



**STAFF REPORT  
ACTION REQUIRED  
with Confidential Attachment**

**Construction of Front Street West Reconfiguration and Replacement of a 600mm Diameter Watermain including authority to enter into Sole Source Agreements with TTC for General Construction Administration Services, and with AECOM for Professional Engineering Services**

<b>Date:</b>	August 30, 2012
<b>To:</b>	Public Works and Infrastructure Committee
<b>From:</b>	Executive Director, Technical Services, Acting General Manager, Transportation Services; and Acting Director, Purchasing and Materials Management Division
<b>Wards:</b>	Ward 20 – Trinity – Spadina Ward 28 – Toronto Centre – Rosedale
<b>Reason for Confidential Information:</b>	This report involves the security of property belonging to the City or one of its agencies, boards, and commissions.
<b>Reference Number:</b>	P:\20112\Cluster B\TEC\ PW12034 (AFS #15931)

**SUMMARY**

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The purpose of this report is to request authority to enter into a sole source agreement with the Toronto Transit Commission (TTC) for the replacement of a 600mm diameter watermain and for the reconfiguration of Front Street West; to request authority to retain AECOM on a sole source basis, the engineering design consultant, for the provision of contracted professional engineering support for services during construction and post construction phases; and to inform with respect to a sole source agreement with the TTC for the replacement of a 300mm diameter watermain that is currently being sought.

Union Station is undergoing a major revitalization. The TTC is concurrently constructing a second subway platform at Union Station which requires the reconstruction of Front Street West, between Bay and York Streets. To coordinate the City capital projects impacted by these initiatives, the construction of the replacement of existing watermains within the Front Street right-of-way, and the implementation of the reconfiguration of Front Street West in accordance with the recent Municipal Class Environmental

Assessment Study Report is required to be included into TTC's Union Station Subway Platform Expansion project that is currently under construction.

## **RECOMMENDATIONS**

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**The Executive Director of Technical Services, Acting General Manager of Transportation Services, and the Acting Director of Purchasing and Materials Management recommend that:**

1. City Council authorize the Executive Director, Technical Services, to negotiate and enter into any required agreements with, and to issue a sole source purchase order to the TTC for the construction of a 600mm diameter watermain replacement including the provision of general contract administration and site services for a total amount not to exceed the upset limit as outlined in Confidential Attachment 1 and on terms and conditions satisfactory to the Executive Director, Technical Services, and in a form satisfactory to the City Solicitor.
2. City Council grant authority to issue sole source purchase orders for contracted professional engineering support services, for the replacement of the 600mm diameter watermain, to AECOM for services during construction, and for services during post-construction in the amounts of \$142,500.00 and \$7,500.00, net of HST recoveries, respectively.
3. City Council authorize the Executive Director, Technical Services, to negotiate and enter into any required agreements with, and to issue a sole source purchase order to the TTC for the construction of the road reconfiguration work for Front Street between Bay Street and York Street including the provision of general contract administration and site services for a total amount not to exceed the upset limit as outlined in Confidential Attachment 1 and on terms and conditions satisfactory to the Executive Director, Technical Services, and in a form satisfactory to the City Solicitor.
4. City Council grant authority to issue sole source purchase orders for contracted professional engineering support services, for the construction of the road reconfiguration work for Front Street between Bay Street and York Street, to AECOM for services during construction, and for services during post-construction in the amounts of \$336,283.19 and \$17,699.12, net of HST recoveries, respectively.
5. City Council direct that the project cost and funding in Transportation Services 2012 Capital Budget and 2013 to 2021 Capital Plan in the amount of \$5.0 million be reallocated from the Scarlett Road Bridge Rehabilitation project (CTP811-43) to the Front Street West Reconfiguration project with new cash flow commitments totalling \$2.500 million in 2013 and \$2.500 million in 2014.
6. Council authorize the public release of the confidential information in Attachment 1 when a final decision is made by the Executive Director of Technical Services on

whether to proceed or not proceed with the construction work in Recommendations 1-5 above, and, if proceeding to contract with TTC for the work in one or both of the Recommendations, once all cost negotiations have been finalized and any required agreements have been executed in respect of that work.

7. This report be forwarded to Budget Committee for consideration.

## **FINANCIAL IMPACT**

The financial impacts arising from the recommendations of this report are outlined in Confidential Attachment 1.

## **DECISION HISTORY**

At its meeting of March 5, 6, and 7, 2012 Council adopted Public Works and Infrastructure Report PW12.5 entitled "Front Street West Reconfiguration Environmental Study Report" which recommended the issuance of a Notice of Completion and to file the Front Street West Reconfiguration Municipal Class Environmental Assessment. Public Works and Infrastructure Report PW12.5 also advised that TTC's Union Subway Station Platform Expansion project, currently being constructed by TTC, provides an opportunity for the City to incorporate the recommended reconfiguration of Front Street West between Bay and York Streets. Otherwise, deferral of this opportunity would require the TTC to reinstate Front Street to the original configuration, and future reconfiguration would come at considerably higher cost and additional public disruption.

Following is the link to the Council decision and staff report:

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2012.PW12.5>

## **ISSUE BACKGROUND**

Transportation Services has recently completed an Environmental Assessment Study reviewing the reconfiguration of Front Street West in the vicinity of Union Station following the recommendations from the 2006 Union Station District Plan. City Council adopted Public Works and Infrastructure Report PW12.5 which recommended a reconfiguration of Front Street including narrowing of Front Street between Bay and York Streets to meet the City's objective of improving this area for increased pedestrian volumes, improved public realm and enhance pedestrian environment and safety.

TTC is currently constructing a second subway platform at Union Subway Station which requires major excavation work, within the Front Street right-of-way, necessary to construct the new subway platform and to waterproof the subway roof structure. TTC's work under this contract includes reinstatement of Front Street West to its original configuration between Bay and York Streets. TTC's project is scheduled to be completed mid 2014, in advance of the 2015 Pan American (PanAm) Games.

The existing Toronto Water infrastructure within the right-of-way of Front Street West from York Street to Bay Street includes a 116 year old 600mm cast iron watermain on the north side and a 129 year old 300mm diameter watermain on the south side. The section of the 600 mm watermain between York Street and Bay Street has been out of service for several years due to previous watermain leaks.

Toronto Water identified both watermains for replacement from York Street to Bay Street in its 2008 capital plan due to the age of the pipes, previous break history as well as the risk and consequences of possible future breaks. The replacement of the watermains had previously been deferred to coordinate with Transportation Services road reconfiguration of Front Street West.

The work currently being performed by TTC at the Union Subway Station requires excavating in stages, down to the subway roof structure for approximately the full width of the Front Street road allowance from east of Bay Street to approximately the mid-point toward York Street. Much of the work to deliver Toronto Water watermain replacement work and Transportation Services Front Street reconfiguration work require excavation of the same portion of roadway that is or will be excavated/disturbed by TTC's construction work.

Following the recent completion and adoption of the Front Street West Reconfiguration Environmental Assessment Study Report, the opportunity now exists for the City to coordinate with TTC's work, by retaining TTC to issue change orders in conjunction with their existing subway platform expansion construction contract. The change orders will direct the reconstruction of Front Street to the new configuration as recommended in the Environmental Study Report, in lieu of reconstructing the road to its original configuration per the existing terms of their construction contract. Watermain replacement work would also be coordinated to ensure all area works are completed.

The current construction activity on Front Street and in its vicinity is congested with complex workzone coordination requirements. Due to the size and duration of the TTC work, the only opportunity the City would have to complete these works in advance of the PanAm Games is through a sole source to the TTC to amend their existing contract. Inclusion of the City's work with the TTC work eliminates critical occupational health and safety liability issues that could only be addressed by delaying the City works until TTC construction is complete.

## **COMMENTS**

### Construction of the Road Reconfiguration and Watermain Replacement Work

To enable coordination of the City works with TTC's current construction contract, the City is required to complete the designs of the watermain replacement and the road reconfiguration work for submission to TTC for pricing by their subway platform expansion contractor. Subject to fair and reasonable pricing as reviewed by City staff, TTC would include the city work into their subway platform expansion contract through

issuance of contract change orders.

TTC's subway platform expansion work requires a large portion of Front Street between Bay and York Streets to be excavated down to the subway tunnel. With the progress of the TTC's current excavation work, a considerable segment of the existing 300 mm diameter watermain including services and other utilities are currently exposed and readily visible within the excavation. It was identified that backfill operations are scheduled to commence September 2012, prior to which, the construction of the 300 mm diameter watermain is required. As such, the design work for the 300 mm diameter watermain replacement was expedited and the designs provided to TTC for pricing by their contractor.

Staff are currently negotiating the terms of a letter agreement with the TTC that will govern the inclusion of the 300mm diameter watermain construction in the TTC's construction project, with a view to completing this construction work by mid-September. In order to preserve the TTC's own project timelines and budget, TTC is requiring the City (specifically, Transportation Services and Toronto Water) to assume all additional liability and risk arising out of the inclusion of the added watermain work, to indemnify the TTC against any claims arising out of the added work and to waive the right to make any claims against the TTC with respect to the added work.

Although this represents a higher level of risk than the City typically assumes in a construction project, in this case the other party to the agreement is a City commission delivering a separate project to the City. The TTC will be taking instructions directly from Technical Services staff. Therefore in the specific context of this project, staff are of the view that the level of risk is manageable and commercially reasonable, particularly given the opportunity to avoid future construction disruption later. It is anticipated that any subsequent agreements with TTC for inclusion of the 600mm watermain and reconfiguration of Front Street in the TTC's project would include similar requirements. Transportation Services and Toronto Water have been briefed on these requirements and are prepared to proceed on this basis.

A sole source contract to the TTC to construct the replacement of the 300 mm diameter watermain including the cost for TTC's construction administration services will be finalized subject to the execution of the letter agreement with the TTC. Award of this sole source is within authorities delegated to staff. This sole source approval will be finalized in advance of the approval of this report in order to meet TTC's current timelines to construct the replacement of the 300 mm diameter watermain commencing in September 2012. The sole source upset limit amount to the TTC that is being sought under Chapter 195 of the Municipal Code is as outlined in Confidential Attachment 1 for the construction of the 300mm diameter watermain.

The design of the replacement of the 600 mm diameter watermain and the road reconfiguration work is underway and is being fast tracked to be completed early October 2012.

The feasibility of inclusion of this work into TTC's construction contract is dependent on

obtaining suitable construction pricing through the requested sole source, and the ability to meet all approvals and delivery timing constraints subject to the resolution of other key issues as follows:

- The Notice of Completion for the Environmental Assessment Study was closed on June 11, 2012. There have been two Part II Order requests regarding the provision of bicycle lanes. The City has provided response to the Ministry of the Environment (MOE). Timelines for response by MOE is 66 calendar days, which may be extended by the Ministry. The MOE response may trigger scope changes to the EA recommendation and require further communication and notification requirements. Due to the tight timelines for delivery, public notification and stakeholder communication as part of the design process will proceed concurrent to the Part II Order request.
- A meeting with the Design Review Panel has been scheduled for September 21, 2012 in accordance with the February 2012 information report to City Council. A follow up report is required directly to Council on comments from the Design Review Panel with respect to the recommended configuration. This report directly to Council will be completed prior to or concurrently with this staff report.
- Phased implementation of the implementation of the Front Street West Reconfiguration Environmental Assessment Study recommendations is required due to both financial and delivery time frame constraints. The initial phase provides an interim solution, to be delivered by TTC through the requested sole source that will implement the basic functionality of the road to its new configuration with total costs not to exceed the amount outlined in Confidential Attachment 1. Implementation of this work based on TTC's construction schedule is for completion in 2014. A later phase will follow once TTC construction is completed and after the 2015 Pan Am Games that will implement the EA recommended streetscape and public realm elements. The intent of the phased implementation is to minimize the scope of the City's work to be delivered by TTC through the sole source in the initial phase to reduce the impact of the City's work to TTC's existing construction contract, thereby reducing the City's risk to delay claims from the TTC and their contractor. Streetscape and public realm elements consistent with the approved Environmental Assessment Report recommendations will be considered in future year budgets with cash flows in 2016 at the earliest, as this later phase of work cannot commence until after TTC construction is completed and after the 2015 Pan Am Games. The design of the initial phase for implementation of the interim design is currently underway including stakeholder notifications. The work is being expedited to meet TTC's timelines for inclusion to their construction contract. The design for the streetscape and public realm elements, including stakeholder consultation, is proposed to be completed by the end of 2012.

Resolution of the above issues and receipt of fair and reasonable construction pricing as reviewed by City staff, is required in advance of the City's execution of contract change

orders which initiates the construction of the City's works. Otherwise, the City work will be deferred and programmed for implementation after the completion of TTC construction work, and after the 2015 PanAm Games. Detailed timing will be subject to funding availability and in coordination with the City's 5-year capital program plan.

Detailed costing information is not available at the time of this report as timelines for the necessary authorities and approvals parallel the design and pricing of the work. The actual costs for construction will be based on the negotiated cost for contract change orders which are not known at this time.

The scope of the work to be delivered for the construction of the City works by TTC includes for TTC's costs for project management, construction administration and site inspection services.

#### Contracted Professional Engineering Services

Sole Source Purchase Order No. 6035233 was issued in June 2012 to AECOM, TTC's engineering design consultant for the Union Station Subway Platform Expansion project, in the amount of \$478,643.00, net of HST recoveries (\$540,866.59 inclusive of HST), for the design of the road reconfiguration and watermain replacement work. AECOM, as TTC's engineering consultant for the Union Station Subway Platform Expansion project, has specific information and knowledge of this section of Front Street, including utility relocations and field changes made during construction, required to expedite the design of the City works for incorporation into TTC's existing construction contract.

The tight timelines for design as required to meet TTC's construction schedule, did not allow tender of the design work through the normal competitive call process. The design for the 300 mm diameter watermain replacement work was fast tracked and completed within 2 months and provided to TTC for pricing by their contractor in early August 2012. The design of the 600 mm diameter watermain replacement and the basic functional road reconfiguration is underway and is expected to be completed for pricing by TTC's contractor early October 2012.

Additional sole source purchase orders to AECOM in the amount of \$142,000.00 and \$7,500.00, net of HST recoveries, are required for the provision of contracted professional support services during construction and post construction respectively, for the replacement of the 600mm diameter watermain.

Additional sole source purchase orders to AECOM in the amount of \$336,283.19 and \$17,699.12, net of HST recoveries, are required for the provision of contracted professional support services during construction and post construction respectively, for the construction of the road reconfiguration of Front Street.

AECOM's rates have been reviewed by Technical Services and are comparable to engineering services assignments of similar complexity.

Toronto Water has been consulted and concurs with the recommendations in this report.

The City's Legal Services and Insurance and Risk Management Divisions have been consulted in the preparation of this report.

The Fair Wage Office has reported that the recommended firms have indicated that they have reviewed and understand the Fair Wage Policy and Labour Trades requirements and have agreed to comply fully.

## **CONTACT**

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## **SIGNATURE**

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## **ATTACHMENTS**

Attachment 1 – Confidential Information.