

**West Street South Improvements
Municipal Class EA
City of Orillia**

Public Information Centre (PIC)

Welcome



Welcome to the online Public Information Centre for the City of Orillia West Street South Improvements Municipal Class Environmental Assessment. My name is Drew Davidge and I am a Professional Engineer with R.J. Burnside and Associates. I will be guiding you through the 30 slides that form this presentation on behalf of the City of Orillia study team.

Problem / Opportunity Statement:

“Following the recommendations of the 2005 Transportation Master Plan, 2011 Transportation Master Plan Update and 2019 Multi-Modal Transportation Master Plan, the City of Orillia has identified the need to widen West Street South from James Street to Highway 12 to support the connection between downtown Orillia and Highway 12 and to meet the needs of anticipated population and employment growth and traffic demands, including active transportation.”

Purpose of this PIC is to:

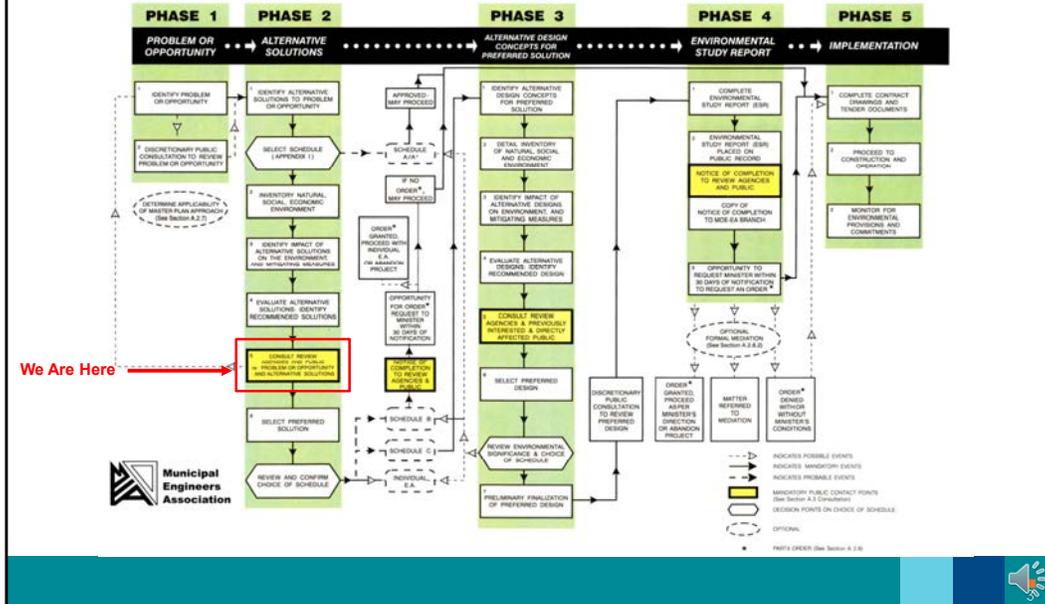
- Present the Problem/Opportunity Statement
- Provide an overview of the Municipal Class Environmental Assessment process
- Provide information on the existing environment of the Study Area
- Present an evaluation of the alternative solutions
- Obtain input on the alternative solutions
- Identify next steps

Following the recommendations of the 2005 Transportation Master Plan, the 2011 Update, and the Multi-modal Transportation Master Plan completed in 2019, the City of Orillia has identified a need to widen West Street South Street from James Street to Highway 12. This is to support the connection between downtown Orillia and Highway 12 and meet the needs of anticipated population and employment growth, including active transportation.

This Public Information Centre will present information about the project area, the Municipal Class Environmental Assessment process, an evaluation of the alternatives being considered and obtain input on the alternatives, including the preliminary preferred solution, as well as the next steps in the process.

Following the presentation, we invite you to offer your comments on this project, the evaluation of the solutions and the engagement materials presented on this platform. Information on how to submit your input to this study is provided at the end of the presentation. Your input is appreciated and will be considered by the study team in the selection of the preferred solution.

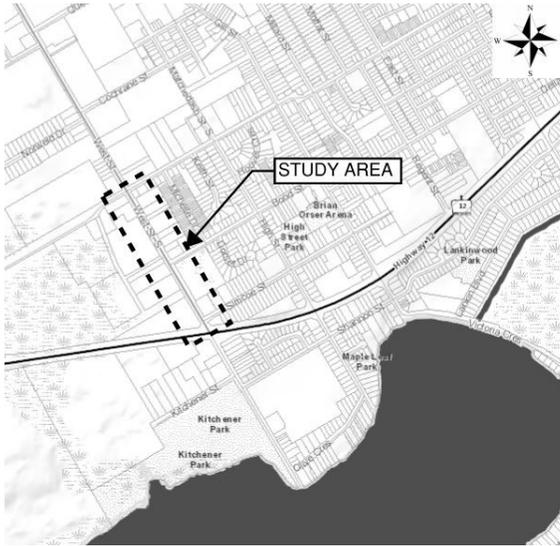
This project is being considered as a Schedule 'B' Project (Phases 1 and 2), as defined in the Municipal Engineers Association Class EA document. The appropriate Schedule will be reviewed at the end of Phase 2 of the EA Process.



This Study is being completed in accordance with the Schedule B process of the Municipal Class Environmental Assessment, which is an approved process under the Ontario Environmental Assessment Act. An overview of the EA process is illustrated on the flow chart. This study is currently at the stage where we engage with interested parties and the public about the project and the alternative solutions, as highlighted in the red box under Phase 2

<p>Phase 1- Problem or Opportunity</p> <p>What is there now? What do we need?</p>	<ul style="list-style-type: none"> •Review available information and studies •Identify the Problem or Opportunity 	<p>Notice of Commencement</p>
<p>Phase 2- Alternative Solutions</p> <p>What are the options to meet our needs? What do the options look like? What is the cost of the options? What is the impact to the environment?</p>	<ul style="list-style-type: none"> •Identify Alternative Solutions •Identify Impacts and Mitigation Measures •Evaluate Alternative Solutions •Select Preferred Solution •Confirm EA Schedule (Schedule B) 	<p><i>Public Information Centre #1</i></p>
<p>Project File Report</p>	<ul style="list-style-type: none"> • Document the EA planning process for public review 	<p>Notice of Completion and Public Review</p>

Through the EA process, information about the Study Area is reviewed to develop the Problem or Opportunity Statement. Feasible solutions are identified and evaluated at a broad level with input from agencies, Indigenous communities and stakeholders toward a recommendation for a preferred solution. At the conclusion of Phase 2, the appropriate EA planning Schedule is confirmed. The planning of the project is documented in a Project File Report and made available to the public for review and comment before the proponent may proceed to design and implementation of the project.



The Study Area includes West Street South from Highway 12 to James Street.

The 0.6 kilometer corridor is a mix of light industrial, arterial commercial land use. The corridor contains treed and open areas as well as several drainage ditches and two culvert crossing. The watercourse in the Study Area is known as Mill Creek.

Improvements to West Street South within the Study Area will be necessary to support the future growth and maintain effective traffic flow and connection between Highway 12 and downtown Orillia.

The West Street South widening EA is guided by the policies and objectives outlined in the City's Official Plan and other municipal planning documents. These documents outline strategies for growth and corporate operation. Particular consideration is given to the recently completed Official plan and Multi-modal Transportation Master Plan.

The EA will also have regard for policies of the provincial government through the Ministry of Transportation and other agencies.

The traffic conditions along the corridor were assessed for the 10 year and 20 year future horizon based on forecasted traffic growth, traffic from future developments and future improvements to the greater road network. The analysis determined that future traffic volumes up to the year 2042 can be accommodated with a 4-lane or 3 lane roadway, with the third lane being a centre two-way turn lane, with additional improvements such as optimized signal timing and additional lanes along Highway 12.

Strategic Planning

The EA is guided by the City's strategic planning documents, including:

- City of Orillia Official Plan (Consolidated 2021)
- 2019 Multi-modal Transportation Master Plan
- Provincial Standards and Design Guidelines
- City of Orillia Comprehensive Stormwater Management Master Plan (February 2016)
- City of Orillia Water System Master Plan (December 2015) (currently being updated)
- City of Orillia Wastewater System Master Plan Update (January 2013) (currently being updated)
- City of Orillia Engineering Design Criteria (July 2012)
- City of Orillia Active Transportation Plan (July 2012)



Future Traffic Analysis

Future traffic conditions for the 2032 and 2042 study horizon years were used to assess the 10-year and 20-year future traffic along the Study Area corridor, assuming that the widening of West Street South is completed in 2022.

Future traffic volumes were projected based on forecasted traffic growth along the study corridor, background traffic from planned future developments and future road network improvements.

The Traffic analysis considered the following scenarios:

- existing conditions (2 lanes)
- 4 lanes (2 travel lanes each direction)
- 3 lanes (1 travel lane each direction and a two-way left turn lane)

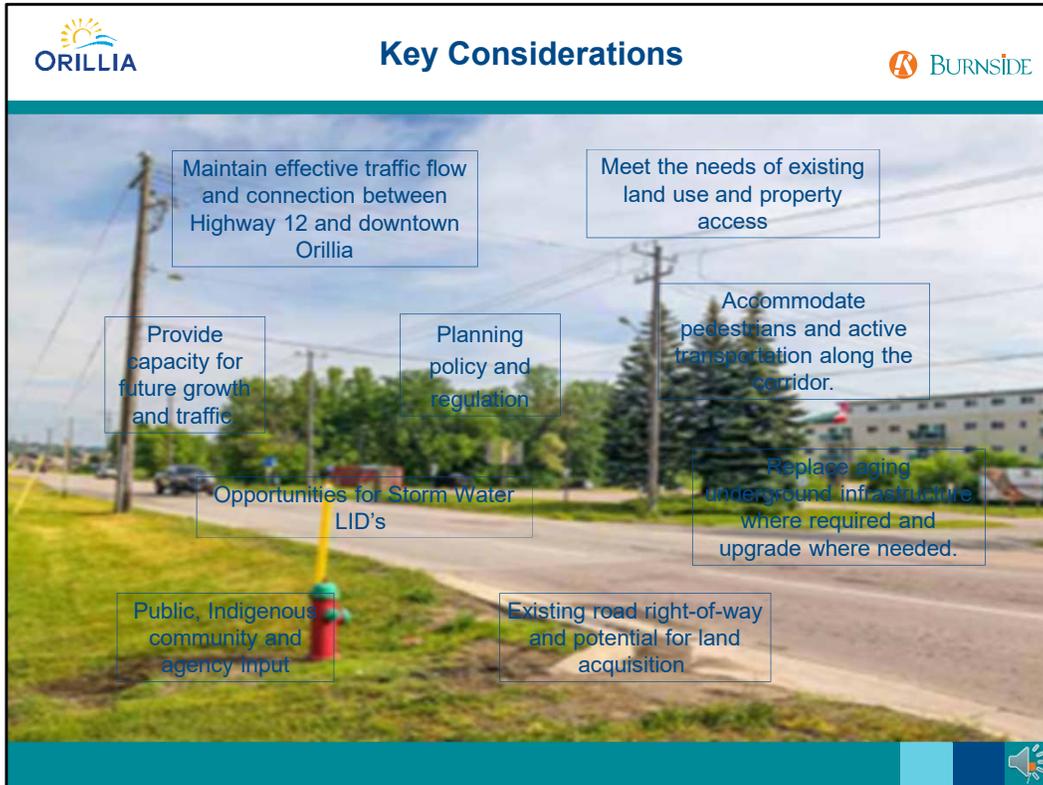
The 3-lane cross-section with the two-way left-turn lane and 4-lane cross-section are both able to accommodate future traffic volumes up to the horizon year of 2042, with additional improvements (i.e., optimized signal timings and additional lanes along Highway 12).



The West Street South widening EA is guided by the policies and objectives outlined in the City's Official Plan and other municipal planning documents which outline strategies for growth and corporate operation. Particular consideration is given to the recently completed Official plan and Multi-modal Transportation Master Plan.

The EA will also have regard for policies of the provincial government through the Ministry of Transportation and other agencies.

The traffic conditions along the corridor were assessed for the 10 year and 20 year future horizon based on forecasted traffic growth, traffic from future developments and future improvements to the greater road network. The analysis determined that future traffic volumes up to the year 2042 can be accommodated with a 4-lane or 3 lane roadway, with the third lane being a centre two-way turn lane, with additional improvements such as optimized signal timing and additional lanes along Highway 12.



Key considerations in the development and evaluation of the alternative solutions for the Study Area include;

- Maintaining traffic flow and connection in the City as well as providing capacity for future development,
- Minimizing encroachment on private property and the potential for land acquisition,
- Maintaining access to property, accommodating pedestrians and active transportation
- Identifying opportunities to replace aging infrastructure
- Working within existing planning policy and regulations , and
- Considering community and agency input.

Traffic and Transportation

- Two-lane, north-south arterial road (4 lanes north of James Street) with an average of 11,000 vehicles per day
- Posted speed limit of 50km/hr
- Several driveways along the West Street corridor provide access to light industrial / commercial developments
- Four intersections along the Study corridor
- Existing traffic signals at James Street and Highway 12 intersections
- City bus route with 3 bus stops in the northbound lane
- Hourly transit service 7 days per week

Utilities and Infrastructure

- Buried and aerial telecommunications, hydro and buried gas
- Existing Watermain & Sanitary Sewer

Storm Water

- Open ditch and existing storm sewers

Active Transportation

- Sidewalk along east side of the road
- Pedestrian signals at James Street and Highway 12 intersections
- Multi-use path north side of James Street, west of West Street South

Existing Road Network

Legend

- Lane Configuration
- Right turn taper
- Stop Sign
- Traffic Signal

N.T.S

The selection of a preferred solution is based on the evaluation of alternatives with consideration of the technical, socio-cultural, financial and natural environment. The following slides provide a summary of the existing conditions in the Study area for these environments.

West Street South is a two-lane arterial road with a posted speed limit of 50 km/hr with an annual average daily traffic volume of approximately 11,000 vehicles. As an arterial road, the purpose of the West Street South corridor is primarily as a transportation facility that serves as a through routes for vehicles, pedestrians and cyclists. The Study Area corridor has four intersections, including James Street, Bond Street, Simcoe Street and Highway 12. The intersections of James Street and Highway 12 are signalized. A sidewalk is present along the east side of the road. A multi-use path is present along the north side of James Street to the west of the project site. The South Route Orillia Transit bus travels one way along with hourly service, seven days a week to 3 bus stops in the northbound direction. Storm water in the Study Area is conveyed through a combination of road-side ditches and existing storm sewers.

Land Use

The lands adjacent to the Study Area corridor consist of employment lands including Light Industrial Services and Arterial Commercial land use as well as an area between Bond Street and Simcoe Street identified as an intensification area.

Transportation Master Plans for the City of Orillia from 2005 to 2019 identified the reconstruction and widening of West Street South to four lanes with the Study Area including protected bike lanes on both sides of the road and the addition of a sidewalk on the west side of the road.

City's *Multi-modal Transportation Plan (MTMP)* identified West Street as a key corridor for improvement within the cycling network.

Additional bus stops may be considered on the west side of West Street South to support potential transit route network improvements for two-way service.

The Official Plan Parks and Trail System Network identifies a proposed multi-use trail located along West Street South.



Official Plan land use designation within the Study Area (Official Plan City of Orillia, consolidated February 2021)

Cultural Heritage

Cultural heritage resources are not anticipated to be present within the West Street South right-of-way.

Archaeological Resources

A Stage 1 archaeological assessment will be completed to assess the archaeological potential of the Study Area as part of the Municipal Class EA. Where archaeological resources may be affected by the preferred solution, appropriate mitigation measures will be developed.

The lands adjacent to the Study Area corridor consist of employment lands including Light Industrial Services and Arterial Commercial land use as well as an area on the east side of West Street South between Bond Street and Simcoe Street, identified as an intensification area. The Official Plan Parks and Trail System Network identifies a proposed multi-use trail located along West Street South.

Transportation Master Plans for the City of Orillia from 2005 to 2019 identified the reconstruction and widening of West Street South to four lanes with the Study Area including protected bike lanes on both sides of the road and the addition of a sidewalk on the west side of the road. West Street is considered a key corridor for improvements within the City's cycling network. Additional bus stops on the west side of West Street South may be considered to support potential transit route network improvements for two-way service.

Cultural heritage resources are not anticipated to be present within the West Street South right-of-way. A Stage 1 archaeological assessment will be completed to assess the archaeological potential of the Study Area as part of the Municipal Class EA. This study will determine if further assessment is required.

The Study Area corridor is mostly developed with limited treed and open areas.

Drainage ditches provide storm water drainage.

Culvert crossing of Mill Creek is considered fish habitat downstream of the culvert.

Study Area is Located within the Lake Simcoe Region Conservation Authority (LSRCA) watershed boundary, within the Oro Creeks North Subwatershed.

Mill Creek is not regulated by LSRCA.

Potential wildlife habitat may be suitable for species adapted to an urban environment such as squirrel, chipmunk, raccoon, bird species etc.

Habitat for Species at Risk is marginal as a result of ongoing disturbance and maintenance of vegetation adjacent to West Street South.

Preferred wildlife habitat may be present to the west of the Study Area within the Orillia Filtration (OR2) Wetland Natural Area. Mill Creek may provide potential connection to the Study Area.



The assessment of the natural environment was completed through field investigation to characterize the vegetation communities and the potential for habitat of Species at Risk in the Study Area. The corridor is mostly developed with limited treed and open areas. Vegetation communities in the Study Area are considered to be relatively common in Ontario.

Drainage ditches are in present adjacent to West Street South with one watercourse known as Mill Creek. The watercourse downstream of the culvert crossing is considered fish habitat. The Study Area is located within the Lake Simcoe Region Conservation Authority (LSRCA) watershed boundary and is within the Oro Creeks North Subwatershed, however, the watercourse is not regulated by the LSRCA.

Potential wildlife habitat may be suitable for species adapted to an urban environment such as squirrel, chipmunk, raccoon, several bird species etc. Habitat for Species at Risk is marginal as a result of ongoing disturbance and maintenance of vegetation adjacent to West Street South. Preferred wildlife habitat may be present to the west of the Study Area within the Orillia Filtration (OR2) Wetland Natural Area. Mill Creek may provide potential connection from this area to the Study Area.

The evaluation of alternatives is a step-by-step process that compares alternatives that are feasible within the project environment and meet the project objectives outlined in the Problem/Opportunity Statement. A range of solutions are being considered in order to create the opportunity for population growth and promote active transportation.

Possible Solutions include:

1. **Do Nothing** - This is a mandatory solution in the Municipal Class Environmental Assessment process.
2. **Widen the Road to 4 Lanes with a Multi-Use Trail on the West Side and Sidewalk on the East Side**
3. **Widen to 4 Lanes with Bike Lanes and a Sidewalk on the East Side**
4. **Widen to 4 Lanes with Bike Lanes and Sidewalk on Both the East and West Side**
5. **Widen to 3 Lanes with Bike Lanes and Multi-Use Trail on the West and Sidewalk on the East Side**
6. **Widen to 3 Lanes with Bike Lanes and Sidewalk on Both the East and West Side**

Alternative solutions that are feasible to address road reconstruction are evaluated relative to each other against a set of criteria developed based on the project environment. Possible solutions that improve traffic flow and accommodate active transportation through the Study Area include:

- 1) Do Nothing,
- 2) Widen to a 4-lane road with a multi-use trail on the west side and sidewalk on the east side ,
- 3) Widen West Street South to 4 Lanes with bike lanes and a sidewalk on the east side,
- 4) Widen the road to 4 Lanes with bike lanes and a sidewalk on both the east and west side of the street,
- 5) Widen to 3 lanes and include bike lanes and a multi-use trail on the west and sidewalk on the east side, and
- 6) Widen to 3 lanes with Bike Lanes and Sidewalk on both the east and west side.

Landscaping, Low Impact Development (LID) Storm Water Management:

In addition to the road improvement options considered above for West Street South, each alternative will be reviewed for opportunities for Storm Water LID's.



Other Improvements:

Specific operational and safety improvements were reviewed during the Municipal Class EA, such as timing of traffic controls and turn lanes to optimize traffic flow.

A multi-use trail extension is planned for the west side of West Street South, from north of James Street to the Orillia Recreation Centre.

Other City infrastructure such as Watermains and Sanitary sewers will be reviewed during detailed design and recommendations will be made for the replacement of aged infrastructure or upgrades as outlined in the City's Asset Management Plans, Wastewater Master Plan (on-going), and Water Master Plan (on-going).



Each of the alternatives will be reviewed and evaluated for the potential to incorporate , Low Impact Development (LID) Storm Water Management techniques.

Independent of the evaluation of alternatives, specific operational & safety improvements such as timing of traffic controls and turn lanes will be reviewed to optimize traffic flow during the Municipal Class EA. A Multi-use trail extension is planned for the west side of West Street South, from north of James Street to the Orillia Recreation Centre.

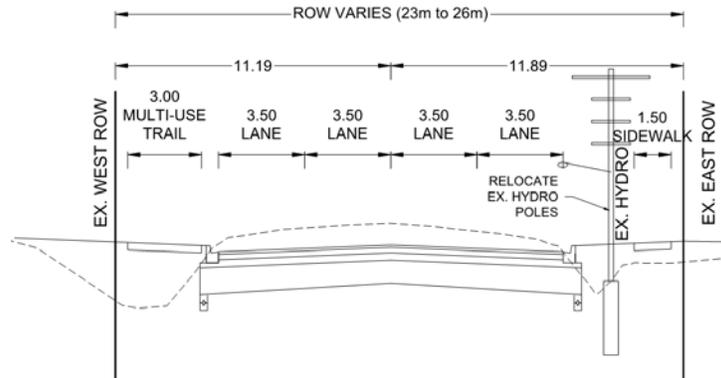
Other City infrastructure such as Watermains and Sanitary sewers will be reviewed during detailed design and recommendations will be made for the replacement of aged infrastructure or upgrades as outlined in the City's Asset Management Plans, Wastewater Master Plan (on-going), and Water Master Plan (on-going).

The Do Nothing alternative is a mandatory requirement for consideration in a Municipal Class EA. In this option, the road corridor would remain the same and operate as a two-lane, two-way road. Regular maintenance would be performed as required. The Do Nothing Alternative does not address the problem statement to meet the needs of anticipated population and employment growth and traffic demands, including active transportation.



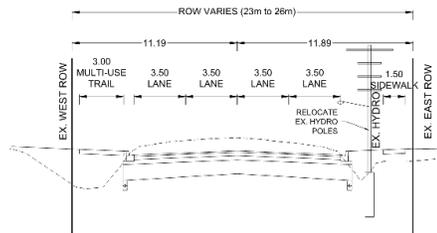
Alternative 1, Do Nothing.

This alternative is a mandatory requirement for consideration in the Municipal Class EA process. In the Do Nothing Alternative, West Street South would remain a two-lane, two-way road. Regular maintenance of the road would be performed as required; however, no improvements or changes would be made to solve the identified problem or opportunity. It would not meet the needs of anticipated population and employment growth, traffic demands, including active transportation.



- Widen the road to a 4 lane, two-way road with curb and gutter
- Reconstruct the existing sidewalk on the east side
- Construct an off-road 3.0 m wide multi-use trail on the west side
- Install storm sewer system and review LID opportunities for roadway drainage
- Relocate utilities, where required

Alternative 2 is to reconstruct West Street South as a 4-lane roadway with a multi-use trail on the west side of the road. Bike lanes would not be included in the design of this option. The roadway would be reconstructed as a 4 lane, two-way road with curb and gutter. The existing sidewalk on the east side would be reconstructed. Storm sewers would be installed with review of opportunities to incorporate Low Impact Development (LID) design elements. Roadside utilities would be relocated as required to accommodate the reconstruction.



- Widen the road to a 4 lane, two-way road with curb and gutter
- Reconstruct the existing sidewalk on the east side
- Construct an off-road 3.0 m wide multi-use trail on the west side
- Install storm sewer system and review LID opportunities for roadway drainage
- Relocate utilities, where required

Benefits:

- Will accommodate future traffic volumes up to 2042, with improved travel time and traffic flow
- Somewhat satisfies MTMP recommendation for sidewalks on both sides with opportunity to use multi-use trail as pedestrian path.
- Improved safety for active transportation with off-road facility and access on both sides of the road
- Land acquisition is not anticipated
- Provides potential connection to existing multi-use trail on north side of James Street
- Impact to archaeological resources not anticipated.
- Impact to adjacent natural features not anticipated

Challenges:

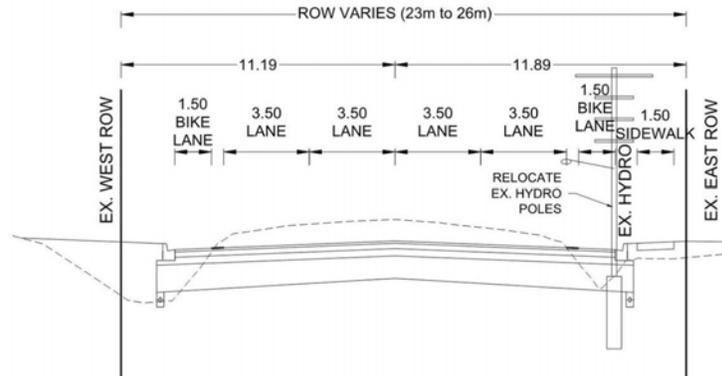
- Does not satisfy MTMP recommendation for protected bike lanes.
- Multi-use trail shared access to potential bus stops on west side for possible two-way bus route
- Multi-use trail may result in greater potential for cycle/motorist accidents at driveway access points. May increase the need for crossing the road to connect to other Active Transportation facilities
- Winter maintenance of multi-use trail, sidewalk
- Temporary construction impacts
- Moderate costs for construction and maintenance relative to the other options

The estimated costs are for comparison purposes, developed based on conceptual design and should not be used for budgetary estimates.



A 4 lane road will accommodate future traffic volumes up to the year 2042 with improved travel time and improved traffic flow as traffic volumes increase over time. Property acquisition for the road widening is not anticipated as this option can be accommodated within the existing road right-of-way. Safety for active transportation is improved by having the trail located off of the road, however, a multi-use trail may result in a greater potential for conflict between cyclists and cars where the multi-use trail crosses driveway access points. As well, the multi-use trail on one side of the road may increase the need for crossing of the road to connect to other active transportation facilities. The need for additional winter maintenance of the multi-use trail and sidewalk will need to be considered. Costs for construction and maintenance are anticipated to be moderate relative to the other options.

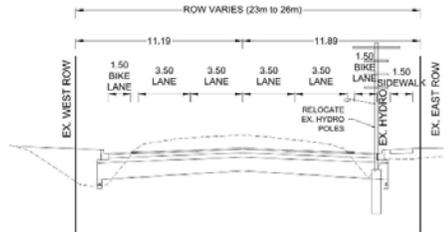
Alternative 3: Widen to 4 Lanes with On-Road Bike Lanes and a Sidewalk on the East Side



- Widen the road to a 4 lane, two-way road with curb and gutter
- Reconstruct the existing sidewalk on the east side
- Construct an on-road 1.5m wide bike lane with 0.5m buffer lane on both sides
- Install storm sewer system and review LID opportunities for roadway drainage
- Relocate utilities, where required

Alternative 3 is to reconstruct West Street South as a 4-lane roadway with on-road bike lanes. The roadway would be reconstructed as a 4 lane, two-way road with curb and gutter. A sidewalk on the west side of the road would not be included in the design of this option. The existing sidewalk on the east side of the road would be reconstructed. Storm sewers would be installed with a review of opportunities to incorporate Low Impact Development (LID) design elements. Roadside utilities would be relocated as required to accommodate the reconstruction.

Alternative 3: Widen to 4 Lanes with On-Road Bike Lanes and a Sidewalk on the East Side



- Widen the road to a 4 lane, two-way road with curb and gutter
- Reconstruct the existing sidewalk on the east side
- Construct an on-road 1.5m wide bike lane with 0.5m buffer lane on both sides
- Install storm sewer system and review LID opportunities for roadway drainage
- Relocate utilities, where required

Benefits:

- Will accommodate future traffic volumes up to 2042, with improved travel time and traffic flow
- Satisfies MTMP recommendation for protected bike lanes

Challenges:

- Does not satisfy MTMP or Official Plan recommendation for sidewalks on both sides of the road
- Land acquisition is anticipated for road and to accommodate Hydro poles
- Possible impact to potential archaeological resources. Further assessment is required.

Challenges:

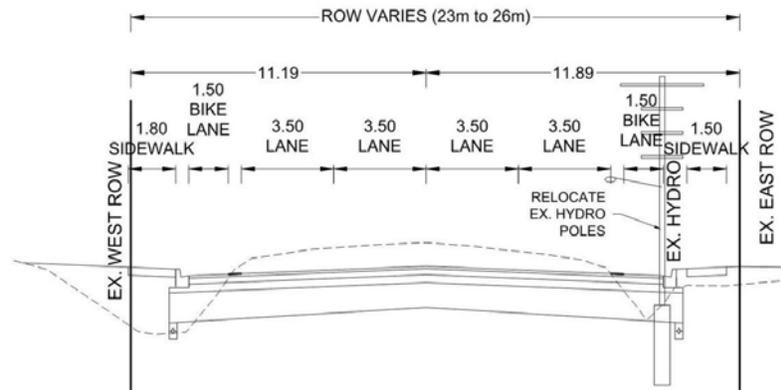
- Tree and vegetation clearing required within areas of property acquisition
- Sidewalk only on one side. No multi-use trail connection to existing trail on north side of James Street
- Temporary construction impacts
- No opportunity for bus stop platforms on the west side for possible two-way bus route
- Winter maintenance of sidewalk. Lack of boulevard for snow storage results in increased frequency of winter maintenance of bike lanes
- Moderate cost for improvements. High cost for regular maintenance relative to the other options.

The estimated costs are for comparison purposes, developed based on conceptual design and should not be used for budgetary estimates.



A 4 lane road will accommodate future traffic volumes up to the year 2042 with improved travel time and improved traffic flow as traffic volumes increase over time. Some property acquisition for the road widening and relocation of hydro poles is anticipated. Safety for active transportation is improved with 0.5m buffer between the bike lane and the vehicle travel lane. Lack of boulevard snow storage will increase the need for frequent winter maintenance of the road and bike lanes. The cost for improvements is anticipated to be moderate with higher cost for regular maintenance relative to the other options.

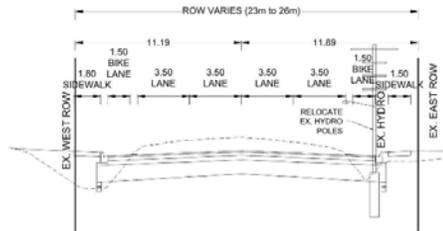
**Alternative 4:
Widen to 4 Lanes with On-Road
Bike Lanes and Sidewalk on Both the East and West Side**



- Widen the road to a 4 lane, two-way road with curb and gutter
- Construct sidewalk on the west side. Reconstruct the existing sidewalk on the east side.
- Construct an on-road 1.5m wide bike lane with 0.5m buffer lane on both sides
- Install storm sewer system and review LID opportunities for roadway drainage
- Relocate utilities, where required

Alternative 4 is to reconstruct West Street South as a 4-lane roadway with on-road bike lanes and a new sidewalk on the west side. The roadway would be reconstructed as a 4 lane, two-way road with curb and gutter. The existing sidewalk on the east side of the road would be reconstructed. Storm sewers would be installed with a review of opportunities to incorporate Low Impact Development (LID) design elements. Roadside utilities would be relocated as required to accommodate the reconstruction.

Alternative 4: Widen to 4 Lanes with On-Road Bike Lanes and Sidewalk on Both the East and West Side



- Widen the road to a 4 lane, two-way road with curb and gutter
- Construct sidewalk on the west side. Reconstruct the existing sidewalk on the east side.
- Construct an on-road 1.5m wide bike lane with 0.5m buffer lane on both sides
- Install storm sewer system and review LID opportunities for roadway drainage
- Relocate utilities, where required

Benefits:

- Will accommodate future traffic volumes up to 2042, with improved travel time and traffic flow
- Satisfies MTMP recommendation for protected bike lanes and sidewalks on both sides of the road

Challenges:

- Land acquisition is anticipated for road and to accommodate Hydro poles
- Possible impact to potential archaeological resources. Further assessment is required.
- Tree and vegetation clearing required within areas of property acquisition

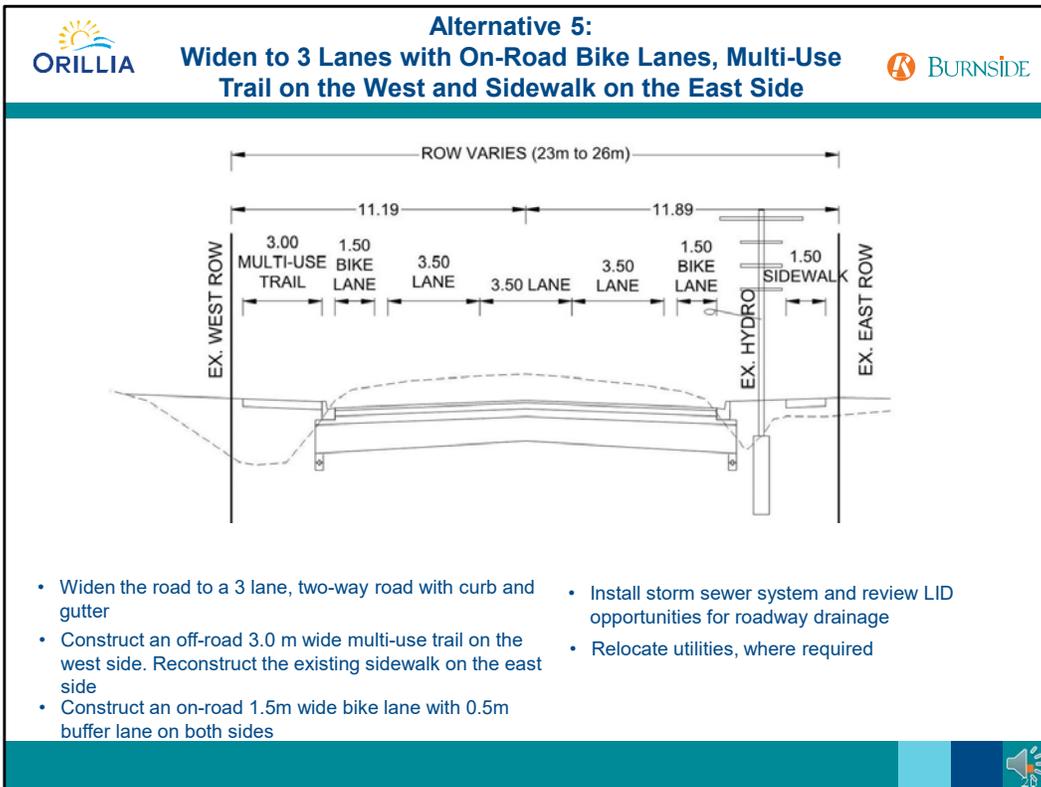
Challenges:

- Temporary construction impacts
- Winter maintenance of sidewalk. Lack of boulevard for snow storage results in increased frequency of winter maintenance of bike lanes
- No multi-use trail connection to existing trail on James Street
- Limited opportunity for bus platforms on west side of street for possible two-way bus service
- Moderate to high costs for construction. Highest cost for maintenance relative to other options

The estimated costs are for comparison purposes, developed based on conceptual design and should not be used for budgetary estimates.

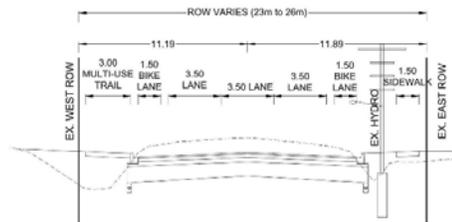


A 4 lane road will accommodate future traffic volumes up to the year 2042 with improved travel time and improved traffic flow as traffic volumes increase over time. Some property acquisition for the road widening and relocation of hydro poles is anticipated. Safety for active transportation is improved with 0.5m buffer between the bike lane and the vehicle travel lane. Lack of boulevard snow storage will increase the need for frequent winter maintenance of the road and bike lanes. The cost for improvements is anticipated to be moderate to high, with the highest cost for regular maintenance relative to the other options.



Alternative 5 is to reconstruct West Street South as a 3-lane, two-way roadway with a centre-turn lane, and on-road bike lanes, and a multi-use trail on the west side. The roadway would be reconstructed as a 3 lane road with curb and gutter. The existing sidewalk on the east side of the road would be reconstructed. Storm sewers would be installed with a review of opportunities to incorporate Low Impact Development (LID) design elements. Roadside utilities would be relocated as required to accommodate the reconstruction.

Alternative 5: Widen to 3 Lanes with On-Road Bike Lanes, Multi-Use Trail on the West and Sidewalk on the East Side



- Widen the road to a 3 lane, two-way road with curb and gutter
- Construct an off-road 3.0 m wide multi-use trail on the west side
- Reconstruct the existing sidewalk on the east side
- Construct an on-road 1.5m wide bike lane with 0.5m buffer lane on both sides
- Install storm sewer system and review LID opportunities for roadway drainage
- Relocate utilities, where required

Benefits:

- Will accommodate future traffic volumes up to 2042, with improved travel time and traffic flow
- Improves safety of turning movements
- Satisfies MTMP recommendation for protected bike lanes. Somewhat satisfies MTMP recommendation for sidewalks on both sides with opportunity to use multi-use trail as pedestrian path.
- Provide multi-use trail connection to existing trail on north side of James Street
- Impact to archaeological resources not anticipated.
- Impact to adjacent natural features not anticipated

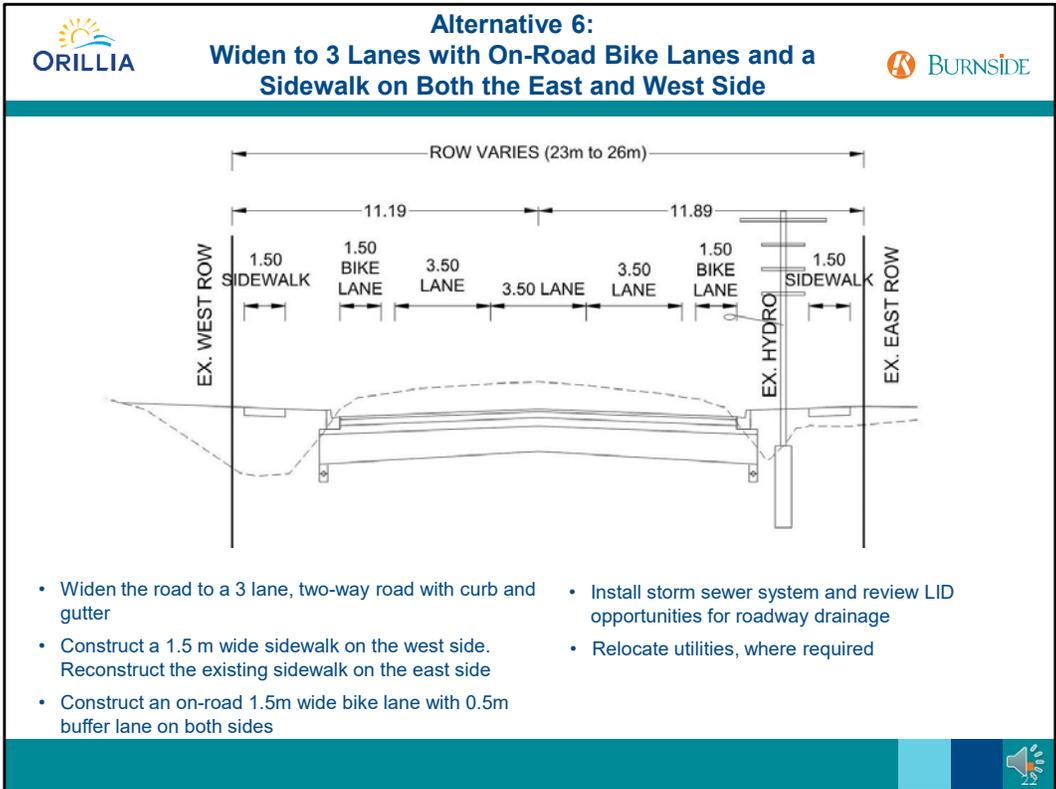
Challenges:

- Temporary construction impacts
- Winter maintenance of sidewalk and multi-use trail
- Multi-use trail shared access to potential bus stops on west side for possible two-way bus route
- Possible land acquisition may be required
- Moderate costs for construction. Moderate to high cost for maintenance relative to other options

The estimated costs are for comparison purposes, developed based on conceptual design and should not be used for budgetary estimates.



A 3 lane road will accommodate future traffic volumes up to the year 2042 with improved travel time and improved traffic flow as traffic volumes increase over time. A two-way left turn lane provides significant additional traffic capacity. There is the possibility of a small amount of land acquisition required for the multi-use trail. Safety for active transportation is improved with 0.5m buffer between the bike lane and the vehicle travel lane. The need for additional winter maintenance of the multi-use trail and sidewalk will need to be considered. The cost for improvements is anticipated to be moderate, with high cost for regular maintenance relative to the other options.

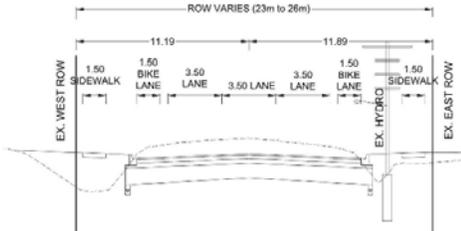


Alternative 6 is to reconstruct West Street South as a 3-lane, two-way roadway with a centre-turn lane, on-road bike lanes and sidewalks on both the east and west sides. The roadway would be reconstructed as a 2 lane, two-way road with curb and gutter. The existing sidewalk on the east side of the road would be reconstructed. Storm sewers would be installed with a review of opportunities to incorporate Low Impact Development (LID) design elements. Roadside utilities would be relocated as required to accommodate the reconstruction.



Alternative 6: Widen to 3 Lanes with On-Road Bike Lanes and a Sidewalk on Both the East and West Side





- Widen the road to a 3 lane, two-way road with curb and gutter. Narrow lanes
- Construct a sidewalk on the west side. Reconstruct the existing sidewalk on the east side
- Construct an on-road 1.5m wide bike lane with 0.5m buffer lane on both sides
- Install storm sewer system and review LID opportunities for roadway drainage
- Relocate utilities, where required

Benefits:

- Will accommodate future traffic volumes up to 2042, with improved travel time and traffic flow
- Improves safety of turning movements
- Satisfies MTMP recommendation for protected bike lanes. Satisfies MTMP recommendation for sidewalks on both sides.
- Opportunity for bus platforms on west side of street for possible two-way bus service
- Land acquisition not anticipated
- Impact to archaeological resources not anticipated
- Impact to adjacent natural features not anticipated

Challenges:

- Temporary construction impacts
- Winter maintenance of sidewalks
- Does not provide multi-use trail connection to existing trail on north side of James Street
- Moderate costs for construction and maintenance relative to the other options

The estimated costs are for comparison purposes, developed based on conceptual design and should not be used for budgetary estimates.

A 3 lane road will accommodate future traffic volumes up to the year 2042 with improved travel time and improved traffic flow as traffic volumes increase over time. A two-way left turn lane provides significant additional traffic capacity. Property acquisition for the road widening is not anticipated as this option can be accommodated within the existing road right-of-way. Safety for active transportation is improved with 0.5m buffer between the bike lane and the vehicle travel lane. The need for additional winter maintenance of the sidewalks will need to be considered. The cost for improvements and maintenance is anticipated to be moderate relative to the other options.

The alternative solutions for road widening in the Study Area are evaluated at a high level relative to each other against a set of criteria. Potential criteria are provided below under each of the project environments:



Natural Environment

- Potential to impact wildlife habitat
- Potential impact to the habitat of species at risk
- Potential impact to ground water resources
- Potential climate change impact and resilience



Socio-Cultural Environment

- Potential to impact heritage resources such as archaeology
- Nuisance impacts such as noise, construction impacts
- Land acquisition needs, impacts to driveway access
- Conformity to municipal and agency policy
- Level of service for local residents and business, impact to municipal services
- Active Transportation connectivity and safety



Financial Environment

- Capital costs
- Operation and maintenance costs
- Property acquisition costs



Technical Environment

- Level of service/ traffic congestion
- Design constraints, utility impacts
- Access to properties



The impacts of the alternative solutions are evaluated against the inventory of the natural, social/cultural, financial and technical environment of the Study Area, including possible mitigating measures. The alternative solutions are compared to each other based on the level of anticipated impact for each criterion. The evaluation leads to the identification of a recommended solution. A summary of the criteria is provided under each environment category. The criteria was developed following a review of the existing conditions in the Study Area.

ORDER OF PREFERENCE		CRITERIA FOR EVALUATING ALTERNATIVES	1) Do Nothing	2) Widen to 4 lanes with Multi-use Trail on the West Side and Sidewalk on the East Side	3) Widen to 4 Lanes with Bike Lanes and a Sidewalk on the East Side	4) Widen to 4 Lanes with Bike Lanes and Sidewalk on Both the East and West Side	5) Widen to 3 Lanes with Bike Lanes and Multi-Use Trail on the West and Sidewalk on the East Side	6) Widen to 3 Lanes with Bike Lanes and Sidewalk on Both the East and West Side
Most Preferred	○							
More Preferred	◐							
Somewhat Preferred	◑							
Less Preferred	◒							
Least Preferred	●							
NATURAL ENVIRONMENT								
Vegetation/Tree (potential to impact or remove vegetation or trees)								
Terrestrial Habitat (potential to impact breeding birds, general wildlife, habitat connectivity)								
Fisheries/Aquatic Habitat (potential to impact habitat features)								
Water Resources (potential to impact groundwater, drainage features)								
Impact on Climate Change (potential for greenhouse gas emissions, impact to carbon sinks, resilience or vulnerability)								
SUMMARY NATURAL ENVIRONMENT								
FINANCIAL FACTORS								
Estimated Capital Costs								
Estimated Operation and Maintenance Cost								
Property Acquisition Cost								
SUMMARY FINANCIAL FACTORS								

The alternative solutions were compared to each other by applying a ranking from most preferred to least preferred based on the level of anticipated impact for each criterion. A full pie represents the greatest anticipated impact, and therefore is the least preferred. An empty pie represents the least anticipated impact, and therefore the is most preferred.

The following tables provide a summary of the evaluation of the alternatives as an average range under each environment category. For the natural environment and the financial environment, the Do Nothing option is most preferred as it has the least cost and is anticipated to have the least impact to the existing natural environment. The remaining alternatives are anticipated to have a similar impact to the natural features of the Study Area. Alternative 3 and 4 are anticipated to represent the greatest financial impact as a result of moderate to high costs for the improvements as well as high costs for regular maintenance including snow removal. Both alternatives do not allow for roadside boulevard space, which result in a lack of available snow storage and increases the need for frequent winter maintenance of the road and bike lanes.

ORDER OF PREFERENCE		CRITERIA FOR EVALUATING ALTERNATIVES	1) Do Nothing	2) Widen to 4 lanes with Multi-use Trail on the West Side and Sidewalk on the East Side	3) Widen to 4 Lanes with Bike Lanes and a Sidewalk on the East Side	4) Widen to 4 Lanes with Bike Lanes and Sidewalk on Both the East and West Side	5) Widen to 3 Lanes with Bike Lanes and Multi-Use Trail on the West and Sidewalk on the East Side	6) Widen to 3 Lanes with Bike Lanes and Sidewalk on Both the East and West Side
Most Preferred								
More Preferred								
Somewhat Preferred								
Less Preferred								
Least Preferred								
SOCIO-CULTURAL ENVIRONMENT								
Conformity to Municipal Policies and Development Planning (road network and connectivity)								
Heritage Resources (archaeological features)								
Local Residents Nuisance Impacts (noise, traffic, visual impact)								
Municipal services (snow removal, garbage pick up, transit stops)								
Level of Service (safety of traveled road, travel time)								
Active Transportation (connectivity to active transportation network)								
Active Transportation (Pedestrian Safety)								
Active Transportation (Cyclist Safety)								
Land Acquisition Requirements								
SUMMARY SOCIO-CULTURAL ENVIRONMENT								

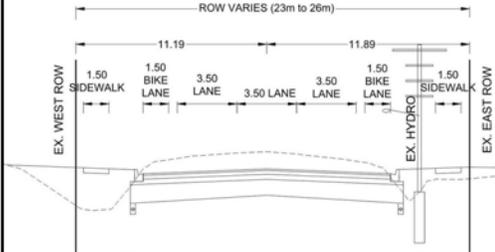
For the Socio-cultural environment, alternatives 5 and 6 are most preferred since they address the MTMP recommendation for protected bike lanes and either sidewalks on both sides of the road or provide the opportunity to use the multi-use trail as pedestrian path. Benefits to a 3-lane cross-section include anticipated traffic calming, improved traffic flow and increased safety for left turns into properties along the Study Area corridor.

ORDER OF PREFERENCE		CRITERIA FOR EVALUATING ALTERNATIVES						
Most Preferred		1) Do Nothing	2) Widen to 4 lanes with Multi-use Trail on the West Side and Sidewalk on the East Side	3) Widen to 4 Lanes with Bike Lanes and a Sidewalk on the East Side	4) Widen to 4 Lanes with Bike Lanes and Sidewalk on Both the East and West Side	5) Widen to 3 Lanes with Bike Lanes and Multi-Use Trail on the West and Sidewalk on the East Side	6) Widen to 3 Lanes with Bike Lanes and Sidewalk on Both the East and West Side	
More Preferred		TECHNICAL FACTORS						
Somewhat Preferred		Addresses futuro traffic volumes and operation requirements (delay, queues, mobility)						
Less Preferred		Accommodates access to adjacent properties and operational safety						
Least Preferred		Design constraints (hydro utilities)						
		SUMMARY TECHNICAL FACTORS						
		PROBLEM STATEMENT						
		Addresses Problem Statement	No	Yes	Yes	Yes	Yes	
		SUMMARY PROBLEM STATEMENT	Not Preferred	Preferred	Preferred	Preferred	Preferred	
		OVERALL SUMMARY	Not Preferred	More Preferred	Least Preferred	Less Preferred	More Preferred	Most Preferred

For the technical environment, the Do Nothing option will maintain two-way access to driveways along the Study Area corridor and will not require the hydro poles to be relocated, however, this option does not accommodate the future traffic volumes up to the horizon year of 2042. The Do Nothing alternative does not meet the problem statement and overall is not preferred.

Alternative 6, widen to 3 lanes with bike lanes and sidewalk on both sides of West Street South is most preferred overall when compared to the other alternatives. Safety for active transportation is improved with 0.5m buffer between the bike lane and the vehicle travel lanes and anticipated traffic calming with 3 lanes. A centre-turn lane will also improve the safety of vehicle turning movements. This alternative will accommodate future traffic volumes and addresses the MTMP recommendation for protected bike lanes and sidewalks on both sides of West Street South within the existing right-of-way, without the need for property acquisition.

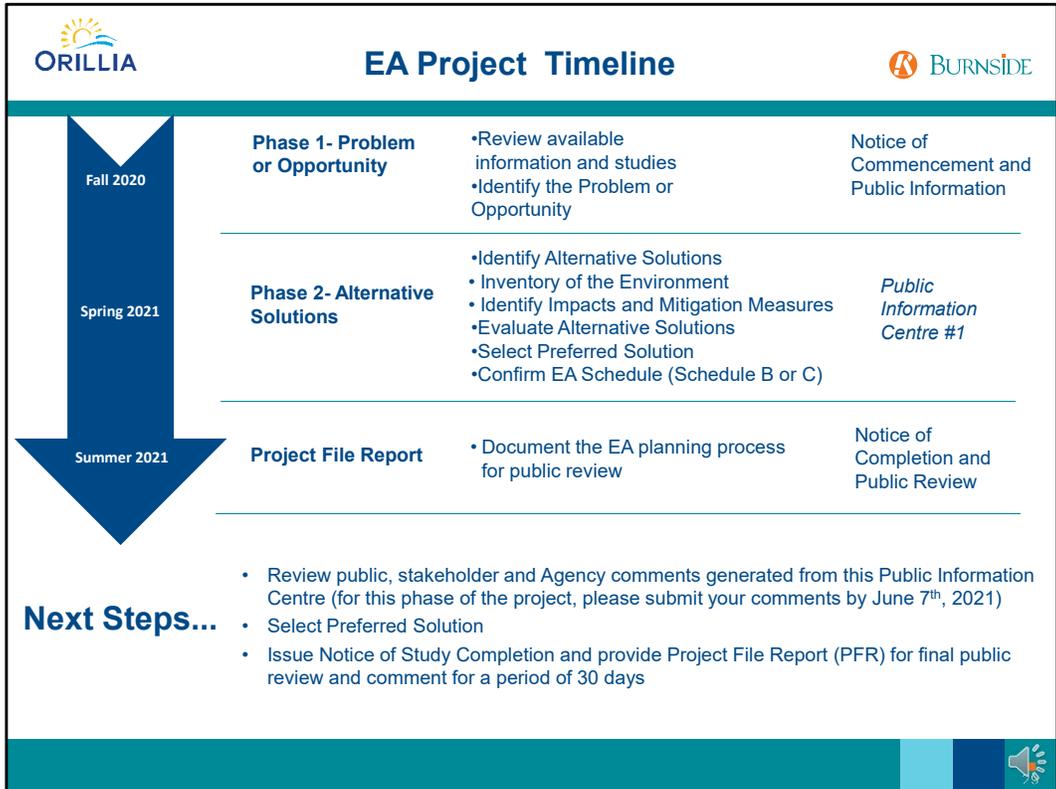
Alternative 6: Widen to 3 Lanes with On-Road Bike Lanes and a Sidewalk on Both the East and West Side



- Widen the road to a 3 lane, two-way road with curb and gutter. Narrow lanes
- Construct a sidewalk on the west side. Reconstruct the existing sidewalk on the east side
- Construct an on-road 1.5m wide bike lane with 0.5m buffer lane on both sides
- Install Storm Sewer system and review LID opportunities for roadway drainage



The preliminary preferred solution is Alternative 6, to reconstruct West Street South as a 2-lane, two-way roadway with a centre-turn lane and on-road bike lanes with a sidewalk on both the east and west side. The roadway would be reconstructed as a 2 lane, two-way road with curb and gutter. The existing sidewalk on the east side of the road would be reconstructed. Storm sewers would be installed with a review of opportunities to incorporate Low Impact Development (LID) design elements. Roadside utilities would be relocated as required to accommodate the reconstruction.



Following the input received from this PIC, the Study Team will confirm the preferred solution. The Municipal Class Environmental Assessment for West Street South was initiated with the notice of commencement issued in the Fall of 2020. The Municipal Class Environmental Assessment process, including the input from the public, agencies, Indigenous communities and stakeholders will be documented in a Project File Report and made available for public review and comment for a period of 30-days following the Notice of Completion of the project. At this time, it is anticipated that the Notice of Completion and the Project File Report will be available in the Summer of 2021.



Thank you for participating



Help shape decisions made in this Study

- Please complete the comment form available on the City's website at the link provided
- Information materials about the study will be made available online at www.orillia.ca/weststreetsouth for review and comment until June 7th, 2021
- A summary of your written comments along with responses to comments received by June 3rd will be provided in a Public Information Centre Summary report posted on the Major Project Page of the City's website

If you would like more information or if you have any questions or concerns please contact:

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Project and notice information will be made accessible upon request in accordance with the Accessibility Standard for Information and Communication under the *Accessibility for Ontarians with Disabilities Act, 2005*.

Information will be collected in accordance with the *Freedom of Information and Protection of Privacy Act*. With the exception of personal information, all comments will become part of the public record.



Thank you for participating in this Public Information Centre. We ask that you help shape the decisions made as part of this study by encouraging you to complete the comment form available on the City's website at the link provided. The presentation materials will be available on the project webpage for review and comment until June 3rd, 2021. Responses to comments received by June 3rd will be provided in a Public Information Centre Summary report along with a summary of your written comments and posted on the City project webpage. We appreciate your input and look forward to receiving your comments.