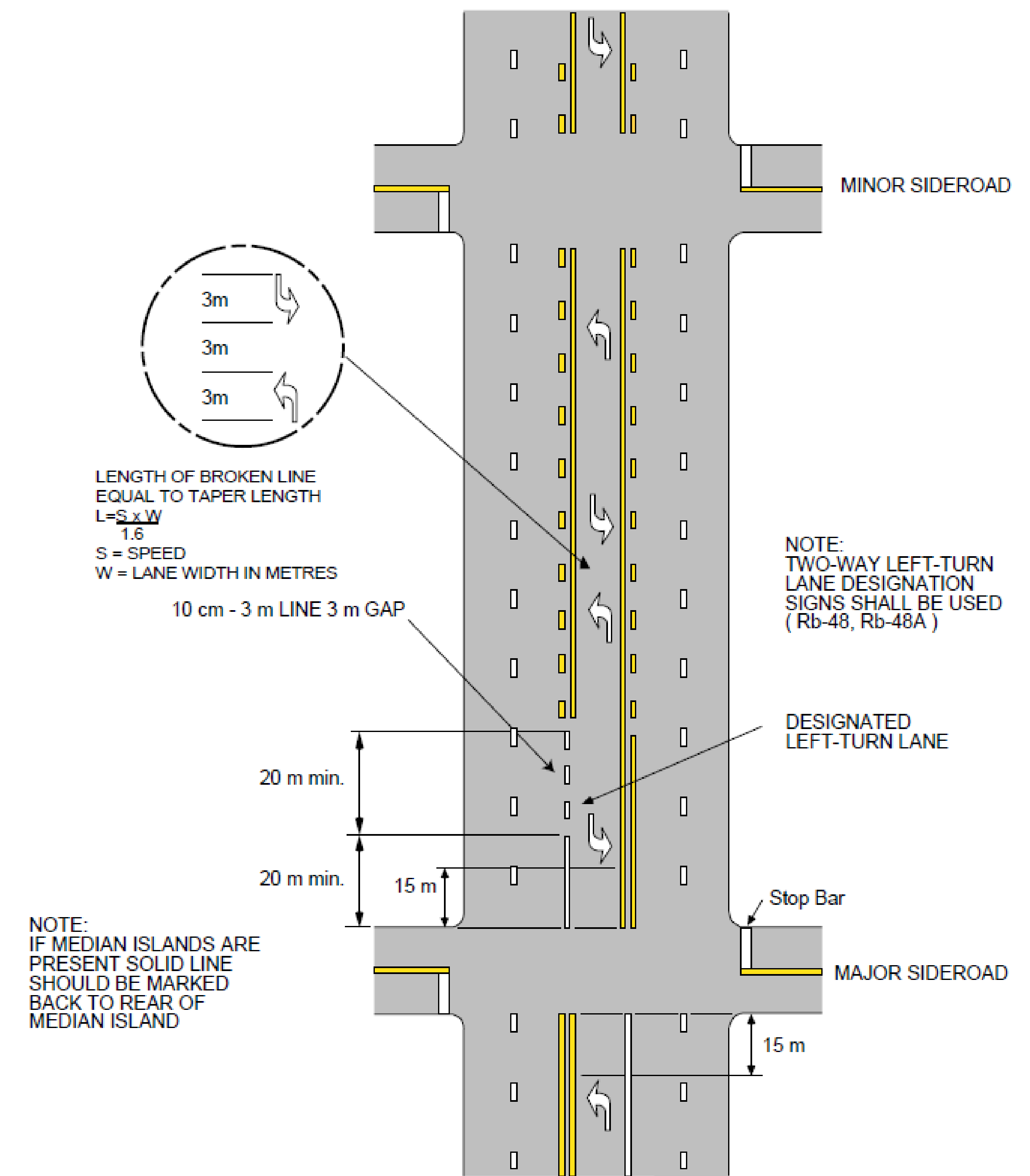
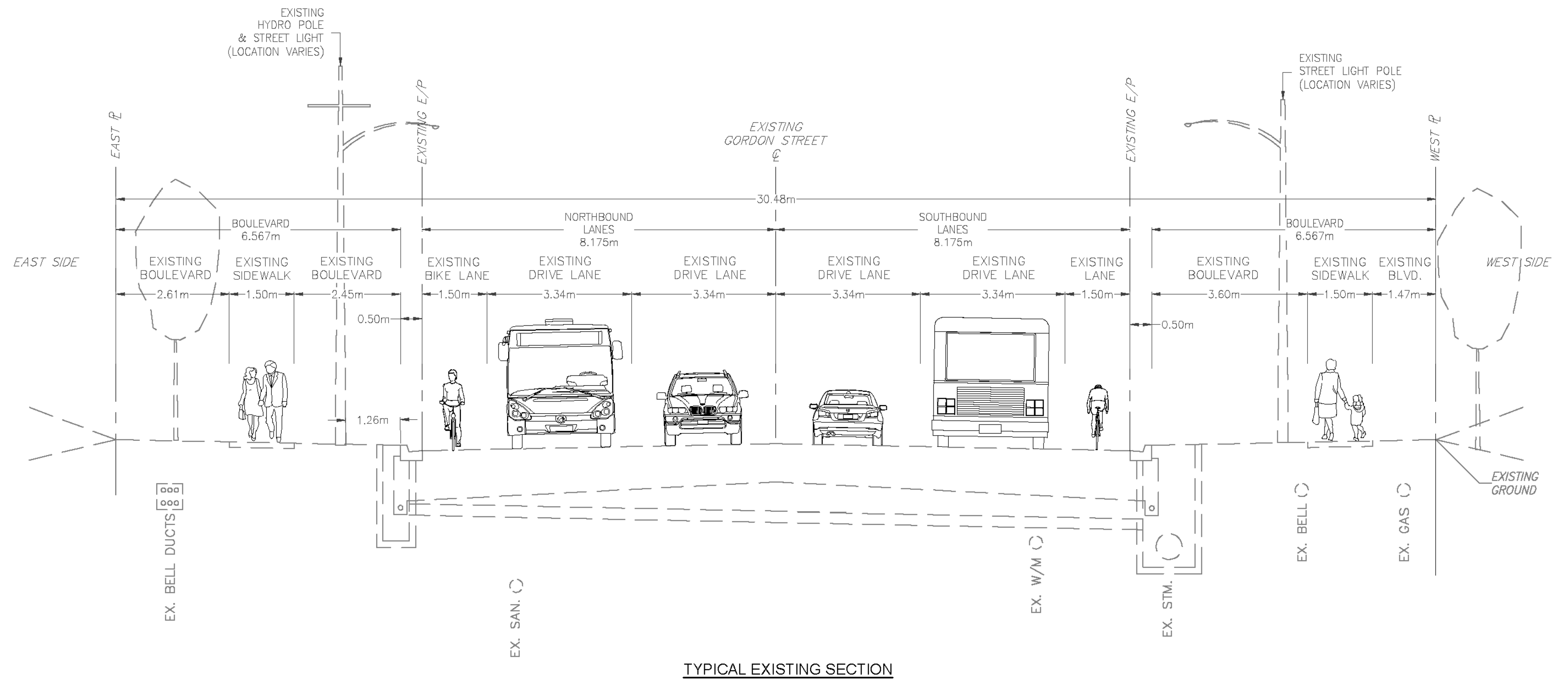


IMAGE SOURCE: Ontario Traffic Manual Book 11

Potential Solutions – Option 1

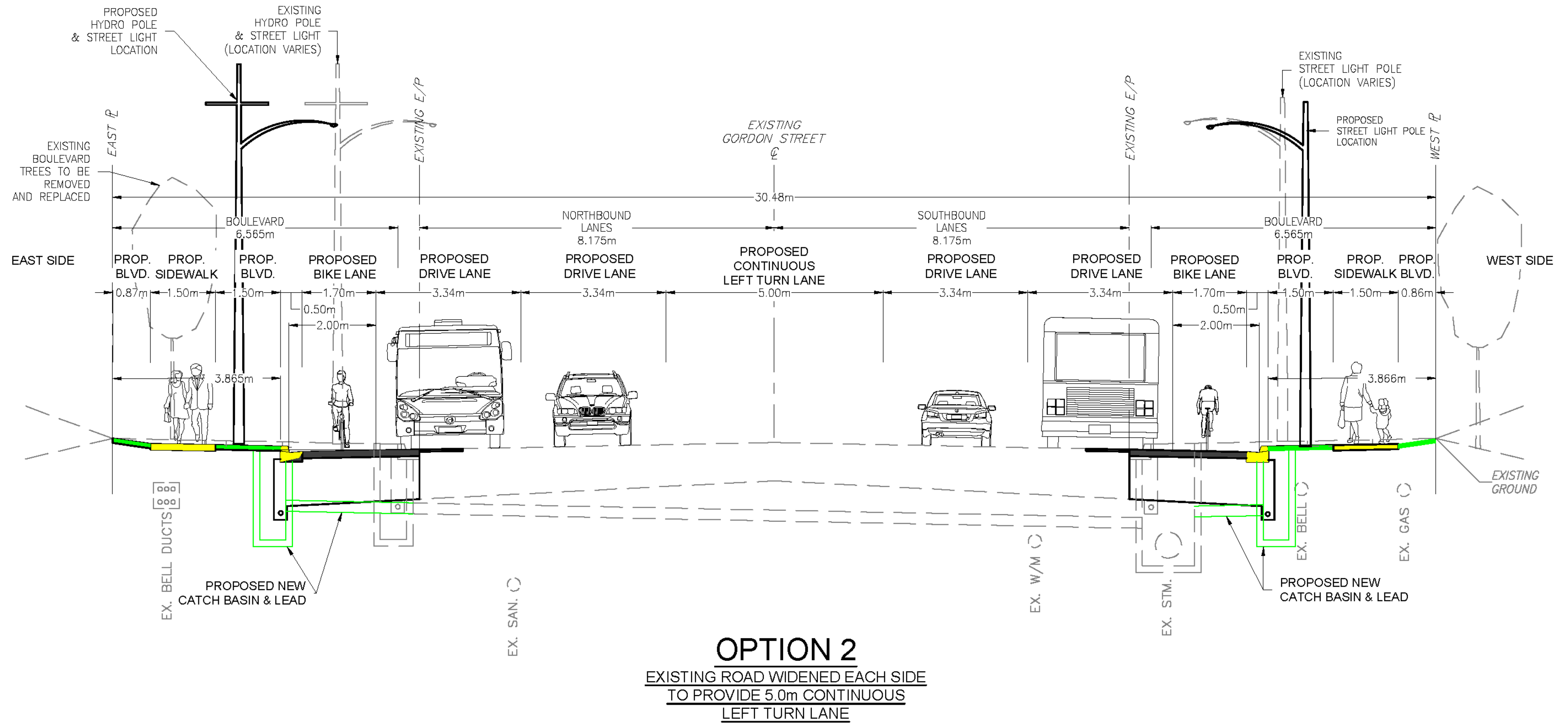
Keeping the existing cross-section



Potential Solutions – Option 2

Widen Equally About Existing Centreline with a 5 metre two-way left-turn lane

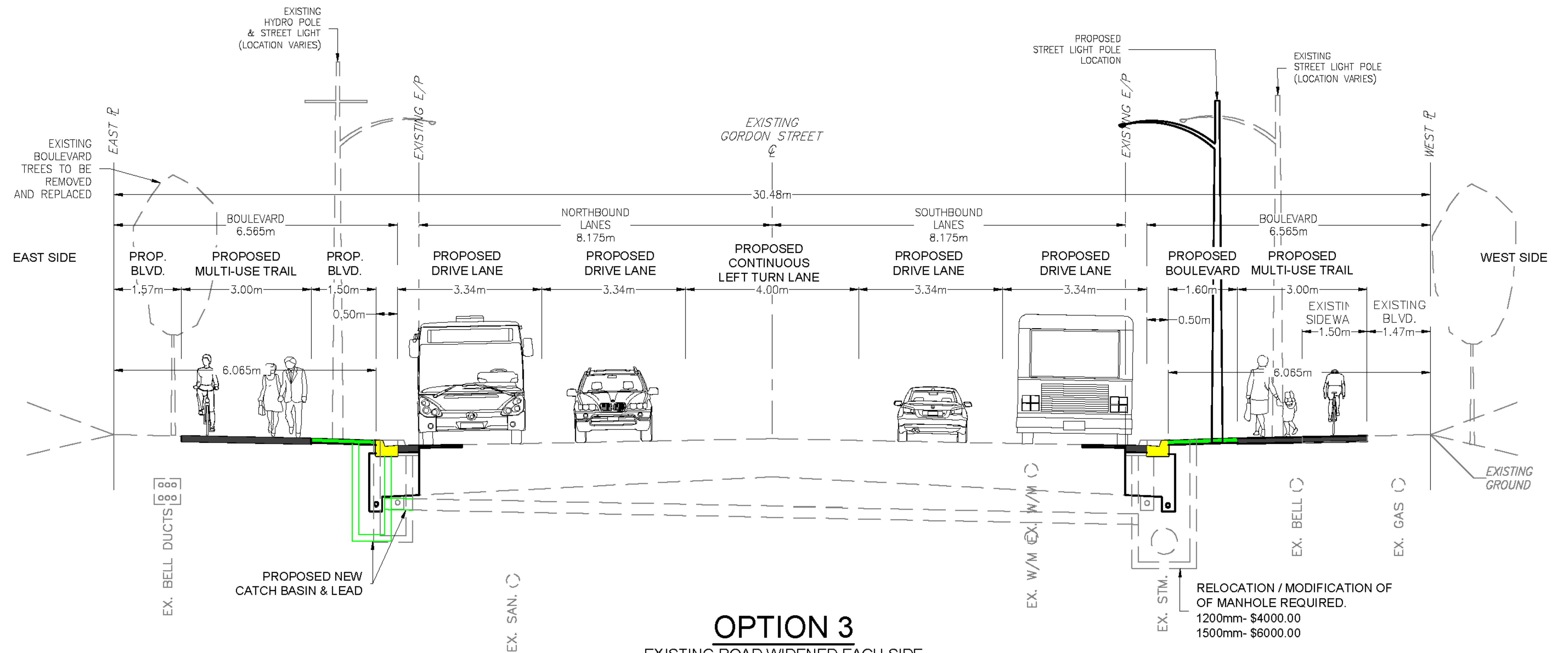
- Add on-road bike lanes
- Add 1.5 metre sidewalks in boulevards
- Cost: \$1,152.00 per metre



Potential Solutions – Option 3

Widen Equally About Existing Centreline with a 4 metre two-way left-turn lane and 3 metre multi-use trails

- Add 3 metre asphalt multi-use trails in boulevards
- Cost: \$892.00 per metre

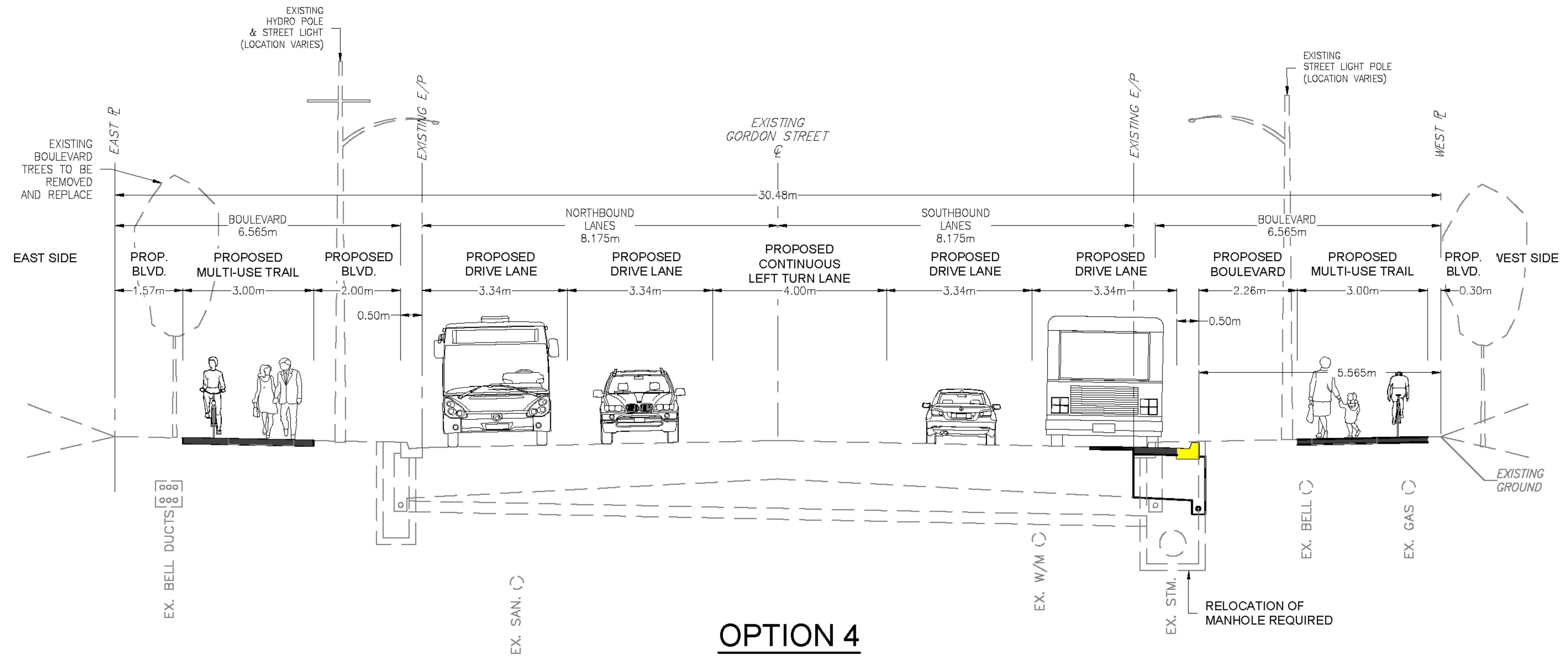


OPTION 3
 EXISTING ROAD WIDENED EACH SIDE
 TO PROVIDE 4.0m CONTINUOUS
 LEFT TURN LANE WITH
 3.0m MUT ON EACH SIDE

Potential Solutions – Option 4

Widen road on west side with a 4 metre two-way left-turn lane and 3 metre multi-use trails

- Add 3 metre asphalt multi-use trails in boulevards
- Cost: \$657.00 per metre

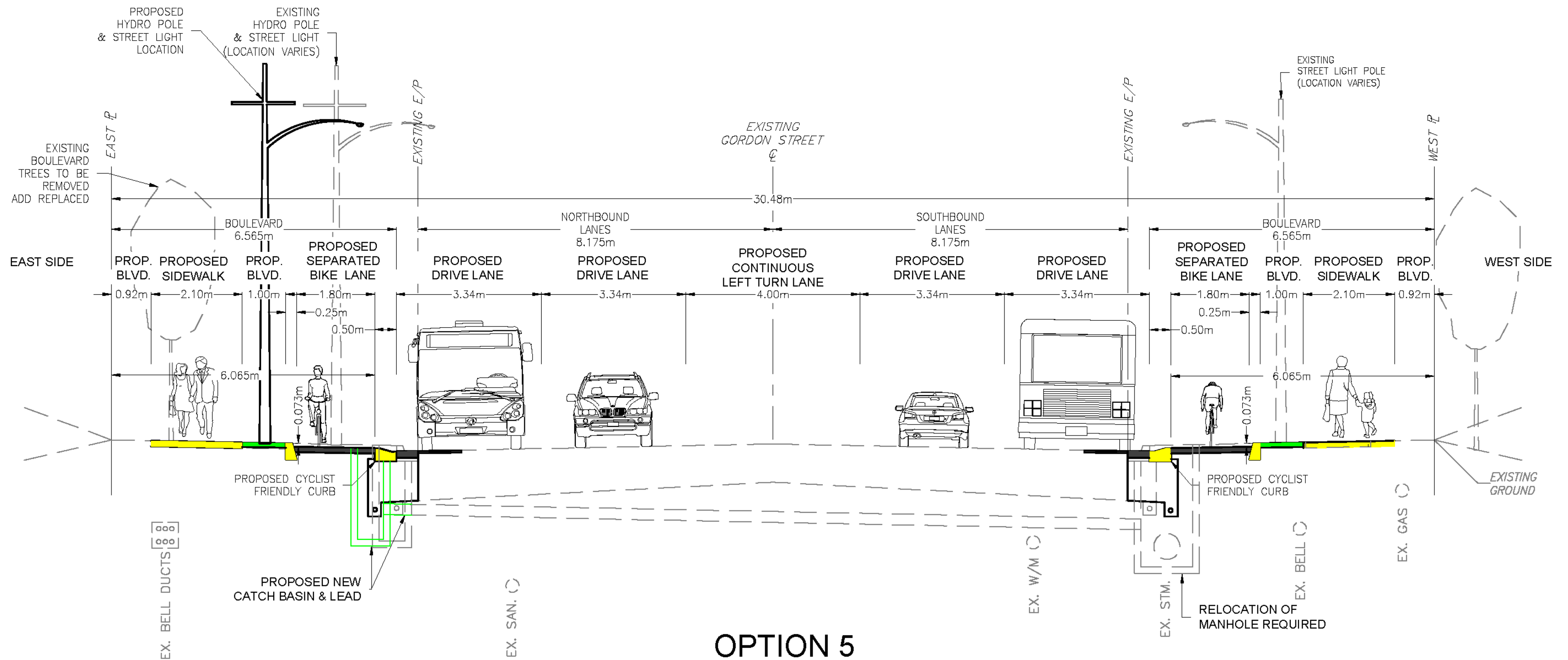


OPTION 4
EXISTING ROAD WIDENED ON WEST SIDE
TO PROVIDE 4.0m CONTINUOUS
LEFT TURN LANE WITH
3.0m MUT ON EACH SIDE

Potential Solutions – Option 5

Widen Equally About Existing Centreline with a 4 metre two-way left-turn lane and 1.8 metre separated bike lanes and 2.1 metre sidewalks

- Add 1.8 metre separated bike lanes
- Add 2.1 metre sidewalks in boulevards
- Cost: \$1,369.00 per metre



OPTION 5
EXISTING ROAD WIDENED EACH SIDE
TO PROVIDE 4.0m CONTINUOUS
LEFT TURN LANE WITH
1.80m SEPARATED BIKE LANE
AND 2.10m SIDEWALKS BOTH SIDES

Environmental Study Area



Natural Areas

Wildlife

- Species found are generally common and widespread.
- These species are adapted to the existing surroundings.

Species at Risk (SAR)

- There is potential roosting habitat for bat SAR at certain roadside trees within the study area.
- Bat SAR include:
 - Little Brown Myotis (*Myotis lucifugus*)
 - Northern Myotis (*Myotis septentrionalis*)
 - Tri-colored Bat (*Perimyotis subflavus*)
- The Ministry of the Environment will be consulted if potential habitat trees may be impacted.

Wetlands

- Provincially Significant Wetland (Hanlon Creek Swamp Complex) occurs just west of Gordon Street.
- Limits were confirmed with the Grand River Conservation Authority.
- A 30 metre buffer has been applied to the wetland boundary.
- This buffer corresponds to the Significant Natural Area limit west of Gordon Street.

Aquatic Habitat

The project study area does not contain any watercourse features or fish habitat.

Natural Areas

Vegetation

A vegetation inventory was completed for the project study area and the following was observed:

- 76 plant species found.
- Plantings were found within the right-of-way and on private properties.
- No federally, provincially or regionally significant species occur within or immediately adjacent to the right-of-way.
- 47% of species are non-native.
- Natural features west of Gordon St, including the Provincially Significant Wetland (PSW) edge, are heavily colonized by non-native buckthorn shrubs.
- Higher quality wetland conditions occur away from the road right-of-way.

Tree Inventory

159 trees were inventoried, and there were 26 species.

- The majority of trees are planted within the right-of-way and on private properties.
- 60% of the trees are not native to Ontario, and include:
 - horticultural/landscape plantings
 - a Scots Pine plantation west of Gordon St
- The existing trees will be protected where feasible.
- A streetscape plan will be prepared to propose new plantings along the corridor as part of the final design.

Natural Areas

Deer Crossings and Ecological Linkage

- There are two known Deer Crossing locations within the study area located on Gordon Street between Edinburgh Road and Arkell Road where white-tailed deer move between Hanlon Creek Swamp and Torrance Creek Wetland.
- An Ecological Linkage has been designated in the more southerly of the two known Deer Crossing locations. Ecological Linkages are considered Significant Natural Areas, and form part of the City's Natural Heritage System.
- Crossings are relatively infrequent and mainly occur between dusk and dawn. Past studies have estimated that approximately 5-20 deer cross at the Ecological Linkage.
- Portions of the linkage have been naturally restored, and other portions will be restored as part of future land re-developments.
- The study will consider opportunities to mitigate deer collisions by directing/altering deer movements and/or altering motorist behavior.

Issues and Constraints

- Adjacent natural topography and environmental features just outside the right-of-way.
- Property and existing developments along the corridor and at the established intersections.
- Existing roadside utilities, including an existing overhead hydro pole line along the east side of the corridor and switching to the west side just north of Lowes Road.
- Street trees in the boulevard areas.
- Other utilities and municipal infrastructure including storm sewers, sanitary sewers, distribution watermain, buried cable TV, telephone, gas main, and water and sanitary services.

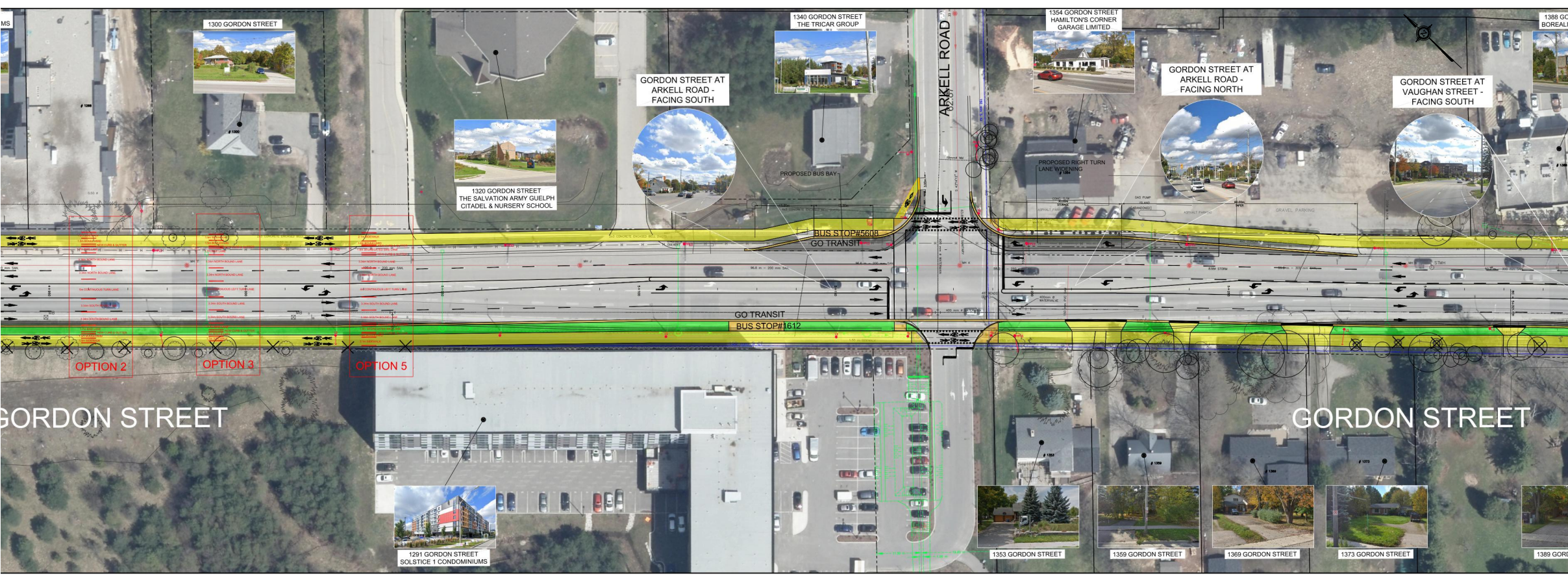
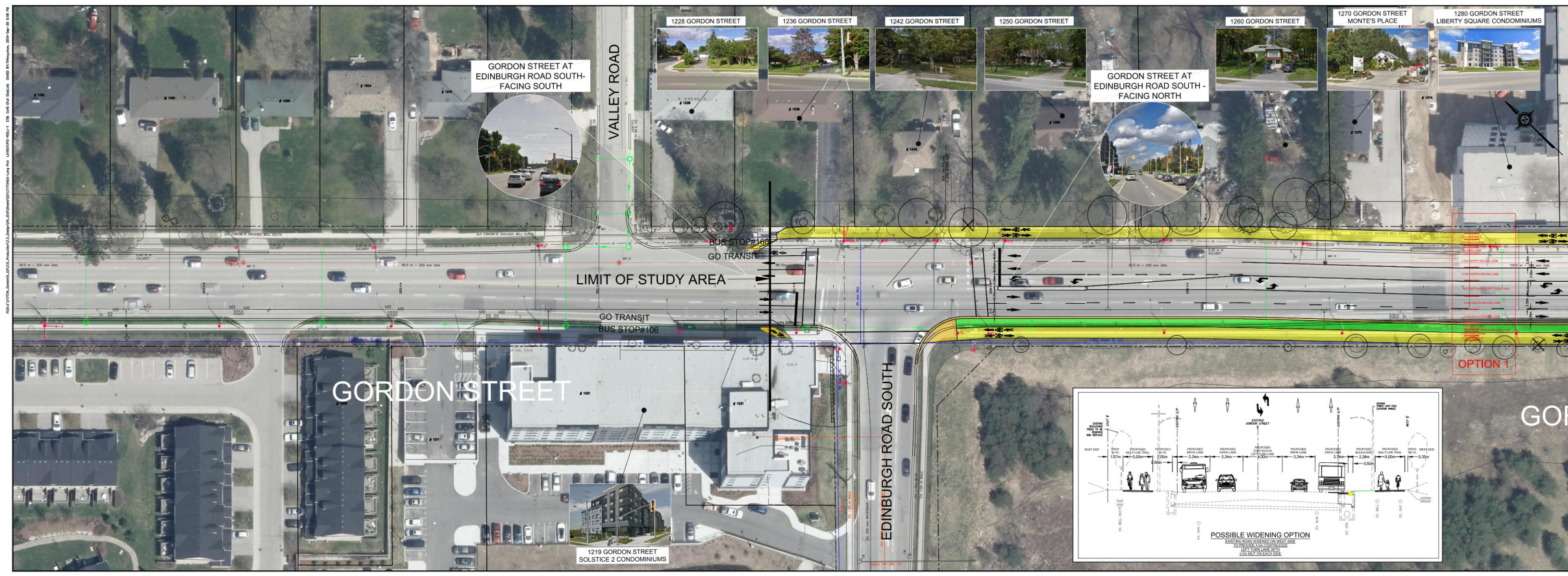
Evaluation of Impacts

Criteria	Evaluation Consideration
Traffic Safety and Operations on Gordon Street	How well does the alternative manage cycling, pedestrian, transit and motor vehicle traffic?
Natural Environment	What impacts does the alternative have on natural environment features such as vegetation, wildlife and drainage?
Socio-Cultural Environment	What impacts does the alternative have on existing established communities and businesses, property noise/ vibration, potential archaeological resources, built heritage features and visual character?
Economic Environment	What is the comparative cost to construct each alternative, including utility location, capital, property and maintenance and operating costs?
Official Policy - Active Transportation	How well does the alternative adhere to Active Transportation related policies?

Next Steps

- Receive and review all comments and suggestions from the community, stakeholders and agencies after this open house.
- Complete detailed evaluation of roadway improvement alternatives.
- Confirm Active Transportation planning needs and compatibility.
- Identify recommended alternative solution.
- Present recommended design alternative to the community at Open House #2.
- Receive and review all comments and suggestions from the community, stakeholders and agencies after Open House #2.
- Prepare the Project Study File for public review period.
- Issue Notice of Study Completion (30-day public review process).

Please Complete a Comment Sheet
Thank you!



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SCALE 1:5000
 DATE October 1, 2019
 PROJECT No. 117734



GORDON STREET
 "SCHEDULE B"
 CLASS ENVIRONMENTAL ASSESSMENT

PUBLIC INFORMATION
 CENTRE#1

ROLL PLAN 1 (PG. 1 OF 2)



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