

Report
Staff Report
The Corporation of the City of Brampton
10/11/2023

Date: 2023-09-25

Subject: Feasibility and Need for a Partial Interchange at Highway 410

and Countryside Drive (Ward 2)

Contact: Nelson Cadete, Manager, Transportation Planning, Planning,

Building and Growth Management

Report Number: Planning, Bld & Growth Mgt-2023-817

Recommendations:

 That the report from Nelson Cadete, Manager, Transportation Planning, dated September 25, 2023, to the Committee of Council Meeting of October 11, 2023, re: Feasibility and Need for a Partial Interchange at Highway 410 and Countryside Drive (Ward 2) be received; and,

2. That the Commissioner of Planning, Building and Growth Management be delegated authority to reach out to the Ministry of Transportation (MTO) to confirm the City's position of support for access being provided on Countryside Drive to serve the Burt Log subdivision (City File: C03E15.010) and confirmation of the City's position that a future partial interchange at Highway 410 and Countryside Drive is no longer needed.

Overview:

- Committee of Council directed staff to report back to the October 11, 2023 Committee of Council meeting with respect to the following proposed motion: "That the Commissioner of Planning, Building and Growth Management be delegated authority to reach out to the Ministry of Transportation (MTO) to confirm the City's position of support of access being provided on Countryside Drive (and confirmation of the City's position of not having Cloverleaf ramps at Countryside Drive and the future 410 extension)." - CW334-2023
- As a condition of approval from a Local Planning Appeal Tribunal (LPAT)
 decision, a new roadway to Countryside Drive, to and from the residential
 development at the southwest corner of Heart Lake Road and

Countryside Drive, will be permitted and restricted to right turns in and out and the City is required to obtain from the MTO, on behalf of the Owner, the lands required and/or encroachment agreements required for the construction of the proposed public road connection from the development.

- Although the MTO has agreed to protect the lands in favour of future interchange ramps, this process was City initiated and the MTO are not supportive of the City's proposal for a new partial Highway 410 interchange at Countryside Drive.
- The MTO's position is that a future Highway 410 interchange at Countryside Drive, "would be extremely problematic given that such an access will create operational and capacity issues and will also not comply with Access Management Guidelines".
- Without the future plan for an interchange at Highway 410 and Countryside Drive, the MTO has no concerns with the proposed Countryside Drive intersection to the Burnt Log Subdivision.
- The proposed secondary roadway and intersection on Countryside Drive between Highway 410 and Heart Lake Road facilitates good land use planning (second access - emergency), long-term transportation planning (connectivity) and represents a proactive solution that contributes to the mitigation strategy to protect Heart Lake Road.
- The City's Travel Demand Model indicates that future traffic demand on the area road network can be accommodated at an acceptable level of service without the addition of a partial interchange at Countryside Drive and no significant improvements are gained from adding the partial interchange.

Background:

At it's meeting of September 20, 2023, City Council (Special Meeting) approved the following Committee of Council motion (CW334-2023):

That staff report back to the October 11, 2023 Committee of Council Meeting with respect to the following proposed motion: "That the Commissioner of Planning, Building and Growth Management be delegated authority to reach out to the Ministry of Transportation (MTO) to confirm the City's position of support of access being provided on Countryside Drive (and confirmation of the City's position of not having Cloverleaf ramps at Countryside Drive and the future 410 extension)." - CW334-2023

Residential Subdivision (Burnt Log Management Inc.) and LPAT Decision

An application to amend the Official Plan and Zoning By-law and for the proposed residential subdivision (472 residential units, public park, open space, woodlot and

environmental buffers) at the southeast corner of Heart Lake Road and Countryside Drive (City File: C03E15.010) was appealed to the Local Planning Appeal Tribunal (LPAT) by the applicant for 'lack of a decision'.

In April 2010, the City and applicant reached a settlement and the following provision, with respect to the Countryside access, was a part of that settlement:

Access to Countryside Drive at the intersection of Countryside Drive with the new municipal road will be restricted to right in/right out operations only. The City of Brampton shall obtain from the MTO, on behalf of the Owner, the lands required and/or encroachment agreements required for the construction of the proposed public road connection from the development to Countryside Drive. All costs associated for the land acquisition and/or encroachment agreements related to the public road connection from the development shall be the responsibility of the Owner.

This condition is embedded in the Conditions of Draft Approval and Master Site Plan Agreement. The LPAT Approved Conceptual Site plan for the Burnt Log Management Inc. site is attached to this report (Attachment A).

In addition to the above-noted condition, the LPAT decision also included the following provision relating to a future roundabout at the intersection of Heart Lake Road and Countryside Drive:

Prior to final approval, the Owner shall enter into an agreement with the City of Brampton for the front ending costs associated with the installation of intersection improvements at the intersection of Countryside Drive and Heart Lake Road. In addition, the Owner shall front end all costs associated with the detailed engineering design and construction of the EA preferred design at the intersection of Countryside Drive and Heart Lake Road, including, but not limited to acquisition of permits. The City of Brampton shall obtain approvals from Toronto and Region Conservation Authority and/or other authorities as part of the approvals process. All required land acquisition, for lands not owned by the Owner, will be paid for and obtained by the City of Brampton to implement the preferred EA design, any lands required that are owned by the Owner shall be gratuitously dedicated to the City. The City shall agree to reimburse the Owner, by way of a Development Charges Credit Agreement, for all reasonable costs for the design and construction of the intersection improvements at Heart Lake Road and Countryside Drive upon substantial completion of the construction of the intersection improvements and the provision of supporting receipts and proof of a

procurement process satisfactory to the City prior to contracts being executed.

The Interchange and the Ministry of Transportation Ontario

The Ministry of Transportation Ontario (MTO), at the request of the City, has been protecting lands for a future partial interchange Highway 410 and Countryside Drive. These lands are owned by the MTO and identified as Highway Corridor in the Official Plan. The partial interchange would serve eastbound and westbound traffic along Countryside Drive that are destined to and from Highway 410 south of Countryside Drive only. The partial interchange would not provide access to and from the north. It is important to note that although the MTO agreed to protect the interchange lands, the request was City-initiated and the Ministry is not supportive of the City's proposal for a new interchange at this location. The MTO's position is that a future interchange at this location "would be extremely problematic given that such an access will create operational and capacity issues and will also not comply with Access Management Guidelines". Further, if the City wished to build the interchange, the entire cost for the planning, design and construction would need to be funded by the City.

In May 2015, RJ Burnside & Associates Limited undertook a transportation study that concluded the introduction of a new intersection on Countryside Drive west of Highway 410 is feasible and will not adversely impact the future partial interchange ramps. The study also indicated that the proposed intersection will operate safely with excess capacity and allow acceptable turning operations now and in the future. The MTO's response to this study was the confirmation that they are not in favour of the City's proposal for a new interchange at this location.

The MTO has no concerns with the proposed Countryside Drive intersection to the Brunt Log Subdivision, provided that there is not a future plan for an interchange at Highway 410 and Countryside Drive.

Environmental Concerns along Heart Lake Road

Wildlife mortality caused by vehicle collisions along Heart Lake Road has been documented in a number of ecology monitoring projects involving intensive surveys of Heart Lake Road, between Mayfield Road and Sandalwood Parkway. The results of those surveys demonstrate thousands of incidents of wildlife mortality directly related to wildlife-vehicle collisions.

Furthermore, the Heart Lake Road Natural Area (HLNA) represents one of the most significant natural areas within the City of Brampton and includes the following locally and regionally significant and sensitive natural features:

- The HLNA is located within the Etobicoke Creek subwatershed, connected to the provincial Greenbelt and Oak Ridges Moraine natural systems.
- The Heart Lake Conservation Area
- The Brampton Esker
- Provincially significant wetland complex that contains 40 wetland communities

In addition to supporting good land use and transportation planning (i.e., a second/emergency access to the subdivision, improved network connectivity), the intersection on Countryside Drive between Highway 410 and Heart Lake Road represents a proactive solution that contributes to the mitigation strategy to protect Heart Lake Road.

Current Situation:

Policy

The lands that would be required for the partial interchange at Highway 410 and Countryside Drive are depicted as "Highway 410 Corridor" on Schedule 48(a) from the Countryside Villages Secondary Plan (Secondary Plan Area 2). The interchange/ramps however are not addressed in the policies contained within the Secondary Plan. The interchange/ramps are also not addressed in either the current Official Plan (September 2020 Office Consolidation) or the Draft Brampton Plan (Final Draft September 2023). Given that there is no formal policy direction respect the need for the interchange in the Official Plan or Secondary Plan, an amendment to the Official Plan would not be required.

Needs and justification analysis

Using the City's Travel Demand Forecasting Model, staff have analyzed the impact of a future partial interchange at Highway 410 and Countryside Drive, based on the horizon year of 2041. The analysis included a comparison of roadway performance based on transportation demand for two scenarios - one without the partial interchange and one with the partial interchange. The analysis was conducted for both the morning and afternoon peaks hours and using traffic protected to the full build-out horizon year of 2041.

Analysis indicates that the future transportation demand on the network (including Mayfield Road, Sandalwood Parkway, Dixie Road and Countryside Drive) can be accommodated at an acceptable level of service without the addition of a partial interchange at Countryside Drive. The comparison of the two scenarios indicates no

significant service level improvement on any links in the network as the result of adding the partial interchange at Countryside Drive.

See Attachments B and C for AM and PM peak hour volume-to-capacity comparisons, with and without the interchange.

Corporate Implications:

Financial Implications:

The partial interchange at Highway 410 and Countryside Drive was included the 2019 Development Charge Background Study valued at \$10.70 million and identified to be implemented in the 2019 to 2041 timeframe.

There are no direct financial implications associated with this report since development charges are collected on a city-wide basis to fund capital projects that benefit the whole City. Consequently, any costs assigned to this capital project will be redeployed to other growth-related infrastructure requirements within the same service category.

Strategic Focus Area:

City's position of support for local road access being provided on Countryside Drive, and confirmation that the partial interchange is no longer needed is consistent with the "Transit & Connectivity" strategic focus area. The additional local road access point to Countryside Drive will meet the intent of focusing on transportation and connected infrastructure that is safe, convenient, efficient, and sustainable. The City's position also supports the "Environmental Resilience & Sustainability" focus area as site generated traffic to and from the proposed residential development will be directed away from the environmentally sensitive areas adjacent to Heart Lake Road, protecting our environment for a sustainable future.

Conclusion:

To accommodate a second access to the residential subdivision proposed at the southwest corner of Heart Lake Road and Countryside Drive, the Ministry of Transportation Ontario would like confirmation from the City (by way of a Council motion) that it supports a new internal road and intersection on Countryside Drive, east of Heart Lake Road and confirmation that the City no longer wishes to pursue a future partial Highway 410 interchange at Countryside Drive. The benefits of adding an internal road and intersection at Countryside Drive (west of Heart Lake Road) outweigh

the nominal potential benefits from introducing a future interchange at Countryside Drive.

Authored by:	Reviewed by:
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Attachments:

- Attachment 1 LPAT Approved Conceptual Site plan for the Burnt Log Management Inc.
- Attachment 2- AM Peak Hour V/C Comparison With and Without Interchange
- Attachment 3 PM Peak Hour V/C Comparison With and Without Interchange