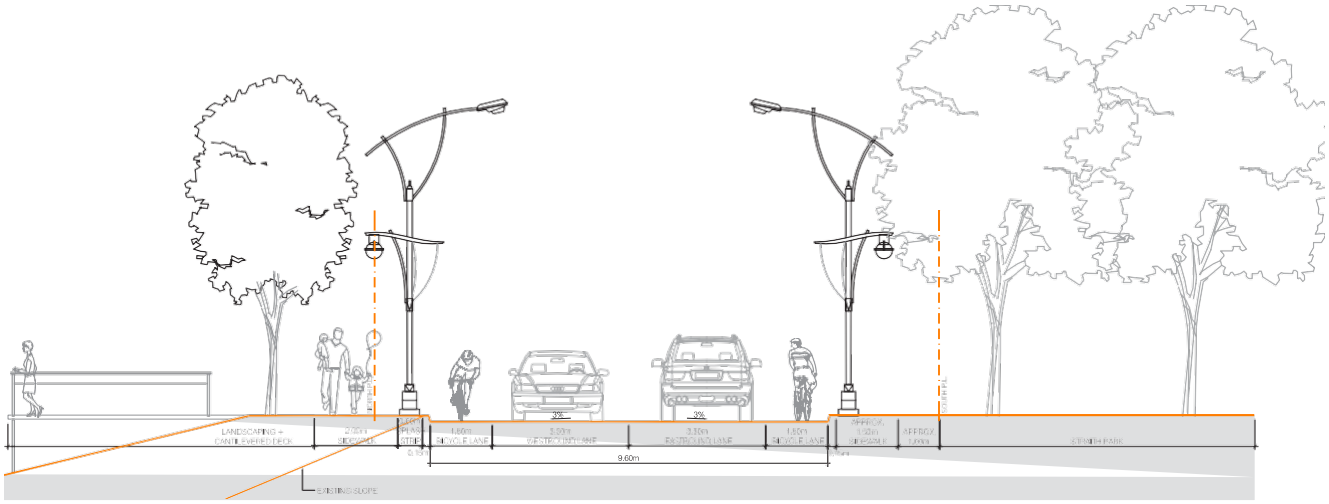
Key Impact Considerations:

Positive Impacts	Negative Impacts
• The Promenade will provide the aesthetic, visual and physical improvements to the Riverside Drive corridor west of Lincoln Road as envisioned by City Council when the CRIP plan was approved.	• Introduction of the various types and widths of Pedestrian Promenade along the north side of Riverside Drive will have significant impacts on existing vegetation, lawns and pathways on abutting riverfront parkland (see design concept plans in Appendix D). Adjustments should be made to the plan during detailed design to avoid or minimize as many of these direct impacts as possible. • The high capital cost to construct the Pedestrian Promenade as planned in the CRIP is estimated in Section 8.1).

EXHIBIT 7.4 – PEDESTRIAN PROMENADE CROSS-SECTION



Looking East at the Campbell N-2 Node

7.1.3 EXCLUSIVE ON-ROAD BIKE LANES

Six key bikeway planning principles have been followed in the designation of bicycle facilities within the preferred Riverside Drive improvement program:

1. Owing to the abundant parkland, prominent vista and continuous alignment provided along Riverside Drive, it should accommodate both utilitarian and recreational cyclists;

2. Having utilitarian and recreational cycling sharing a road with motorized traffic depends on the volume, speed and type of that traffic. In Section 5.8 of this ESR, on-road bike lanes are preferred as the best, safest form of bikeway along a road such as Riverside Drive with mixed land use and moderate traffic volumes and speeds;

3. It is advantageous to provide a choice of on-road bike lanes and off-road multi-use trails where space is available to meet the cycling needs and capabilities of a wide cross-section of cyclists and pedestrians;

4. Exclusive on-road bike lanes along the entire length of Riverside Drive from Huron Church Road to the east City boundary are recommended as part of the Bicycle Use Master Plan;

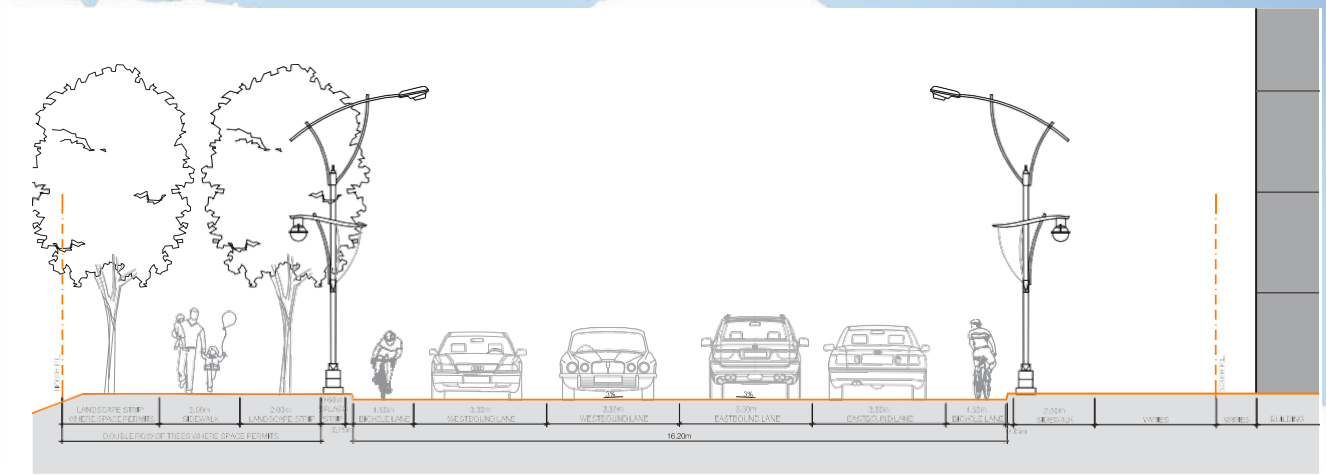
5. The basis for on-road cycling is already in place on Riverside Drive with exclusive bike lanes extending from Huron Church Road to Crawford Avenue (with one gap), and from Lincoln Road to Strabane Avenue; and

6. One important principle of bikeway planning is to make the various types of bikeways as continuous as possible. Gaps and routes where the type of bikeway changes should be avoided, say from an on-road bike lane to an off-road trail. The transition from one type of bikeway to another, going on and off the road, can be difficult to design and often induces wrong-way cycling and other poor, dangerous or illegal cycling behaviour.

Based on these principles, experience with cycling planning in other cities and public input provided as part of this EA, the extension of on-road cycling lanes on Riverside Drive through Program Section 1 forms part of the preferred solution in the downtown. For cyclists desiring a more passive cycling route through this area, they will have the choice of using either the existing off-road Recreationway trails through the riverfront parkland, or the multi-use trail planned as part of the Pedestrian Promenade between Huron Church and Cameron, Parent to Lincoln and east to Walker Road. On the sections of the Promenade between Cameron Avenue and Parent Avenue (CRIP Condition Area 1 and 2) where no multi-use trail is planned, cyclists will have on-road exclusive bike lanes added to Riverside Drive.

The minimum pavement width required to accommodate four lanes of traffic and two on-road bike lanes from face of curb is 16.2 m. This width is currently not available along most of Riverside Drive in Program Section 1, and so north side curb extensions will be required to introduce the on-road bike lanes as shown on Exhibit 7.5, staged with implementation of the Pedestrian Promenade.

EXHIBIT 7.5 – FOUR LANE PEDESTRIAN PROMENADE CROSS SECTION



For example, the existing Riverside Drive pavement width immediately east of Bruce Avenue is 14 m from face-of-curb to face-of-curb. Adding two 1.5 metre bike lanes would require remarking the four travel lanes to a minimum 3.3 m width (13.2 m total) to gain 0.8 m, and then widen the paved surface by 2.2 m to obtain the full 16.2 m width required to include the bike lanes.

Key Impact Considerations:

Positive Impacts	Negative Impacts
• Provision of expanded cycling choice and opportunities along the riverfront.	• Natural impacts on existing streetscape from widening the north side of Riverside Drive to accommodate bike lanes. • Potential impact of north side widening on archaeological resources that may be identified through Stage 2 Archaeological Assessments, especially between Parent and Pierre.

7.1.4 TRAFFIC DIVERSION

On the four lane cross-section, the inside westbound lane acts as a shared through/left turn lane for traffic turning onto the side streets. In the eastbound direction, right turns are made onto side streets without opposing traffic, shown for example on Plan 8 in **Appendix A**. This ability to conveniently turn onto the side streets from Riverside Drive supports the diversion of Riverside Drive traffic east of the core onto routes connecting with Wyandotte Street and Tecumseh Road as alternative, higher capacity routes.

The alternative of reducing Riverside Drive through Program Section 1 to two travel lanes and a centre turn lane was also evaluated, in part as a traffic calming and diversion measure, and to gain space within the existing pavement surface to include bike lanes without the need for surface widening. This alternative was not selected because to reduce this capacity would impact safe and efficient traffic flow not only on Riverside Drive, but also on Wyandotte Street as the parallel route, and on connecting side streets. Casino Windsor also noted concerns

about any capacity reduction, unless it was limited to the section east of Glengarry Avenue to avoid Casino access congestion.

Key Impact Considerations

Positive Impacts	Negative Impacts
Retention of traffic capacity on Riverside Drive and turning capabilities to divert traffic south to the Wyandotte Street and Tecumseh Road routes.	

7.2 Program Section 2: Lincoln Road to Strabane Avenue

With the riverfront trail system shifting from the north side Recreationway along Riverside Drive to the south side Recreationway at Lincoln Road, the character of Riverside Drive also changes from that of a downtown fringe area into the Hiram Walker/Walkerville industrial area. The passive residential condition of the Pedestrian Promenade also changes to industrial east to Walker Road in the CRIP plan, and extends further east to Strabane Avenue.

721 NODES

With the industrial nature of Program Section 2 and no public parkland on the north side of Riverside Drive, three pedestrian crossing and streetscaping nodes are recommended:

Location	Stop Control Type	Node Type & Associated Crossing Requirement
Devonshire Road	None	N-3
Walker Road	Signal	N-
Strabane Avenue	Signal	N-2

The existing signalized intersections at Montreuil Avenue and Drouillard Road currently provide pedestrian crossing control for Hiram Walker employees, and so nodes are not recommended at these locations. However, any future redevelopment proposals in this area may provide new opportunities for inclusion of Riverside Drive nodes at these two intersections

Key Impact Considerations:

Positive Impacts	Negative Impacts
▪ Addition of a an exclusive eastbound right turn lane at the Walker Road node to encourage traffic diversion off Riverside Drive as shown in Sheet 10 in Appendix A. ▪ Avoids any road widening requirements in proximity to the Hiram Walker Administration Building (circa 1892). ▪ Improves pedestrian crossing safety for area employees to from south side parking lots.	▪ Requires acquisition of a strip of property on the southeast corner of the Devonshire Road intersection measuring an average 2 m x 70 m to accommodate the N-3 median refuge. Strips of property between 1-2 m wide are also required on the north and south side of the Walker Road intersection as shown on Sheet 10 in Appendix A. The properties are owned by Ford of Canada and Hiram Walker respectively.

7.2.2 RIVERSIDE DRIVE PEDESTRIAN PROMENADE

The planned Pedestrian Promenade is combined into the riverfront pedestrian/Recreationway (off-road trail) which separates at Lincoln Road, with the Recreationway continuing east as the two on-road bike lanes and associated sidewalks.

723 EXCLUSIVE BIKE LANES

On-road exclusive bike lanes are already included on Riverside Drive from Lincoln Road east to Strabane Avenue.

724 ROAD RECONSTRUCTION

The section of Riverside Drive between Devonshire Road and Montreuil Street is rated in poor physical condition with significant block and traverse cracking, poor riding surface and some settlement. This section should be reconstructed within the existing right-of-way as recommended in Section 6.2 of this ESR. This reconstruction alone, without bike lanes or traffic calming features, could be accomplished without the need for an Environmental Assessment approval.

725 SIDEWALK ADDITION

Program Section 2 currently includes a continuous sidewalk along the south side of the Riverside Drive right-of-way, and a partial sidewalk on the north side between Devonshire Road and mid-block between Walker Road and Drouillard Road, east of Montreuil Avenue. Since the north side gap in the sidewalk shows signs of use by pedestrians, and with a major parking lot located on the south side of Riverside Drive between Montreuil Avenue and Drouillard Road, a north side sidewalk extension is preferred in this section. The need for further sidewalk extension to the east along the Ford of Canada property will be dependent on redevelopment plans for the lands along the north side of Riverside Drive. Should further property redevelopment on the north side of Riverside Drive provide the need and opportunity for sidewalk extensions, this can be accommodated through the site plan and development process.

Similar signs of pedestrian movement along the north side of Riverside Drive are present between Lincoln Road and Devonshire Road where there is no sidewalk. It is recommended that a north side sidewalk be added to this section in response to existing pedestrian travel patterns in the Hiram Walker and Great West Park areas.

Key Impact Considerations:

Positive Impacts	Negative Impacts
Extension of the north side sidewalk along Riverside Drive in Program Section 2 will enhance pedestrian safety and mobility, and can be accommodated within the existing road right-of-way.	

7.3 Program Section 3: Strabane Avenue to Lauzon Road

At Strabane Avenue, the character of Riverside Drive changes significantly from that of a Scenic Drive and Civic Way through the downtown area and Walkerville industrial area, to a Scenic Way through a residential community. It provides residential access along this section, as well as access to the City's extensive riverfront public parkland.

Conversely, it is in Program Section 3 where most physical roadway improvements are needed along Riverside Drive, including resurfacing, consistent barrier curb work and improvement to the existing continuous south side sidewalk. As a residential and parkland street, this section of Riverside Drive also contains 77 street trees on the north side and 95 trees on the south side abutting or near the road right-of-way.

7.3.1 NORTH SIDE SIDEWALK

With a continuous south side sidewalk currently in place in Program Area 3, it is proposed that a north side sidewalk be added to Riverside Drive only in the following two (2) locations abutting public parkland between Strabane Avenue and Lauzon Road as shown on the concept plans 12-13 and 19 in Appendix A. They are intended to provide a safer and more comfortable environment for pedestrian movement along park edges:

1. Between the N-2 node at Strabane Avenue and the N-3 node at George Avenue along the south edge of Alexander Park since there is no parallel off-road pathway provided; and

2. From an N-3 node at Fairview Place to the mid-block N-3 node at Kiwanis Park along the south edge of Bridges Bay Park.

No further north sidewalk addition is recommended in Program Area 3 as most of the remaining abutting lands are residential properties.

Key Impact Considerations:

Three alternative concepts were evaluated regarding new north side sidewalks in Program Section 3 from Strabane to Lauzon

1. PARTIAL NORTH SIDE SIDEWALK:

Positive Impacts	Negative Impacts
• Most additional north side property required to accommodate the widened Riverside Drive cross-section (2 travel lanes, 2 bike lanes, 2 sidewalks, curbs, boulevards) is located within the existing road right-of-way. • Enhances pedestrian access along the parkland after dark. • No street tree impacts. • Most park features are located outside the road right-of-way.	• Encroachment of the Riverside Drive cross-section up to 5 m north into parkland will impact directly on some streetscape and natural features. • The amount of parkland encroachment between Strabane and Lauzon for north sidewalks is estimated to be 1.7 ha.

2. FULL NORTH SIDE SIDEWALK

Positive Impacts	Negative Impacts
Best responds to Official Plan policies regarding pedestrian movement, including: *Section 7.2.3.1 on Pedestrian Movement indirectly supports sidewalks on both sides of Riverside Drive stating, "Council shall require all proposed development and infrastructure undertakings to provide facilities for pedestrian movements wherever appropriate".* Section 7.2.3.2 requires sidewalks in new developments as follows: i) on both sides of ... Scenic Roads; a) give priority to completion of pedestrian networks in areas where there is significant vehicular and pedestrian traffic and the above-noted policy has not been met.	Based on public feedback and existing conditions, a continuous north side sidewalk abutting multiple residential properties is not interpreted as being "appropriate" along Riverside Drive. Encroachment into public parkland along the north edge of Riverside Drive. Capital cost of sidewalks where not appropriate. Direct impacts on private landscaping and parking areas that encroach into the north edge of the Riverside Drive right-of-way.

3. No North Side Sidewalk Extensions

Positive Impacts	Negative Impacts
No additional capital costs in Road Improvement Program. No encroachment into abutting parkland.	Accessibility limitation along park edges.

7.3.2 NODES

East of the N-2 Strabane Avenue node, four (4) N-3 nodes, three (3) N-2 nodes and one primary N-1 are recommended as follows to provide strategic pedestrian crossing opportunities, to link north side sidewalk sections and prominent parkland vistas and to provide visual, tactile and delay traffic calming effects to the traffic progression along this section of Riverside Drive:

Location	Stop Control Type	Node Type & Associated Crossing Requirement
George Avenue	None	N-3
Pillette Road	Signal	N-1
mid-block between Reaume Park and Coventry Park	None	N-2 requiring a mid-block pedestrian signal
Ford Boulevard	None	N-2 requiring a mid-block pedestrian signal
Fairview Boulevard	None	N-3
Kiwanis Park	None	N-3
Lauzon Road	Signal	N-2

Key Impact Considerations:

Positive Impacts	Negative Impacts
• Two N-2 nodes with ll% signals between Strabane and Lauzon will not adversely delay the flow of traffic on Riverside Drive. • Traffic calming effects of the N-2 and N-3 nodes are intended to slew travel speed. • All nodes with improved road cross-section can be contained within the existing Riverside Drive Right-of-Way.	• A N-2 node is included at Lord Boulevard to access the existing trailhead at Coventry Gardens, and as part of the node progression along this section of Riverside Drive. However, the horizontal curve of the Drive between Ford and Buckingham limits sight distance to the node. Removing the node at Ford was evaluated, plus options to realign the Riverside Drive alignment either slightly to the north encroaching into about 110 m2 or 0.1 ha of Coventry Garden parkland, or south encroaching on private property to lengthen the eastbound line of sight. Realigning the road slightly through Coventry Garden as shown on Sheet 14-15 in Appendix A was selected as the preferred solution with the least impacts, requiring no acquisition of private property The driveway at 5310 Riverside Drive on the north side encroaches about 4 m into the road right-of-way. Widening the roadway curb-to-curb width to accommodate the preferred cross-section will cover this encroachment, shorten the available driveway parking space and reduce the line-of-sight for vehicles backing out of the driveway. While the reduction in driveway depth cannot be avoided, a suitable line of sight can be maintained by reducing the height of the front yard wall at the front edge of the adjacent property at 5324 Riverside Drive and clearing some associated vegetation. To accommodate the wider cross-section, the following strips of residential property will be required either through property acquisition or conveyance: A strip of property approximately one (1) metre wide from municipal address 4590, 4620 and 4670 Riverside Drive to include the new N-1 node at Pillette Road (see Sheet 14) estimated 91.5 m2 in total size; A small 40 m2 triangle from the front edge of municipal address 7180 Riverside Drive at Isabelle Place (see Sheet 18) estimated to be 23.6m2 in size; and A strip approximately one (1) metre wide from the south edge of municipal address 7380 Riverside Drive and a small portion of the south edge of the lot to the west (see Sheet 19) estimated to be 58 m2 in size.

7.3.3 BIKE LANES

On-road marked bike lanes 1.5 m wide on each side of the Riverside Drive pavement surface are recommended along the entire length of Program Section 3. This space should also use coloured asphalt to visually highlight the cycling lanes. The remainder of the 13.6 m public right of way would contain two 3.3 m travel lanes, new barrier curbs, a 1.5 m south sidewalk and associated boulevard space needed to accommodate utilities (see previous Exhibit 5.5).

During the detailed design stage, if any short section of the widened Riverside Drive cross-section is identified as requiring removal of major street trees, or having other localized property impacts, the City should consider two options regarding bike lanes:

1. negotiate an easement or other conveyance for sidewalks to be located on short sections of abutting private property; or

2. transition the bike lanes into short sections of shared bike/auto lanes on the Drive over a distance not to exceed 50 metres (typically half a residential block). Using 4.2 m wide shared travel lanes marked for both motor vehicles and cyclists to share, the minimum 13.6 m right-of-way width can be further reduced to 12.5 m to avoid restrictive conditions and associated impacts. These potentially narrowed shared sections are described as follows

Shared Lane Option

As with bike lanes, a shared lane section has cyclists travelling in the same direction as the motor vehicles. The Highway Traffic Act Rules of the Road require motorists to pass with care, allowing the cyclist sufficient room on the roadway, which may require them to encroach on the opposing lane if it is safe to do so.

The Transportation Association of Canada (TAC) has developed a new pavement marking, *bicycle with chevrons* for the expected position of a cyclist in a wide, shared-use lane. These markings will also serve to make wide, shared use lanes more visible to all road users, such as with the markings for bike lanes, promoting cycling in that particular corridor.

Wide, shared-use lanes should be at least 4.0 m wide but not wider than 4.5 m. The desirable minimum width is 4.2 m. Lane widths greater than 4.5 m should be avoided as this may result in two motor vehicles sharing the lane side-by-side.

The new TAC marking standard requires that if the shared-lane narrows to less than 4.0 m over a section of roadway not more than 500 m long, and the posted speed is 50 km/h or less, the *bicycle with chevrons* symbol can be used in the middle of the lane to indicate that the cyclist and motorist should operate in single file with the cyclist positioned in the middle of the lane. Passing of the cyclist in the same lane would be prohibited in the narrow section

Key Impact Considerations

Some Resident Concerns - The inclusion of exclusive on-road bike lanes on Riverside Drive East has been a major community issue in this Riverside Drive VIP EA project, as well as previous City plans to improve Based on public input provided in the project, the public appears somewhat polarized between residents of Riverside Drive City rt on-road bike lanes, and some residents primarily residing or the Drive who oppose such lanes as being either unsafe or unnecessary. The following sum main concerns that those opposing the lanes have expressed, marily between Strabane and St. Rose within Program Section

Resident Concern	Response
Bicycles have no right to be on the road.	In Ontario, cyclists have the same rights and responsibilities as drivers of motor vehicles under the Highway Traffic Act (HTA). Bikeway designs must reinforce cycling behaviour that is compatible with the regulations of the HTA. Generally, cyclists are to ride as far to the right as practical. This means that there will be circumstances when it is not practical to ride to the right, such as when making left-turns, avoiding hazards on the right, passing slower vehicles, riding in a lane that is too narrow to share with motor vehicles, etc.
There are no set rules on how to provide cycling on roads.	As previously reported in Section 5.8 of this ESR, there are numerous provincial, national and international sources of guidelines available to assist planners and engineers in designing bikeways. For example, pavement markings and signage for bikeways must follow the Transportation Association of Canada's (TAC) Bikeway Traffic Control Guidelines for Canada (December 1998) and update Guidelines for the Design and Application of Bicycle Traffic Pavement Markings.
The Windsor Bicycle Use Master Plan directs bicycles to Wyandotte Street, not Riverside Drive.	In east Windsor, the BUMP plans bike lanes on both Riverside Drive and Wyandotte east of Strabane. This is because cycling access is needed to the extensive parkland, vistas and other public attractions along Riverside Drive, and with a link to the Ganatchio Trail. Bike lanes on Riverside Drive East are intended to provide for this riverfront-related cycling, in association with lanes for more utilitarian cycling along Wyandotte Street East.
Cyclists are a vocal minority, and there is ittle demand for bike lanes on Riverside Drive.	Community surveys conducted as part of the BUMP show there is considerable community support for the provision of more cycling facilities, such as bike lanes or multi-use trails in the City.
Bike lanes will increase traffic speeds and volumes on Riverside Drive	A spokesperson for some Riverside Drive East residents has said that they do not oppose cycling generally or even specifically on the Drive, but differ on the "configuration of the cohabitation". They are concerned that such facilities may result in increased motor vehicle traffic and speed, and also may change the character of this particular section of Riverside Drive. These concerns have not been substantiated to date, and are not supported by technical research.

Resident Comment	Response
To achieve a win-win solution for Riverside Drive, a discrete multi-use recreational pathway should be provided by expanding the south sidewalk	Section 5.8.3 of this ESR reports on the dangers of using a multi-use two-way pathway (called a sidepath) on roads such as Riverside Drive that have many intersecting street and driveway conflict points. To reiterate, this project evaluated the suggested use of this sidepath as a widened sidewalk on either the south or north side of the right-of-way, separated from or abutting the curb and road surface. The Project Team has concluded that this option cannot be supported in the context of Riverside Drive for the reasons reported in Section 5.8.3 of this ESR.
Other cities don't encourage on-road cycling, so why should Windsor?	There are many examples in Ontario and across North America where both on-road bike lanes and off-road trails are provided. Ontario examples include Alta Vista Drive in Ottawa, Can-Amera Parkway in Cambridge, Ira Needles Boulevard in Kitchener, Queens Quay in Toronto and Northshore Boulevard, North Service Road, Appleby Line and Walkers Line in Hamilton. There are also some very busy off-road trails where some cyclists prefer to ride on the road, for example along the Niagara River Recreation Trail, the Parkway along the Ottawa River and Rideau Canal in Ottawa and the Seaside Trail in Vancouver.
Existing bike lanes on Riverside Drive are underutilized because they "go nowhere and end nowhere".	This is the case today with the Riverside Drive bike lanes west of the downtown and from Lincoln Road and Strabane Avenue. The intent is to extend these bike lanes on Riverside Drive so that they eventually connect to all attractions and destinations along the Drive. Riverside Drive is an important connection between the City's central riverfront and the Ganatchio Trail, and will significantly enhance Windsor's Trail and Cycling network as a major amenity for both residents and tourists.
Riding a bicycle on a road like Riverside Drive is inherently dangerous.	There are risks associated with all modes on travel anywhere, but they can be minimized by following appropriate design, operation and behaviour requirements. The concept of "safety in numbers" has also been proven for vulnerable road users including cyclists. The likelihood that a given person bicycling will be struck by a motorist varies inversely with the amount of bicycling. This pattern is consistent across communities of varying size, from specific intersections to cities and countries, and across time periods. Policies that increase the numbers of people bicycling appear to be an effective route to improving the safety of people bicycling.
Cyclists should stay on the Ganatchio Trail and other off-road trails.	The Ganatchio Trail is used by cyclists, rollerbladers, skateboarders, pedestrians, adults and children. With this mix of users and age groups on this and other mixed use trails, the provision of on-road bike facilities provides an alternative choice for more utilitarian cyclists.

Resident Concern	Response
How can taxes be spent on bike lanes that serve a very small special interest group?	Bike lanes broadcast to the community that bicycles are an important part of tra for both those who ride now and those who would like to ride. Communities have demonstrated that a connected network of on-road bike lanes increases the number of cyclists, and with an increasing number of cyclists comes further improvements in their safety, and a move towards a more balanced transportation system, improved air quality and healthier residents. Other cities have seen an increase in cycling volumes by 50% to 150% after bike lanes have been installed, showing that there is a latent demand for this type of investment.
Wyandotte Street East should be the main commuter route and bicycles.	Wyandotte Street East is expected to be a major east-west route for Windsor cyclists and a key part of the spine of the network. Although this route is in close proximity and parallel to the proposed Riverside Drive bike lanes, it does not access the riverfront parks, vistas and other public attractions that attract many cyclists to the Drive.
Adding bike lanes to Riverside Drive creates the equivalent of 3 auto travel lanes to serve more traffic at higher speed.	The primary objective in improving Riverside Drive is to maintain and even reduce traffic volume and speed. Bicycle lanes are intended for bicycles only, and cannot be reverted to auto use as they are too narrow by today's standards for vehicle travel lanes.

Street Tree Impacts – Another major concern of area residents is the loss of existing street trees that would result from a widened Riverside Drive cross-section. As previously reported in this document, the preferred Riverside Drive cross-section can fit within almost all of the existing public right-of-way of Riverside Drive, except in the vicinity of some parkland, at five (5) residential lots and at the Hiram Walker area between Devonshire Road and Walker Road. As a result, the required removal of any existing street trees necessitated by this improvement program is extremely limited. All trees are located outside the right-of-way, but some older trees have grown and encroached onto the right-of-way edge and would restrict road widening. This is expected to occur to the following **8 to 11 trees** depending on whether sidewalk easements or other conveyances can be negotiated with property owners in cases:

Status	Location		Code
Trees to be Removed:	5340 Riverside Drive @ Ford Blvd.		N108
	5745-5777 Riverside Drive west of Reedmere Ave.		S040-S046
	Sub-total:	8	
Trees to be Removed unless Sidewalk Conveyance Available:	SE Corner Riverside Drive & Thompson		S056
	NE corner of 211 St. Louis Avenue		S047/48
	Sub-total:		

Maps of these expected tree removal impact locations are included in the Street Tree Direct Impacts section of **Technical Appendix Volume 1**

7.3.4 SOUTH SIDEWALK, BARRIER CURB AND ROAD RECONSTRUCTION

Parts of Riverside Drive East in Program Section 3 are in poor physical condition with severe cracking, differential settlement, serious rutting and associated poor rideability, primarily between George Avenue and Ford Boulevard, and from Esdras Place to St. Rose Avenue. Subject to EA approval, reconstruction of these roadway sections will be staged in association with required improvements to the south sidewalk, and reconstruction of a barrier curb along the section with curb cuts for driveways and streets.

Key Impact Consideration

Since barrier curbs are not present along most of the Riverside Drive north edge in Program Section 3, the current mountable curb allows many abutting residents to park vehicles on part or all of the remaining road right-of-way parallel to the street, and to use the right-of-way space to advance into the traffic flow rather than backing out into traffic. By installing barrier curbs, these practices will no longer be possible. While the result is a more attractive, less cluttered streetscape with less physical and visual obstructions, some residents may object to the loss of parking space, even though it is on public property.

7.3.5 TRAFFIC CALMING

The introduction of selected traffic calming features to Riverside Drive East in Program Section 3, as well as Sections 4 and 5 is recommended in order to; 1) reduce travel speeds within the primarily residential area, 2) enhance cycling safety along the recommended Riverside Drive bike lanes and 3) encourage through traffic to divert to a more convenient Wyandotte Street East (see more on associated Wyandotte Street improvements in Section 7.3.6).

The evaluation of alternative solutions screened out the use on Riverside Drive of any obstructive traffic calming measures such as directional closures, full closures and traffic diverters, plus most vertical deflections including speed humps and rumble strips to reduce traffic volumes and “calm” the street. In section 5.5 of this ESR, the types of vertical and horizontal traffic calming measures selected for further consideration on the Drive are:

Vertical Deflections	Horizontal Deflections
Raised Crosswalks	Traffic Circles
Raised Intersections	Raised Median Islands
Textured Crosswalks	

During the preparation of design concept plans as part of this EA, opportunities were investigated as to where these types of traffic calming measures could be best located with the sections of Riverside Drive east of Strabane Avenue. The following summarizes the findings and conclusions of this design exercise: