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WIDENING AND RECONSTRUCTION WARDEN AVENUE 14TH AVENUE TO APPLE CREEK BOULEVARD TOWN OF MARKHAM, PROJECTS 9899 AND 9678

(Regional Council at its meeting on January 22, 2004, amended the foregoing Clause as follows:

Committee Recommendation 2 and Staff Recommendation 2 be received and replaced with the following:

“2. Regional staff expedite and take action on the tender in 2004 for the Warden Avenue widening work.)

The Transportation and Works Committee recommends that:

- 1. The recommendations contained in the following report, December 16, 2003, from the Commissioner of Transportation and Works be adopted;**
- 2. All necessary steps be taken to advance this project.**

1. RECOMMENDATIONS

It is recommended that:

1. The following report be received for information by Transportation and Works Committee and Regional Council.
2. Regional staff report back to the Transportation and Works Committee in mid 2004 on the potential for a late 2004 tender of the Warden Avenue widening work.
3. The Regional Clerk forward a copy of this report to the Town of Markham Clerk's Department.

2. PURPOSE

The purpose of this report is to respond to the Town of Markham Council resolution of November 25, 2003, (*see Attachment 1*) requesting that the Region review the possibility of expediting the reconstruction of Warden Avenue between 14th Avenue and Apple Creek Boulevard (*see Attachment 2*) prior to the currently programmed 2005/2006 construction years.

3. BACKGROUND

3.1 Class Environmental Assessment

A Class Environmental Assessment (Class EA) for the reconstruction of Warden Avenue between Steeles Avenue and Major Mackenzie Drive project was carried out and the Environmental Study Report (ESR) was filed into the public record in May, 2001. This report identified that, due to existing and projected traffic volumes, additional traffic lanes are required to provide increased north-south capacity within the Warden Avenue corridor in order to improve traffic operations and reduce traffic congestion and delays.

Following the public review period of the ESR and the acceptable resolution of received concerns, the requirements of the Environmental Assessment Act (EA Act) have been satisfied.

The Class EA recommendations included the proposed widening of Warden Avenue to a basic seven lane road between Steeles Avenue and Apple Creek Boulevard. Between Apple Creek Boulevard and 16th Avenue, the section of Warden Avenue was identified as having sufficient traffic capacity to meet future demands and no roadway widening is required. A basic five lane road was recommended between 16th Avenue and Major Mackenzie Drive.

3.2 Detailed Design

Subsequent to the approval of the Warden Avenue Class EA, Regional Council passed a By-law in 2001 allowing property acquisition, design and construction between Steeles Avenue and Apple Creek Boulevard to proceed.

The acquisition of the property required to construct the road improvements is underway and agreements have been established with five of the nine affected property owners. Possession of the remaining four properties is expected by spring 2004.

The detail design for the roadwork is also underway. Structural design is complete for the widening of the railway overpass north of 14th Avenue and discussions are ongoing with the railway authority towards an agreement for the widening of the structure.

Permits and approvals are required from regulatory agencies for the widening of the bridge structure over the Rouge River, north of Enterprise Drive. These pre-requisite approvals are required prior to any construction at that environmentally sensitive location. Structural design is ongoing.

Utility relocation plans are being prepared by the various utility companies for the relocation of services.

Collectively, pre-construction activities (detailed design, property acquisition and utility relocation planning) have progressed sufficiently to allow consideration of a late 2004 tender of the Warden Avenue improvements, assuming the scope of work remains consistent with the preferred solution as contained in the approved ESR for the project.

3.3 Timing of Construction in the 10 year Capital Plan

The widening and reconstruction of Warden Avenue is included in the 10 year Roads Capital Program approved by Council for construction in the following years:

- Steeles Avenue to Highway 407 2005
- Highway 407 to Apple Creek Boulevard 2006

In the 10 year Capital Program for 2002, Warden Avenue was identified for improvement in 2003 between Steeles Avenue and Highway 407, while the section between Highway 407 and Apple Creek Boulevard was scheduled for 2005.

However, at the request of the Town of Markham, Regional Council through the adoption of Report No. 7 of the Transportation and Works Committee, Clause 12, approved at the meeting on June 27, 2002, the reallocating of 2003 funds for the Warden Avenue project between Steeles Avenue and Highway 407. These funds were reallocated to the Major Mackenzie Drive East widening from Warden Avenue to the east limit of the proposed Town of Markham Angus Glen Community Centre and Library. This work was tendered and completed in 2003. As a result of this reallocation, improvements to Warden Avenue were rescheduled as described above.

3.4 Rapid Transit Study

York Consortium is currently undertaking the Individual Environmental Assessment (IEA) for the Markham North-South Rapid Transit Link (MNSL), where completion is anticipated by the end of 2004. Through this separate study, Warden Avenue has been identified as a potential alignment for the Markham north-south rapid transit link. Regional staff are working closely with York Consortium with regard to the potential that the MNSL may be located in the Warden Avenue corridor so that the appropriate coordination with the Warden Avenue road project occurs.

3.5 Traffic Demands

The Warden Avenue road EA established a need and justification for a widening of Warden Avenue to a basic six lanes between Steeles Avenue and Apple Creek Boulevard. The need for the widening was based on an assessment of existing and projected traffic volumes. The traffic analysis also considered the extensions of Rodick Road and Birchmount Road by the Town of Markham.

Existing peak hour traffic volumes on Warden Avenue are the highest between 14th Avenue and Highway 7, where current congestion is greatest due to the 4,100 vehicles that travel the road section in either the morning or afternoon peak hour. North of Highway 7, traffic congestion is somewhat lighter, but significant enough to warrant the immediate widening of the road section to Apple Creek Boulevard.

Given the current level of traffic congestion on Warden Avenue and anticipated build-up with the completion of approved area development, traffic congestion can only be expected to get worse barring an immediate widening of the roadway.

4. ANALYSIS AND OPTIONS

In response to the Town of Markham Council resolution, several options were reviewed to advance the timing for the improvement of Warden Avenue. These options considered the current status of pre-construction activities, project funding and potential influence of the Markham North-South Link Rapid Transit IEA.

4.1 Option 1 – Advance the Entire Section between Steeles and Apple Creek Boulevard

Pre-construction activities (design, property acquisition and utility relocation planning) have progressed sufficiently to allow for the potential advancement of roadway improvements on Warden Avenue to commence in late 2004.

Discussions with York Consortium have determined that any widening of Warden Avenue to a basic six lane roadway between 14th Avenue and Apple Creek Boulevard would not preclude future rapid transit within the corridor and that only minor road alterations would be required in spot locations to suit future rapid transit if Warden Avenue becomes the preferred link for rapid transit.

From south of 14th Avenue to Steeles Avenue, current traffic volumes are more manageable and widening through this section can be deferred at this time. In addition, the MNSL study has identified that implementing a transitway through this section may be significantly more difficult and less cost effective if the road widening proceed in advance of the completion of the MNSL IEA.

4.2 Option 2 – Advance the Section between 14th Avenue and Apple Creek Boulevard

The most severe traffic congestion is currently within the section between 14th Avenue and Highway 7. The improvement of this section would be the priority in addressing the concerns of the Town of Markham.

Again, through discussions with York Consortium, the most significant alteration that would be required to Warden Avenue to accommodate rapid transit would be a further widening of the railway bridge overpass north of 14th Avenue, beyond the current widening requirement for six traffic lanes. The approved ESR for the Warden Avenue project only permits for the widening of the bridge to six lanes and any further widening that may be required to accommodate rapid transit would need additional approval.

4.3 Proceed as Planned under the Current Capital Program

This option, conforming to the current Roads Capital Plan, does not address the immediate concerns of the Town of Markham.

4.4 Summary Comments

Based on considerations of the above options, Regional staff have concluded that Option 2, the improvement of Warden Avenue between 14th Avenue and Apple Creek Boulevard, is the best current option for advancement of Warden Avenue improvements.

The reasons for this can be summarized as follows:

- It is the section subject to the worst traffic congestion and, once improved, would address the Town of Markham concerns.
- Rapid Transit would not be precluded through road widening in this section and could be subsequently accommodated relatively easily.

This option has also been discussed with Markham staff who concur with the recommendation that Warden Avenue between 14th Avenue and Apple Creek Boulevard provides the best opportunity for advancement to 2004.

5. FINANCIAL IMPLICATIONS

The construction cost estimate for the widening of Warden Avenue between Steeles Avenue and Apple Creek Boulevard is \$10.5 million, as outlined in the following table:

Table 1
Construction Cost Estimates

Road Section	Cost Estimate
Steeles Avenue to 14 th Avenue	\$4.5 M
14 th Avenue to Highway 407	2.5 M
Highway 407 to Apple Creek Boulevard	3.5 M
Total	\$10.5 M

Funding for the section between Steeles Avenue and Highway 407 is currently included in the 2003 Capital Budget for 2005. In order to advance funds to 2004 other key projects would have to be deferred, funds from delayed or underspent projects could be used or an increase in the tax levy could be considered.

Staff recommend that the reconstruction and widening of Warden Avenue between 14th Avenue and Apple Creek Boulevard be regarded, at this time, as a contingency project and proceed to construction if design and approvals are successfully achieved, and if funds become available from within the 2004 Roads Budget Capital due to under spending or delay of any other projects within the 2004 budget. Staff will report to the Transportation and Works Committee in mid 2004, or earlier, on the potential for a late 2004 tender of the Warden Avenue widening work.

6. LOCAL MUNICIPAL IMPACT

The Town of Markham is concerned with the current level of traffic congestion along Warden Avenue. The Region is appreciative of the Town's concerns and will endeavour to implement the needed improvements at the earliest opportunity or as scheduled under the 2005 Capital Program.

During the course of the detail design, meetings will be held with Town of Markham staff to identify the Town of Markham requirements for sidewalks. The Region will provide sidewalks, if so requested, on a cost recovery basis from the Town of Markham. These items have yet to be finalized and, therefore, the costs noted above exclude any of the Town of Markham requirements.

7. CONCLUSION

The widening of Warden Avenue between 14th Avenue and Apple Creek Boulevard will reduce congestion and improve traffic operations for the travelling public when the improvements to Warden Avenue are carried out.

Through joint reviews and co-ordination with York Consortium, future rapid transit implementation will not be adversely affected by the advanced widening of Warden Avenue north of 14th Avenue.

Several options have been reviewed for advancing any section of Warden Avenue within the 2004 Capital Program. It is recommended that the reconstruction and widening of Warden Avenue between 14th Avenue and Apple Creek Boulevard (Option 2) be regarded as a contingency project and proceed to construction as funds become available from within the 2004 Capital Program budget allocations and when all pre-construction activities have been completed.

The Senior Management Group has reviewed this report.

(A copy of the attachments referred to in the foregoing is included with this report and is also on file in the Office of the Regional Clerk.)