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MUNICIPAL ROAD ASSUMPTIONS

15TH SIDEROAD FROM BATHURST STREET TO DUFFERIN STREET

**18TH SIDEROAD FROM BATHURST STREET TO DUFFERIN STREET
TOWNSHIP OF KING**

The Transportation and Works Committee recommends:

- 1. Receipt of the following report dated February 20, 2009, from the Commissioner of Transportation Services; and**
- 2. Deferral of a decision on this matter pending receipt of a response from the Township of King regarding the items listed in Recommendation No. 2.**

1. RECOMMENDATIONS

It is recommended that:

- 1. Regional Council receive the municipal road assumption analysis provided in this report.**
- 2. The Regional Clerk advise the Council of the Township of King that Regional Council will consider the assumption of 15th Sideroad and 18th Sideroad based on the assumption analysis and subject to:**
 - a) York Region receiving a formal request from the Council of the Township of King to assume the roads.**
 - b) The Council of the Township of King supporting the upgrade of the roads to Regional standards.**
 - c) The limits of the assumption of 15th Sideroad be from Bathurst Street (Y.R. 38) to Keele Street (Y.R. 6).**

2. PURPOSE

This report is to respond to correspondence from the Clerk of the Township of King (*see Attachment 1*) requesting the review of 15th Sideroad and 18th Sideroad from Bathurst Street to Dufferin Street road sections for possible transfer to York Region.

3. BACKGROUND

At its meeting on June 23, 2005, Regional Council approved the Regional Road Assumption Policy to be followed when considering the transfer of a road either from a local municipality to the Region or from the Region to a local municipality.

Each of the criteria and the road compliance for the subject road sections are discussed in section 4.

The locations requested for consideration are as shown on *Attachments 2, 3 and 4*.

4. ANALYSIS AND OPTIONS

General compliance with road assumption criteria

This section outlines how each segment of road under consideration for assumption meets the road compliance and assumption criteria.

In order for a road to be designated as a Regional road in rural areas, it must meet at least one of the criteria, one through six, and it must meet criteria seven and eight. This will help ensure that only the major arterial roads are transferred to the Region.

The Regional Council approved criteria are:

1. Connects designated rural settlements, having existing major commercial/industrial development or more than 150 persons, to each other and a Regional road or Provincial Highway.
2. Connects a Provincial Highway or Regional road to Provincial Highway, major commercial and industrial areas and major institutional complexes such as colleges and hospitals.
3. Provides service close to consistent major attractors or generators of heavy vehicles.
4. Provides service parallel to and, where justified, crossing major barriers to free traffic movement.
5. Provides service on those roads which are extensions of roads designated as Regional roads in urban areas and to a Regional road or a Provincial Highway.
6. Provides service on those roads which are extensions of roads designated as Regional or County roads in neighbouring jurisdictions and, to a Regional road or a Provincial Highway.

7. Roads should have a current traffic volume greater than 4,000 annual average daily traffic (AADT).
8. Roads should be part of the original concession road grid system.

Compliance with the criteria for the two sections of roadway highlighted in the King Township request is summarized in Table 1.

Table 1
Compliance with Assumption Policy

	15th Sideroad (Bathurst Street to Dufferin Street)	18th Sideroad (Bathurst Street to Dufferin Street)
1. Connects designated rural settlements, having existing major commercial/industrial development or more than 150 persons, to each other and a Regional road or Provincial Highway.	✓	✓
2. Connects a Provincial Highway or Regional road to: • Provincial Highway • Major commercial and industrial areas • Major institutional complexes such as colleges and hospitals	✓	✓
3. Provides service close to consistent major attractors or generators of heavy vehicles.	X	X
4. Provides service parallel to and, where justified, crossing major barriers to free traffic movement.	X	X
5. Provides service on those roads which are extensions of roads designated as Regional roads in urban areas and to a Regional road or a Provincial Highway.	✓	✓
6. Provides service on those roads which are extensions of roads designated as Regional or County roads in neighbouring jurisdictions and, to a Regional road or a Provincial Highway.	✓	✓
7. Roads should have a current traffic volume greater than 4000 annual average daily traffic (AADT).	✓	✓

8. Roads should be part of the original concession road grid system.	✓	✓
Overall Rating (meets criteria for assumption as a Regional road)	✓	✓

4.1 15TH SIDEROAD BETWEEN BATHURST STREET AND DUFFERIN STREET

While reviewing this roadway section against the Regional road criteria, a number of additional factors were also noted by staff.

Transit and vehicle usage

This section of 15th Sideroad from Bathurst Street to Dufferin Street has an Average Annual Daily Traffic Count of 6,300 vehicles per day, with an average of 3.5% trucks. This section of road is classified as a Class 3 road as per the Minimum Maintenance Standards.

York Region Transit operates three bus routes along this section of 15th Sideroad from Bathurst Street to Dufferin Street, Route #88 Bathurst, Route #32 Aurora South, and Route #22 King City. This section constitutes a vital transportation link from Yonge Street, Bathurst Street and Keele Street corridors to the ultimate destination of Seneca College King Campus and as well as a means for transportation for local residents on 15th Sideroad.

The section of 15th Sideroad, from Bathurst Street to Dufferin Street, is currently posted with a “No Trucks Local Traffic Only” sign. The section of road is also posted with an annual Spring Load Restriction regulatory sign as per the Township of King By-law # 2000-65 and as amended by By-law #2007-32. The current Region practice does prohibit trucks on Regional roads. Regional staff will evaluate the road structure and report back to Regional Council to place appropriate load restriction signs complete with applicable Regional by-laws, if warranted.

Existing road condition

The section of 15th Sideroad, from Bathurst Street to Dufferin Street, is presently a two-lane paved road. The existing condition in many areas does not meet current Regional road design standards. The road section includes a GO level crossing of the Newmarket subdivision.

Some key highlights of the existing condition include:

- Substandard road cross section (i.e. narrow shoulder areas of +/- 1m) in many areas that do not meet current design standards of a 1.5m paved cycling lane and 2.5m gravel shoulder. This section of 15th Sideroad has been identified in the Pedestrian and Cycling Master Plan as part of Regional cycling routes.
- At-grade railway crossing.
- Poor structural road condition that will require road base repairs. The current pavement condition has extensive alligator cracking, pot holes, rutting, pavement fatigue, and isolated base failures, an estimated Pavement Condition Index (PCI) would report a measure below 50, which indicates this road section is due for reconstruction now.
- Narrow right-of-way averaging 20m that will require significant property acquisition to bring the road to Regional standard of 36m.
- Significant roadside vegetation which may require trimming or removal.
- Crossing through environmentally significant area.

The effect of these conditions is that bringing this section of road to full Regional standard will require a lengthy and significant environmental assessment process and will require significant capital investment which has not been programmed by the Region.

York Region staff have developed a preliminary cost estimate based on our standard construction prices. The estimated cost to bring this two kilometre two-lane roadway with partial paved shoulders up to Regional standards is approximately \$8.5 million. The estimated work includes Planning Environmental Assessment, roadway reconstruction of the two-lane cross section adding 1.5m of paved shoulders, improving the vertical and horizontal alignments, replacing roadway cross culverts, upgrading the level rail crossing and railway safety gates, pavement markings, traffic signal and illumination, installation of street trees, estimated property acquisition costs and any utility relocation costs. This estimate needs to be confirmed once York Region staff have the opportunity to undertake preliminary engineering studies (geotechnical studies, structure condition study, etc.). Based on Region staffs' experience, a project with this complexity, that requires a Class EA, environmental approvals, significant property acquisition will likely take a minimum of five to seven years to complete.

The annual maintenance cost for 15th Sideroad, from Bathurst Street to Dufferin Street, is estimated at approximately \$28,000 utilizing the 2009 proposed budget lane kilometre costs.

Summary – 15th Sideroad between Bathurst Street and Dufferin Street

Regional staff have concluded that the assumption of the 15th Sideroad between Bathurst Street and Dufferin Street as a Regional arterial road would appropriately reflect the usage of this road section by intra-regional traffic and York Regional Transit. To better

meet the Regional transportation needs, the Region's 10-Year Roads Capital Program and the Roads Operating Budgets would however require the adjustments identified above.

The relative priority of capital improvements to this section of the road network would normally be considered as part of the annual capital prioritization process leading to the development of a draft 10-Year Capital Plan to be submitted for Regional Council's approval.

The maintenance and operations costs would require adjustment of the Roads Operating Budget. In order to properly plan for coordinated maintenance activities at both the Regional and local municipal levels, the optimal times for transferring jurisdictional responsibilities would be at the start of either the spring or the fall maintenance cycles.

There are benefits to both York Region and the Township of King to assume the 15th Sideroad from Bathurst Street to Keele Street

York Region residents would benefit having the 15th Sideroad as a Regional road between Bathurst Street and Keele Street (*see Attachment 3*) as an improved network connection to Highway 400. While assisting King residents with lower traffic volumes on King Road.

4.2 18TH SIDEROAD BETWEEN BATHURST STREET AND DUFFERIN STREET

While reviewing this roadway section against the Regional road criteria, a number of additional factors were also noted by Regional staff.

Transit and vehicle usage

This section of 18th Sideroad, from Bathurst Street to Dufferin Street, has an Average Annual Daily Traffic Count of 7,600 vehicles per day, with an average of 4% trucks. This section of road is classified as a Class 3 road as per the Minimum Maintenance Standards.

Currently, York Region Transit does not operate any scheduled service on this section of 18th Sideroad.

This section of 18th Sideroad, from Bathurst Street to Dufferin Street, is currently posted with a "No Trucks Local Traffic Only" sign. The section of road is also posted with an annual Spring Load Restriction regulatory sign as per the Township of King By-law #2000-65 and as amended by By-law #2007-32. The current Region practice does prohibit trucks on Regional roads. Regional staff will evaluate the road structure and report back to Regional Council to place appropriate load restriction signs, complete with applicable Regional by-laws, if warranted.

Existing road condition

The section of 18th Sideroad, from Bathurst Street to Dufferin Street, is presently a two-lane paved road. The existing condition in many areas does not meet current design standards.

Some key highlights of the existing condition include:

- Substandard road cross section (i.e. narrow shoulder areas of +/- 1m) in many areas that do not meet current design standards of a 1.5m paved shoulder and 2.5m gravel shoulder.
- Very steep grade.
- Poor structural road condition that will require road base repairs. The current pavement condition has extensive alligator cracking, pot holes, rutting, pavement fatigue, and isolated base failures, an estimated Pavement Condition Index (PCI) would report a measure below 50, which indicates this road section is due for reconstruction now.
- Narrow right-of-way averaging 20m that will require significant property acquisition to bring the road to Regional standard of 36m.
- Significant road side vegetation which may require trimming or removal.
- Crossing through environmentally significant area.

The effect of these conditions is that bringing this section of road to full Regional standard will require a lengthy and significant environmental assessment process and will require significant capital investment which has not been programmed by the Region.

York Region staff have developed a preliminary cost estimate based on our standard construction prices. The estimated cost to bring this two kilometre two-lane roadway with partial paved shoulders roadway up to Regional standards is approximately \$7 million. The estimated work includes Planning Environmental Assessment, roadway reconstruction of the two-lane cross section adding 1.5 metre partial paved shoulders, improving the vertical and horizontal alignments, replacing roadway cross culverts, pavement markings, traffic signal and illumination, installation of street trees, estimated property acquisition costs and any utility relocation costs. This estimate needs to be confirmed once York Region staff have the opportunity to undertake preliminary engineering studies (geotechnical studies, structure condition study, etc.). Based on Regional staff's experience, a project with this complexity, that requires a Class EA, environmental approvals, significant property acquisition will likely take a minimum of five to seven years to complete.

The annual maintenance cost for 18th Sideroad, from Bathurst Street to Dufferin Street is, estimated at approximately \$28,000 utilizing the 2009 proposed budget lane kilometre costs.

Summary – 18th Sideroad between Bathurst Street and Dufferin Street

Regional staff have concluded that the assumption of the 18th Sideroad between Bathurst Street and Dufferin Street as a Regional arterial road would appropriately reflect the usage of this road section by intra-regional traffic. To better meet the Regional transportation needs, the Region's 10-Year Roads Capital Program and the Roads Operating Budgets would however require the adjustments identified above.

The relative priority of capital improvements to this section of the road network would normally be considered as part of the annual capital prioritization process leading to the development of a draft 10-Year Capital Plan to be submitted for Regional Council's approval.

The maintenance and operations costs would require adjustment of the Roads Operating Budget. In order to properly plan for coordinated maintenance activities at both the Regional and local municipal levels, the optimal times for transferring jurisdictional responsibilities would be at the start of either the spring or the fall maintenance cycles.

5. FINANCIAL IMPLICATIONS

The annual maintenance cost for operating and maintaining 15th Sideroad, between Bathurst Street and Dufferin Street is estimated at approximately \$28,000. The estimated cost to reconstruct this section of road to Regional arterial standards is approximately \$8.5 million.

The annual maintenance cost for operating and maintaining 18th Sideroad, between Bathurst Street and Dufferin Street, is estimated at approximately \$28,000. The estimated cost to reconstruct this section of road to Regional arterial standards is approximately \$7 million. Maintenance costs have not been included in the 2009 Roads Operating Budget.

Upon Regional Council's agreement to the assumption of these roadways, York Region staff will work to include these road sections in the next D.C. By-law update process, and subsequently consider programming of capital improvements for these two sections of road in preparation of future 10-Year Roads Capital Programs, as well as work with Township staff to determine if any local development charge funds have been collected and to transfer any revenue collected to date to the Region.

Table 2
Summary of Financial Impacts

	2009 Operating Costs	Annual Operating Costs	Capital Costs (Future Years)
15 th Sideroad	\$9,500	\$28,000	\$8,500,000
18 th Sideroad	\$9,500	\$28,000	\$7,000,000

6. LOCAL MUNICIPAL IMPACT

It is expected that these road assumptions will reduce the maintenance budget for the Township of King. The Region will also be in a position to provide a higher level of service by considering improvements to the roads in future Roads Capital Budgets.

The road assumptions of 15th and 18th Sideroad between Bathurst Street and Dufferin Street help improve connectivity within the Regional road network. Future road improvements will improve the connectivity between the urban areas of Newmarket and Aurora with Highway 400 for what is largely inter-municipal traffic using these two sections of road.

7. CONCLUSION

The Township of King requested the Region to review 15th and 18th Sideroads, from Bathurst Street to Dufferin Street, for possible transfer into the Regional road system. The road sections were reviewed and evaluated using the Regional Road Assumption Policy criteria to determine if they should be assumed into the Regional road system.

For more information on this report, contact Paul Jankowski, General Manager, Roads at extension 5901 in the Transportation Services Department.

The Senior Management Group has reviewed this report.

(The four attachments referred to in this clause are attached to this report.)