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On behalf of Metrolinx, in coordination with the City of Mississauga



Port Credit GO Station Area Master Plan Study

# Advisory Panel Meeting #3 – Handouts and Presentation Materials (draft)

June 10, 2015

## Agenda

- 1. Recap on Metrolinx Development Partnership Initiative
- 2. Examples of Above-Grade Parking Structures
- 3. Revised Draft Built Form Concepts & 3-D Model
- 4. Review of Traffic Analysis Undertaken To-Date
- 5. Next Steps



## **Recap on Metrolinx Development Partnership Initiative**

- Metrolinx plans to redevelop its south east commuter parking lot with a parking structure (adding 400 net new spaces for GO customers) and transit-oriented development (TOD):
  - Metrolinx is seeking to acquire approximately 0.3 acres from the City (i.e. a closed portion of the Queen Street right-of-way).
  - Approximately 20% of the site (0.5 acres) has been identified to accommodate an HLRT stop and a 15-metre wide multi-purpose walkway along Hurontario Street.



Source: Excerpt from Official Plan Amendment No. 19 to the Mississauga Official Plan (i.e. Section 13.1.12 of the Port Credit Local Area Plan) and City of Mississauga Aerial Mapping



## **Recap on Metrolinx Development Partnership Initiative**

- For operational, safety and cost reasons, the majority of the 800 GO parking spaces will likely be provided for above-grade (e.g. within a 5 to 6 storey structure).
- Metrolinx understands the importance of quality architecture and landscaping:
  - The Master Plan is intended to provide direction on appropriate land use, built form and design, while also being flexible and realistic.
  - The Master Plan is the first stage in the design and planning/approvals process. It will be followed by amendments to the Official Plan and Zoning By-law (with supporting studies) and Site Plan Approval).
  - Through an RFQ / RFP process, Metrolinx will select a development partner who will be responsible for design and construction of the garage and TOD.





DRAFT

#### The Lex, Chicago, Illinois

• 4 storey parking podium (367 spaces) with ground floor retail and 31-storey residential tower.



#### Market Warf, St. Lawrence Market, Toronto

- 8-storey parking podium (spaces TBD) with ground floor retail and 26 storey residential tower.
- Parking podium built in two phases. Residential component built in phase 1 and parking built in phase 2, along with the tower. Parking elevations mimic the residential elevations.









#### **Charles & Benton Street Parking Garage, Kitchener**

- 6 storey parking podium (500 spaces) with at-grade retail.
- Public art installation ('Pedestrian', 7 life-sized bronze figures) acquired through municipality's 1% mandatory public art contribution.







#### The Rise (Cambie Street), Vancouver

- 6-storey mixed-use development with at-grade enclosed truck court and waste/recycling facility and underground parking (641 spaces).
- The landscape zone contains vents that supply air to the parking garage that are covered with an art installation.









#### Albert Street Parkade, Brisbane, Australia

• 9 storey parking podium (530 spaces) with ground floor retail. The 13-storey office tower was built on top of the existing garage and the art installation (known as 'Landlines') was added to help mask the garage. It also reduced mechanical electrical costs.



#### Santa Monica Parking Structure 6, California

- 9 storey above-grade parking structure with 3 levels below-grade parking (744 spaces).
- Façade functions as a light enhancement screen, bringing light into the structure while eliminating harsh glare at the edge.
- First building of its type in the USA to receive a LEED-Certified rating.



#### Santa Monica Parking Structure, California

- 5 storey above-grade parking structure with ground floor retail.
- A large art installation made up of polished and mirrored stainless steele spheres ('Cradle') is suspended from one side of the garage.





#### Pure Spirits Condominium, Distillery District, Toronto

- 4 storey parking podium (# spaces TBD).
- Residential and parking in the podium structure.
- Distinct identity for the parking structure use of brick to temper modern design and help it fit within the context of the historic Distillery District.





#### Erindale GO Parking Structure, Mississauga, Ontario

- 6 storey parking structure (1,500 spaces) with integrated station building, platform elevator tower and pedestrian bridge.
- Certified LEED<sup>™</sup> Silver.
- Awarded the International Parking Institute Award of Merit: Category II Best Design of a Parking Facility with 800 or More Spaces.





#### Fourth Street Parking Garage, San Jose

- 8 storey parking structure (750 spaces) with 22,700 sq. ft. of ground-floor retail and an 18,000 sq. ft. rooftop banquet centre.
- Features 24 illuminated neon sculptures on the building exterior and the five glass elevators.





#### Santa Monica Civic Centre Parking Structure, California

- 6 storey parking structure (900 spaces) with ground-floor retail and local art work.
- Eco-friendly design incorporating solar panels, an on-site stormwater treatment systems and recycled construction materials. LEED certified.



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#### Former Preliminary Draft Built Form Concept – A1 (discussed on May 26, 2015)



#### **<u>Revised</u>** Draft Built Form Concept – A1



#### Purpose of Revised Draft Built Form Concept – A1 (discussed on May 26, 2015)

- The Revised Draft Concepts prepared by IBI Group are intended to continue the conversation with the Advisory Panel about potential built form and urban design.
  - They are a work in progress.
  - The Master Plan Study is not intended to produce an actual architectural design for the GO parking garage or the other buildings. The preliminary draft 3-D massing model is intended just to shows potential building height and floor plates.
  - The Revised Draft Concept A1 illustrates typical residential floor plates (with a maximum residential floor plate of 800 sq. m.). The typical floor plate of an office tower is much larger (e.g. 1,600 to 2,400 sq. m.). It is anticipated, and illustrated in the Draft Concept, that should a large office tenant be attracted to the Master Plan Area and office space be built on top of the GO parking structure, the floor plate would be larger than 800 sq. m. and the height of the building would likely be lower.



Concept A1 (Stakeholder Meeting May 26, 15) Preliminary Draft for Discussion Revised A1 (Stakeholder Meeting June 10, 15) Preliminary Draft for Discussion

#### Western View Comparison





Concept A1 (Stakeholder Meeting May 26, 15) Preliminary Draft for Discussion Revised A1 (Stakeholder Meeting June 10, 15) Preliminary Draft for Discussion

#### Southern View Comparison





Concept A1 (Stakeholder Meeting May 26, 15) Preliminary Draft for Discussion Revised A1 (Stakeholder Meeting June 10, 15) Preliminary Draft for Discussion

#### Southwestern View Comparison





West Side of Hurontario – Looking South (June early morning conditions)



West Side of Hurontario – Looking North (June early morning conditions)



Shadow Impact – December 4 pm



Shadow Impact – December 4 pm





Shadow Impact – June 4 pm



Shadow Impact – June 4 pm





#### • Existing Traffic – Intersection Operations at AM Peak Hour



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• Existing Traffic – Intersection Operations at PM Peak Hour











 The Master Plan Study is reviewing existing and potential future traffic for the GO Station Area, the Port Credit Community Node (i.e. pink area) and a larger Traffic Influence Area (i.e. adjacent Neighbourhoods - yellow area).

#### **Background Traffic – Traffic Influence Area**

 To factor in future traffic related to background growth within the Traffic Influence Area, anticipated traffic growth rates (% increase) from development sites outside of the Traffic Influence Area were provided by the City of Mississauga, based on their network traffic model. Existing traffic volumes were grown by the annual growth rates to arrive at 2031 Base Background Volumes. These 2031 Base Background Volumes only include traffic growth from outside of the Port Credit Community Node.





#### **Potential Future Traffic – Port Credit Community Node**

- Development site statistics for planned and potential redevelopment sites (5-13) were provided by the City of Mississauga.
- IBI Group prepared estimates of full-build out for the Master Plan properties (1-4).
- Traffic analysis is still underway (e.g. confirmation of traffic generation rates associated with each development land use, origin and destination of traffic, percentage of trips that are vehicle-based versus non-vehicles based (transit, walk, etc.) and finalization of development permissions for sites 1-4.).





- Methodology to Include 13 Port Credit Development Sites
- Trip generation surveys were undertaken at two residential locations
  - One site was in Port Credit, while the other was in Long Branch in Toronto
  - The intention was to see how the residential trip rates differed from typically used industry publications, and to agree upon a reasonable, defendable rate
  - The trip rate is still being finalized
- Projected transit usage and non-vehicle usage in 2031 is being determined using:
  - Projections in the Hurontario / Main Street Corridor Master Plan
  - Existing modal splits in comparable areas and corridors
  - The mode share between vehicles and non-vehicles is still being finalized



#### 2031 Background Growth + Developments – AM Peak Hour



#### 2031 Background Growth + Developments – PM Peak Hour



- Preliminary Results for 2031 Base Background Traffic Conditions
  - This scenario only includes traffic growth from developments within the Traffic Influence Area, and not the 13 sites in Port Credit
  - AM and PM peak hour results are anticipated to be comparable, but slightly worse than 2015 Existing Conditions, which is expected
  - One new location that could have capacity problems is at Lakeshore / Stavebank, for the eastbound movements in the PM peak
    - This is primarily due to the anticipated 300 eastbound through trips, due to developments outside of the study area, within the Traffic Influence Area
    - The traffic delays are anticipated to be a LOS of E, while the overall intersection LOS could be a D, which is generally acceptable



- Preliminary Results for 2031 Background Traffic Conditions with 13 Sites
  - This scenario includes traffic growth from developments within the Traffic Influence Area, and traffic associated with the 13 sites in Port Credit

#### AM Peak Hour

- With the exception of two intersections, all of the signalized intersections should operate with an overall intersection LOS of C or better, which demonstrates good traffic operations on the whole.
- **Hurontario/Park**: The eastbound left is anticipated to have a LOS of E, and there could be lengthy queues. The overall LOS of this intersection is predicted to be D, which is generally acceptable. Additionally, there is anticipated to be spare capacity for the eastbound left turn movement at the adjacent intersection, Hurontario/High, in which drivers would naturally seek in congested periods.
- Hurontario/Lakeshore: It is anticipated that a few movements could have a LOS of E (eastbound left turn, southbound left turn, and westbound through movement). The overall LOS of this intersection is anticipated to be D, which is generally acceptable.



• Preliminary Results for 2031 Background Traffic Conditions with 13 Sites

#### AM Peak Hour

- For unsignalized intersections, all intersections are anticipated to operate without significant delays, and well under capacity, except for the intersection of Park/Ann.
  - There could be issues with the northbound and southbound movements, which are stop-controlled.
- Mitigation measures will be tested during the thorough analysis phase, as the study parameters and assumptions are finalized.



• Preliminary Results for 2031 Background Traffic Conditions with 13 Sites

#### PM Peak Hour

- With the exception of three intersections, all of the signalized intersections should operate with an overall intersection LOS of C or better, which demonstrates good traffic operations on the whole.
- **Hurontario/Park**: The eastbound left is anticipated to have a LOS of E, and there could be lengthy queues. The overall LOS of this intersection is predicted to be C, which is good. Additionally, there is anticipated to be spare capacity for the eastbound left turn movement at the adjacent intersection, Hurontario/High, in which drivers would naturally seek in congested periods.
- **Hurontario/Lakeshore**: The eastbound left is anticipated to have a LOS of E. The overall LOS of this intersection is predicted to be C, which is good.



• Preliminary Results for 2031 Background Traffic Conditions with 13 Sites

#### PM Peak Hour

- Lakeshore/Stavebank: The eastbound through and the northbound left turn movements are anticipated to operate with a LOS of F, and the intersection is at capacity. This is primarily due to the anticipated 300 eastbound through trips due to developments outside of the study area, within the Traffic Influence Area.
- For unsignalized intersections, all intersections are expected to operate without significant delays, and well under capacity, except for the intersection of Park/Ann. There could be issues with the southbound movements, which are stop-controlled. Mitigation measures will be tested during the thorough analysis phase.



- Preliminary Results for 2031 Background Traffic Conditions with 13 Sites
  - Important to note:
    - The results are preliminary and likely to be refined
    - The refinement of the analysis parameters will likely cause changes throughout the network, which might improve some of the potential problem areas noted, and worsen some of the other intersection movements
  - Overall, the network does not have major capacity problems
    - There are isolated delay and queue length issues which require further review and potential mitigation



## **Next Steps**

- June 16, 2015: Public Open House (Clarke Hall, 6:30 to 8:30).
- June July, 2015: With the feedback received from the City, the Advisory Panel, the public and Metrolinx, IBI Group will finalize its analysis and submit a Master Plan Report to the City of Mississauga.
- Summer, 2015: Review of Master Plan and Preparation of Planning Report (Recommendations) by City Staff; and
- Fall, 2015: Master Plan and City Staff Report brought to City Council and the Planning and Development Committee.
- Winter 2015 2016: Official Plan Amendment
  - To incorporate recommendations from the Master Plan Study and City Staff, if required/appropriate.
  - Mandatory public meeting.
  - 2016 2018 onward: Other Approvals Required Prior to New Development Proceeding (e.g. Zoning By-law Amendment, Site Plan Approval and Building Permits)

