



## MEMO / NOTE DE SERVICE

To / Destinataire	Mayor and Members of Council	File/N° de fichier:
From / Expéditeur	Director, O-Train Construction Director, O-Train Planning Transportation Services Department	
Subject / Objet	O-Train Confederation Line Quarterly Update (Q2 – 2018)	Date: August 13, 2018

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 memo outlines the milestones achieved in Q2 2018, and provides an overview of the planned work for Q3 2018. In addition, it provides information that addresses the most common questions received by staff from Members of Council and incorporates the August update to the Finance and Economic Development Committee (FEDCO).

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

#### **Construction:**

##### **Stations**

Overall, the eastern stations are nearing completion and form part of the train testing that is occurring on the Ottawa University to Blair segment. Western stations are in varying degrees of progress and overall are tracking well. The key stations that need continued focus by RTG and are critical to the western segment are Bayview and Tunney's. The underground stations continue to show progress and as noted below, Rideau Station is being closely monitored. Below is a station-by-station summary.

##### **Tunney's Pasture Station**

Envelope work for roof, ceilings and precast stair treads has been completed. Platform topping slabs and glazing installations are close to completion while installation of wood ceiling finish panels, elevator shrouds, entrance lanterns, platform furnishings and signage installations to commence.

##### **Bayview Station**

Composite Metal Panel installation on the ceiling and integrated art in the form of Inter-track barriers are complete; trackwork for the Trillium Line extension at Bayview Station is substantially complete; glazing, fare gates, fare vending machines, station lantern installation, soft and hard landscaping work and non-integrated public art installation will continue.



Bayview Station

### **Pimisi Station**

Platform and concourse concrete toppings are complete. Public Art (Eel and Welcoming Basket) have been installed. Work to install glazing, fare gates, fare vending machines, station lantern installation, soft and hard landscaping work, and remaining public art work installations (paddles and birch bark) continues.

### **Lyon Station**

Work for final finishes, escalator and elevators, fare gates and fare vending machine installations continues while the Public Art mural is substantially complete.

### **Parliament Station**

Steel erection for the mid-entrance structure is substantially complete and rock excavation for the west Tunnel Vent Shaft (TVS) has been completed. The shaft construction is nearing substantial completion. The East TVS shaft and East entrance piston relief shafts are completed to grade level and the grating has been installed. Glazing installations are substantially complete at both the East & West Integrated Station Entrances.

Work at the west Tunnel Vent Shafts (TVS) will be completed to grade level with grating installed. Glazing will be completed at the mid-entrance as well as the balance of the vertical transportation escalator/elevator installations; installation of doors and frames should be substantially completed at both Integrated Station Entrances and the mid-entrance in Q3 along with faregate & fare vending machines, fire protection and HVAC infrastructure and architectural finish works for floors, wall and ceilings.

### **Rideau Station**

Rideau Station, as noted previously to FEDCO, is a key station that is being carefully monitored as is vital to successfully achieving November 2 Revenue Service Date. RTG continues to operate 24/7 and RTG and the City are monitoring every aspect of the station build.

West Entrance escalator installation, final structural lining of the west TVS, station platform and track slab concrete pours, and installation of west and eastbound track work all complete. Ongoing work will include architectural finishes, mid-entrance elevator installation, elevator and escalator installation between concourse and platform levels, and station service rooms construction and equipment installation.



Rideau Station

### **uOttawa Station**

Sign band and platform edge lighting, lighting at roof soffits, lighting at lower concourse, exterior stairs leading to lower concourse, glass roofs on platform canopies, fare gates and fare vending machine installation a lower concourse, composite metal and ceramic panel installations are complete. Work continues to complete the wood ceiling, sandblasting of platforms, installation of entrance glazing and lanterns, remaining lighting, signage & wayfinding, and landscaping; art work installation has commenced on the sphere along the access ramp and tile work in the underpass.

### **Lees Station**

Framing for the wood ceiling, concourse topping slab, sandblasting of platforms, roof drains, porcelain panels, glass on elevators towers, multi-use pathway access stairs, water and sewer servicing connections are all complete. Ongoing work includes completion of the wood ceiling, fare gates, fare vending machines, entrance lantern, lighting, utility cabinets, stair railings, glazing tall walls and canopies, elevator tower shrouds, signage & wayfinding, landscaping, and installation of public art.

### **Hurdman Station**

Wood ceiling above the platforms, tall wall glazing, windscreens and stairs balustrades, composite metal panels, lighting of concourse under the elevated guideway, platform sign bands, fare vending machine installation, fare gates installation and escalator stainless steel cladding are complete. Ongoing work includes completion of wood ceilings and wood wall finishes, handrails, finishes and shrouds at elevator towers, lantern, sign bands, utility cabinets, hard and soft landscaping.



Hurdman Station

### **Tremblay Station**

Installation of glazed curtain wall, wood ceilings and fare gate entrances complete. Canopy ceiling supports for artwork have been installed. Completion of platform furnishings, signage, lantern, public art, final plaza landscaping, and commissioning of elevators is scheduled for Q3.

### **St. Laurent Station**

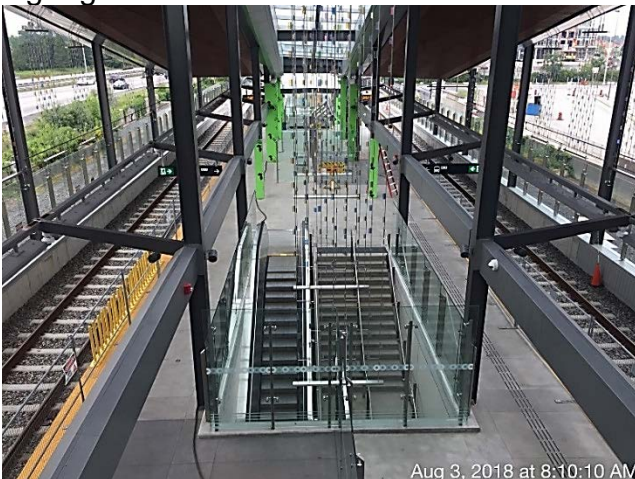
Installation of glazed curtain wall, wood ceilings and fare gate entrances are complete. Completion of entrance lanterns, platform furnishings, signage, public art, utility cabinets and commissioning of escalators and elevators is in progress.

### **Cyrville Station**

Installation of glazed curtain wall, wood ceilings, fare gate entrances and public art (birchtree in the guideway) complete. Completion of lantern installation, platform furnishings, signage, utility cabinets and commissioning of elevators is ongoing.

### **Blair Station**

Installation of glazed curtain wall, wood ceilings and fare gate entrances are complete and public art has been installed; completion of platform furnishings, utility cabinets, lantern, signage and artwork installations is scheduled for Q3.



Blair Station

**Guideway:**

Rail installation for the trackwork in both directions is complete from Tunney's Pasture to Blair, including inside the tunnel. Ongoing work continues to finalize guideway installation including electrical isolation testing, restraining rail installation and ballast profiling.

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

Work has begun on the Booth Street Bridge cycling improvements. Work continues on reinstatement of MUP network, signage & wayfinding including:

- MUP paving along the east side of guideway between Hurdman Station and uOttawa Station is underway;
- Lighting installations for the MUP between uOttawa and Hurdman stations has begun;
- The Rideau River Bridge MUP link on the west side of the bridge has been opened; and,
- Reinstatement of Waller St south of Laurier Avenue is scheduled for Q3.

**Systems, Vehicle, Testing and Commissioning Update:**

- The Overhead Catenary System (OCS) rigid rail hangers have been installed on the east bound track throughout tunnel;
- Traction Power Sub Station (TPSS) 3 has been installed at Rideau Station and is awaiting Hydro connection;
- Train Control System integration testing continues east of uOttawa Station and has begun in the west end from Tunney's Pasture Station to Pimisi Station;
- Base transmission site for P25 radios has been installed at the west portal and system installation at underground stations and Maintenance and Storage Facility (MSF) is ongoing;
- Radiax cables have been installed for P25 radios and cellular from the west portal to Lyon Station;
- Communication system installation is continuing at the eastern above ground stations;
- Vehicle tests continue with multi-vehicle type testing and dynamic testing with the Computer Based Train Control on board;
- The last of 34 vehicles is currently in assembly;
- Work on Power Supply & Distribution systems is being completed;
- A "Loop test" to demonstrate multiple vehicle operation in Automatic Train Operation mode is scheduled for Q3;
- Communications systems installation at all stations followed by testing and commissioning and system integration; and,
- Completion of Train Control system installation, testing and commissioning, and system integration will commence.



LRV Testing at Tunney's Pasture



Testing at Belfast Yard

### **Preparations for Operations:**

- Appointment of an Independent Safety Auditor;
- On the job development for Light Rail Vehicle Instructors continuing;
- On the job development for Controllers continuing;
- Training for Electric Rail Operators continuing;
- Familiarisation tours for operations staff have begun;
- Security Tabletop Exercise held in April;
- Meetings held with the RCMP, OPP, and Parliamentary Security Services on integrated Emergency Responder response continue;
- Emergency Responder Instructor training is ongoing;
- Full Scale Exercise for emergency responders scheduled for Q3;
- On-going coordination with RCMP, OPP and Parliamentary Security Services on Emergency Responders integrated response; and,
- RTG and the City continue meetings with the Ottawa and District Labour Council.

### **November 2, 2018 Revenue Service Availability:**

RTG remains committed to the November 2, 2018 Revenue Service Availability date and continues to indicate their confidence in achieving it. City staff and RTG meet regularly to discuss schedules, issues, mitigation strategies and detailed plans outlining how RTG plans to achieve the November 2 RSA date.

A detailed field review is planned to review all critical items and cross check them against RTG's plans. Critical areas that are being monitored continue to be:

### **Key Activities to Monitor that are Critical to November 2, 2018 RSA date:**

- Rideau Station;
- Vehicle testing in the tunnel;
- End-to-end vehicle testing from Blair Station to Tunney's Pasture Station;
- Multiple trains operating in full CBTC mode along the eastern alignment; and,
- Pre-Trial Running and Trial Running.

Critical to achieving November 2, RSA date is the Trial Running period, which requires RTG to demonstrate full system capabilities including capacity, headways, etc.

**Budget**

June 30, 2018				
Project Description	Authority	Actual Expenditures	Contractual Obligations/ Contingency Draws	Unspent/ Uncommitted Balance
Confederation Line	2,130,000,000	1,544,716,608	575,462,518	9,820,874
Confederation Line Contingency	100,000,000	41,217,315	55,673,800	3,108,885
LRT 417 Widening	224,500,000	223,880,602	238,391	381,007

The Confederation Line Contingency fund is \$100M. Of this amount, \$41.2M has been spent to date. The remaining funds are earmarked for potential future changes primarily related to property requirements and transit priorities.

When funds are reserved for contract variations, the upset limit for the variation is typically used and upon completion of the work, any unspent monies are returned to the Contingency Fund. For this reason, the funds reserved figure is likely to be higher than the actual amount spent.

Funds that are reserved for potential future changes have no contractual obligations, but are reserved for risk mitigation purposes, and to cover any potential future claims. As the project draws closer to completion, some of these risks are expected to drop off and the funds reservation will be released.

**Negotiations with RTG on Delay:**

Using the Project agreement as the basis for negotiations the City and RTG are working through delays, disputes and recovery of incremental costs.

**Funding Partner Events:**

On Friday May 4, 2018, in cooperation with our Federal and Provincial Funding Partners, the City hosted an event at Tremblay Station where dignitaries from all levels of government participated in the ceremonial installation of the final rail clip on the O-Train Confederation Line track. Members of the media were invited to witness this event, marking a significant milestone in the construction of the Confederation Line guideway.

On July 13, 2018, the City again hosted our federal and provincial funding partners for an event at Blair Station. In addition to getting a sneak peek at public art, dignitaries experienced the customer journey, noting design features that will allow riders to move easily between buses and trains, such as fare paid zones, wayfinding, bicycle parking, digital departure screens and accessibility features of Blair Station.

**Ready for Rail:**

In July, video footage was captured at Blair and Cyrville Stations for the next phase of the Ready for Rail campaign. This phase will features transit customers using the bus and LRT system to increase customer familiarity with the line before revenue service launch.

### **Public Safety Message Regarding Overhead Catenary System:**

The Overhead Catenary System is now energized along the entire length of the alignment, from Tunney's Pasture Station to Blair Station.

As safety is our top priority, the City has provided safety messaging to affected Ward Councillors, public schools, and community associations. To avoid electrocution, or being in the path of a moving light rail vehicle, residents should be aware of the following information:

- Never try to reach the wires or throw items at them. Do not fly kites or any other airborne object near the LRT corridor. Stay clear of the corridor at all times to avoid the risk of electrocution;
- Stay away from the tracks at all times; and,
- Parents should educate their children about rail and electrical safety, and discourage them from going near the LRT corridor at all times.

### **Stakeholder Relations and Communications:**

The Stakeholder Relations group continues to meet with Councillors, stakeholders and community representatives affected by the O-Train Confederation Line project to provide information about upcoming work, mitigate risks, and coordinate activities as required.

With respect to citywide communications, the City has increased communications efforts around all construction-related projects to provide timely, accurate, and reliable information to help the public plan how to move around the city. The public is also kept informed and engaged on construction milestones. Please continue to monitor @Ottawacity, @Ottawa\_Traffic and @OCTranspo for up-to-date traffic and transit information.

Weekly updates on the Confederation Line are included on [Ottawa.ca/confederationline](http://Ottawa.ca/confederationline); and milestones and interesting facts about the project are highlighted via the City's social media channels.

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

#### **Transfer Agreements with the National Capital Commission (NCC):**

A critical component of the Stage 2 LRT project was completed this past June as the City of Ottawa executed the Trillium and Confederation Line Transfer Agreements with the NCC. These documents are the final agreements required by the City and the NCC in accordance with the 100-Day Memorandum of Understanding (MOU) and the Agreement in Principle between our organizations.

The Stage 2 alignment travels through significant portions of federally owned property. These agreements provide the City access and certainties moving forward as construction begins in 2019.

The Transfer Agreements establish terms for the transfer to the City of property interests and licenses with respect to property owned by the NCC and required for constructing, operating and maintaining the Stage 2 LRT Project. It also includes detailed provisions regarding the



construction of infrastructure on NCC Lands, including parkland improvement works, the payment of parkland improvement funds by the City to the NCC and the completion of legacy obligations such as the removal of infrastructure forming part of the City's bus rapid transit system.

### **Procurement Update:**

The final version of the Project Agreement (PA) and Project Specific Output Specifications (PSOS) are complete. The PA and PSOS are the result of a collaborative effort between the O-Train Planning Office, Owner's Engineer Team, City departments and critical stakeholders such as NCC, Ministry of Transportation of Ontario (MTO) and the Ottawa International Airport. Additionally, ongoing feedback was received from the proponent groups as the documents evolved.

For both the Trillium and Confederation Line procurement, final submissions are anticipated from proponents this fall. Once the final submissions are received from the proponents an evaluation team will review the bids to determine compliance and then score the bids to decide on a preferred proponent for both Confederation Line and Trillium Line. At this time, a report to Council is scheduled for December, which will recommend the preferred proponents.

### **Environmental Assessment Update:**

The City has approved environmental assessments (EA) for both the Trillium and Confederation Line projects. As there have been additions and changes to these projects since their environmental approvals in 2016, amendments have been required.

The Maitland Bridge Municipal Class EA is now complete. The project includes bridge widening to accommodate the cycle tracks and wider sidewalks; modifications to the north and south ramp intersections to accommodate the new cycling facilities; and the provision of transitions between the new cycling facilities and the existing roadway.

The Federal Environmental Effects Evaluations (EEE) for Trillium Line and Confederation Line are nearing completion.

### **Byron Corridor Tree Relocation Project and Tree Canada Grant:**

Prior to Stage 2 construction taking place, the City relocated transplantable trees from Byron Park to suitable areas in the nearby community. The City is looking to reduce its impact on the urban tree canopy by replacing trees ahead of construction in these communities. As part of the Byron Corridor Tree Relocation Initiative, trees from the Byron Linear Park were moved to several locations in the community, including Redwood Sherbourne, Westwood, Woodroffe, New Orchard and McEwen parks, as well as along the Sir John A. Macdonald Parkway, and on a small number of private residential lots. The City worked with ward Councillors to offer these trees to area residents who could accommodate them on their properties.

To help with this tree relocation program, the City of Ottawa received a \$25,000 grant from Tree Canada. The grant is part of the CN *EcoConnexions – From the Ground Up* initiative that invests in community greening projects across Canada. Ottawa was one of 27 communities to receive a grant, based on more than 140 applications. The grants provide community greening, innovation and stewardship programs across the country. The City will hold a celebration event in August for this initiative.

Should you have any questions, please do not hesitate to contact Steve Cripps at extension 16623 or Chris Swail at extension 12408.

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