



## MEMO / NOTE DE SERVICE

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| To / Destinataire | Mayor and Members of Council  | File/N° de fichier: |
| From / Expéditeur | Director, Rail Construction Program<br>Transportation Services Department |                     |
| Subject / Objet   | O-Train Confederation Line Quarterly Update (Q1 – 2019)                   | Date: June 7, 2019  |

As part of the ongoing commitment to keep Council apprised of the progress of the O-Train Confederation Line Stage 1 and Stage 2 projects, this memorandum outlines the milestones achieved in Q1 2019 and up-to June 6, 2019 and provides an overview of the planned work for the remainder of Q2 2019.

### ***Stage 1 Light Rail Transit (LRT) Project Update***

#### **Stations**

Over the course of Q1 2019, significant progress has been made towards the completion of all Confederation Line stations. Final station finishes, installations and site clean-up, and minor correction work is ongoing throughout the alignment.

Building Occupancy Permits with minor conditions have been issued for all stations. Building occupancy permits are issued by Building Code Services (BCS) when stations are deemed complete, safe and are suitable for occupancy and public use. Conditions to the building occupancy permits vary depending on the station and when the permit was issued, but can include the removal of construction fencing, site hoarding and general construction site cleanliness. Rideau Transit Group (RTG) must arrange for a BCS inspection to confirm that the conditions have been corrected prior to the station opening for public use.

#### **Guideway**

Work on the Confederation Line guideway is substantially complete. Electrical testing for the sections west of Hurdman Station and minor deficiency repairs will be ongoing in Q2 2019.

#### **Multi-Use Pathways (MUP), Cycling Lanes and Roadway Re-instatements**

The majority of MUPs installed as part of the Confederation Line project are now complete.

The MUP between Hurdman and Lees stations has been paved and lighting is now completed. The Waller Street reinstatement work, including final asphalt and landscaping will be completed in Q2 2019. The connection to Nicholas Street will be undertaken following Revenue Service.

## **Queen Streetscaping (Bay Street to east of O'Connor Street)**

The Queen Street Streetscaping project is substantially complete with remaining minor work, including final landscaping, to be completed in Q2 2019.

### **Systems, Vehicle, Testing and Commissioning**

- The power supply and distribution system is complete across the alignment;
- The train control system end-to-end integration testing is in its final stages;
- The installation of communication systems is complete with minor deficiency work underway;
- System integration tests are in the final stages for all communication systems using the Supervisory Control and Data Acquisition (SCADA) system;
- Vehicle testing continues with multiple single and coupled vehicles; and,
- Final vehicle assembly is complete with final retrofits in progress across the fleet.

### **Preparations for Operations**

- The Independent Safety Auditor is reviewing documentation to confirm that safety requirements will be met at Revenue Service Availability (RSA);
- Safety and security requirement resolution and closure is nearing completion;
- On the job training of Electric Rail Operator Instructors is nearing completion;
- On the job development and training for Controllers is nearing completion;
- Training for Electric Rail Operators (ERO) is nearing completion;
- Operational familiarisation tours for operations staff continues;
- Desktop exercises and training for first responders is nearing completion; and,
- The maintenance team is finalising requirements, training and procedures.

### **Key Activities to Monitor**

The City continues to monitor and track the progress of critical elements. The following list provides an updated look at key activities required to achieve project completion:

1. Fleet availability for service requirements;
2. Station occupancy for all stations – complete;
3. Tunnel Ventilation System (TVS) tests – final testing;
4. Testing of the train control system – final testing;
5. Control systems for transit operations – final testing;
6. Power system to the alignment and trains – final tests;
7. RTG's system assurance –sign-off is to be provided on all documents required by the City's Safety Auditor;
8. End-to-End Practice Plan Running -demonstrate system capability; and,
9. Winter Operations –final readiness.

In addition, the City is implementing steps required to achieve system operationalization. These steps include:

1. Successful launch of a practice plan by RTG;
2. Sign-off by the Independent Safety Auditor on all safety requirements;
3. Achievement of Substantial Completion and move to Trial Running;
4. Trial Running – successful demonstration of performance compliance;
5. Revenue Service Availability (RSA); and,
6. Launch of train service.

As noted at the Finance and Economic Development Committee meeting on June 4, 2019 and following the receipt of the Independent Certifier’s (IC) determination on RTG’s Substantial Completion Notice, the City has been actively working with RTG to identify the outstanding work remaining and the path to resubmission of a Substantial Completion Notice. The City anticipates receiving an update from RTG regarding next steps in the next two weeks.

As previously communicated, following RSA and handover to the City, staff will need to undertake the operational readiness activities required to ensure that the Confederation Line seamlessly integrates into the OC Transpo network prior to opening day, including additional City-led system practice, simulated system operations and staff training.

It is expected that Confederation Line service would be launched within one month of RTG achieving the RSA date.

**Budget**

| March 31, 2019                 |               |                     |                |                              |
|--------------------------------|---------------|---------------------|----------------|------------------------------|
| Project Description            | Authority     | Actual Expenditures | Funds reserved | Unspent/ Uncommitted Balance |
| Confederation Line             | 2,130,000,000 | 1,556,848,700       | 573,151,300    | -                            |
| Confederation Line Contingency | 100,000,000   | 54,798,113          | 50,104,322     | (4,902,435)                  |
| LRT 417 Widening               | 224,500,000   | 224,322,717         | 171,209        | 6,074                        |

The Confederation Line Contingency Fund is \$100M. To date, \$54.8M from the total fund has been spent. Remaining funds are earmarked for potential future changes primarily related to property requirements and transit priorities. When funds are reserved for contract variations, the upper cost limit for the variation is typically used and upon completion of the work, unspent monies are returned to the Contingency Fund. For this reason, the funds reserved figure is an estimate that may be higher than the actual amount spent.

***Stage 2 Light Rail Transit (LRT) Project Update***

**Procurement Update**

On March 6, 2019 Council approved the Contract Award of Ottawa’s Stage 2 Light Rail Transit Projects and Related Matters Report, recommending East-West Connectors (EWC) to design, build and finance the Stage 2 Confederation Line Extensions and TransitNEXT to design, build, finance and maintain the Stage 2 Trillium Line Extension. TransitNEXT will also be responsible

for upgrading the existing stations, as well as maintenance for the existing infrastructure and rolling stock up until 2048.

On March 22, 2019, the provincial government reaffirmed their Stage 2 funding commitment of \$1,208M at an announcement at the Belfast Yard Maintenance and Storage Facility. Pursuant to Council's approval of the March 6, 2019 report, the City of Ottawa executed the transfer payment agreements with both the federal and provincial governments in late March, securing a total contribution of \$2.366 billion to Ottawa's Stage 2 LRT Project, the largest joint federal and provincial commitment in the City's history.

With formal confirmation of the financial contributions of both senior levels of government, the City of Ottawa has reached commercial and financial close with both TransitNEXT and EWC. Commercial and financial close was reached with TransitNEXT on March 29, 2019 and with EWC on April 26, 2019.

Further to financial close with EWC on the Confederation Line, the City has formalized agreements with RTG for their participation in Stage 2 design and construction. The agreements clarify and confirm their role in systems integration, procurement support undertaken to date, participation in the Stage 2 infrastructure design and construction review process, warranty and handover process from EWC, and a final agreement on the start of maintenance for the expanded Confederation Line East in 2024 and Confederation Line West in 2025. As part of final clarification on RTG's scope as well as costs resulting from the extended Stage 2 procurement process and construction schedule, a net increase of \$9M has been negotiated on the original Stage 2 MOU with RTG. This amount does not impact the overall budget.

The Stage 2 Trillium Line Project Agreement will be posted on the accountability and transparency section of [ottawa.ca](http://ottawa.ca) in the coming weeks, with appropriate redactions pursuant to MFIPPA, including certain sections deemed commercially confidential.

### **Status of Environmental Assessments and Regulatory Approvals**

As discussed in the Q4 2018 memo, the City of Ottawa submitted several applications to the Canadian Transportation Agency (CTA) for the construction of the Trillium Line extension project. CTA approval for construction of the extension and for operation of the extended passenger line is required, as the Trillium Line is a federally regulated railroad. The City is pleased to report that the CTA has granted federal regulatory approval on May 3, 2019 to permit the construction of the Trillium Line extension project under Section 98 of the *Canada Transportation Act*.

### **Enabling works update**

As reported to Council, to prepare for Stage 2 LRT construction, the City undertook enabling works that allow the successful proponent to effectively advance its construction schedule. From February to April, clearing and grubbing operations commenced along the future Trillium Line alignment between South Keys Station and Limebank Station, including the Airport Link. The Rail Construction Program will continue to work with Ward Councillors to advise where work is underway and provide public notification as appropriate.

## **Early works lookahead**

TransitNEXT and EWC have started to mobilize along their respective alignments with investigative geotechnical work. Borehole drilling is taking place at various sites along each alignment, allowing proponents to further advance their designs by collecting soil and water samples. The Rail Construction Program will provide notifications to the public where required. Impacts are anticipated to be minor during these early activities.

Should you have any questions about the information provided in this memo, please do not hesitate to contact me at extension 52718.

*Original signed by  
Michael Morgan*

c.c. Senior Leadership Team  
Transportation Services Departmental Leadership Team  
Director, Public Information and Media Relations