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1 EXECUTIVE SUMMARY

London’s Rapid Transit Initiative Transportation Master Plan (2017) (RTMP) Streetscape Appendix provided a vision for the Rapid Transit (RT) Boulevard. This Streetscape Appendix continues where the RTMP Streetscape Design for Rapid Transit Appendix left off, presenting a more detailed streetscape approach.

The London RT EPR Streetscape Design Appendix outlines:

- The design objectives for Rapid Transit Streetscaping, including an overview of the vision, policy context, principles, and design approach and strategy;
- A preliminary streetscape design, including an overview of key elements and initiatives; and,
- Eight areas of conceptual demonstration, including an analysis and conceptual design representing various scenarios along the corridors:
  - King Street and Wellington Street Intersection;
  - White Oaks;
  - Oxford Street and Wonderland Road Intersection;
  - South Street and Wellington Street Intersection;
  - Western Fair;
  - Richmond Street and Grosvenor Street;
  - Fanshawe College; and,
  - Western Road and Lambton Drive.

2 DESIGN CRITERIA

2.1 STREETSCAPE VISION


Rapid Transit corridors have transformative potential to create vibrant streetscapes that cater to all users and encourage mixed-use intensification in key areas. As the RTMP describes, Transit Villages and BRT corridors have the potential to:

- Encourage transit oriented mixed-use development and intensified urban form;
- Provide an enhanced pedestrian realm, including continuous pedestrian clearways, public spaces and amenities;
- Provide infrastructure for active transportation;
- Optimize tree canopy and green infrastructure; and,
- Provide flexible open spaces to encourage a lively community.

The RTMP continues to describe that,

“BRT corridors and Transit Villages should not only provide safe and efficient transportation, but also provide vibrant places that encourage a strong sense of community, active transportation and the greening of the City of London. This vision for the London BRT can be reached through employing Complete Streets and Transit Oriented Development Urban Design Principles.”

The design of the BRT corridors works towards achieving the corridor vision through a set of key design principles.
2.2 DESIGN PRINCIPLES

In order to achieve The London Plan’s vision for Rapid Transit Corridors, as well as the RTMP’s vision for a complete street with Rapid and Effective Transportation, Environmental Resilience, and Connected Urban Communities, the following design principles are employed:

- Balanced Multi-Modal Transportation;
- Environmental Resilience;
- Lively Sense of Place; and,
- Safe for All Users.

Refer to the Streetscape Design for Rapid Transit in the RTMP for more information on the streetscape design principles.

2.3 POLICY CONTEXT

The streetscape design for Rapid Transit Corridors should uphold the initiatives set out within existing City of London policy documents. Relevant documents include:

- The London Plan (2016)
- London ON Bikes: City of London Cycling Master Plan (2016)
- Secondary Plan - London Psychiatric Hospital Lands (2016)
- Creating Dundas Place: A Flexible Street Scoping Study (2015)
- City of London Urban Forest Strategy: Enhancing the Forest City (2014)
- A New Mobility Transportation Master Plan for London: 2030 Transportation Master Plan Smart Moves (2013)
- Downtown London: Heritage Conservation District Plan (2013)
- Downtown London: Our Move Forward (2013)
- Regeneration South of Horton Street: A Community Improvement Plan for London’s SoHo District (2011)
- City of London Placemaking Guidelines (2007)
- Heritage Community Improvement Plan (2007)
- Old East Village Community Improvement Plan (2005)
- Downtown London Community Improvement Plan (1996)

The policy framework and recommendations set out by these documents have informed the Streetscape approach of the BRT corridor streetscapes and Transit Villages. For a brief summary of the most relevant aspects of The London Plan, refer to Streetscape Design for Rapid Transit in the RTMP.

The BRT corridors and the Transit Villages’ urban design is also informed by Urban Design best practices, guidelines and standards, including AODA and City of London street trees planting requirements.
2.4 STREETSCAPE STRATEGY AND APPROACH

The London Plan classifies most BRT corridors as Rapid Transit Boulevards. The Plan describes Rapid Transit Boulevards with the following:

- **a. Priority on through movement and connection to/of transit vehicles**
- **b. Moves high volumes of traffic (pedestrian, cycle and vehicular)**
- **c. Very high-quality pedestrian realm**
- **d. Very high standard of urban design**

According to The London Plan, Rapid Transit Boulevards have a planned street width of 50 m and are eligible to include a streetscape design elements including cycling facilities, sidewalks, street trees, street furniture, pedestrian scale lighting, landscape planters, grass boulevards, enhanced cross-walk treatments and low impact development (refer to Part 5 of The London Plan for more details).

As Streetscape Design for Rapid Transit outlines, the streetscape condition should not only uphold Complete Streets principles and best practices, as well as The London Plan’s vision for a Rapid Transit Boulevard, but also respond to the present and future surrounding land uses and available right of way. Through responding to the surrounding land use context, the streetscape can cater to the specific needs of the community.

The BRT corridors should respond to the corresponding Place Types outlined in The London Plan. Place Types provide a vision for the future of the City of London. As The London Plan describes, each Place Type provides a framework for “the range of permitted uses allowed, the expected intensity of development, and the envisioned built form that is intended within that given place type.” Through following Place Type designations, the BRT corridors will aid in achieving the vision for the future of the City of London and ensure that the corridors are harmonious with future uses.

In line with the Place Types, BRT corridors are categorized into the following typologies in Streetscape Design for Rapid Transit:

1. Downtown;
2. Transit Village;
3. Rapid Transit Corridor; and,
4. Institutional (Note: the RTMP does not define Institutional cross-sections, which will be developed in consultation with Western University).

These Place Types account for the majority of the BRT corridor. In occasions where another Place Type is located directly adjacent to the BRT corridor, the guidelines and policies set out for the Place Type should inform the streetscape design and all future development.
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As The London Plan explains, not all segments of the Rapid Transit Corridors “will be the same in character, use and intensity.” Due to the specific contexts along the Rapid Transit Corridors, these areas contain differing active transportation facilities, such as cycle tracks and a multi-use paths that responds to a more detailed contextual analysis along the corridors. The following conditions are employed for Rapid Transit Corridors:

- Standard Condition;
- Standard Condition with Multi-Use Path; and,
- Standard Condition with Cycle Tracks.

The Streetscape Typologies’ ideal mid-block conditions are outlined in Streetscape Design for Rapid Transit, as well as their proposed geometry at stop areas at intersections. These cross-sections present a general guideline for the streetscape geometry. Specific contextual conditions and relevant plans and policies should be taken into account, while employing the Streetscape Typologies. For any elements outside of the right of way necessary for the RT corridor streetscape elements, refer to The London Plan Place Types, Urban Design Guidelines and Secondary Plans.

2.5 STREETSCAPE STRATEGY AND APPROACH

In keeping with the London Plan, the over-arching plan for civic infrastructure along Rapid Transit Boulevards and in the area of Transit Villages is to create high quality urban spaces. The implementation of rapid transit combined with the policies in the London Plan are expected to inspire Transit Oriented Development along the corridors and nodes. As redevelopment and intensification begins, site design and building form will be integrated with the public realm in a manner that is pedestrian, cycling, and transit supportive.

Implementation of the rapid transit network must have regard for both existing and future land uses along the corridor. While all design features of a rapid transit boulevard should be considered during detail design and construction, there may be instances where certain elements are not achievable based on specific context. In some cases, where the existing RT corridor has or supports an urban cross-section, the project will optimize use of RT Boulevard design elements as part of initial construction. While in other cases, construction of certain RT Boulevard design elements will be coordinated with future development applications to optimize integration and to reduce throw-away costs.

3 STREETSCAPE DESIGN

3.1 INTRODUCTION

This section provides an overview of the streetscape design within the BRT corridors, with design guidelines for the streetscape elements. This section presents the standard approach to be implemented along the streetscape. Context-specific elements and surroundings, such as existing right of way width, hydro-poles, and surrounding built form, will impact how the streetscape design manifests along the corridor. For illustrated examples of how the streetscape elements may be accommodated within specific areas along the BRT corridor, refer to the Areas of Conceptual Demonstration section.

3.2 STREETSCAPE ELEMENTS

In order to achieve the BRT corridor vision and create a complete street, the following elements should be incorporated into BRT streetscapes, where context-appropriate and/or possible:

- Sidewalk;
- Cycling Facility;
- Planting Zone or Planting and Furnishing Zone;
- Streetscape Furnishing;
- Street Lights;
- Public Art; and,
- Medians.

3.2.1 Sidewalk

A continuous pedestrian clearway must be provided on both sides of the street along all BRT corridors. Sidewalks should typically have a minimum clearway width of 2.0 metres, however there is potential to reduce the width to a 1.5 metres minimum clearway in more constrained environments.

Sidewalks will provide a continuous pedestrian clearway for users and should instill pedestrian priority. Pedestrian priority should be provided through the continuation of sidewalk materiality through all driveways and clearly marked crosswalks at intersections.

All sidewalks must meet AODA requirements. AODA adherence includes the following measures (refer to Ontario AODA Guidelines for the most up to date and accurate information):

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- Maintain a minimum clear width of 1.5 metres;
- Maintain a walkable slope (maximum cross slope of 1:20 and maximum running slope or 1:20 unless the adjacent roadway is steeper);
- Ensure a firm, stable and slip resistant surface; and,
- Provide curb ramps at intersections with a tactile warning strip and high tonal contrast.

BRT corridor sidewalks should have a distinctive look and feel, with a consistent banding pattern along the streetscape in key areas (i.e. Downtown Place Types and around curbside BRT stops). Typical sidewalks will consist of concrete with coloured concrete banding at stop areas. In areas that are marked by significant foot traffic, specialized unit pavers will be used along the pedestrian clearway, with accent unit paving banding. Accent banding should correspond with tree placement.

### 3.2.2 Intersections

Pedestrian priority shall be provided at intersections to encourage safe crossing. Intersections can encourage safe crossing by providing the following:

- A ramped pedestrian clearway that leads to cross walks;
- A tactile warning strip with a differentiated tone to signify to users the beginning of the roadway;
- Clearly delineated crosswalks with a minimum 3.0 metres width that meets AODA standards of colour contrast and slip-resistant surface material; and,
- Clearly marked cycling facility crossings, where applicable.

### 3.2.3 Cycling Facilities

Cycling facilities should be provided along BRT corridors, as outlined in London ON Bikes: City of London Cycling Master Plan. Transit Villages should incorporate cycling facilities wherever possible.

Cycling facilities will adhere to the standards set out in the Ontario Ministry of Transportation Bikeways Design Manual (2014) and/or the Ontario Traffic Manual Book 18: Cycling Facilities (2013) (refer to these documents for the most up to date, accurate guidelines).

London ON Bikes: City of London Cycling Master Plan delineates proposed bicycle facility routes including the recommended type of facility. These routes and types shall be adhered to wherever possible within the BRT corridors, barring extenuating circumstances. Cycling facilities can take the form of the following:

#### 3.2.3.1 Multi-Use Path

A multi-use path (MUP) provide an active transportation connection that is shared between cyclists and pedestrians. MUPs are appropriate for areas that are less urban and frequented by active transportation users, such as along parks or conservation areas. Multi-use paths should be a minimum of 3.0 metres wide and should contain clear signage and surface markings to indicate cycling and pedestrian use. MUPs are typically constructed of asphalt, with a potential to utilize permeable asphalt.

#### 3.2.3.2 Cycle Track

A cycle track is a cycling facility that has physical separation from the roadway. Cycle tracks are ideal for roadways that have a significant volume of cyclists, vehicles, and pedestrians. Depending on the context and right of way, cycle tracks are raised either to sidewalk level, or between the roadway and the sidewalk. Unidirectional cycle tracks are typically 1.5-2.0 metres wide, with bi-directional cycle tracks are typically 3.0-4.0 metres wide.

#### 3.2.3.3 Bike Lane

Bike lanes are cycling facilities within the roadway that are delineated by pavement markings or physical separation such as bollards, curbs or planters. Bike lanes are appropriate for roadways with significant cyclist presence that do not have space or budget for cycling tracks. Bike lanes are typically 1.5-2.0 metres wide.

#### 3.2.3.4 Sharrow

Sharrows are markings along the roadway that indicate the presence of cyclists on the road. Sharrows are appropriate for roadways that have cyclist presence on them, but do not have sufficient room in the right of way for separated cycling facilities. Sharrows should not be used on roadways with high roadway speed (typically over 60 km/h). Sharrow marking are located along the curbside lane, with a centre point 1 metre from the curb. Sharrows typically require a wider lane width, from 4.0-4.5 metres wide.

#### 3.2.3.5 Bicycle Parking

Bicycle posts and/or racks should be incorporated throughout the BRT corridors within the Planting and Furnishing Zone, clustering about popular destinations such as schools, community and service centres, and retail. Bicycle parking shall be provided in close proximity to the BRT stops.

#### 3.2.4 Planting and Furnishing Zone

A Planting and Furnishing Zone should be incorporated into urban environments where there is space within the right of way. Planting and Furnishing Zones should typically be located between the sidewalk and the curb, to provide extra buffer space between the pedestrian clearway and the...
roadway. There are some circumstances where the Planting and Furnishing Zone will need to be located on the other side of the sidewalk, such as in occasions where there is not currently room in the right of way, however space is gained through new development to enhance the streetscape.

The Planting and Furnishing Zone will consist of hardscape material (unit pavers in highly urban downtown locations and concrete in others) with street trees planted in grates, or in planters, spaced between 7.0 to 10.0 metres on centre. The Zone will also contain lighting and street furnishing such as: benches, waste receptacles, and bike parking.

3.2.5 Planting Zone
Along less urbanized areas of the corridor, such as residential neighbourhoods, where there is space in the right of way, a Planting Zone will be implemented in place of the Planting and Furnishing Zone. The Planting Zone shall be a minimum width of 1.5 metres, and typically consist of sod with street trees planted 7.0 – 10.0 metres on centre.

3.2.6 Streetscape Furnishing
Streetscape furnishing such as benches, waste receptacles, and newspaper corrals should be situated in the Planting and Furnishing Zone, where context-appropriate. The placements of streetscape furniture should respond to the unique needs of the areas along the corridor, with clusters of furniture placed in close proximity to major intersections, and community destinations.

3.2.7 Street Lighting
Existing street light locations will be maintained wherever possible. Street illumination will be reviewed and enhanced where applicable.

In the Downtown and Transit Village Place Types, pedestrian lighting should be considered. Pedestrian lighting can be in the form of pedestrian luminaires integrated with street lights, standalone pedestrian lighting, and/or accent lighting.

3.2.8 Public Art
Public art can be used in select locations where there is available room within the right of way to aid in establishing a strong sense of place along the RT corridor. Vertically oriented public art will likely provide the most visual impact in most circumstances.

3.2.9 Medians
Medians provide opportunities to incorporate placemaking elements such public art, planters, and street trees. The design elements of the median will be determined through the width available. Any vertical elements in the median must be set back from the curb a minimum of 0.3 metres from the curb face, ideally 0.5 metres. Accordingly, the following median width can accommodate the following elements:

- A median with a width of 1.5 - 2.5 metres wide can accommodate public art;
- A median with a width of 2.5 – 3.5 metres can accommodate a planter with ornamental grasses and / or shrubs and public art; and,
- A median with a width of 3.5 metres or more can accommodate a planter with street trees, and public art.

The median surface should be paved with unit pavers or stamped concrete.

3.2.10 On-Street Parking
On-street parking can encourage animation, as it provides the opportunity to support retail and small businesses along the BRT corridor. On-street parking should be employed in key areas with appropriate Place Types, where there is space within the right of way.

3.2.11 Midblock Connections
Midblock pedestrian connections may be employed in areas where there is a great distance between intersections and the surrounding context necessitates a crossing point.

3.3 STREETSCAPE PRIORITIES AND COMPRISSES
All streetscape elements should be incorporated into BRT corridors where feasible. Where there is not sufficient space within the right of way to incorporate all elements, the following hierarchy should be used:

1. Sidewalk (1.5-2.0+ metre pedestrian clearway);
2. Planting and Furnishing Zone / Planting Zone (1.5 metres +); and,
3. Cycling Facilities (if the corridor is identified in London ON Bikes).

If there is not sufficient room within the right of way for the Planting and Furnishing Zone / Planting Zone, there may be potential to incorporate these elements beyond the current right of way in coordination with future development. These streetscape elements may also be coordinated with
future development in cases where the existing land use does not support implementation of these features.

3.4 SUSTAINABILITY AND LOW IMPACT DEVELOPMENT (LID)

Sustainability and Low Impact Development (LID) techniques should be employed along the corridors in order to adhere to the London Plan initiative to adapt to climate change. The following elements should be considered wherever possible to ensure a sustainable streetscape:

- Optimize street trees and planting;
- Utilize drought resistant, native species wherever possible;
- Consider permeable paving;
- Use light coloured paving; and,
- Consider implementing rain gardens.

3.5 CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN (CPTED)

The streetscape design should adhere to CPTED principles, minimizing opportunities for crime along the rapid transit corridors. CPTED is achieved through thoughtful design that optimizes visibility and site lines along the corridor by providing ample light and avoiding elements that provide opportunities for concealment.

3.6 MATERIALITY

3.6.1 Overview

A visual identity for the RT Streetscape corridors should be reinforced through the use of a cohesive and unique material palette along the corridor including hardscape materials such as concrete (with consistent finishes, coloured concrete banding, potentially patterned concrete etc.), unit paving and asphalt, as well as softscape materials including the planting palette. Lighting and street furnishings should also carry through a cohesive identity.

3.6.1.1 Visual Identity and Focused Investment

Due to the length of the BRT corridors, investments in higher calibre materials will be concentrated in key areas, such as the King Street and Wellington Street intersection, major destinations, and the Downtown Place Type.

Cohesive and unique materials will aid in developing a visual identity for the BRT systems, with visual interest focused around the stop areas. A focused visual identity will be achieved through BRT signature banding in the vicinity of BRT stops, and custom BRT signature streetprint crossing treatment.

For reference of the look and feel of the RT streetscape corridors, refer to the streetscape renderings.

3.6.1.2 Durability and Maintenance

Durability is a key consideration for the BRT streetscape design. The materials and construction details should ensure a long lasting streetscape that can withstand harsh winter conditions, including snow and salt. For instance, consistency in materials (coloured concrete accent banding within a concrete sidewalk and unit paving accent banding within a unit paved sidewalk) will minimize the risk of settling issues along the clearway.

Maintenance is key to ensure a long lasting streetscape. Maintenance considerations should be included throughout the design process to ensure the viability of the streetscape design.

3.6.1.3 Context Responsive

The BRT corridor context, including Place Type, amenities, and built form, should inform the materials used in the streetscape. The materiality of the streetscape should respond to the unique context of the corridor, while also maintaining a cohesive visual identity.

3.6.1.4 Sustainability and Resilience

Sustainable design and Low Impact Development (LID) should inform material decisions throughout the streetscape corridors. Resilient streetscapes can be achieved by optimizing planting, selecting native, drought tolerant, and salt tolerant plant species wherever possible, and using light coloured materials to reduce the heat island effect. There is potential to incorporate permeable paving and/or rain gardens to optimize sustainability in the future.

3.6.2 Hardscape

Typically, sidewalks and the Planting and Furnishing Zone should be constructed of concrete. In close vicinity to BRT stops, charcoal coloured concrete accent stripes should be implemented at regular intervals carrying through both zones, as well as the BRT platforms.

Within the Downtown Place Type, the sidewalk and Planting and Furnishing Zone should be constructed of unit pavers, with charcoal accent unit pavers serving as accent strips at regular intervals. Continuing the same paving pattern, with differing materials, throughout the BRT corridors will preserve a consistent visual identity throughout, while maintaining a context-driven design.
3.7 PLANTING

3.7.1 Overview
Planting should be optimized along the BRT corridors, with street trees, shrubs and ornamental grasses being incorporated into medians, the Planting Zone, and the Planting and Furnishing Zone wherever there is space. A consistent planting palette should be employed (consisting of plants approved by the City of London for streetscape use) in order to foster visual identity along the corridor. However, monocultures are to be avoided to mitigate the risk and impact of disease. Seasonality of planting, including bloom times and seasonal colouring should be considered when selecting species. Maintenance requirements, including irrigation and pruning, shall also inform the planting selection.

Where possible, plants species should be native, drought tolerant, and salt tolerant. Adequate soil volumes must be provided through a continuous soil trench or soil cells.

3.7.2 Street Trees
Street trees should be incorporated into the streetscape wherever there is room within the right of way for a Planting or Planting and Furnishing Zone. All street trees must be approved by the City of London for streetscape use. Different contexts will require different types of street trees and different planting methods. Urbanized areas and intersections benefit from street trees in grates to optimize walkable surfaces. Trees in planters will typically be employed midblock in urban areas, with trees in sod being more appropriate for segments of the corridor with less pedestrian activity.

Trees shall be planted 7.0 – 10.0 metres on centre depending on context and tree species.

The following matrix provides a brief overview of the appropriate street trees for differing contexts.

<table>
<thead>
<tr>
<th>CONTEXT</th>
<th>TREE TREATMENT</th>
<th>SPECIES REQUIREMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highly Urban Environment and Significant Intersections</td>
<td>Tree in Grate with Soil Trench / Soil Cells</td>
<td>Salt Tolerant Species</td>
</tr>
<tr>
<td>Urban Environment (Midblock)</td>
<td>Tree in Planter with Ornamental Grasses / Planting</td>
<td>Salt Tolerant Species</td>
</tr>
<tr>
<td>Under Hydro Poles</td>
<td>Hydro Form Tree in Grate / Planter / Sod</td>
<td>Salt Tolerant Species</td>
</tr>
<tr>
<td></td>
<td>Trees with less height capacity</td>
<td></td>
</tr>
</tbody>
</table>

Non-Urban Environments (Residential/Employment, etc.)

<table>
<thead>
<tr>
<th>Medians (3.5 m+)</th>
<th>Trees in Planters</th>
<th>Salt Tolerant Species</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Low Maintenance Species</td>
</tr>
</tbody>
</table>

4 AREAS OF CONCEPTUAL DEMONSTRATION

The section examines eight segments of the BRT corridor, providing analysis and a conceptual direction for each area in order to provide a guidelines for how the RTMP vision, principles, and Streetscape typologies, as well as the EPR Streetscape Design Guidelines, manifest in specific contexts. These segments were selected to be representative of several different urban contexts that have varying land uses, pedestrian activity levels and urban forms. The selected locations are also geographically distributed amongst the four corridors and downtown. The following eight sites are explored:

1. King Street and Wellington Street Intersection;
2. White Oaks;
3. Oxford Street and Wonderland Road Intersection;
4. South Street and Wellington Street Intersection;
5. Western Fair;
6. Richmond Street and Grosvenor Street;
7. Fanshawe College; and,
8. Western Road and Lambton Drive.

Plan drawings and representative cross-sections for these areas are provided in the Additional Drawings section at the back of the report.

4.1 KING STREET AND WELLINGTON STREET INTERSECTION

The intersection of King Street and Wellington Street is within land designated as Downtown Place Type in The London Plan, and as a Downtown Streetscape in the RTMP. London ON Bikes: City of London Cycling Master Plan designates King Street as having an Existing Bike Lane.

The intersection is significant within the City of London as a central, urbanized area. The stretch of King Street is unique in that between Wellington Street and Clarence Street, King Street is
covered in large part by the canopy of Citi Plaza. The Streetscape design should work towards establishing a strong and vibrant sense of place in this important intersection that can accommodate a large volume of pedestrian activity.

The BRT Streetscape Design contains the following elements:

- Minimum 2.0 metre wide sidewalk;
- A 2.5 metre wide Planting and Furnishing Zone with street trees in grates located near intersections. Street trees in grates create a more spacious pedestrian realm by optimizing the walkable surfaces;
- Planting and Furnishing Zone at midblock includes street trees in planters alongside shrubs and ornamental grasses at the beds;
- High-quality material palette features unit pavers along the pedestrian clearway and the Planting and Furnishing Zone, with accent banding that carries through the design;
- Coloured asphalt intersection treatment within the roadway;
- 3.0 metre wide BRT signature street print crosswalks;
- An extended signature street crossing treatment that extends beyond the typical crosswalk on the west side of King Street at Wellington Road to accommodate the high volume of pedestrians and act as a traffic calming measure;
- 3.0 metre wide median with columnar trees planted 7.0 metres on centre, alongside shrubs and ornamental grass, nearing the existing public art installment; and,
- 2.0 metre wide median with unit paving and public art.

The following image provides a conceptual rendering for the King Street and Wellington Street intersection. Given the priority of this intersection as the Transit Hub and its highly urbanized nature, the concept implements many of the Downtown / RT Boulevard street classification design features.

### 4.2 WHITE OAKS

White Oaks Mall is located near Wellington Road and Bradley Avenue. The area is designated as Transit Village Place Type in The London Plan, and as a Rapid Transit Streetscape in the RTMP.

London ON Bikes: City of London Cycling Master Plan designates Wellington Road for In-Boulevard Cycling Facility from Commissioner’s Road to Bradley Avenue. Bradley Avenue is designated for a Buffered Bike Lane east of Wellington Road and marked as an existing Signed Bike Route west of Wellington Road.

The area currently consists of a large mall and big box land uses with surface parking facing the streetscape. Beyond the big box land uses is low-density residential. There are some parks nearby, including St. Stephen’s Park and White Oaks Park.

Identified as a Transit Village in the London Plan, this area is expected to see significant mixed-use intensification in the coming years. The streetscape should respond to the vision for a Transit Village, and the accompanying needs. Accordingly, White Oaks area BRT Streetscape contains the following:

- 2.3 metre wide sidewalk;
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- 3.0 metre wide BRT signature street print crosswalks;
- 6.0 metre wide median with columnar trees planted in a staggered pattern with 6.0 metre spacing on centre;
- Street trees planted where possible without disturbing existing parking with 10.0 metre spacing on centre; and,
- Landscape medians within the stop platform roadway taper include columnar trees planted 6.0 metre on centre, alongside shrubs and ornamental grass at the bed of the trees.

The plan for this area is to ultimately implement the full range of design features identified for the Transit Village place type, however, the existing surrounding land uses are not favourable to constructing a fully urbanized streetscape at this time. The conceptual rendering provided below illustrates how the project can create a high quality urban space, while providing flexibility to integrate the public realm with future redevelopment opportunities.

4.3 OXFORD STREET AND WONDERLAND ROAD INTERSECTION

The intersection of Oxford Street West and Wonderland Road is within land designated as a Transit Village Place Type in The London Plan, and as a Rapid Transit Corridor Streetscape in the RTMP.

London ON Bikes: City of London Cycling Master Plan outlines Wonderland Road North and Oxford Street West of Wonderland Road as having In-Boulevard Facilities and designates Wonderland Road South for a proposed Cycle Track. Due to spatial constraints within the right of way, including cycling facilities on Oxford Street west of Wonderland Road may be problematic.

As a result of the Oxford Street West and Wonderland Road area being designated as a Transit Village, mixed-use intensification can be expected marking a shift from the current predominantly big box urban fabric. The streetscape design in the area should reflect the Transit Village principles.

Due to property constraints, there is currently limited areas for street trees to be accommodated within the right of way at the Oxford Street West and Wonderland Road intersection. Trees have been added within the current right of way wherever possible. Measures should be put in place for street tree planting to be incorporated in with future development in the area.

The conceptual design for the intersection contains the following:

- 2.3 metre wide pedestrian clearway, that connects in to the existing sidewalk where possible;
- 3.0 metre wide BRT signature street print crossing;
- Planted landscape medians within the stop platform roadway taper; and,
- Street trees planted where possible without disturbing private property.

Due to property constraints, the streetscape design is limited within this area. There are opportunities to create an extended public realm with future intensification. The following rendering illustrates how the project can create a high quality space, while providing flexibility to integrate the public realm with future redevelopment opportunities.
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SOUTH STREET AND WELLINGTON STREET INTERSECTION

The intersection of South Street and Wellington Street is within land designated by the Rapid Transit Corridor Place Type in The London Plan with Neighbourhoods and Green Space Place Types nearby. The area is designated as a Rapid Transit Corridor Streetscape in the RTMP.

The area currently consists of predominantly low-density residential with some small scale commercial/mixed-use establishments along Wellington Street. The area contains significant green connections with the Thames River, Richard B Harrison Park, and the Thames Valley Parkway.

Regeneration South of Horton Street: A Community Improvement Plan (CIP) for London’s SoHo District (2011) provides a vision, principles and strategic directions for future projects in the area. The CIP sets out a vision that “our SoHo will be a vibrant and healthy urban neighbourhood that celebrates its rich sense of community and heritage. With its unique links to the Downtown and Thames River, SoHo will be a great place to live, work, shop and play.” The plan delineates Wellington Street as a Mixed Use Mainstreet District. The streetscape design should consider this Mainstreet classification. The CIP document should be consulted throughout the design process.

The streetscape concept design contains the following:

- 2.0 metre wide sidewalk;
- 3.0 metre wide MUP along the east side of Wellington Street south of South Street, connecting to the future Thames Valley Promenade;
- 3.0 metre wide signature BRT street print crosswalks;
- 2.5 metre wide planting zone with trees 7.0 metres spacing on centre;
- On street parking along the west side of Wellington Street, north of South Street;
- Planted medians within the stop platform roadway taper; and,
- Street corner garden opportunities to create neighbourhood scale public realm spaces that include seating, public art, lighting and planting.

The following rendering illustrates the area south of South Street along Wellington Road.
4.5 WESTERN FAIR
The Dundas Street / King Street and Ontario Street area is designated as Rapid Transit Corridor Place Type in The London Plan with Institutional and Commercial Industrial Place Types nearby, and as a Rapid Transit Streetscape in the RTMP. The London ON Bikes: City of London Cycling Master Plan designates King Street as having an existing Bike Lane.

The Old East Village Community Improvement Plan (CIP) (2005) for the Western Fair neighbourhood and surrounding areas provides a vision, principles and strategic directions for future projects in the area. The CIP sets out a vision that fosters a "pedestrian-oriented streetscape while not excluding the automobile". The plan designates the Western Fair area as an Entertainment and Recreation Zone whereby any developments should support the entertainment and recreation "flavour" of the corridor. The CIP document should be consulted throughout the design process.

All intersection quadrants except the north-east have property constraints. The BRT streetscape design contains the following:

- Minimum 2.0 metre wide concrete sidewalk;
- BRT signature coloured concrete banding in the stop vicinity that extends through the sidewalk and stop platform;
- Signature street print crossing (and reinstate existing rainbow crosswalks);
- 4.6 metre wide median with trees 6.0 metre spacing on centre, alongside shrubs and ornamental grass at the bed of the trees;
- 1.5 metre wide median with unit pavers;
- 1.5 metre side cycle track along the south side on King Street and east side of Ontario Street;
- Coloured concrete in the roadway at the King Street and Ontario Street Intersection;
- Recommended landscape buffer of trees and shrubs in platers in Western Fair parking private property area and corner plazas in private property; and,
- Removal of the midblock entrance to the Western Fair parking lot off of Ontario Street.

The following rendering illustrates how the streetscape treatment may look in the area.

4.6 RICHMOND STREET AND GROSVENOR STREET INTERSECTION
The intersection of Richmond Street and Grosvenor Street is within land designated by the Rapid Transit Corridor Place Type in The London Plan and is surrounded by the Neighbourhood Place Type. The corridor is identified as a Rapid Transit Corridor Streetscape in the RTMP.

The area is institutional, with St. Joseph's Hospital and Mount Hope Centre for Long Term Care in close proximity to the BRT stops. The streetscape design is focused on optimizing the green canopy in the area. The streetscape design includes the following:

- 2.3 metre wide concrete sidewalk;
- 3.0 metre wide signature BRT street print crosswalk;
- Street trees planted where possible in the public right of way area used as residential front yards;
- Reinstate existing street corner gardens with existing wayfinding signage;
- Planted medians within the stop platform roadway taper; and,
- Signature BRT street print crosswalk.
Due to property constraints, the streetscape design is limited within this area. There are opportunities to create an extended public realm with potential future intensification along some of the corridor. The rendering below illustrates how the project can create a high quality space, while providing flexibility to integrate the public realm with potential future redevelopment opportunities.

Rendering may not represent final design.

4.7 FANSHAWE COLLEGE

The Fanshawe College stop area is located off of Oxford Street East, just east of Second Street/Fanshawe College Boulevard. The area is designated as a Rapid Transit Corridor and an Institutional Place Type in the London Plan. The corridor is identified as a Transit Village Streetscape in the RT Transportation Master Plan.

The area is also a route terminus and will have several connections to local LTC services and active transportation connections. There is a great opportunity to create a high quality public space that creates a connection between various connecting modes, the rapid transit stop and the surrounding college property.

The stop design itself will also be reflective of the character of the college and celebrate Fanshawe College’s contribution to the community through public art and other unique stop features. The stop should serve as a transportation hub for Fanshawe students, faculty and staff. The BRT streetscape design contains the following:

- 2.5 metre wide concrete sidewalks;
- BRT signature coloured concrete banding in the stop vicinity that extends through the stop platform and nearby campus area;
- Trees in grates in the waiting area;
- Signature street print crossings;
- Signature coloured asphalt in the intersection and turn around;
- An ample median with trees, shrubs and ornamental grass;
- Trees in sod in landscaped area;
- Planters with integrated seating;
- Potential for public art.

The following rendering illustrates the route terminus on Oxford Street East.

Rendering may not represent final design.
4.8 WESTERN ROAD AT LAMBTON DRIVE

The intersection of Western Road and Lambton Drive is designated as Institutional Place Type in The London Plan, and the streetscape design will be developed in consultation with Western University, Brescia College and Huron College.

5 FURTHER CONSIDERATIONS

The streetscape concepts that are proposed as part of this EPR were done within the confines of the existing or proposed right of way. In some of these areas, there is not room within the right of way to incorporate all the streetscape elements outlined in the streetscape design approach. In constrained conditions, the top streetscape priority is to ensure a continuous 2.0 metre minimum sidewalk for accessibility and safety. Where there is not room within the current right of way for a Planting and Furnishing Zone, street trees and/or other context appropriate elements outlined in the streetscape approach, there may be opportunities to incorporate these elements into adjacent lands that are currently privately owned. In order to fully achieve the vision for streetscape along the BRT corridors and Transit Villages, efforts will need to go beyond the scope of the Rapid Transit Project itself.

To achieve this, the City will work with land owners and developers through the development process. The policy tools and strategies that should be considered to help achieve this are listed below.

- Urban Design Guidelines – Objectives and guidelines for implementing consistent and high quality urban design in the Transit Villages and along the BRT corridors;
- Station Area Plans – Plans that encourage the transformation of station areas to reflect best practices in Transit Oriented Development, including guidance on the evolution of the public realm; and,
- City Provisions for streetscape features, such as rain gardens, street furniture and landscaping on frontages of private property, with the consent and cooperation of property owners.