

To: Development Services Committee

From: Warren Munro, HBA, RPP, Commissioner,  
Development Services Department

Report Number: DS-21-19

Date of Report: February 3, 2021

Date of Meeting: February 8, 2021

Subject: Durham-Scarborough Bus Rapid Transit Project Public  
Information Centre 3

File: B-7000-0006

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## **1.0 Purpose**

The purpose of this report is to provide an overview of the Durham-Scarborough Bus Rapid Transit (D.S.B.R.T.) Project and introduce the information presented at Public Information Centre (P.I.C.) 3 that was held virtually from November 16, 2020 through January 10, 2021.

The material presented at P.I.C. 3 is not attached to this report owing to its size and lack of accessibility. However, the material can be viewed or downloaded by clicking here:

<https://www.metrolinxengage.com/en/engagement-initiatives/durham-scarborough-bus-rapid-transit-public-information-centre-3>

Metrolinx has requested comments by January 10, 2021. However, to accommodate the City's meeting schedule for Committee and Council, City staff have confirmed with Metrolinx that the submission of comments after the requested deadline is acceptable.

Attachment 1 shows the Study Area and the municipal limits of the City of Oshawa. It should be noted that King and Bond Streets are under the jurisdiction of the City of Oshawa.

Attachments 2 through 8 illustrate information extracted from the material presented by Metrolinx at P.I.C. 3.

Attachment 2 illustrates a density map showing a high concentration of businesses in Oshawa, particularly for the portion of King Street and Bond Street between Stevenson Road and Ritson Road.

Attachment 3 illustrates how travel patterns may change resulting from the D.S.B.R.T. Project.

Attachment 4 illustrates the proposed cycling facilities within the City of Oshawa.

Attachment 5 illustrates renderings of the proposed shelters and platforms for the D.S.B.R.T. Project.

Attachment 6 illustrates the proposed routing and layover for the D.S.B.R.T. Project.

Attachment 7 illustrates the preliminary design for the D.S.B.R.T. Project within the City of Oshawa.

Attachment 8 illustrates renderings of how the corridor would look in the future with bus rapid transit.

Attachment 9 shows the location of structures in Oshawa that require modification to advance the D.S.B.R.T.

## **2.0 Recommendation**

That the Development Services Committee recommend to City Council:

1. That the comments contained in Report DS-21-19 dated February 3, 2021 be endorsed as the City's comments with respect to the Durham-Scarborough Bus Rapid Transit Project Public Information Centre 3.
2. That Metrolinx and Durham Region Transit be requested to not advance the Durham-Scarborough Bus Rapid Transit Project described in this Report until all City comments have been addressed to the City's satisfaction.
3. That staff be authorized to forward a copy of Report DS-21-19 dated February 3, 2021 and the related Council resolution to Metrolinx, the Region of Durham, the City of Pickering and the Towns of Ajax and Whitby.

## **3.0 Executive Summary**

Not applicable.

## **4.0 Input From Other Sources**

The following have been consulted on the preparation of comments on the information presented at P.I.C. 3 for the D.S.B.R.T. Project:

- Commissioner, Community Services
- Oshawa Environmental Advisory Committee
- Heritage Oshawa
- Oshawa Active Transportation Advisory Committee
- Oshawa Accessibility Advisory Committee
- Town of Whitby

## **5.0 Analysis**

### **5.1 Background**

Metrolinx's 2041 Regional Transportation Plan identified the D.S.B.R.T. Project as being required to meet the needs of the Greater Toronto and Hamilton Area (G.T.H.A.) in the near term. The project will provide approximately 36 kilometres (22.4 mi.) of dedicated transit infrastructure that will connect Durham Region and the City of Toronto, enhancing intra-regional mobility and connecting residents and employment across the Study Area. The D.S.B.R.T. Project will connect local and regionally significant areas including Scarborough Town Centre, University of Toronto Scarborough Campus, and the downtowns of Pickering, Ajax, Whitby and Oshawa.

The Highway 2 corridor along the D.S.B.R.T. Project is expected to grow by approximately 215,000 residents and 66,000 jobs by 2041. Higher capacity transit is needed to strengthen connections between communities and employment in Durham Region and the City of Toronto.

The D.S.B.R.T. Project will provide:

- Dedicated transit lanes for buses, where feasible, resulting in shorter travel times and more reliable transit service;
- Frequent service with a bus every 5 minutes or less during peak hours;
- Smart signals along Highway 2/Dundas Street/King Street/Bond Street that will adapt to support smoother traffic flow for all; and,
- Better connections where Toronto Transit Commission, Durham Region Transit, and GO Transit routes can use the dedicated lanes and share the same stops, making it easier to travel throughout the Region.

The D.S.B.R.T. Project builds on the Initial Business Case completed by Metrolinx in 2018. The Preliminary Design Business Case will involve an expedited Environmental Assessment process for transit projects and an Environmental Project Report. The Preliminary Design Business Case is the second business case as part of the Metrolinx Benefits Management Process.

The D.S.B.R.T. Project will define the following elements to a 30% preliminary design level:

- Number and location of stops;
- Extent of median and curbside dedicated bus lanes, and transition area design and operation;
- Associated transit priority infrastructure (e.g., queue jump lanes)
- Infrastructure for active transportation (i.e., walking, cycling);
- Streetscape and boulevard design;
- Bridge / structural design and impacts;
- Traffic and parking operations and impacts; and,

- Intersection layouts and lane configurations.

The Preliminary Design Business Case is meant to refine the preferred option developed in the Initial Business Case and provide a sufficient level of detail to support funding and implementation. Staff will work with the project team to satisfactorily address any concerns the City may have. If the City's concerns are not addressed, the City may request Metrolinx to consider an alternative solution.

## **5.2 Status to Date**

The D.S.B.R.T. Project has committed funding to undertake the Preliminary Design Business Case following the Transit Project Assessment Process and preparing an Environmental Project Report.

The Preliminary Design Business Case for the project was initiated in early 2019 and includes the following public consultation to date:

- On Wednesday June 12, 2019, P.I.C. 1 was held at the Civic Recreation Complex from 12:00 p.m. to 2:00 p.m. in the City of Oshawa;
- On Tuesday, November 19, 2019, P.I.C. 2 was held at City Hall from 12:00 p.m. to 2:00 p.m. in the City of Oshawa;
- On February 3, 2020, Metrolinx's consultant provided a presentation to Development Services Committee on the status of the D.S.B.R.T. Project and P.I.C. 2;
- On February 18, 2020, Council considered the related Item DS-20-20, a report from the Commissioner of Development Services and passed the following resolution:
  - “1. That Report DS-20-20 dated January 29, 2020 be endorsed as the City's comments on options presented at Public Information Centre 2 for the Durham-Scarborough Bus Rapid Transit project; and,
  - 2. That Metrolinx be requested to make a presentation on Public Information Centre 3 to the Downtown Oshawa Business Improvement Association, the Oshawa Active Transportation Advisory Committee, the Oshawa Accessibility Advisory Committee and the Oshawa Environmental Advisory Committee;
  - 3. That staff be authorized to forward a copy of Report DS-20-20 dated January 29, 2020 and the related Council resolution to Metrolinx, the Region of Durham, the City of Pickering and the Towns of Ajax and Whitby and,
  - 4. That the request for a presentation on the Public Information Centre 3 is not to be understood as approval or denial of the project options.”
- On November 9, 2020, Metrolinx's consultant provided a second presentation to Development Services Committee concerning the information to be presented at P.I.C. 3 for the D.S.B.R.T. Project; and,



- From November 16, 2020 through January 10, 2021, P.I.C. 3 for the D.S.B.R.T. Project was held.

### **5.3 Information Presented at Public Information Centre 3**

Information presented at P.I.C. 3 is available on the D.S.B.R.T. Project website at: <https://www.metrolinxengage.com/en/engagement-initiatives/durham-scarborough-bus-rapid-transit-public-information-centre-3>.

The purpose of P.I.C. 3 was to present and seek feedback on the preliminary design and results of the technical studies, including potential impacts and proposed mitigation measures in the following areas:

- Environment;
- Traffic and Active Transportation;
- Bus Rapid Transit Stops;
- Preliminary Design; and,
- Construction and Phasing.

#### **5.3.1 Environment**

The D.S.B.R.T. Project is preparing for the Transit Project Assessment Process, a streamlined Environmental Assessment process under Ontario Regulation 231/08. To support the project, environmental studies are being completed to document existing conditions and assess any potential impacts from the project.

Field investigations were undertaken in 2019 and 2020 to collect data on existing conditions.

The studies will determine potential impacts and document mitigation measures that could be applied to reduce or eliminate potential impacts. Mitigation measures proposed will be used by the design team to review and improve the design.

These studies will form part of the Environmental Project Report, which will be posted for public review.

The environmental studies that have been completed or were still underway include:

- Air Quality;
- Archaeology;
- Climate Change;
- Cultural Heritage;
- Natural Heritage and Tree Inventory;
- Noise and Vibration;
- Phase I Environmental Site Assessment;
- Socio-economic Conditions; and,
- Stormwater and Structures.

Impact assessments for the air quality, noise and vibration, and climate change studies are still underway. More details on impacts and mitigation measures will be available at P.I.C. 4 which is currently unscheduled. P.I.C. 4 is intended to present the preferred solution.

#### **5.3.1.1 Air Quality**

The existing conditions review is currently underway and includes examining data from air quality monitoring stations to determine existing conditions and the location of sensitive receptors. Examples of sensitive receptors include: places of residence; child care facilities; health care facilities; senior citizen's residences; long-term care centres; and, schools.

Air emissions that will be assessed include: Carbon Monoxide (CO), Nitrogen Dioxide (NO<sub>2</sub>), Sulfur Dioxide (SO<sub>2</sub>), Volatile Organic Compounds (VOCs), Fine Particles or Particulate Matter (PM<sub>2.5</sub>), Polycyclic aromatic hydrocarbon (PAH), and Greenhouse Gases (GHG).

Following an examination of existing conditions, modelling will be conducted to determine air quality levels at sensitive receptor locations. Future scenarios with and without D.S.B.R.T. will be modelled and studied.

Potential construction impacts that could result from construction activities include air pollution and dust from construction activities. To mitigate construction impacts, the following measures are proposed:

- Cover sources of dust where possible;
- Apply dust suppressants;
- Use low emissions equipment where possible; and,
- Limit dust generating activities during high-wind conditions.

Additional impacts and mitigation measures will be presented at P.I.C. 4.

#### **5.3.1.2 Archaeology**

A Stage 1 Archaeological Assessment (the "Assessment") has been completed to determine archaeological potential within the Study Area. The Assessment identified 12 registered sites within 50 metres of the Study Area. However, it is unknown how many of these sites are located in Oshawa as archaeological sites are not identified to protect the archaeological resource from unauthorized artifact extraction. Parts of the Study Area have archaeological potential and will require a Stage 2 assessment prior to disturbance/construction.

Interested Indigenous Communities may be engaged during further assessments. Most of the Study Area has already been assessed in previous studies which did not identify any archaeological potential.

Five cemeteries were also identified within the Study Area and of those five, three are within 10 metres of the Project and therefore require further Stage 3 analysis. Union

Cemetery at the northeast corner of Thornton Road North and King Street West and Pioneer Memorial Garden Cemetery at 185 Bond Street West within Oshawa require a Stage 3 analysis.

A Stage 3 Cemetery analysis is required for lands impacted by the project within 10 metres (approximately 33 ft.) of cemetery properties to confirm the presence or absence of unmarked graves. If unexpected archaeological materials are encountered during construction, all work will stop. The site will be protected and assessed by a licensed archaeologist before work can resume.

Three previously registered archaeological sites are located within the Study Area. None of these sites exhibit cultural heritage value or interest or require further assessment.

#### **5.3.1.3 Climate Change**

The D.S.B.R.T. Project envisions increased climate resiliency through encouraging more sustainable modes of transportation choices by:

- Increasing transit ridership by providing a more reliable, convenient, and comfortable transit service; and,
- Improving existing active transportation facilities and eliminating gaps in the network.

Other proposed means to increase climate resilience include:

- Including street trees within the boulevard, where feasible;
- Implementing Low Impact Development measures, where feasible; and,
- Increasing the size and capacity of structures and culverts to accommodate greater storm events. Extreme storm events are being considered during hydraulic analysis of structures and culverts to identify characteristics of spill flow and the limit of regulatory floodway.

An assessment will be completed to determine the project's impact on greenhouse gas emissions. Both existing and future scenarios will be compared to the Ontario provincial target. Potential mitigation measures will be recommended.

Impacts and mitigation measures will be presented at P.I.C. 4.

#### **5.3.1.4 Cultural Heritage**

Cultural heritage specialists reviewed the corridor to identify known and potential cultural heritage properties.

A total of 230 built heritage resources and cultural heritage landscapes were identified in the study area. An assessment of impacts is currently underway.

There are a total of 77 properties in Oshawa that require further review and investigation by Metrolinx. The 77 properties include the following:

- 8 Class A heritage properties representing the highest potential for heritage designation;

- 12 Class B heritage properties representing a good potential for heritage designation;
- 2 designated properties at 185 to 201 Bond Street West (Pioneer Memorial Garden Cemetery) and 62 to 68 King Street West (Oshawa House Hotel); and,
- 1 registered, non-designated property located at 760 King Street West (Union Cemetery).

The preliminary preferred design for the D.S.B.R.T. Project strives to stay within the road allowance to minimize impacts to cultural heritage resources. In some areas, where road improvements cannot be done within the road allowance, the design of the project may have direct impacts to known/potential cultural heritage resources. Additionally, construction activities may also result in indirect impacts. To mitigate these potential impacts, the following measures are proposed:

- A Cultural Heritage Evaluation Report will be completed to understand the directly impacted resource's cultural heritage value or interest.
- If the resource has cultural heritage value or interest, a Heritage Impact Assessment will be completed.
- Local Heritage Advisory Committees and the Ministry of Heritage, Sport, Tourism and Culture Industries will be consulted during the completion of the studies.
- Indirect impacts include temporary adverse vibration from construction activities. A condition assessment of structures within the vibration zone of influence is recommended.

#### **5.3.1.5 Natural Heritage and Tree Inventory**

Detailed field investigations were undertaken between April 2019 and June 2020 to examine natural heritage features and tree resources.

The following are present within the Study Area:

- 7,926 trees consisting of 86 species;
- 305 plant species, 57% native and 43% non-native;
- 7 herpetofauna, 1 invertebrate, 9 mammal species and 69 bird species;
- 17 species at risk (3 aquatic, 2 plant, and 12 wildlife): 3 were identified during field investigations: Barn Swallow, Butternut and Kentucky coffee tree;
- 3 Provincially Significant Wetlands;
- 14 Environmentally Significant/Sensitive Areas, and 3 Areas of Natural and Scientific Interest; and,
- 23 watercourses within 10 watersheds.

Within the City of Oshawa, there are 480 identified trees of which the D.S.B.R.T. Project will result in the removal of 101 with an additional 49 impacted.

Potential construction impacts include:

- Removal / disturbance of roadside trees, vegetation/vegetation communities and significant natural heritage features;
- Removal / disturbance of wildlife/wildlife habitat;
- Disturbance to species at risk/species at risk habitat;
- Disturbance to fish/fish habitat; and,
- Disturbance to soils and an increase in erosion and sedimentation.

To mitigate construction impacts, the following measures are proposed:

- Construct buffers around trees and other sensitive environmental features to prevent injury and minimize disturbance;
- Adhere to timing restrictions for construction and in-water works;
- Implement erosion and sediment control measures; and,
- Meet requirements under the Canada Species at Risk Act and Ontario Endangered Species Act.

Additional impacts and mitigation measures will be presented at P.I.C. 4.

#### **5.3.1.6 Noise and Vibration**

A background review has been completed. Aerial and street-level photography was examined to determine noise and vibration sensitive receptors in the Study Area in general and in the City of Oshawa in particular.

Approximately 40 potential sensitive receptors have been identified to help understand the ambient noise within the study area.

Following the background review, modelling will be completed to analyze future conditions. Future 'with D.S.B.R.T.' and 'without D.S.B.R.T.' scenarios will be modelled, and noise and vibration levels will be determined for each scenario. Based on the impacts, additional mitigation measures may be proposed.

Potential construction impacts include noise and vibration from construction activities. To mitigate construction impacts, the following measures are proposed:

- Use low vibration construction equipment where possible;
- Use construction equipment that is compliant with the Ministry of Environment, Conservation, and Parks' noise level specifications; and,
- Implement restrictions on construction hours.

Impacts and mitigation measures will be presented at P.I.C. 4.

#### **5.3.1.7 Phase I Environmental Site Assessment**

The intent of the Phase 1 Environmental Site Assessment is to determine if current or historical uses have impacted the soil or groundwater in the Study Area in general and in the City of Oshawa in particular.

A background review has been completed, including a desktop review of contaminant data and field reconnaissance. However, if during construction, soil and/or groundwater are impacted in areas of anticipated soil excavation and/or dewatering, the Phase 1 Environmental Site Assessment recommends that subsurface soil and/or groundwater sampling be undertaken in those locations.

#### **5.3.1.8 Socio-economic Conditions**

An existing conditions review was completed to understand the population that exists in the Study Area. Census data was reviewed to determine factors such as population and business density, age structure, household income, immigration, and education attainment.

The review found that there are areas with a high density of businesses along the corridor in Oshawa in the portion of King Street and Bond Street between Stevenson Road and Ritson Road. The D.S.B.R.T. Project will support expected growth by connecting people and jobs along the corridor.

Attachment 2 illustrates a density map showing the concentration of businesses within the City of Oshawa.

Potential construction impacts include:

- Temporary disruption to accesses and parking;
- Temporary disruption to curbside activities;
- Temporary closure of sidewalks and cycling facilities;
- Congestion related to construction activity and detours;
- Visual effects from construction areas/activities; and,
- Reduction of on-street parking.

Potential operational impacts include:

- Permanent changes to access with centre-medians;
- Improved streetscape, walking and cycling facilities; and,
- Higher demand for community resources within study area due to new development / redevelopment.

To mitigate construction impacts, the following measures are proposed:

- Develop an action plan to support businesses including signage, wayfinding and an ambassador program;
- Implement Curbside Management Plan for waste removal, deliveries and pedestrian activities;
- Create Emergency Response Plan;
- Create Traffic Management and Control Plan; and,
- Identify alternative parking to support businesses.

To mitigate operational impacts, the following measures are proposed:

- Implement signage and educational programs to educate the public about U-turns;
- Identify alternative goods movement routes to support businesses;
- Work with emergency services to identify potential median crossings and / or alternative routes; and,
- Identify need for additional community resources to maintain adequate capacity through the development application process.

#### **5.3.1.9 Stormwater and Structures**

Major culverts and bridges in the Study Area have been identified and reviewed to understand the existing hydraulic and structural conditions.

There are 32 crossings along the corridor, including: 28 watercourse or drainage ditch crossings, and four other crossings of railways and highways.

Within the City of Oshawa, a total of four structures have been identified, three of which are recommended for modification. These include the structures along King Street and Bond Street over the Corbett Creek and Oshawa Creek (see Attachment 9). Potential modifications include replacement, rehabilitation, extension or widening to: meet current hydraulic standards, strengthen older structures, and accommodate the addition of bus lanes.

The King Street bridge structure over the Oshawa Creek is proposed to be replaced to accommodate the bus lanes and provide accessible sidewalks.

#### **5.3.2 Traffic and Active Transportation**

Information related to traffic and active transportation that was presented include:

- Transit Travel Time Reliability;
- Left-turns and U-turns; and,
- Active Transportation.

##### **5.3.2.1 Transit Travel Time Reliability**

Microsimulation models were developed to examine interactions between transit and general traffic. The modelling primarily focused on sections of the corridors where there were right-of-way constraints such that the existing number of travel lanes plus dedicated transit lanes did not fit. The performance measures/outputs of the modelling included traffic and transit travel times, and reliability of travel times.

The results of the models show that dedicated transit lanes improve transit travel times by 15 to 25%, meaning that the total travel time between the City of Oshawa and the Scarborough Town Centre would improve from 100 minutes to approximately 75 to 85 minutes. Furthermore, transit travel time reliability is also improved by 10%, meaning that every transit trip would save up to an additional 10 minutes.

### **5.3.2.2 Left-turns and U-turns**

As part of the preliminary design, raised median islands will separate transit lanes from general traffic lanes between signalized intersections. As a result, these islands will prevent left-turns at unsignalized intersections and driveways.

Drivers will be able to make left-turns and U-turns during protected phases at signalized intersections. This configuration is expected to enhance safety.

Attachment 3 illustrates how travel patterns may change resulting from the D.S.B.R.T. Project.

### **5.3.2.3 Active Transportation**

The D.S.B.R.T. Project provides the opportunity to improve connectivity and expand the active transportation network. New sidewalks and cycling facilities will be provided to fill in existing gaps. A combination of cycle tracks, buffered bike lanes and multi-use paths (M.U.P.) are proposed.

The type of cycling facility was selected based on a review of:

- Existing cycling infrastructure;
- Proposed cycling infrastructure in municipal and regional cycling plans;
- Land use context;
- Traffic volumes;
- Posted speed limits; and,
- Roadway characteristics.

Within the City of Oshawa, in addition to new sidewalks being proposed throughout the corridor, an M.U.P. is proposed along the north side from the west city limit to Thornton Road North and would connect with the multi-use path being constructed along Thornton Road North from King Street West to Taunton Road West. East of Thornton Road, the Study Area has been identified as being constrained and alternate active transportation routes are identified north or south of the corridor. Furthermore, parking for bicycles will be provided at proposed transit stops to connect cyclists to transit.

Attachment 4 illustrates the proposed cycling facilities within the City of Oshawa.

### **5.3.3 Bus Rapid Transit Stops**

At the previous P.I.C. for the project, 47 stop locations were proposed. Since then, two additional stops have been identified in Toronto for a total of 49 proposed stops. Within the City of Oshawa, stops have been proposed and they are located at the following intersections:

- Thornton Road and King Street West;
- Stevenson Road at both King and Bond Streets West;
- Gibbons Street at both King and Bond Streets West;
- Park Road at both King and Bond Streets West;



- Centre Street at both King and Bond Streets West; and,
- Simcoe Street at both King and Bond Streets.

At each transit stop, shelters and platforms will be provided and level-boarding is being considered for the system. There are two different design concepts that are being proposed for these shelters. Within the City of Toronto, an open concept shelters, with wind screens for weather protection are proposed. Within the Region of Durham, enclosed, pass-through shelters with openings that align with bus doors are proposed.

Attachment 5 illustrates renderings of the proposed shelters and platforms for the D.S.B.R.T. Project.

The following elements will be consistent among all shelters along the corridor:

- Platform width (3.6 or 4.2 m, context sensitive);
- Width of sheltered area;
- Access ramp and railings;
- Tactile strips; and,
- Location of stop name signage.

Certain parts of a shelter can be customized, including:

- Materials, colours and finishes of the platform surface and/or wall panels;
- Art, maps, and cultural heritage elements;
- Placement and number of benches and seating;
- Number of glazed panels. For curbside platforms, some panels can be removed so the platform can be accessed at multiple locations; and,
- Curbside platforms can be narrower or integrated with sidewalk.

More information is required from Metrolinx to justify the different design concept for the City of Toronto versus those proposed for the Region of Durham which appear to provide a lower level of protection from the elements.

### **5.3.4 Preliminary Design**

Attachment 7 illustrates the preliminary design within the City of Oshawa. The B.R.T. lanes depicted on Attachment 7 represent lanes identified by pavement markings. The lanes are not separated from the other travel lanes by a curb.

Along King Street West, from the west city limit to Waverly Street South, the preliminary design proposes two general traffic lanes in each direction and two median bus lanes for a total of six lanes. The median bus lanes will introduce a raised island in the middle of the road to increase safety for cars and buses. As a result, all unsignalized intersections and driveways between signalized intersections will be restricted to right-in/right-out access only. To support the changing travel patterns, signalized intersections will have a dedicated left-turn lane from which U-turns and left-turns can be made during a protected left-turn signal phase, while all other traffic at the intersection has a red light.

At the Thornton Road intersection, the first transit stop is proposed and will have platforms adjacent to the centre-running bus lanes. All transit platforms within the City of Oshawa are proposed to be located at signalized intersections to provide a protected crossing for pedestrians.

At the Waverly Street intersection, new traffic signals are proposed. East of Waverly Street, buses will operate in the curb lane along the one-way streets of King Street and Bond Streets. The new traffic signal will maintain access to Waverly Street and help buses transition from the centre-median bus lanes to the curb lanes. It should be noted that the westbound left turn at the intersection will be prohibited as there is insufficient road right-of-way width to accommodate a westbound left turn lane. Left-turning vehicles will be expected to go through the intersection and make a U-turn at the Thornton Road intersection.

Along King Street and Bond Street, the preliminary design proposes two general traffic lanes and one curbside bus lane for a total of three lanes. Dedicated right and left-turn lanes are provided at key intersections for the efficient progression of transit and regular traffic.

Based on the preliminary design, the dedicated bus lanes would extend to Simcoe Street. As a result, the on-street parking along the south side of King Street will be removed from Centre Street to Simcoe Street to accommodate the bus lane. East of Simcoe Street, some on-street parking would be lost and buses would run in mixed traffic and will turnaround by using the proposed route via Ritson Road and William Street which is illustrated in Attachment 6. A permanent layover location for buses is proposed at the northeast corner of the intersection of William Street East and Division Street, beside the Costco. Buses would then travel westbound along Bond Street within a dedicated bus lane on the north side of the street. As a result, the on-street parking along Bond Street will be removed from Centre Street to Simcoe Street to accommodate the bus lane.

Attachment 8 illustrates renderings of how the corridor would look in the future with bus rapid transit.

### **5.3.5 Construction and Phasing**

After the preliminary design phase, the project will advance to detail design prior to construction.

Construction will depend on funding, property acquisition, permits and approvals. Segments of the corridor in Durham Region will be constructed as part of the Investing in Canada Infrastructure Program, subject to Federal Approval.

To date, curbside bus lanes have already been constructed in Pickering and Ajax. Since the road has been widened to accommodate the infrastructure, construction costs and duration will be minimized in these areas.

#### **5.4 Oshawa Advisory Committees**

On February 18, 2020, City Council adopted Item DS-20-20, as amended, and requested Metrolinx to engage with the Downtown Oshawa Business Improvement Association, the Oshawa Active Transportation Advisory Committee, the Oshawa Accessibility Advisory Committee and the Oshawa Environmental Advisory Committee.

Owing to the COVID-19 pandemic, the Advisory Committees did not begin to meet again until the 4<sup>th</sup> quarter of 2020 and Metrolinx has not had an opportunity to present to them. Nevertheless, the presentation material from P.I.C. 3 was provided to the Advisory Committees with a request that they provide any comments directly to Metrolinx.

#### **5.5 Town of Whitby Comments**

On December 16, 2019, Whitby Town Council considered Item PW-35-19, a joint report of the Public Works Department and the Planning and Development Department regarding the D.S.B.R.T. Project.

Item PW-35-19 requested Metrolinx to consider alternatives developed by Town staff to improve transit operations through Whitby (including along Dundas Street) while meeting the Town's walkability, economic and community based focus. The options focused on:

- Conversion of the existing curb lane into High Occupancy Vehicle Lanes; and,
- A lane reversal system for 3 lane operations where 2 lanes would be dedicated for peak demand.

On December 16, 2019, Whitby Town Council passed the following motion related to Item PW-35-19:

- “1. That Council does not support a widening of Dundas Street to six (6) through traffic lanes in Whitby;
2. That Metrolinx be requested to consider design alternatives for BRT through Downtown Whitby;
3. That Staff organize a meeting with Metrolinx and key stakeholders in the BRT project and in Downtown Whitby. The purpose of the meeting is to develop and review design options that best address the priorities and concerns of the key stakeholders; and,
4. That a copy of this resolution be forwarded to M.P.P Coe, Metrolinx, Region of Durham and area Durham BRT municipalities.”

On November 2, 2020, Metrolinx's consultant provided a presentation to Whitby Town Council concerning the current status of the D.S.B.R.T. Project.

On November 30, 2020, in response to the Metrolinx presentation from November 2, 2020, Whitby Town Council passed the following motion:

- “1. That the Council of the Town of Whitby requests Staff to coordinate hosting virtual community meeting(s) with Metrolinx for residents and business owners to help clarify the scope and impacts of the Durham-Scarborough Bus Rapid Transit Project and answer any questions regarding the project; and,
2. That the Clerk send a copy of this resolution to the Durham-Scarborough Bus Rapid Transit Project team at Metrolinx, MPP Lorne Coe, and lakeshore municipalities in the Region of Durham.”

On December 14, 2020, Whitby Town Council passed the following motion to continue to oppose the Project as referenced on December 16, 2019 through Item PW-35-19:

- “1. That the Council of the Town of Whitby requests Metrolinx to consider the options presented in Report PW 35-19 as adopted by Whitby Council December 16th, 2019, Resolution #358-19;
2. That the Council of the Town of Whitby requests the opportunity of deferring the Whitby downtown portion between Byron Street and Perry Street of the Environment Assessment to provide additional time to develop and consult on design alternatives that address;
  - a. The movement of vehicular traffic and transit through Downtown Whitby between Byron Street and Perry Street;
  - b. Options for pedestrian improvements and safety features including transit access;
  - c. Options for replacement of any lost parking from Dundas Street be considered in conjunction with the Whitby Parking Master Plan; and,
  - d. Options for support to businesses during the construction phase and routing options during displacement of traffic.
3. That the Council of the Town of Whitby continues to oppose the proposal to widen portions of Dundas Street to six (6) traffic lanes, as stated previously in Resolution # 358-19 adopted at the December 16, 2019 Council Meeting; and,
4. That a copy of this motion be forwarded to Metrolinx.”

## **5.6 Staff Comments**

As a result, the following comments are provided to the D.S.B.R.T. Project team:

1. The City recognizes that the D.S.B.R.T. Project will provide faster more efficient reliable transit service in the City. However, Metrolinx and Durham Region Transit should ensure that the D.S.B.R.T. Project embraces a better balance between the needs of

transit users with the needs of and impact on the broader community including the business community.

2. The City is concerned with the introduction of 6 lanes of traffic along King Street West between Waverly Street and the Oshawa-Whitby border. This concern is heightened when the number of travel lanes increases to 7 or 8 at an intersection to account for left-turn or U-turn lanes. As the number of lanes increases, the quality of the streetscape may decline and the pedestrian experience is impacted negatively. In addition, staff are also concerned with the impacts of widenings on abutting properties (i.e. Union Cemetery).
3. The City only supports the curb lane option outside of the downtown which would allow for easier flow of traffic for transit vehicles as they traverse through the Study Area between the Oshawa-Whitby boundary and MacMillan Drive. The curb lane option is also safer for transit users as they embark and disembark from transit vehicles.
4. The City opposes the proposed median from the Oshawa-Whitby boundary to Waverly Street South given the impact of prohibiting left-hand turn movements into private properties and at Waverly Street South.
5. The City only supports through the downtown, from MacMillan Drive to the eastern terminus of the D.S.B.R.T. Project at Ritson Road, that transit vehicles are integrated with mixed vehicular traffic and that there be no dedicated bus lane in this portion of the City.
6. The City does not support any loss of on-street parking as a result of the D.S.B.R.T. Project.

The D.S.B.R.T. Project would result in losses in on-street parking currently estimated at 23 spaces along King Street and 20 spaces along Bond Street.

7. More clarity is needed from Metrolinx on the rationale for the “looping” of westbound transit vehicles from Division Street to King Street East to Ritson Road North to ultimately travel westbound on Bond Street East. A right-hand westbound turn at Division Street and Bond Street East seems more logical.
8. City staff note that the D.S.B.R.T. Project will have an impact on the ability of business owners or residential tenants to load or unload goods and materials in the curb lane in the event that it becomes a dedicated bus lane.
9. City staff have concerns with certain operational aspects such as Traffic and Parking By-law 79-99 and the enforcement of matters such as those related to the provisions of the By-law.
10. Metrolinx and Durham Region Transit are encouraged to investigate the future potential use of the Oshawa Bus Terminal at 47 Bond Street West.
11. It is the City’s expectation that Metrolinx and Durham Region Transit will develop a comprehensive communication plan to engage both residents and businesses via

direct mailout to the City's satisfaction. It is further expected that Metrolinx and Durham Region Transit will jointly host and pay for a virtual consultation focused on the D.S.B.R.T. Project in Oshawa with the assistance of City staff in terms of advertising and messaging.

12. The M.U.P. shown on the north side of King Street West, west of Thornton Road should connect with the M.U.P. the City is constructing along the west side of Thornton Road North. There are plans to extend the M.U.P. further south along Thornton Road South. This connection should also be shown and accommodated.
13. There are concerns with the proposed "reduced width platforms" being proposed along King Street between Centre Street and Celina Street. This is a heavy pedestrian traffic area and every effort should be made to expand the bus stop and sidewalk areas to promote accessibility.
14. Clarity is needed on the issue of a full redesign of King Street/Bond Street. Curbs and catch basins/storm sewers will need to be relocated. Depending on the road condition as many portions of King Street and Bond Street would require rehabilitation or reconstruction to support this implementation.
15. Regarding the permanent layover on William Street East, Durham Region Transit has been granted temporary approval to use this area, but Council has directed staff to follow up regarding compensation for lost revenue related to on-street parking before providing permanent approval.
16. The financial implications to the City are not clear and any cost-sharing expectations for the D.S.B.R.T. Project should be established as soon as possible as there are several City of Oshawa infrastructure asset types which would require reconstruction/upgrade through the project area. These concerns include but are not limited to the following infrastructure:
  - a) The Goodman Creek and Oshawa Creek crossings along King Street should also be considered from a structural and climate change resiliency perspective. Climate change resiliency can also be improved through upgrading the existing stormsewer system within the proposed D.S.B.R.T. corridor. Structural changes can improve accessibility at the Oshawa Creek crossings in particular.
  - b) The Corbett Creek culvert, King Street, and Bond Street structures have been identified for an upgrade from a flow conveyance and life cycle perspectives. This recommended improvement should also be extended to the Goodman Creek structure.
  - c) Sidewalks through this area are less than 1.8 metres in width and should be upgraded.
  - d) All proposed M.U.P.s.
  - e) Signalization at Waverly Street.

17. The impacts to road maintenance have not been identified.
18. A justification for the two different design concepts for bus shelters is requested. In addition, Metrolinx should commit to obtaining the municipalities' approval for a high quality design of shelters.
19. The total potential loss of 150 street trees is a concern and Metrolinx and Durham Region Transit should commit to a compensation plan to replace the lost trees to promote sustainability.

It is recommended that the staff comments be endorsed as City's comments.

## **6.0 Financial Implications**

There are no immediate financial implications resulting from the recommendations of this Report. However, future City capital costs resulting from the project, loss of on-street parking revenues and long term operations and maintenance costs to the City will need to be determined as the D.S.B.R.T. Project advances. All future costs to the City will be determined through the D.S.B.R.T. Project and will be included for approval in the applicable City capital budget and forecast submission to Council.

## **7.0 Relationship to the Oshawa Strategic Plan**

This report advances the Economic Prosperity & Financial Stewardship, Accountable Leadership and Environmental Responsibility goals of the Oshawa Strategic Plan.



Anthony Ambra, P.Eng., Director,  
Engineering Services

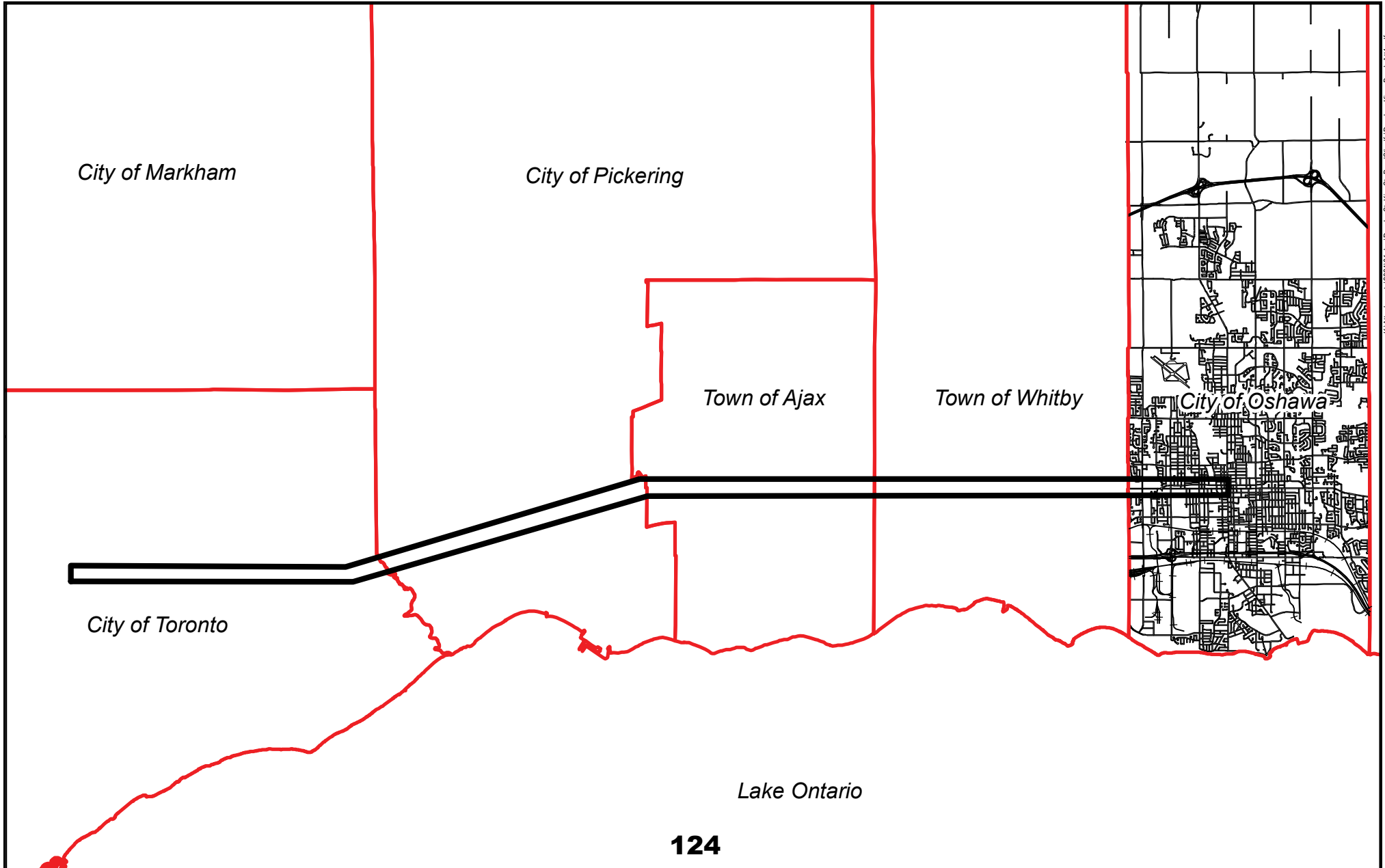


Warren Munro, HBA, RPP, Commissioner,  
Development Services Department

Title: Study Area and Municipal Limits  
Subject: Durham-Scarborough Bus Rapid Transit Project Public Information Centre 3  
File: B-7000-0006

 Study Area  
 Municipal Boundaries

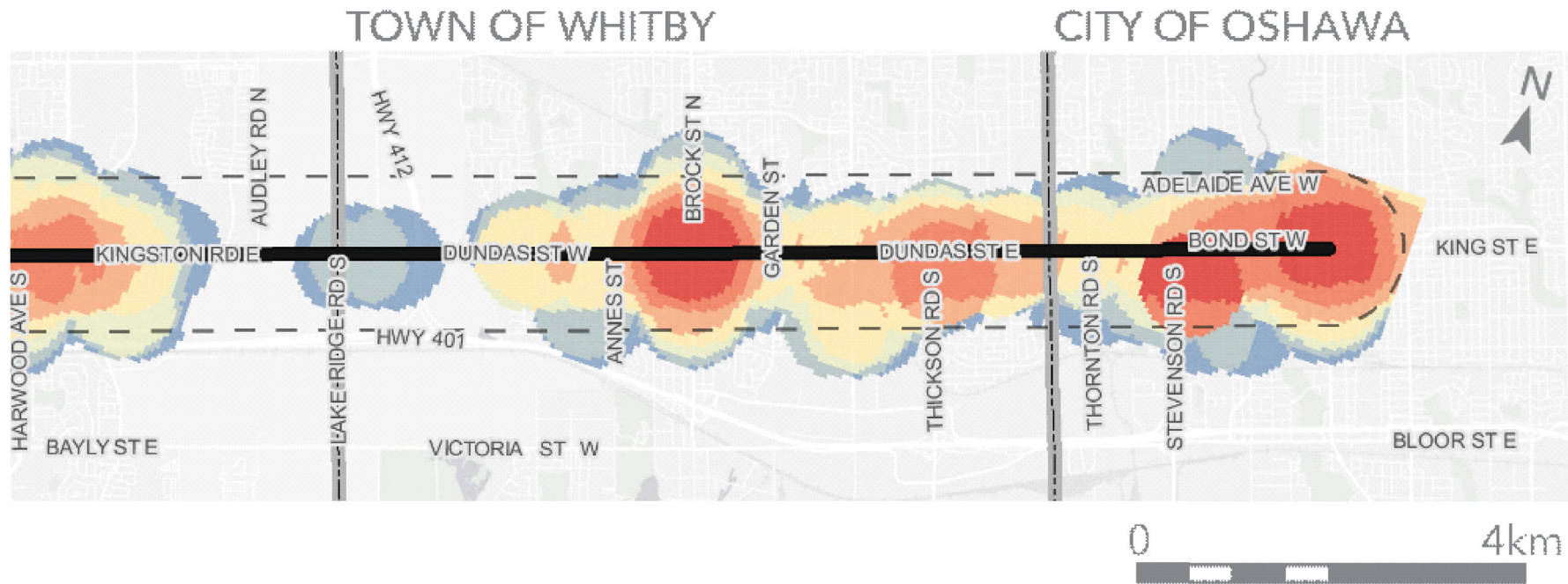
City of Oshawa  
Development Services Department 





Title: Map of Business Density  
Subject: Durham-Scarborough Bus Rapid Transit Project Public Information Centre 3  
File: B-7000-0006

City of Oshawa  
Development Services Department



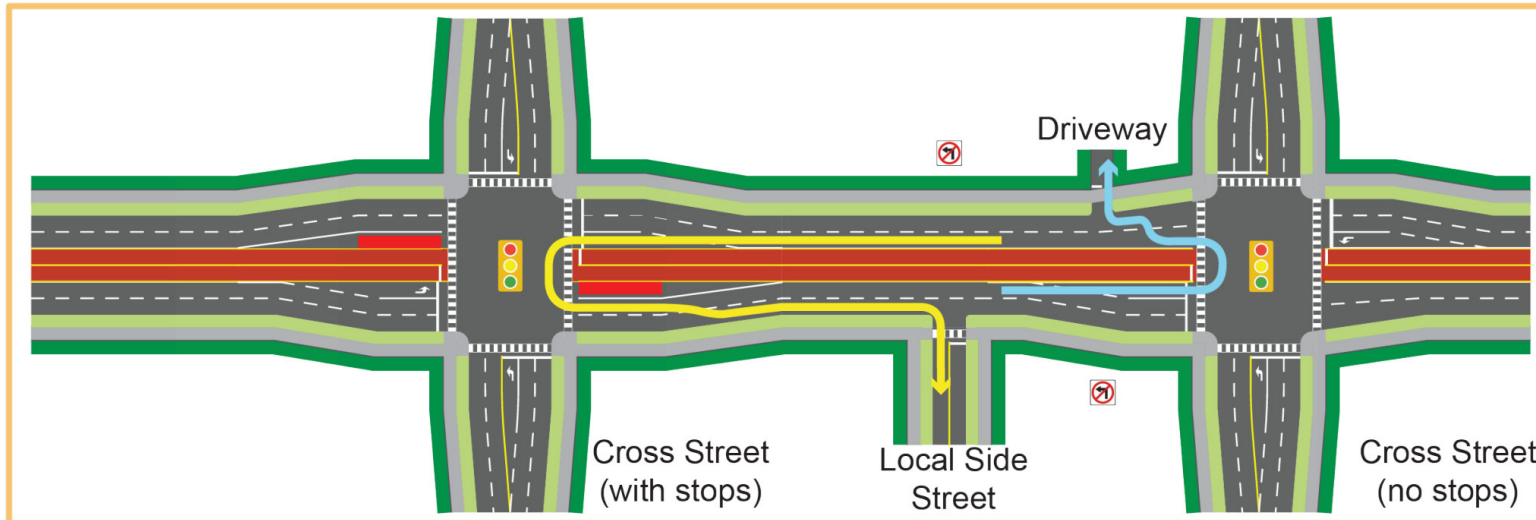
## LEGEND



Map of Business Density within Oshawa  
Source: Metrolinx Public Information Centre 3 material

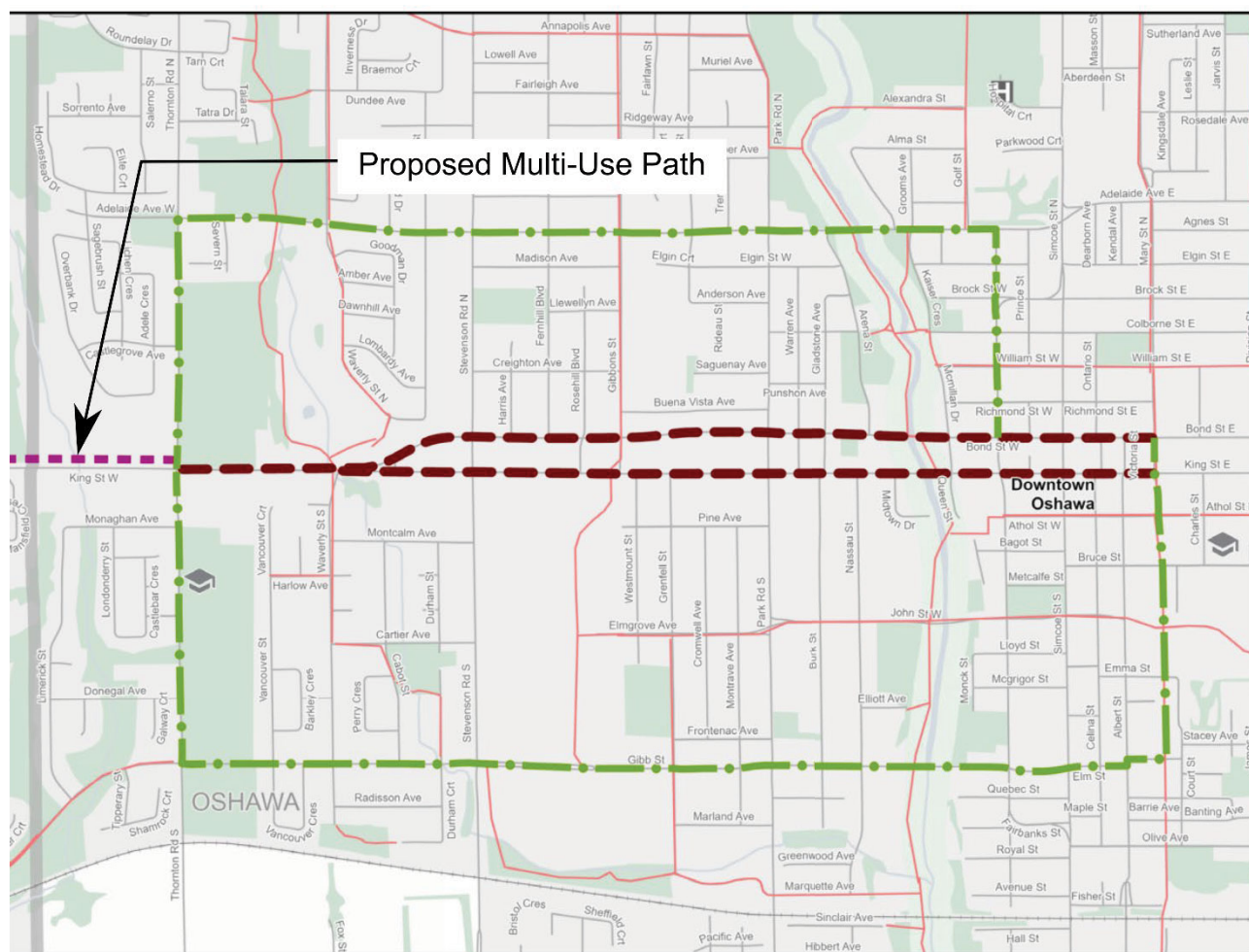
Title: Changes to Travel Patterns  
Subject: Durham-Scarborough Bus Rapid Transit Project Public Information Centre 3  
File: B-7000-0006

City of Oshawa  
Development Services Department




Changes to Travel Patterns

Source: Metrolinx Public Information Centre 3 material



## EXISTING / PLANNED FACILITIES

-  Existing Buffered Bike Lanes or Cycle Tracks
-  Existing Multi-use Path
-  Existing Cycling Facility

## PROPOSED FACILITIES ALONG BRT CORRIDOR

- Proposed Multi-use Path
- Proposed Cycle Track (One-Way)
- Proposed Cycle Track (Two-Way)
- Alternate Route
- No Cycling Facilities Identified
- Under Review

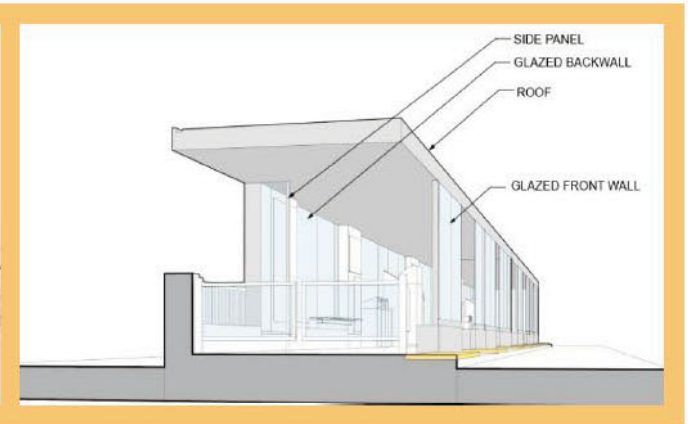
### LEGEND

- |   |                     |   |                           |
|---|---------------------|---|---------------------------|
|  | Hospital            |  | Highway                   |
|  | School              |  | Road                      |
|  | Urban Growth Centre |  | Waterbody                 |
|  | GO Station          |  | Lower Tier Municipalities |
|  | GO Rail             |  | Greenbelt Designation     |
|  | Rail                |  | Greenspace / Wooded Area  |

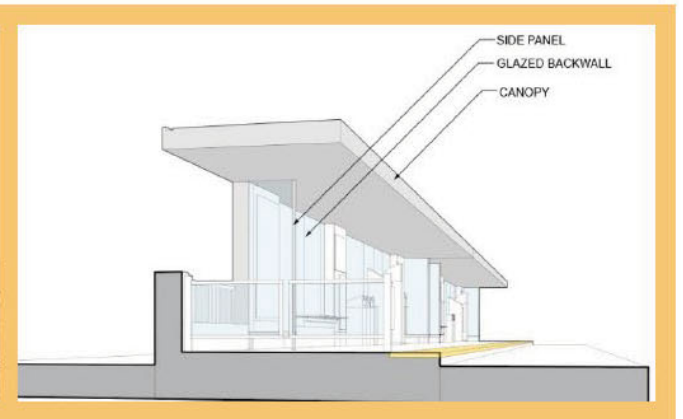
## Proposed Cycling Facilities

Source: Metrolinx Public Information Centre 3 material

Title: Proposed Shelters and Platforms  
Subject: Durham-Scarborough Bus Rapid Transit Project Public Information Centre 3  
File: B-7000-0006



Proposed Shelters and Platforms for Toronto  
Source: Metrolinx Public Information Centre 3 material



Proposed Shelters and Platforms for Durham  
Source: Metrolinx Public Information Centre 3 material



Title: Proposed Routing and Layover  
Subject: Durham-Scarborough Bus Rapid Transit Project Public Information Centre 3  
File: B-7000-0006

City of Oshawa  
Development Services Department



Proposed Routing and Layover Location  
Source: Metrolinx Public Information Centre 3 material



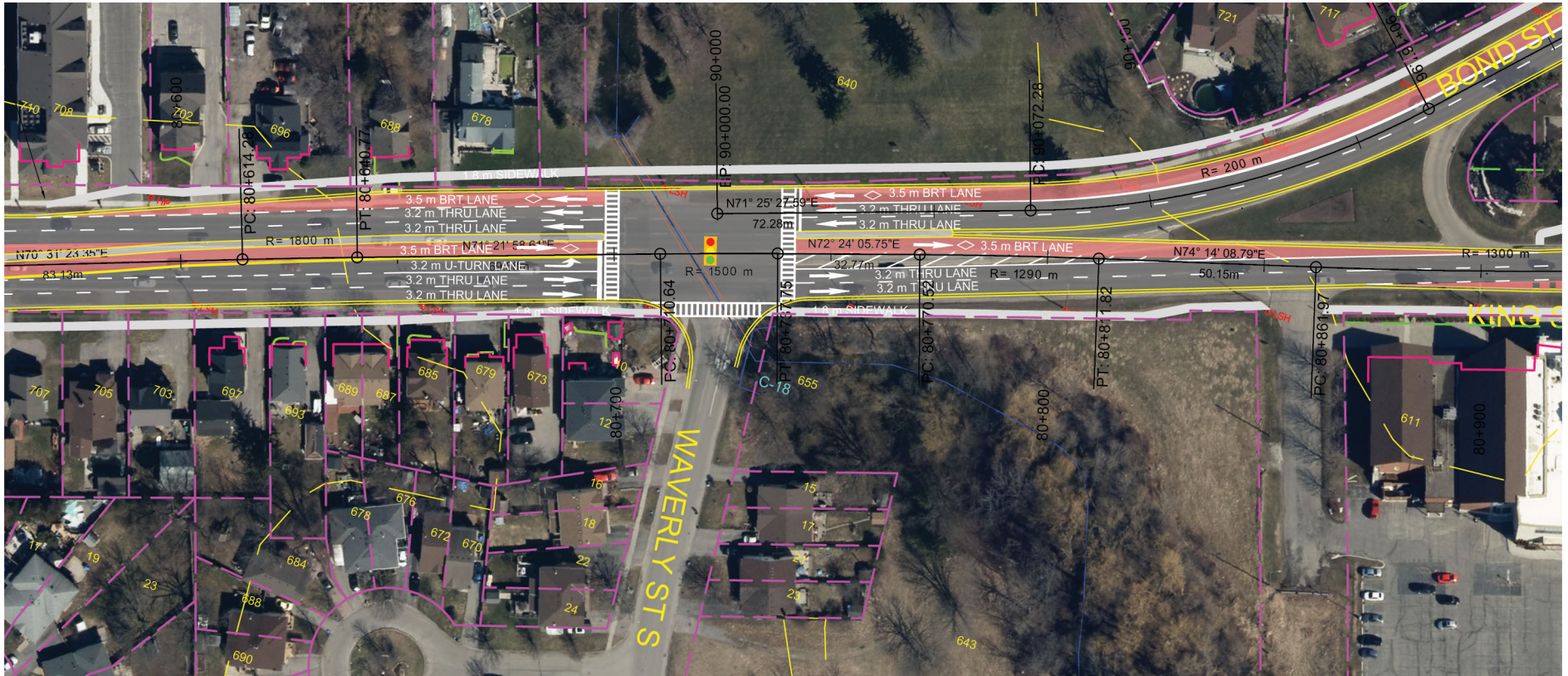
Title: Preliminary Design within the City of Oshawa  
Subject: Durham-Scarborough Bus Rapid Transit Project Public Information Centre 3  
File: B-7000-0006

City of Oshawa  
Development Services Department



Preliminary Design from Corbett Creek to Thornton Road  
Source: Metrolinx Public Information Centre 3 material

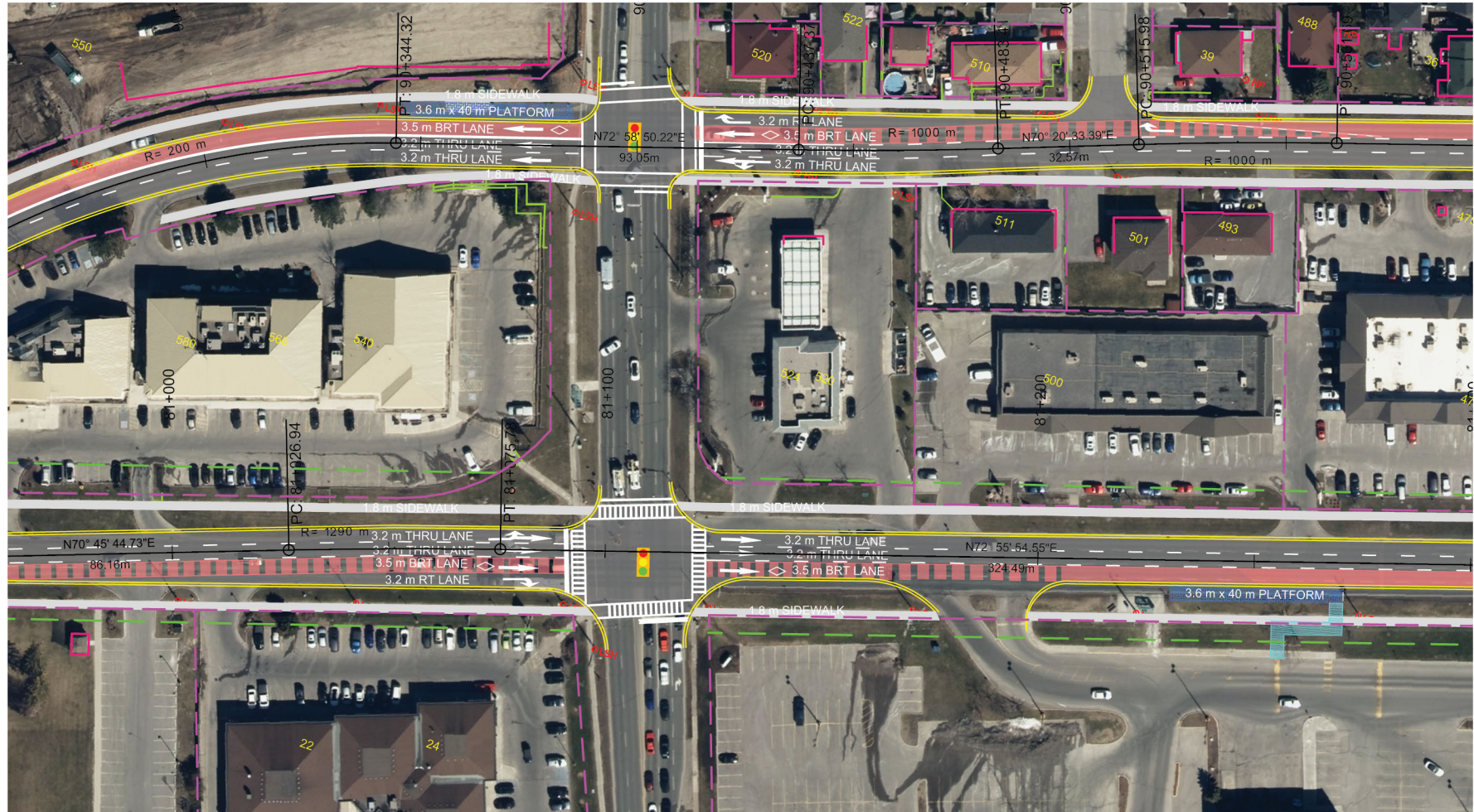




Preliminary Design at Waverly Street  
Source: Metrolinx Public Information Centre 3 material



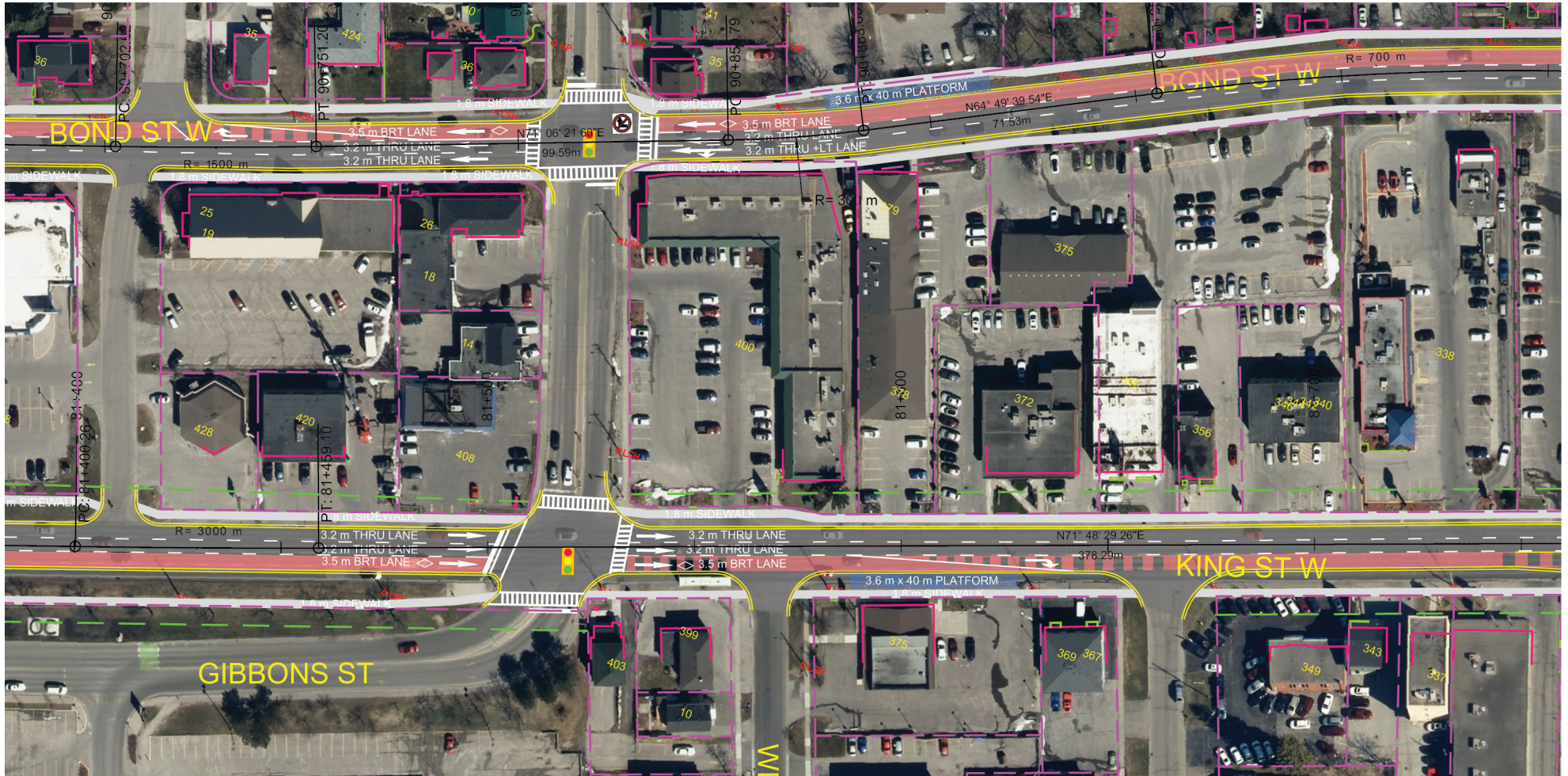
Title: Preliminary Design within the City of Oshawa  
Subject: Durham-Scarborough Bus Rapid Transit Project Public Information Centre 3  
File: B-7000-0006



Preliminary Design at Stevenson Road  
Source: Metrolinx Public Information Centre 3 material



Title: Preliminary Design within the City of Oshawa  
Subject: Durham-Scarborough Bus Rapid Transit Project Public Information Centre 3  
File: B-7000-0006

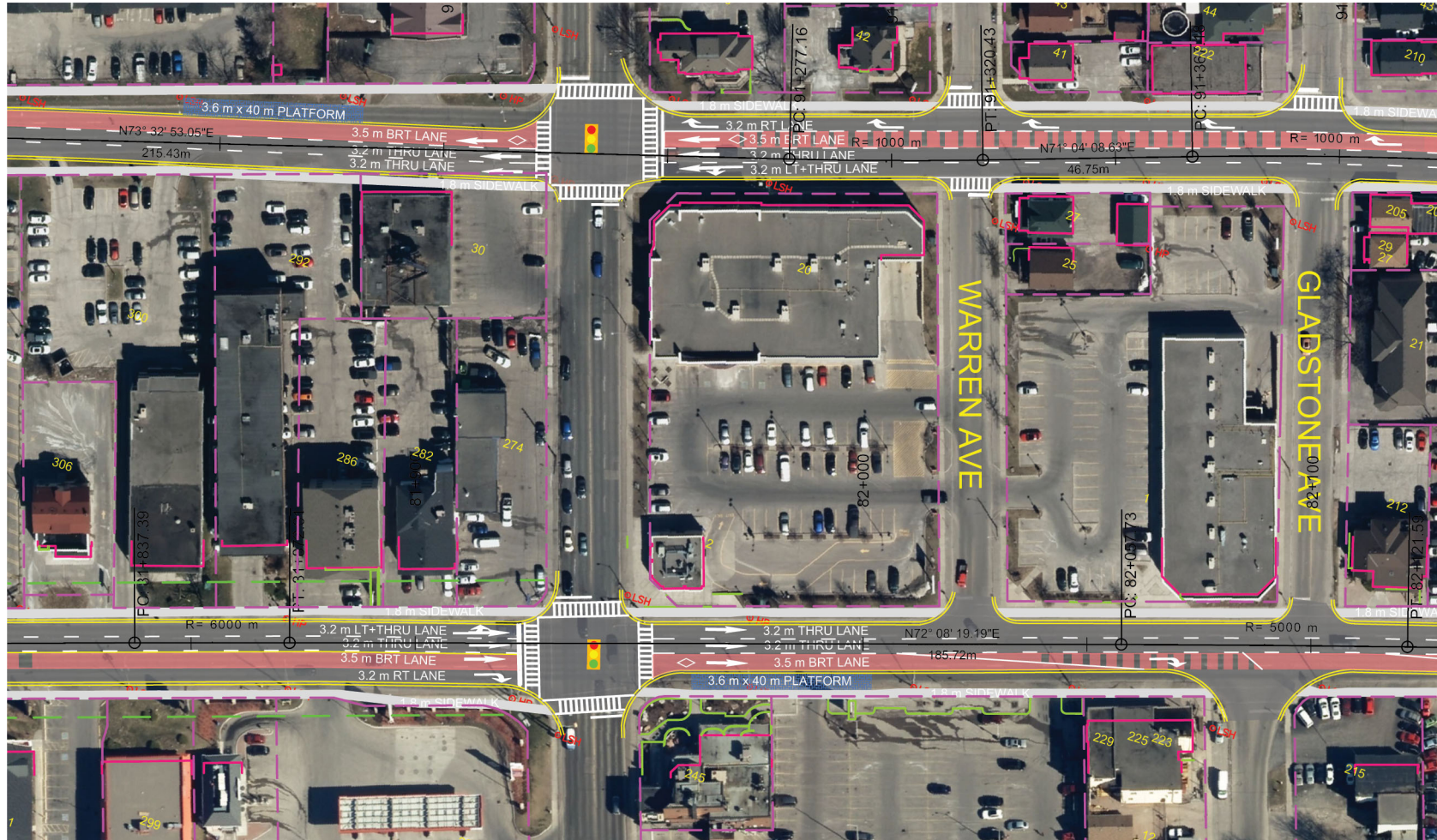


Preliminary Design at Gibbons Street  
Source: Metrolinx Public Information Centre 3 material



Title: Preliminary Design within the City of Oshawa  
Subject: Durham-Scarborough Bus Rapid Transit Project Public Information Centre 3  
File: B-7000-0006

City of Oshawa  
Development Services Department

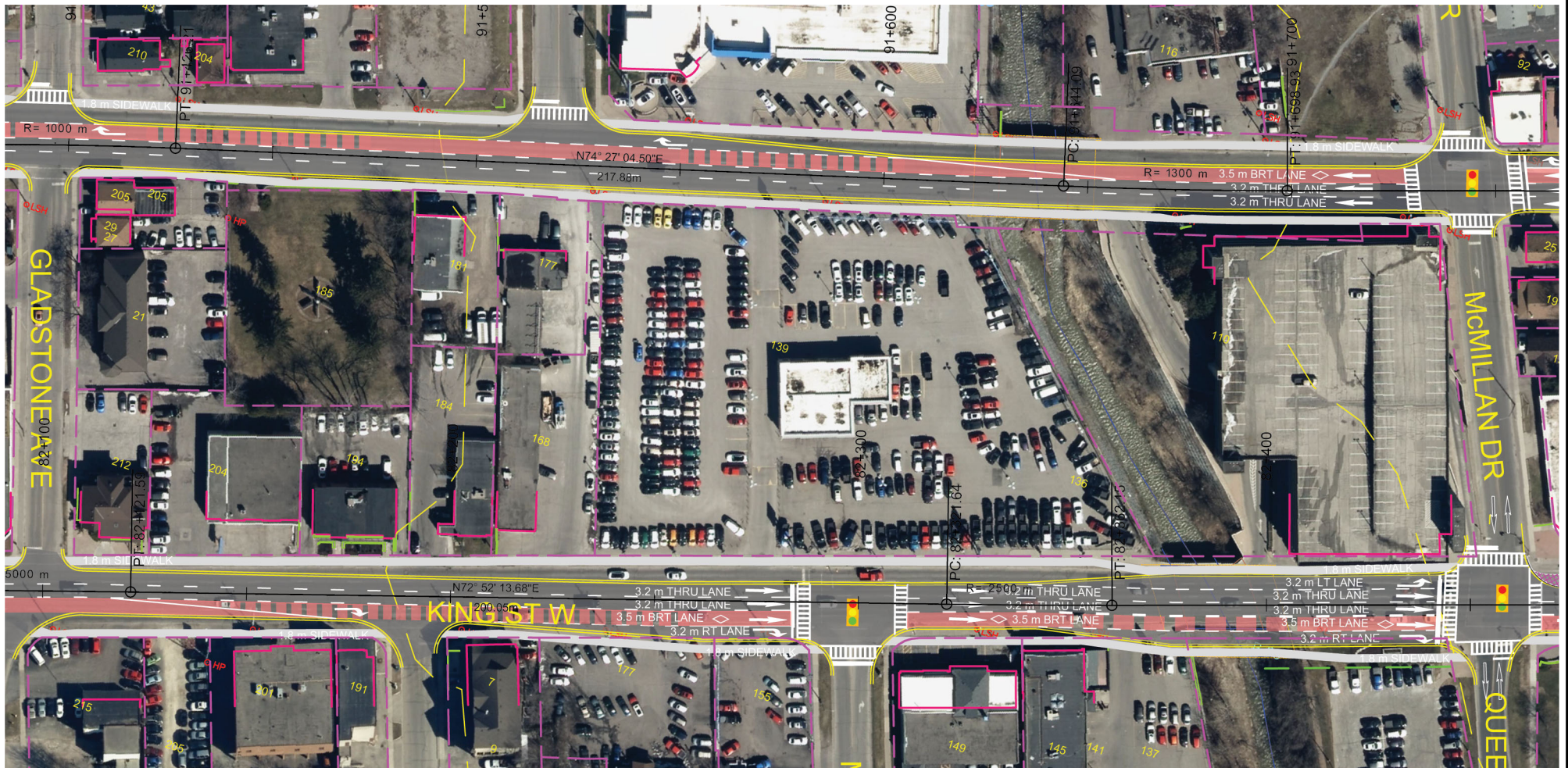


Preliminary Design at Park Road  
Source: Metrolinx Public Information Centre 3 material



Title: Preliminary Design within the City of Oshawa  
Subject: Durham-Scarborough Bus Rapid Transit Project Public Information Centre 3  
File: B-7000-0006

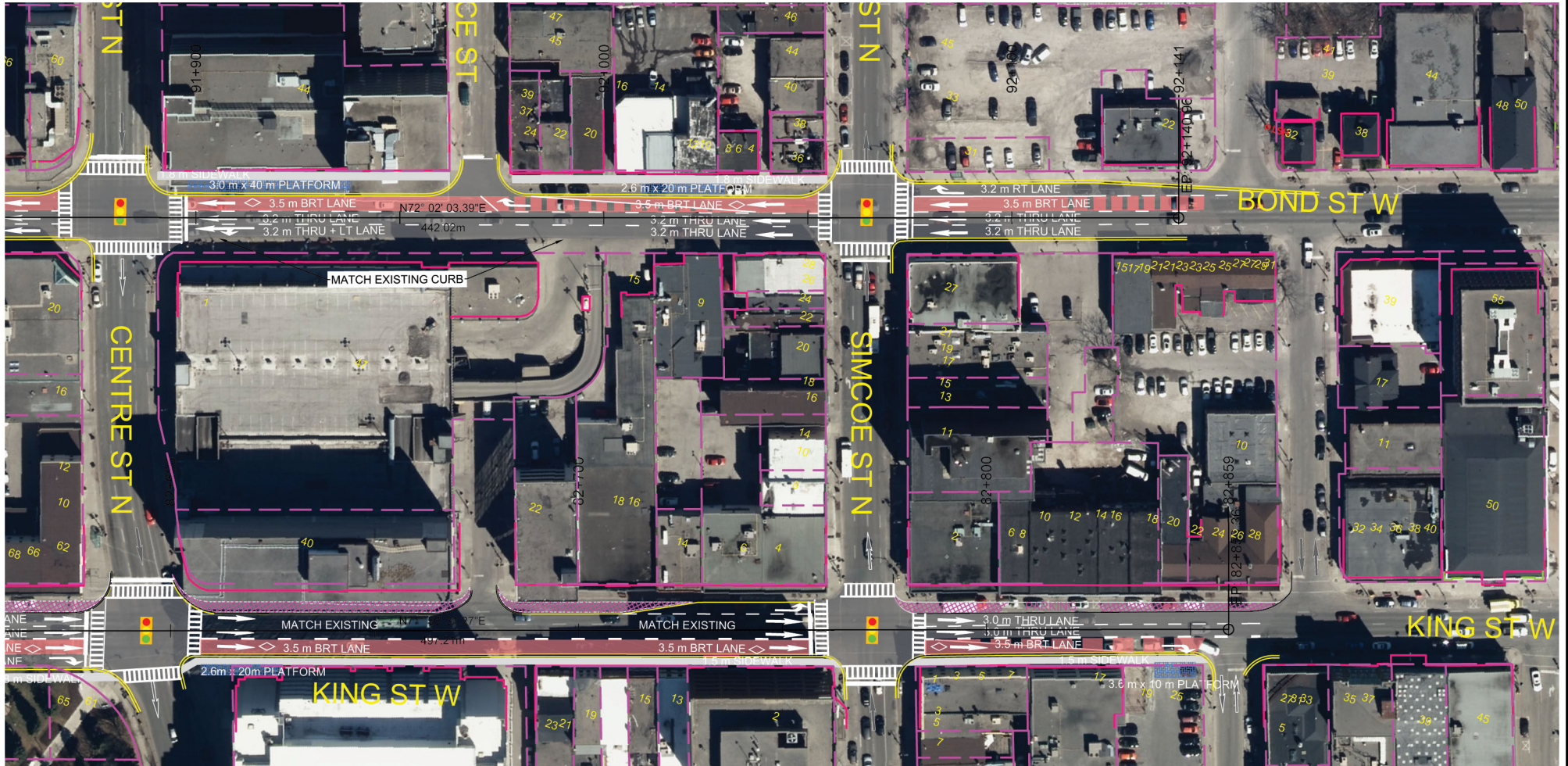
City of Oshawa  
Development Services Department



Preliminary Design from Gladstone Avenue to McMillan Drive  
Source: Metrolinx Public Information Centre 3 material



Title: Preliminary Design within the City of Oshawa  
Subject: Durham-Scarborough Bus Rapid Transit Project Public Information Centre 3  
File: B-7000-0006



Preliminary Design from Centre Street to Ontario Street  
Source: Metrolinx Public Information Centre 3 material



Title: Renderings of the Future Bus Rapid Transit Corridor along Bond Street  
 Subject: Durham-Scarborough Bus Rapid Transit Project Public Information Centre 3  
 File: B-7000-0006

City of Oshawa  
 Development Services Department



Bond Street east of Stevenson Road, looking west

Rendering of Stevenson Road, Looking West  
 Source: Metrolinx Public Information Centre 3 material



Bond Street at Park Road, looking southeast

Rendering of Park Road, Looking Southeast  
 Source: Metrolinx Public Information Centre 3 material



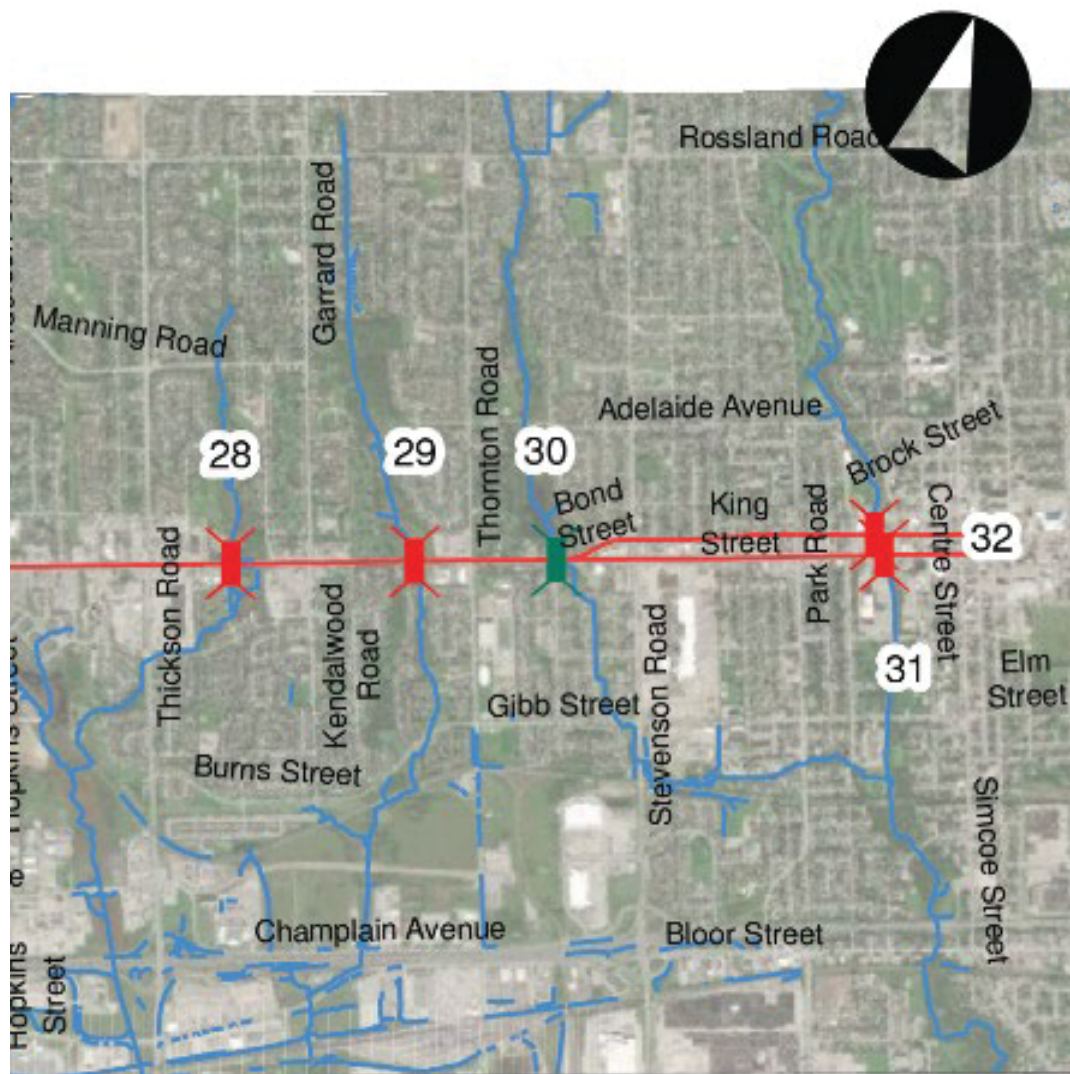
Title: Location of Structures that Require Modification

Subject: Durham-Scarborough Bus Rapid Transit Project Public Information Centre 3

File: B-7000-0006



City of Oshawa  
Development Services Department



## Legend

- BRT Alignment
- ✦ Water Crossings (Structure Modification)
- ✦ Water Crossings (No Structure Modification)

Location of Structures that Require Modification

Source: Metrolinx Public Information Centre 3 material