

## Q4 2019 Update

**Transportation Services Department** 







## **O-Train South Design Update**

- The City is reviewing final designs of the following projects:
  - Airport Station;
  - Vehicle Branding (Livery); and,
  - Structural details for rail bridges along the alignment.
- The City is reviewing preliminary designs for the following project elements:
  - Sections of trackwork;
  - Uplands, Leitrim, Limebank and Bowesville Stations;
  - Structural details for some rail bridges along the alignment;
  - Vehicle Elements (Interior Design, Brake System, etc.); and,
  - Communications Systems (CCTV, Access Control, etc.).

#### **Uplands Station**



#### **Leitrim Station**



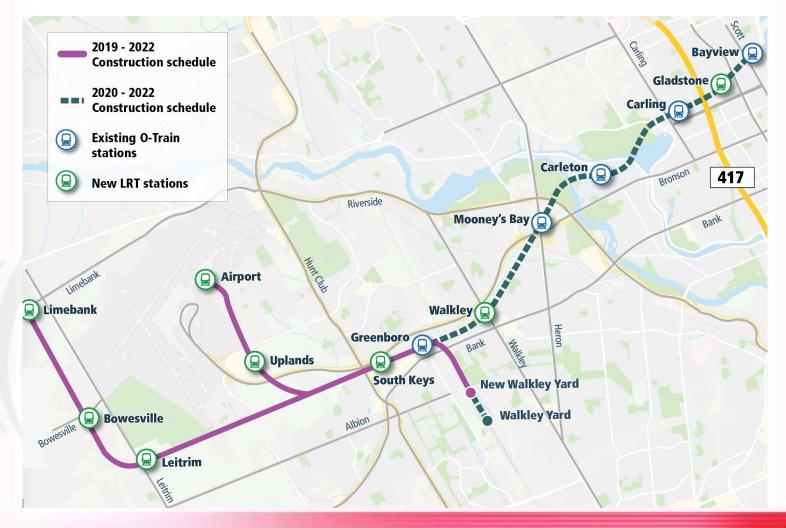
#### **Bowesville Station**



#### **Limebank Station**



#### Construction



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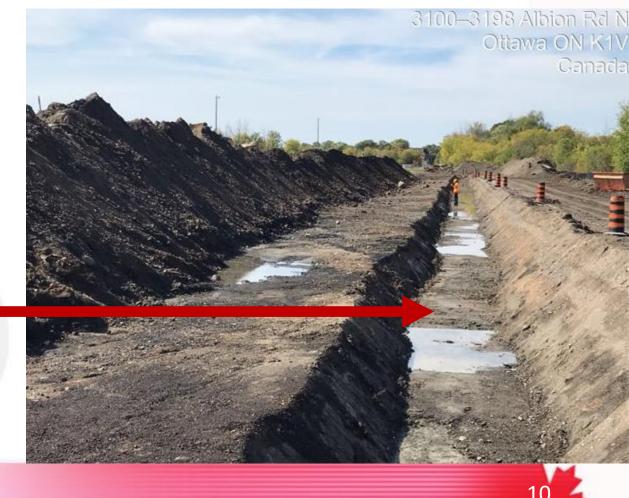
#### **O-Train South Construction Progress**





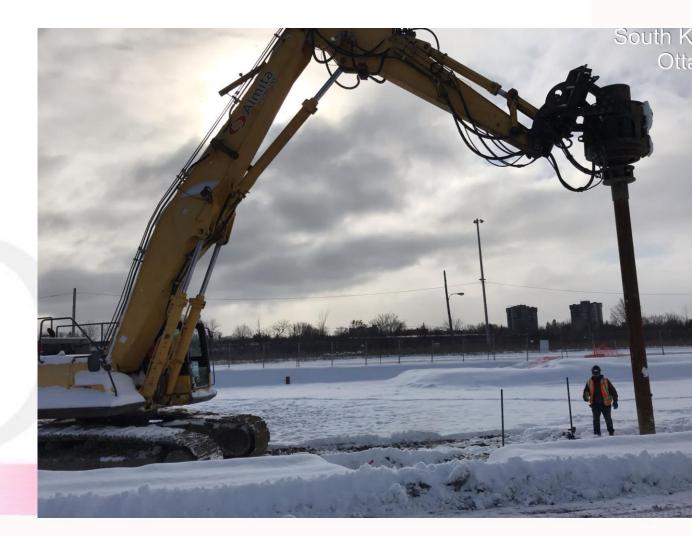
# Walkley Maintenance & Storage Facility

- Preparatory works such as surveying, clean up, trackwork and fencing are complete; and,
- Foundation excavation is underway.

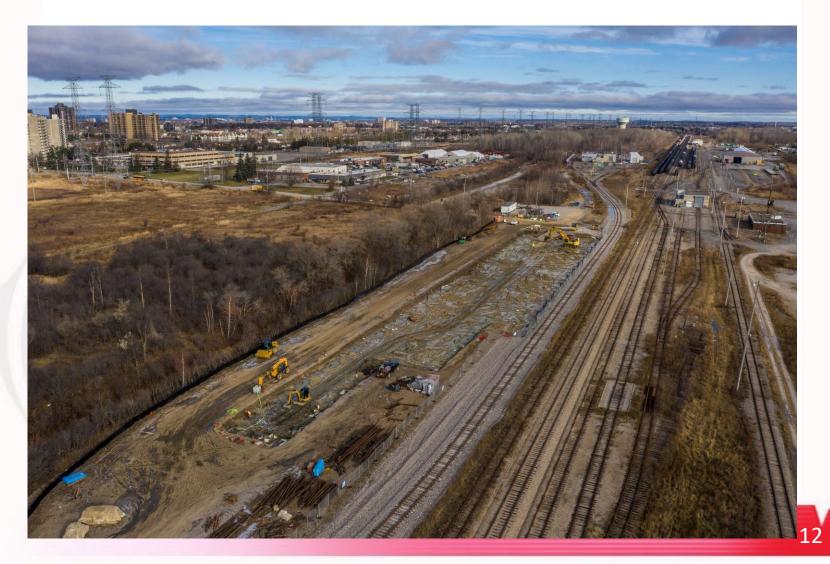


## Walkley Maintenance & Storage Facility (Cont'd)

 Helical pile installation is underway to support the facility foundation.



## Walkley Maintenance & Storage Facility (Cont'd)



## **Airport Link**

- Excavation, grading, culvert installation, and embankment construction are ongoing on the Airport Link;
- Preliminary foundation work is visible from the Airport Parkway and from Uplands Drive;

#### Airport Link (Cont'd)

Airport Link Guideway

North Prescott Track (access to National Research Council Test Facility)



#### **Airport Link Embankment Construction**



### Airport Link (Cont'd)

- Uplands Drive Rail Bridge:
  - Caisson drilling (the caisson forms the foundation for the bridge columns) is complete; and,
  - Column construction is underway.
- Airport Parkway Rail Bridge:
  - Caisson drilling is currently underway.

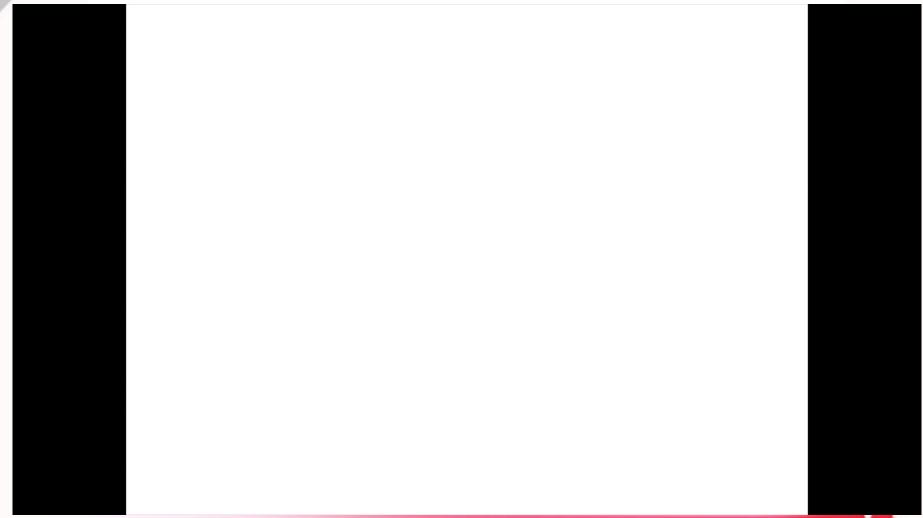
## **Caisson Drilling**



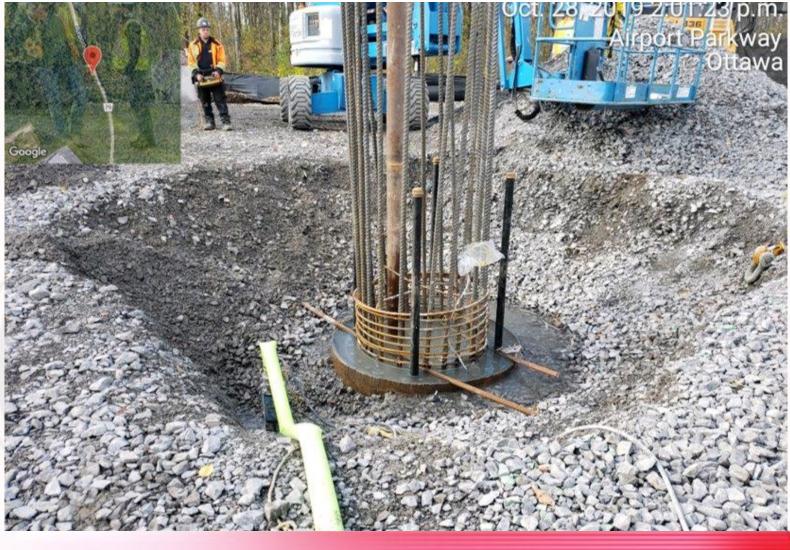
#### Caisson Drilling (Cont'd)



#### **Rebar Lift**



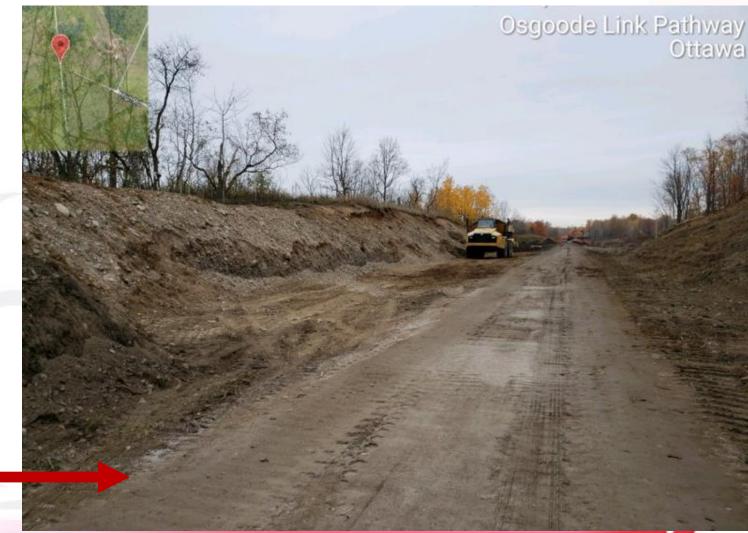
#### **Concrete Pour**



#### **Pier Construction**

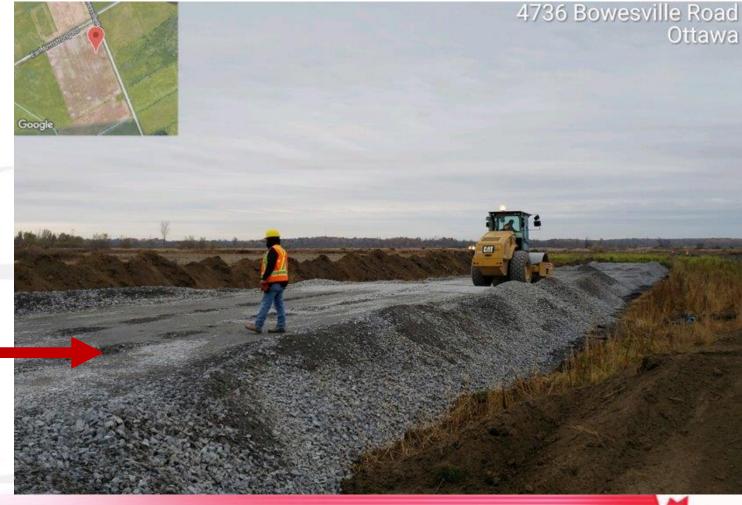


### **Leitrim Station To Bowesville Station**



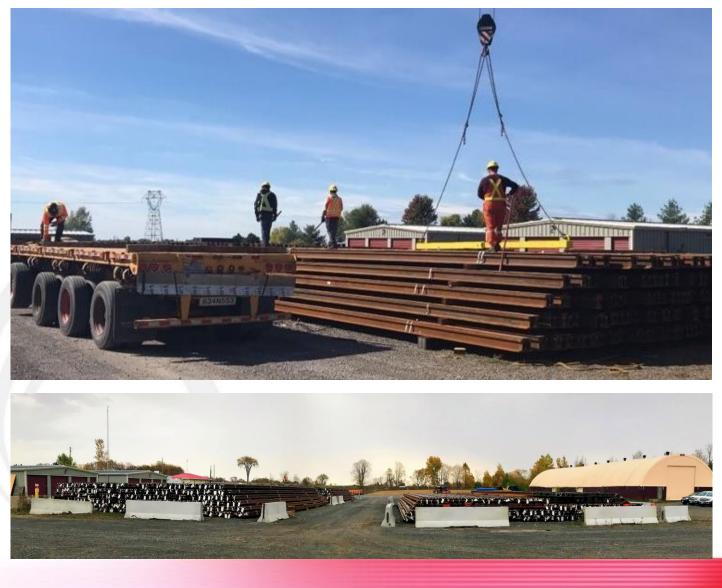
Guideway Excavation

#### **Bowesville Station To Limebank Station**



Guideway Construction

#### **Rail Delivery**



## Upcoming Q1 2020 activities

- Tree clearing from Bayview Station to Limebank Station;
- Pillar construction at Uplands Drive and Airport Parkway Rail Bridges;
- Commencement of Airport Link guideway construction;
- Commencement of Walkley Maintenance and Storage Facility structure construction;
- Utility relocation at Lester Road and Leitrim Road; and,
- Caisson construction at Bowesville and Earl Armstrong Rail Bridges.



## **O-Train East Design Update**

- The City is reviewing construction drawings of the following project elements:
  - Track East Alignment and Profile;
  - Utility east expansion Water, wastewater and stormwater work; and,
  - Montreal Road overpass.
- The City is reviewing final designs for the following project elements:
  - Roadway Drainage;
  - Overall designs for utility west expansion; and,
  - Greens Creek culvert.

## O-Train East Design Update (cont'd)

- The City is reviewing final designs of the following project elements:
  - Roadway Drainage;
  - East Traction Power Substation;
  - Jeanne D'Arc Station;
  - Place D'Orleans Station; and,
  - Trim Station.

#### Construction



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## O-Train East Construction Progress

- Highway 174 reconfiguration underway between Blair and Sir George Etienne Parkway;
- Tree and vegetation clearing is approximately 70% complete; and,
- Highway 174 / Montreal Road interchange widening.

## Highway 174 Interchange Widening

- Crews are widening the Highway 174 footprint to create enough space within the median for the future O-Train East extension;
- Eastbound lanes will be shifted south and westbound lanes will be shifted north, included access ramps in certain areas; and,
- Existing lane configuration will be maintained (two vehicular lanes and one transit facility) during peak periods with lane closures taking place off-peak.



#### Highway 174 Montreal Road Interchange

#### MONTREAL STATION

## **Upcoming Q1 2020 Activities**

- Montreal Bridge preparatory works:
  - Installing excavation support (retaining structures) at Montreal Road Interchange; and,
  - Drill shaft for abutments.
- Highway 174 reconfiguration work to continue; and,
- Watermain replacements at Shefford Road and Jeanne D'Arc Boulevard.





### **O-Train West Design Update**

- The City is reviewing Construction Drawings for the following project elements:
  - Track West Alignment and Profile;
  - Track light maintenance and storage facility Alignment and Profile;
  - Utility west expansion Water, wastewater and stormwater work;
  - Sir John A. Macdonald Parkway detour; and,
  - Carleton Avenue & Cleary Avenue pedestrian overpass structures.

## O-Train West Design Update (Cont'd)

- The City is reviewing Final Designs for the following elements:
  - Woodroffe Stormwater Pond;
  - Churchill Avenue pedestrian overpass & Lanark Avenue pedestrian overpass;
  - Goldenrod bridge; and,
  - Lincoln Fields elevated rail "flyover" structure.

# O-Train West Design Update (Cont'd)

- The City is reviewing Preliminary Designs for the following project elements:
  - Sections of Roadway Drainage;
  - Light Maintenance and Storage Facility Design overall design and Transfer Power Substation design;
  - Highway 417 Ramps Pinecrest, Moodie & Richmond/Holly Acres – Overall design;
  - Lincoln Fields Station;
  - Baseline Station;
  - Queensview Station;
  - Pinecrest Station; and,
  - Moodie Station.

#### Construction



## **Tree & Vegetation Clearing**

- Clearing is currently underway at the following locations:
  - Baseline and Iris Station;
  - Connaught Avenue and Southwest Transitway;
  - Pinecrest Station; and,
  - Byron Linear Park (between McEwen and Cleary Avenue).
- Clearing is planned for the following locations:
  - Moodie Light Maintenance and Storage Facility;
  - Bayshore Station;
  - Lincoln Fields Station; and,
  - Sir John A. Macdonald Parkway.

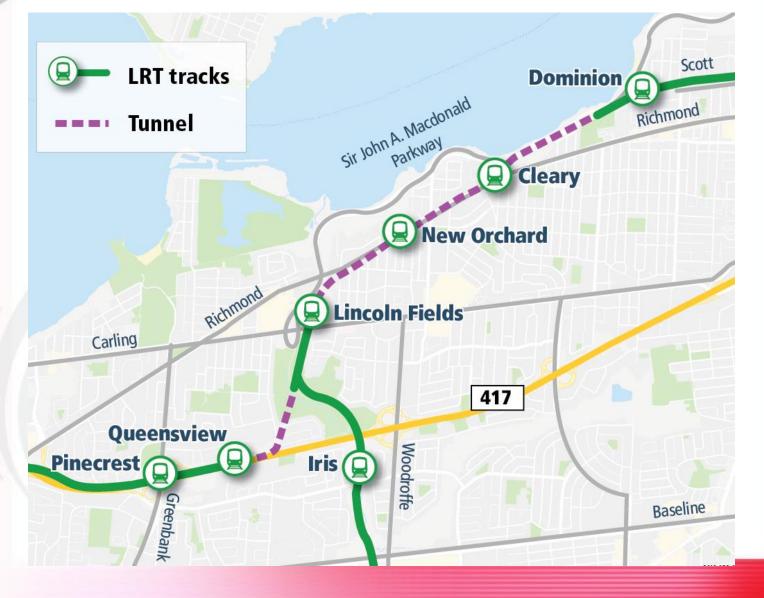
## **Tree Clearing At Iris Station**



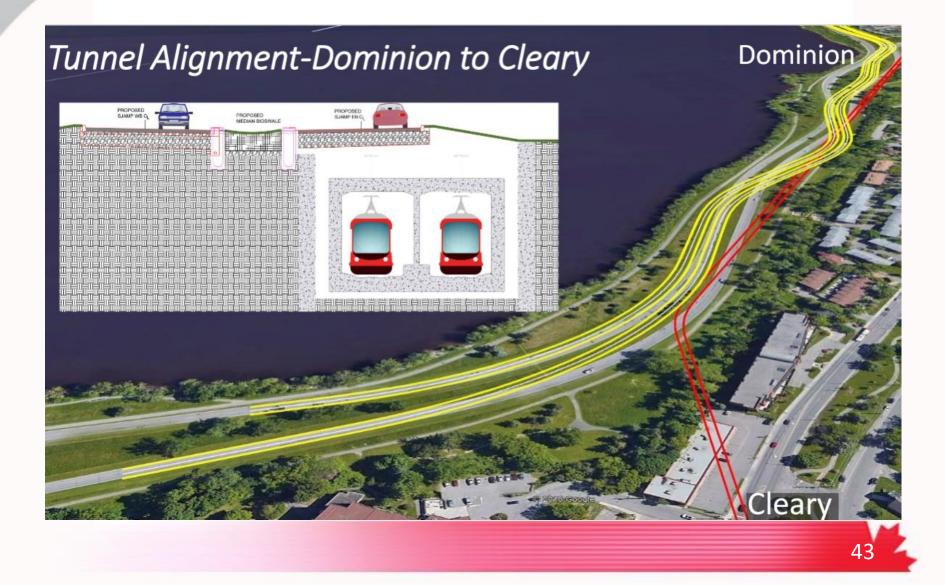
### **Tree Mitigation & Replacement Strategy**

- An overall average tree replacement ratio of 2:1 (two trees for every one removed) will be replanted within Stage 2 project limits;
- When tree removal is unavoidable, trees are documented based on size and species;
- In some cases where a large diameter tree is removed, a higher replacement ratio will be applied; and,
- Area restoration, tree replacement and greenspace reseeding will be completed as part of the final works.

### **O-Train West Tunnels**

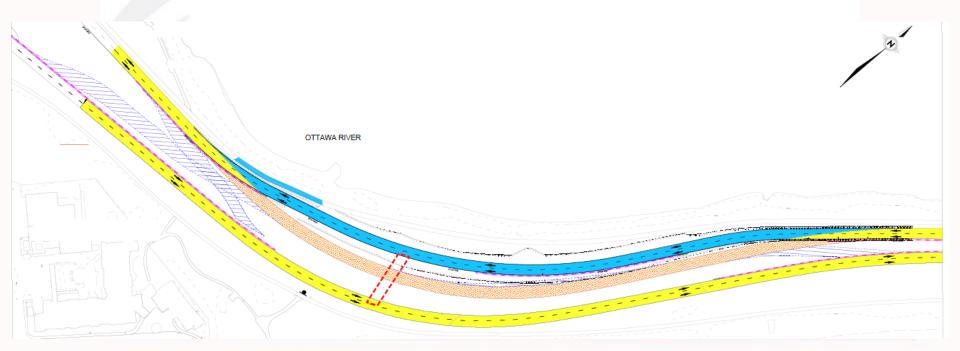


#### Future Sir John A. Macdonald Parkway



### Sir John A. Macdonald Parkway Reconfiguration

- Traffic has shifted to temporary westbound traffic lanes; and,
- Temporary eastbound traffic lane construction will resume in the spring of 2020.



### Sir John A. Macdonald Parkway Temporary Westbound Lanes



# **Upcoming Q1 2020 Activities**

- Pinecrest Stormwater Pond construction to begin once Environmental Compliance Approval permit is received;
- Iris Culvert Preparatory Work;
- Hydro Pole & Bell Line relocation in Byron Linear Park; and,
- Carling Avenue utility relocation nearby Lincoln Fields Station.

# **Stage 2 Alstom Citadis Vehicles**

- RTG is providing 38 additional Alstom Citadis vehicles to ensure the expanded Stage 2 Confederation Line operates as a single, uniform service;
- Prior to introducing vehicles into passenger service, new vehicles will have to prove they are reliable during a testing period that will occur during late night hours/weekends on the mainline; and,
- Test vehicles will be easily identifiable through the use of temporary decals to ensure passengers are aware the vehicle is not in service.



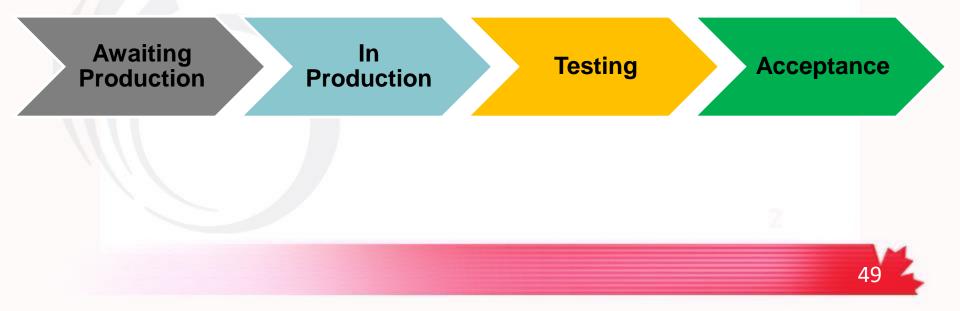
#### **Stage 2 Alstom Citadis Vehicle Testing**



# Status Of Stage 2 Alstom Citadis Vehicles

Of the 38 Stage 2 Alstom Citadis Vehicles:

- 24 vehicles are awaiting production;
- 8 vehicles in production; and,
- 6 vehicles are undergoing testing.



# **Information Sessions**

- Stage 2 drop-in information sessions are planned to occur in December through to early 2020.
- Each session will provide a project overview and cater to a specific geographic area:
  - Cleary Station to Lincoln Fields Station (December 3, 2019);
  - Blair Station to Trim Station (December 5, 2019);
  - Westboro Station to Dominion Station (December 9, 2019);
  - Iris Station to Baseline Station (December 11, 2019);
  - Lincoln Fields 'Flyover' Bridge to Moodie Station (December 12, 2019);
  - South Keys Station to Airport Station and Limebank Station (2020 TBD); and,
  - Bayview Station to Greenboro Station (2020 TBD).
- Staff continue to engage with Councillors, Transit Commissioners and community stakeholders as work progresses.

## **Questions?**