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SUBWAY EXTENSIONS MONTHLY REPORT MARCH 2009

The Rapid Transit Public/Private Partnership Steering Committee recommends the adoption of the recommendation contained in the following report dated February 26, 2009, from the Vice-President, York Region Rapid Transit Corporation.

1. RECOMMENDATION

It is recommended that:

1. Council receive this report for information.

2. PURPOSE

This report updates the Yonge and Spadina subway extension activities during the months of January and February 2009.

3. BACKGROUND

The Spadina Subway team is fully engaged and the preliminary design and engineering effort is underway for each of the stations in York Region. Design concepts for each station are being developed with the expectation that conceptual design to the 10% completion mark will be ready for review and comment over the coming weeks. In support of the preliminary design efforts, York Region Rapid Transit Corporation (YRRTC) staff, in conjunction with representatives of the City of Vaughan, has been meeting with the consultant teams to provide background and contextual reference for the development of the station facilities and integration with adjacent transit-oriented development. The YRRTC has developed appropriate protocols with the TTC team to ensure that the YRRTC is accountable for the project management of the surface facilities, bus terminals and passenger pick-up and drop-off and transit-oriented development integration in association with the design and delivery of the subway.

The Yonge Subway team has completed the technical study for the extension of the Yonge subway from Finch Avenue to Highway 7 and filed the Environmental Project Report as of February 2, 2009. The 30 day public review period will end on March 4, 2009, whereupon, if there are no objections, the project will be approved. If there are objections, the Yonge subway team will have five days to respond. The Minister will have an additional thirty-five days to consider any objections and responses and make a

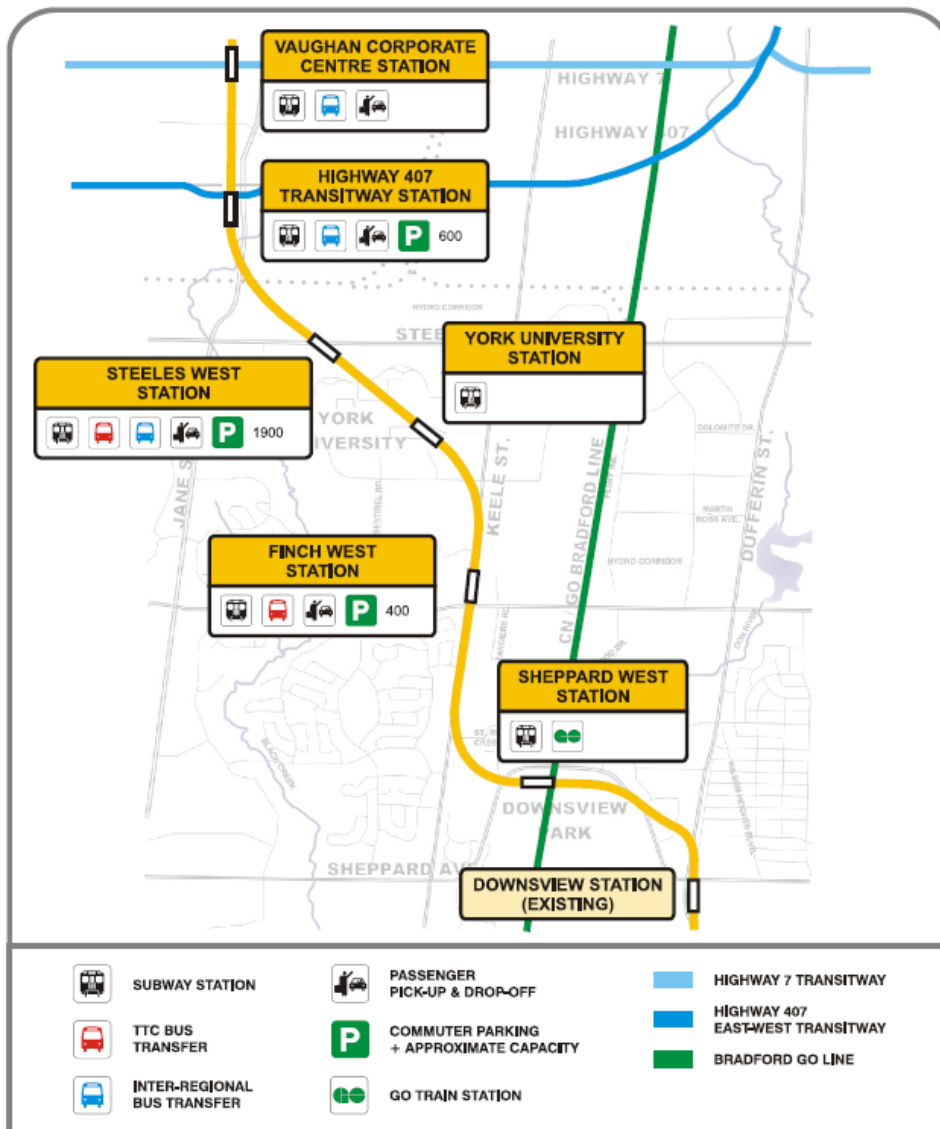
decision. The Minister's scope of consideration is limited to matters of provincial interest.

4. ANALYSIS AND OPTIONS

Spadina Subway Progress Update

The Spadina Subway Extension project continues on time and on budget

The staff report to the TTC on December 18, 2008, indicates that the Spadina subway project is proceeding on time and on budget as of the end of November 2008.



Tunnel boring machines are being acquired for the property based on the following considerations:

- The project team has recommended that an additional Tunnel Boring Machine (TBM) be purchased. This results in a purchase of 4 TBM's, rather than 3, as was originally planned. The additional capital cost is approximately \$8.5 million and is expected to be offset by savings of approximately \$13.4 million that will be associated with a shortened construction schedule.
- The tunnel size has been increased from 5200mm to 5400mm. The increase reflects changes in National Fire Protection standards, which have changed since the construction of the Sheppard Subway.

The station design teams have begun work on the subway stations and bus terminals

The conceptual design process is underway for each of the York Region stations:

- Finch West and Steeles West Stations - The Spadina Group Associates (Joint Venture, Stevens Group Architects, Lea Consulting and Halsall Associates).
- York University Station and the Vaughan Corporate Centre Terminal Station – ARUP Canada.
- Sheppard West Station and Highway 407 Station – AECOM (formerly Earth Tech Canada).

Staff is working with the station design teams on the surface facilities and transit-oriented development integration in accordance with the project schedules and will continue to report back on the findings of this work at future Committee meetings.

The Steeles West Station design is in its very early stages of development

The Steeles West Station is a complicated design and engineering exercise as the station cuts through lands owned by York University and York Region at an acute angle. The station also accommodates an additional platform to permit short-turning and train storage. This results in a 40 metre wide station box, which is wider than the traditional line station. The additional station width represents a particular challenge to the integration of aboveground facilities, especially transit-oriented development, where the increased spans and diagonal alignment impact building layout and efficiency.

Prior to engaging the station consultant team, a preliminary study of various alternatives for bus terminal and passenger pick-up and drop-off (PPUDO) configurations and transit-oriented development integration was undertaken. The findings of the study recommended splitting the bus terminals to the north and south of Steeles Avenue and keeping the PPUDO facility on the Hydro lands. This recommendation was endorsed by the project team and was provided to the design team to guide the station design effort.

Preliminary station design is at a very early stage and preliminary concepts have recently been discussed at a high level between the station designers and Toronto-York Spadina Subway Extension and York Region Rapid Transit Corporation staff. The station designers are revisiting their preliminary concepts based on input received.

As the preliminary design evolves, staff will work with the station designers to further define how the bus terminal and transit-oriented development facilities can be integrated with the subway box structure through column strengthening or the positioning of additional structural supports within the subway box. Staff is in the process of developing a work programme to retain independent consultants to provide advice on the practicality of various structural options and on the ability of the Regional site to accommodate typical mixed use office and residential floor plates to fully realize the site's development potential. The results of the preliminary design efforts will be brought forward for review by Committee at a future meeting.

The delivery of the Steeles West Station impacts a number of adjacent land owners

The subway alignment and Steeles West Station development impacts a number of land owners in the vicinity. To address the impacts and develop mitigation strategies, the subway team embarked on a number of focussed workshops with affected land owners and agencies, including Hydro One/ORC, Toronto Region Conservation Authority, CN and United Parcel Service to resolve alignment and other issues. The workshops have been extremely helpful and productive in identifying issues and concerns, as well as potential mitigation alternatives. The mitigation strategies are nearing completion and are being put forward for endorsement to the various owners and agencies.

Further workshops with Hydro One/ORC have considerably narrowed project risks

A further workshop was undertaken with Hydro One on January 12, 2009 to discuss an alternative alignment to address Hydro's concerns regarding Hydro Tower 158. The workshop also addressed the use of the hydro corridor for a portion of the east-west road, commuter parking, storm water management facilities, passenger pick-up and drop-off, and ancillary buildings. The workshop addressed the major risks identified by Hydro staff and discussed a range of mitigation strategies for Hydro's consideration. One of Hydro's main concerns has been the impact of the east-west road on Hydro operations. The workshop concluded that Hydro could accept a two lane cross-section on its property on an interim basis until such time as the UPS site is redeveloped, whereupon the road would be relocated to private property and wholly off their lands. The two lane cross-section would support the opening of the subway and some level of development within OPA 620. The level of development support will need to be determined as part of the completion of the EA for the eastern component of the east-west road that is currently under consideration by the City of Vaughan.

A revised subway alignment was recommended to shift to the east, out from under Tower 158, to mitigate Hydro One concerns. As a result of the workshop, supplementary

information has been provided to Hydro One to address their concerns. The supplementary information includes:

- Two alternative alignments that shift the alignment further away from Tower 158.
- Various mitigation strategies related to tunnelling that will be implemented by the Toronto-York Spadina Subway Extension project.
- Design and engineering details respecting the proposed east-west road, of which approximately 22 percent of its length would be located within the hydro corridor on an interim basis.

A workshop was held with the Toronto Region Conservation Authority to consider an alignment shift at the 407 station

A workshop was undertaken with the Toronto Region Conservation Authority (TRCA) on January 16, 2009 to discuss issues associated with a more easterly location for the 407 Station subway box and the potential impact on a realignment of Black Creek. A number of supplementary reports have been provided to TRCA in order to assist in their assessment. A primary concern relates to coordination and consistency with the larger Black Creek Optimization Study (BCOS) that the City of Vaughan commenced at the end of 2008. The Spadina Subway Extension team met with the BCOS project team on January 27, 2009 to discuss the implications of the BCOS study and it was generally agreed that consistency and coordination could be achieved. The subway team is satisfied that the technical issues surrounding the subway alignment shift can be addressed and appropriately mitigated.

A workshop was held with CN to review the rail crossing

A workshop was held with CN on January 22, 2009 to discuss potential issues with the proposed crossing of the CN right-of-way east of Jane Street. Because of special trackwork located east of Jane Street, CN prefers that the subway be aligned west of Jane Street. CN's concerns are primarily associated with issues arising during construction, which can be effectively mitigated. CN have requested supplementary information respecting implications for their specific special trackwork, as well as additional geotechnical information for the area within their right-of-way. Subway alignments to the west of Jane Street were investigated, but these alignments created greater issues for other stakeholders.

Work continues to implement the UPS MOU

A workshop was held with United Parcel Service (UPS) on January 23, 2009 to discuss construction staging and tunnelling, as well as the potential impacts on UPS. UPS has received the proposed high level construction staging plan and revised alignment shift to avoid Tower 158. The shift has a slight impact on UPS operations on-site, but has negligible impact on the structural slab strengthening that was undertaken by the project at the time of construction of the UPS addition. The staging plan indicated the various

steps to be taken by the project to relocate UPS parking facilities from the lands east of the addition onto the Damiani lands. This included the sequencing of construction on the existing UPS site to achieve the transfer of the UPS parcel to the Region in exchange for the Damiani and storm water pond lands owned by the City of Vaughan. UPS will consider the impacts and will provide their comments in the coming weeks.

A 407 Station preliminary concept has been developed

The 407 Station design team developed three station alternatives for review by the subway team and subsequent consultation with the 407 Transitway EA consultants. Through preliminary stakeholder discussions, a preferred concept direction was identified and subsequent alternatives for the integration of the 407 Transitway and bus terminal facilities have been developed. These alternatives are currently being examined by the subway team. A preliminary concept design to 10% completion is planned to be delivered by the design team shortly. The concept will be brought forward to the next Committee meeting for review and comment. The 407 Station design is planned to be 30% complete by the summer.

The Vaughan Corporate Centre Station will require additional stakeholder consultation

The Vaughan Corporate Centre (VCC) design team that has been engaged to develop the station concept has identified a need to have additional up-front consultation with stakeholders and the City of Vaughan prior to developing a preliminary station concept. The VCC Station is a terminal station, and as such, will need to address the design and delivery of the surface facilities in the context of an evolving city centre Official Plan review by the City. Before putting pen to paper, the design team has been engaged in reviewing bus terminal and passenger pick-up and drop-off configurations, including on and off street alternatives, in order to identify a preferred arrangement that will integrate with the City's vision for its new downtown.

Planning options for the Vaughan Corporate Centre Station bus terminal configuration were previously developed by York Consortium 2002

A preliminary Vaughan Corporate Centre workshop with municipal stakeholders was held in October to consider alternative surface transit facility arrangements that were developed by York Consortium 2002 and the York Region Rapid Transit Corporation. Several development principles were identified and discussed as potential drivers for the ongoing conceptual design activities. A second workshop, to provide further definition, was held on December 18, 2008. The second workshop included York Region and City of Vaughan staff and examined alternatives and evaluation criteria for further study in January prior to engagement with the TTC design team and area landowners.

As a first step in the design process, the Vaughan Corporate Centre (VCC) Station designers, ARUP, met with several stakeholders during the week of January 19th 2009 in

smaller one on one meetings to gather information. Meetings included the TTC, York Region Rapid Transit Corporation, City of Vaughan, York Region Transit, and Toromont. At those meetings, additional concepts were identified for consideration, as well as criteria added to the evaluation matrix to reflect urban design principles and objectives. The stakeholders met in early February 2009 to review the alternatives and to begin the process of identifying preferred alternatives for further evaluation and development. ARUP will present their design basis report (a list of assumptions and principles upon which the design will be based), as well as some preliminary alternative concepts for consideration and comment by the end of February. The VCC Station design is planned to be at the 10% design completion stage by end of April. The design concept will be brought forward at a Committee meeting later this spring for review and comment.

Yonge Subway Progress Update

The environmental project report has been submitted on time to the Ministry of the Environment

On February 2, 2009, the Environmental Project Report was submitted to the Ministry of Environment and copied to the key stakeholders.

The Transit Project Assessment Process for the Yonge Subway Extension is now in the 30 day public review, which will continue into the next reporting period and conclude on March 4th. Following the public review, any comments received that are of provincial interest will have to be addressed before the 35 day Ministry of the Environment review and comment period which will conclude on April 8, 2009.

- No comment is assumed to be approval, and comments only anticipated on areas of provincial importance.
- The Minister has a number of powers with respect to the Environmental Project Report:
 - Notice to Proceed with no conditions.
 - Notice to Proceed with conditions.
 - Notice requiring Further Consideration, if issues of Provincial importance are of concern.
 - If the Minister does not issue any Notice after the 65 day combined review period, then York / Toronto can issue a Statement of Completion of Transit Project Assessment Process, and then commence with the project.

Any matters of a provincial interest that are raised by the public and stakeholders will be brought forward in the next reporting cycle.

Work continues with Metrolinx to develop the Project Definition Report and Benefits Case Analysis

In parallel with the work to develop the Environmental Project Report, and in conjunction with the City of Toronto and the TTC, staff has been working with Metrolinx and their consultants to develop the project definition and options for the purposes of evaluation, and the development of the Benefits Case Analysis. Metrolinx consultants are focusing on ridership analyses with input from the City of Toronto.

Additional work is also required to finalize the estimated costs and cash flow required for the project, which will be an input into the Benefits Case Analysis.

A Rail Yard Needs Study (RYNS) has been initiated by the TTC to investigate the system-wide needs for rolling stock storage and maintenance that will result from the Spadina and Yonge subway extensions, ongoing fleet expansions, and other projects. The results of the study will determine the rolling stock maintenance and storage requirements and options for the Yonge Subway extension. It is anticipated that study results will be available at the end of March.

It is expected that the Benefits Case Analysis will be completed in April.

COMMUNICATIONS AND PUBLIC ENGAGEMENT

Spadina Subway Extension

Public newsletter to be published and distributed for the first time in April

The joint communications team aims to issue the first public newsletter about the Spadina subway extension in April 2009. Two additional issues are planned for the remainder of 2009. This newsletter will be circulated on a broad basis by e-mail and printed versions will be made available to municipal offices, elected officials and communications personnel.

Yonge Subway Extension

Staff continues to work with the Uplands community regarding the commuter parking lot

Staff met with representatives of the Uplands community in February to discuss the rationale for the recommendations in the Environmental Project Report and reviewed possible mitigation measures. Meetings will continue with this group and area residents at large to address their concerns as we move into final design.

5. FINANCIAL IMPLICATIONS

Tables 1 and 3 provide a summary of expenditures incurred to year end 2008 on each of the Spadina and the Yonge Street Subway extensions, respectively.

Spadina Subway Extension

Table 1
Expenditure Summary for the Spadina Subway Extension

Contract	Description	Proponent	Contract Amount	Spent to Date Year End 2008
Spadina Subway				
Spadina Interim work program	Work to advance the project on behalf of TTC	York Consortium 2002	\$300,000	\$239,661
Transit-Oriented Development	To undertake work to investigate transit oriented development opportunities related to the Spadina Subway	York Consortium 2002	\$200,000	\$0
Total			\$500,000	\$239,661

The most current information on the financial status of the project is based on the TTC project status report of December 2008. Of the \$56.8 million annual budget, \$14.36 million were spent. Despite lower than forecast expenditures for 2008, the TTC projects that expenditures will match forecasts by 2009 and will exceed forecasts in 2010 to catch up for underspent activities in 2008. The project continues to be on target for total expenditures of \$2.634 billion at the time of revenue service commencement, which is scheduled for the end of 2015.

The TTC submits invoices for services from their contractors, as well as TTC staff and office costs, costs incurred by the City of Toronto and York Region, to the City of Toronto, the banker for the project, and the City of Toronto then issues claims to each funding partner for their proportionate share of costs. Table 2 provides a summary of the claims made to York Region.

Table 2
Summary of Expenditures by Party
(\$000s)

Project Costs - TTC and Toronto		Claimed to Date
Project Costs incurred by the TTC to Date (Dec 2008)		\$1,978.40
Costs incurred by the City of Toronto to Date		\$622.28
Total - TTC and Toronto		\$2,600.68
Project Costs - York Region	Invoiced	Reimbursed
2007 Staff and other cost recovery	\$673.31	\$673.31
2008 Costs	\$216.80	\$0.00
Total - York Region	\$890.11	\$673.31

Reimbursement for additional costs incurred by York Region in 2008 will be invoiced to TTC this quarter. For 2009, staff has implemented a detailed time and activity tracking system to expedite the claims process. It is anticipated that claims to TTC by York Region will be made on a quarterly basis.

Yonge Subway Extension

On June 21, 2007, Council approved an interim budget of \$3,000,000 to commence an Environmental Assessment and preliminary engineering for the Yonge Street subway extension to Richmond Hill Centre. Work programmes have been awarded to McCormick Rankin and York Consortium 2002 to complete this work.

Approximately \$2 million of the total \$3 million budget had been invoiced to the end of 2008. With the submission of the Yonge Subway Environmental Project Review, and subsequent printing and distribution, it is anticipated that the final costs for the project will approximate \$3 million.

Table 3
Expenditure Summary for the Yonge Street Subway Extension

Contract	Description	Proponent	Contract Amount	Spent to Date Year End 2008
Yonge Subway				
Yonge Subway EA	Environmental Project Review	MRC	\$985,320	\$1,162,076
Yonge Subway EA	Environmental Project Review	York Consortium 2002	\$689,400	\$779,430
Yonge Subway Communications	Additional communications to support the EA process	York Consortium 2002	\$107,000	\$65,777
Total			\$1,781,720	\$2,007,283

6. LOCAL MUNICIPAL IMPACT

The subway extensions are being closely coordinated with local planning, economic development and public works activities along their respective corridors.

7. CONCLUSION

This report provides a comprehensive description of the activities of the York Region Rapid Transit Corporation during January and February 2009 relating to the Yonge and Spadina subway extensions.

For additional information, please contact Mary-Frances Turner, Vice-President, York Region Rapid Transit Corporation at (905) 886-6767 ext. 2226.

The Senior Management Group has reviewed this report.