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CONSULTANT SELECTION FOR ENGINEERING SERVICES KEELE STREET AND 15TH SIDEROAD INTERSECTION IMPROVEMENTS TOWNSHIP OF KING, PROJECT 81510

The Transportation and Works Committee recommends the adoption of the recommendations contained in the following report, May 3, 2006, from the Commissioner of Transportation and Works:

1. RECOMMENDATIONS

It is recommended that:

1. The consulting engineering firm of National Capital Engineering Limited be engaged to undertake the engineering services for the Class Environmental Assessment and Preliminary Design for intersection improvements at Keele Street (Y.R. 6) and 15th Sideroad at a total upset limit fee of \$292,400.00, excluding GST.
2. The Regional Chair and Regional Clerk be authorized to sign the necessary agreements, subject to review by Legal Services.

2. PURPOSE

This report recommends the retention of consulting engineers to complete the Class Environmental Assessment and Preliminary Design for intersection improvements on Keele Street 15th Sideroad. A location plan is appended to this report (*see Attachment 1*).

The Purchasing By-Law requires council approval for award of consulting assignments when the recommended proponent is not the lowest price proposal.

3. BACKGROUND

3.1 Project Description

The Region's transportation and roadway management strategies have identified future road network needs at the intersection of Keele Street and 15th Sideroad. Improvements at this intersection are required to address opportunities for potential safety and operational improvements and anticipated future deficiencies.

The intersection of Keele Street and 15th Sideroad is controlled by stop signs on 15th Sideroad, and has a fifth leg at the corner of the intersection, a private driveway to the Marylake Augustinians Monastery (13760 Keele Street). The intersection is offset by approximately 17 m between the west and east approaches. The west leg of 15th Sideroad

is not a through road and currently serves to provide an access to the St. Thomas of Villanova Catholic High School approximately 400 m west of the intersection. Keele Street and 15th Sideroad are two-lane roads with no right- or left-turn lane provisions at the intersection.

The intersection lies on the Oak Ridges Moraine with lands south of 15th Sideroad (SW and SE quadrants) identified as Settlement Area, lands in the NW quadrant identified as Countryside Area and lands in the NE quadrant identified as Natural Core Area. The King City Community Plan (January 2000) also identifies environmental protection areas on the south side of 15th Sideroad, east of Keele Street.

The intersection is identified in the Regional Streetscape Policy (2001) as an entryway and the northern limit of the Regional Road Streetscape Plan for Keele Street that continues south to the King/Vaughan boundary. Furthermore, the King City Community Plan (2000) identifies this intersection as a major gateway to the community that must reflect the character of the community and ensure that it is “distinctly different and separate from the adjacent more urban communities”. This entryway or gateway area may be highlighted by feature planting, signage and architectural elements. Boulevard trees, landscaped medians, continuous sidewalks and decorative transit shelters with street furnishings are also identified in the Region’s Streetscape standard for entryways and may be incorporated.

Keele Street serves as the major north/south transportation corridor through King City and is important in establishing the identity of the community. This portion of Keele Street must reflect the dominance of the natural environment combined with the low density residential character of the area.

Property constraints in the vicinity of the intersection are also significant. The Marylake Augustinians Monastery on the northwest corner of the intersection, including the stone arch gateway, entrance walls and gatehouse, are heritage features as designated under the Ontario Heritage Act that must be protected. Furthermore, the existing limited right-of-way for Keele Street north of 15th Sideroad and the Natural Core Area east of Keele Street are also constraints that may impact on the ultimate configuration of the intersection. Other natural environment issues such as potential loss of agricultural land, mature trees, and environmental protection areas identified in the King City Community Plan, must also be considered.

The current misaligned configuration of the intersection is undesirable and there is a need to improve traffic flow and safety. The poor site visibility and complex intersection manoeuvring for vehicles has raised concerns for safe efficient operation of the intersection, especially for vehicles on 15th Sideroad crossing Keele Street or negotiating left turns onto southbound Keele Street from the east approach.

In addition, the intersection of Keele Street and 15th Sideroad is approaching the warrants for the installation of traffic control signals. The substantial increase in traffic

counts on the west approach due to the previous Phase 2 expansion of the St. Thomas of Villanova Catholic High School has created the need to review traffic signal warrants and the impact of the proposed Phase 3 expansion of the school contemplated for 2006 construction. Notwithstanding the signal warrants, the traffic impact study for the Phase 3 expansion recommends improvements to the intersection prior to occupancy. The impact of increased traffic generated from a new residential subdivision on the east side of Keele Street south of 15th Sideroad and a planned subdivision on the south side of Keele Street west of 15th Sideroad (directly south of the school) will also have to be reviewed.

To satisfy these needs, York Region's objectives for this project will include, but not be limited to, the following:

- Providing a road intersection constructed to Regional standards that is capable of safely serving the existing and future travel needs of the area.
- Enhancing road user safety by improving the geometry and roadside environment in the vicinity of the intersection.
- Improving connectivity to residences, the Marylake Monastery and the St. Thomas of Villanova Catholic High School.
- Avoiding/minimizing impacts to the Marylake Monastery Heritage Features, ORM Natural Core Area and other environmentally sensitive areas identified.
- Incorporating recommendations of the Region's Streetscape Policy and King City Community Plan and providing Gateway elements that reflect the character of the King City Community.
- Full compliance with the Oak Ridges Moraine Conservation Plan, Greenbelt Plan (2005) and King City Community Plan (2000).

Possible improvements for this intersection may include, but are not limited to, the following:

- Re-alignment of intersection and elimination of the jog in 15th Sideroad.
- Re-alignment of the intersection shifting the east leg (or both legs) of 15th Sideroad southerly to remove the existing offset and to avoid/minimize impacts on the Monastery heritage features and the ORM Natural Core Area.
- Re-alignment of Keele Street to avoid/minimize impacts on the Monastery heritage features.
- Installation of Traffic Signals.
- Partial illumination of the intersection.
- Addition of left and right turn lanes, particularly northbound left turn lane.

Accordingly, the Region's latest approved 10 Year Roads Construction Program has scheduled the implementation of improvement works in 2008.

3.2 Scope of Assignment

The scope of work for this assignment includes:

A complete study of roadway improvements at the intersection of Keele Street and 15th Sideroad in accordance with all requirements of the Municipal Class Environmental Assessment (Class EA) document for municipal projects, prepared by the Municipal Engineers Association dated June 2000. The study shall be classified as a Schedule 'B' however will go beyond the minimum requirements as outlined in the Class EA document for Schedule 'B' projects. This enhanced study shall incorporate a Phase 3 analysis identified in the Class EA document for Schedule 'C' projects, which includes, but is not limited to the following:

- Development of alternative designs.
- Detailed inventory of natural, social and economic environment.
- Identification of impact of alternative designs on environment and mitigating measures.
- The comparison/evaluation of alternative designs to identify preferred design.
- The consultation of review agencies, the public and other stakeholders.
- Selection of preferred design.
- Preparation of a monitoring program for key environmental impacts designed to be carried out during and after construction.
- Complete the study to meet the requirements of Canadian Environmental Assessment Act (CEAA) as required and coordinate it with the Class EA, under the concept of "one project – one assessment"
- Complete the preliminary design of the project requirements, including all field investigations, reviews, relevant tests, inspections and studies, with due regard for environmental, traffic accommodation and safety concerns, capital cost and operating efficiency all in accordance with York Region standards, specifications and practices.

3.3 Project Phasing

The Region's proposed 2006 10-Year Road Construction Program has identified the timing for the improvement works at this intersection as follows:

- Schedule 'B' Class Environmental Assessment (EA) – 2006.
- Detailed Design – 2007.
- Construction – 2008.

4. ANALYSIS AND OPTIONS

4.1 Outcome of Evaluation of Proposals

In accordance with the Regional Purchasing By-law, Expressions of Interest (EOI) were received for this work in response to an appropriate advertisement in a publication of general circulation. All EOI's were reviewed and based on the results of the evaluation three firms were invited to submit a response to our Request for Proposal (RFP) document.

The four firms invited to submit written proposals for this assignment were as follows:

- Stantec Consulting Ltd.
- National Capital Engineering Limited (NCE)
- Chisholm, Fleming and Associates
- Cole Engineering Group Ltd.

Cole Engineering Group Ltd. declined to submit for this proposal.

The Region used the “two envelope” evaluation process for this RFP, in which Technical/Management Proposals were opened and evaluated prior to the opening and evaluation of the corresponding Financial Proposals. The total weighting of the technical/management proposal is 80% and the total weighting of the financial proposal is 20%. This allocation of technical/management and financial weighting will ensure that the assignment is awarded to a consultant that is very technically competent as well as cost competitive.

The technical proposals were evaluated based on the following technical criteria:

- Project Team Experience
- Project Management
- Project Implementation

In accordance with the terms of the RFP, the financial proposals were opened only after Region staff agreed to the overall technical scores. After compliance of the financial proposals had been established, the overall proposal was evaluated based on a weighting of 80% for the technical/management proposal and 20% for the financial proposal. The best proposal was deemed the one with the highest total score.

The consultant proposal evaluation summary is presented in Table 1 and includes the technical score, the upset limit fee and corresponding financial score and the total score for each proponent.

Table 1
Consultant Proposal Evaluation Summary

Firm	Technical Score (Out of 80)	Upset Limit Fee Excluding GST	Financial Score (Out of 20)	Total Score (Out of 100)
National Capital Engineering Limited	65.4	\$ 292,400.00	12.8	78.2
Chisholm, Fleming and Associates	55.6	\$ 187,257.00	20.0	75.6
Stantec Consulting Ltd.	46.9	\$ 224,463.00	16.7	63.5

The best overall (combination of technical and financial) proposal was received from National Capital Engineering Limited (NCE) as their proposal had the highest total score and represents the best value for the Region on this assignment.

The technical proposal submitted by NCE received higher scores over most of the categories of the evaluation criteria as outlined in the Region's Request for Proposal, and especially on certain project requirements that were crucial to the success of the project. As a result, the NCE received the highest technical score of the three proposals by a considerable margin.

Among the categories scored, NCE's technical proposal was superior to the other two proposals in the following respects:

- 1) NCE's proposal featured a good complement of senior project management and technical staff and compiled the most comprehensive and multidisciplinary project team with a proven and successful track record on previous environmental assessment studies, including many Region projects. In addition, NCE's proposal clearly identified and described the roles and responsibilities of the planning team as they relate to their work plan. Their proposal presented a firm corporate commitment of the necessary resources required to complete this complex assignment.
- 2) NCE's proposal demonstrated an intimate understanding of the existing constraints and potential opportunities on this project given the uniqueness of the project, and the sensitive environmental issues associated with the natural core area of the Oak Ridges Moraine Plan, sensitive watercourses and heritage features such as the Marylake Monastery. Their proposal presented an effective and efficient work plan that reflects the requirements of the Environmental Assessment Act and was the most responsive to Region's requirements, schedule and capital delivery program.

- 3) Their proposal incorporated a realistic schedule and schedule control plan that will be required in meeting requirements of agencies and stakeholders and in achieving milestone deliverables set for the project. The schedule presented a logical flow of activities with realistic review times and careful consideration given to the Region's public consultation requirements.

Although the financial proposals for Chisholm Fleming and Stantec are notably lower, NCE's fee is well supported by the appropriate commitment of resources and level of effort to address the significant issues of this project. NCE's financial proposal is based on a total 2,300 person hours required, compared to 1,000 person hours of Chisholm Fleming.

The Supplies and Services Branch has reviewed the evaluation summary and has issued their internal report confirming that National Capital Engineering Limited be recommended as the successful overall proponent for this assignment

5. FINANCIAL IMPLICATIONS

The upset limit fee for the work is \$292,400.00, excluding GST.

There are sufficient funds in the Region's proposed 2006 Roads Capital Budget to undertake the study in 2006. Funding for the study in 2007 will be adjusted accordingly in the upcoming 2007 Capital Budget Process. Proposed expenditures and sources of funding for this project are given in the following table:

Table 2
Proposed Budgeted Expenditures and Sources of Funding
(Cash Flow in 000s)

Project	2006	2007	2008	Total
Keele Street and 15 th Sideroad	\$80	\$270	\$2,035	\$2,385
Total	\$80	\$270	\$2,035	\$2,385
DCs	\$48	\$161	\$1,184	\$1,393
Tax Levy	\$32	\$109	\$851	\$992
Other*				

The upset limit fees provide for provisional items of consulting activity (i.e., stage two archaeological assessments or additional public consultation, if required). The consultant

will only be paid for these items if specifically directed by the Region to undertake the work covered under the provisional item(s).

6. LOCAL MUNICIPAL IMPACT

The Keele Street and 15th Sideroad intersection improvements will be constructed in the Township of King. The project will improve traffic safety and operations for the travelling public within the local road network. It will also support the King City Community Plan (2000) by ensuring that the character of the community is maintained and enhanced through the provision of Gateway features. Throughout the Class EA, Regional staff will work closely with staff from the Township of King to accommodate their requirements in the Class EA and preliminary design

7. CONCLUSION

Consultants' proposals for this project were evaluated in accordance with Regional policy, by-laws and practices. The proposal submitted by National Capital Engineering Limited addressed all of the requirements for this assignment, including qualified and knowledgeable personnel, and proposed a sound methodology to complete this assignment. The proposal represents the best overall value to York Region.

The Senior Management Group has reviewed this report.