



Green Line Board September 2023 Public Progress Report

1.0 Executive Summary

Green Line’s LRV work met a significant milestone on September 28, 2023, with CAF achieving the Final Design Review milestone. This is a testament to the collaborative hard work of the Green Line and CAF teams.

Work with Bow Transit Connectors (BTC), the Development Partner is progressing on schedule. Working groups continued their technical information exchange sessions to further develop details on design, and establish agreement on project costs, risk allocation, and overall schedule.

Two early works utility relocation projects were responsible for the majority of public outreach during the month of September – the Calgary District Heating Inc. (CDHI) work on 5 Avenue S.W. and the 78 Avenue Project in Ogden. Additional outreach and coordination were also required to support a significant change to traffic configuration on 12 Avenue S.E. to improve egress for major events, including changes to the cycle route detour.

Dakota Inc, the contractor brought in to undertake building demolitions, began work on the Lilydale Chicken Factory and three sheds located on 24 Street, north of 114 Avenue S.E. The Lilydale site requires extensive internal remediation and removal work before the structure is demolished and is expected to be completed by the end of 2023.

1.1 Construction Highlights

BDURP Construction Activity

Utility relocation work continued in the month of September within Beltline and Downtown. The following tables summarize utility relocation works that continued throughout the month of September, with a look ahead at planned construction activities for the month of October:

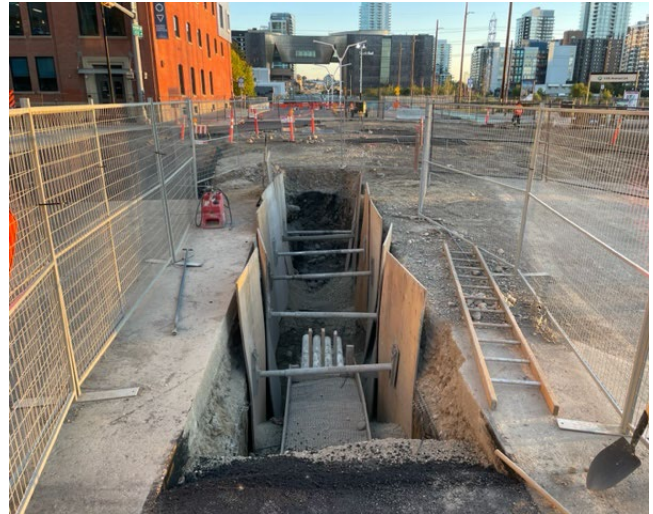
Beltline		
Construction activity	September	October
ENMAX duct bank installation on 11 Avenue S.W.	Completed	-
ENMAX Transmission cable pull on 10 Avenue S.W. and 11 Avenue S.W.	Underway	Continues
ENMAX manhole installation at the intersection of Olympic Way S.E. and 11 Avenue S.E.	Started	Continues
Whissell Installation of storm, sanitary at the intersection of Olympic Way S.E. and 11 Avenue S.E.	Completed	-
Whissell installation of sanitary, storm and feedermain installation at 12 Avenue S.E. and 6 Street S.E.	Underway	Continues
ENMAX duct bank installation in Olympic Way, between 12 Avenue and 11 Avenue S.E.	Completed	-



Downtown		
Construction activity	September	October
CDHI scope on 5 Avenue S.W and 3 Street S.W.	Underway	Continues
ENMAX vault installation at the corner of 6 Avenue S.W. and 1 Street S.W.	Underway	Continues
Bell/Zayo cable pull along 3 Avenue S.W., 4 Avenue S.W., and 5 Avenue S.W.	Started	Expected Completion
ENMAX duct bank installation on 3 Avenue S.W.	Underway	Continues



Councillor Pootmans and Councillor Wong visited the Beltline East utility relocation project site on September 12 with representatives from Alberta Roadbuilders and Heavy Construction Association.



Looking north at Enmax duct bank work along Olympic Way S.E., south of 11 Avenue S.E.

78 Avenue Construction Activity

Construction of diversion embankments at 78 Avenue and the pedestrian tunnel area continued in September with key activities including removal of material, construction of temporary retaining walls and granular fill.

The installation of deep utilities on the east side of the Canadian Pacific Kansas City (CPKC) Rail tracks and the laying of storm duct began. Backfilling also began around the CPKC culvert extension that was previously completed.



Looking south along the diversion track embankment.

1.2 Program Status Dashboard

The table below provides the program status dashboard update for September 2023, including the overall program status and a comparison to the previous month.

Functional Area	September Status	August Status	Comments
Health & Safety	●	●	<ul style="list-style-type: none"> There were two near miss and one property damage incidents in the month of September. Incidents are being investigated and the root causes being addressed with contractor.
Environmental	●	●	<ul style="list-style-type: none"> Drilling for additional environmental and geotechnical due diligence will be completed between October and December 2023. Field work for fish habitat and water depth assessments in the Bow and Elbow Rivers was completed in September 2023.
Public Affairs	●	●	<ul style="list-style-type: none"> Connected with 241 businesses, residents, and key stakeholders in September.
Schedule	●	●	<ul style="list-style-type: none"> Work on key program activities is progressing as per schedule.
Cost	●	●	<ul style="list-style-type: none"> Green Line continues to proactively monitor program costs. Currently advancing design and negotiating risks, price, and the project schedule with BTC as part of the Development Phase to align on project cost.



Functional Area	September Status	August Status	Comments
Quality	●	●	<ul style="list-style-type: none"> Program Quality Management Plan implementation continued with oversight of BDURP and 78 Avenue construction quality and LRV Supply project quality compliance.
<p>*Definitions of the dashboard statuses can be found online in the Monthly board report and financial summary legend.</p>			

1.3 Financial Summary as of September 30, 2023

Green Line continues to monitor the financial position of the program.

Category	Committed Cost	Cost to Date	Cost Year to Date
Owner's Cost	92,044,955	92,044,955	11,839,624
Design & Engineering	313,545,861	294,238,794	27,185,887
Construction, Land & Other Assets	722,466,990	572,733,677	115,763,640
Bus Rapid Transit	5,846,980	5,846,980	1,203,684
Grand Total	1,133,904,786	964,864,406	155,992,835
<p>*Details on specific inclusions can be found online in the Monthly board report and financial summary legend.</p>			

1.4 Achievements and Milestones

Upcoming milestones and achievements for the Green Line program include:

Completed	Upcoming
<p>September 19, 2023 - LRV Final Design Review complete.</p> <p>September 27, 2023 - Independent Safety Assessor RFP Issuance to Market.</p>	<p>October 31, 2023 – 78 Avenue S.E. Grade Separation and Pedestrian Tunnel diversion embankment work to complete.</p> <p>January 2, 2024 - 78 Avenue S.E. Grade Separation and Pedestrian Tunnel track diversion to complete.</p> <p>January 2024 – Development Phase progress update.</p>

1.5 Risk Management

Risks and opportunities are continually monitored by Green Line, some key risks of note from September 2023 are:

- Utility relocation works in Beltline and Downtown are ongoing in busy traffic corridors, which impacts the travelling public and pedestrians. Green Line continues to proactively engage and notify stakeholders of potential construction related impacts (e.g., road closures) and work actively with City business units on a regular basis to optimize traffic control, lane closures, and assist with traffic management in Beltline and Downtown overall.
- Construction of the 78 Avenue Project is ongoing in the community of Ogden. The project has a tight footprint and is located between the very active Canadian Pacific Kansas City Rail mainline carrying approximately 28 trains a day and is adjacent to residential areas. Adequate safety measures are in



place to ensure safety of the workers/residents, and to avoid any interruption to Canadian Pacific Kansas City Rail’s operations. Similarly, proactive measures are planned to minimize quality of life impacts to the nearby residents.

1.6 Public Affairs

Two projects were responsible for the majority of outreach during the month of September – the CDHI work on 5 Avenue and the 78 Avenue Project in Ogden. Additional outreach and coordination were also required to support a significant change to traffic configuration on 12 Avenue S.E. to improve egress for major events, including changes to the cycle route detour.

The CDHI work on 5 Avenue has caused significant traffic impacts and had the potential to cause disruptions to business. To minimize these impacts, Green Line coordinated with adjacent businesses, CDHI and the City’s Mobility team to facilitate major building maintenance and repairs as well as major events, including Calgary Pride, World Petroleum Congress and most recently, Night Light. Despite shifting timelines and some uncertainty through the process, the mitigations implemented were successful.

For the 78 Avenue Project in Ogden, pressure to complete critical work in advance of winter means the intensity of work is increasing in the area. Green Line has been in the community and in regular contact with the residents, observing impacts and providing consistent feedback to improve conditions. Concerns about speed and truck routes have been raised by members of the community and steps have been taken to ensure that residential roads are not used as a shortcut for heavy trucks. Green Line, Graham, and CPKC are collaboratively monitoring operations to ensure community safety.

Green Line’s Community Relations team led its monthly construction outlook for Beltline on September 6 and Downtown on September 27 to help set expectations and inform residents and businesses about the impacts they should expect over the month ahead.

In addition to the nine construction notices sent to more than 86 interested parties (i.e., property owners, property managers, community organizations, businesses, residents, and others) in Beltline, Downtown, and Ogden, the direct business and community outreach for September 2023 is summarized below.

Outreach Activity	Activity (September)
Business outreach*	73
Residential/property outreach*	29
Key stakeholder/partner meetings	33
Email/311 requests	18
Information sessions/events	2

* Outreach includes calls, meetings, and on-site visits.

As anticipated, there was a small increase in inquiries received through the Green Line email inbox and 311 service requests with 18 inquiries received in September (11 received in August). These inquiries covered a range of subjects, including concerns with the 78 Avenue project, the cycle track detour supporting major event egress, and the overall traffic impacts to the downtown.



A social media campaign in September aimed to promote awareness about RouteAhead, the long-term plan for Calgary Transit. The campaign focused on the Primary Transit Network, and how Green Line will improve it. The post on Sept. 18 received a lot of interaction, especially on LinkedIn and Twitter:

- LinkedIn: 166,470 organic impressions, 2,413 likes and 95 comments
- Twitter: 42,900 impressions, 220 likes and 25 comments

A follow-up video with the Director of Calgary Transit will be posted on Green Line’s social channels in early October.

2.0 Health & Safety

Green Line monitors the safety compliance of Green Line staff, consultants, and contractors at construction sites via ongoing site visits and safety inspections. Seventeen (17) site inspections/visits were carried out by Green Line during September.

There were three (3) safety incidents in the month of September:

- A near miss occurred on September 12, 2023, when a sub-contractor was backing up a pickup truck on the diversion track embankment at the 78 Avenue Project site, when there was a close encounter with a worker who was spotting dump trucks and other heavy equipment. Corrective actions have been put in place and include more effective coordination between various sub-contractors working on the project to avoid recurrence.
- A new miss occurred on September 19, 2023, when Construction Manager’s (CM) contractor crew, mobilized to conduct field investigation work near the CPKC rail by 26a Street S.E. and 69 Avenue S.E., did not have a designated CPKC flagger. The CM had their own flagger but effective coordination with CPKC was not done and a CPKC flagger was not arranged for the task. Coordination has been put in place to ensure CPKC flagger is present for any future work.
- A property damage incident occurred on September 20, 2023 when a hydrovac operator raised the boom of the truck to get the suction hoses out of the excavation and contacted the underside of the +15 resulting in the minor damage to two deck soffit panels at 5 Ave between 2 and 3 Street S.W. Green Line is working with third party contractors to ensure their trades are aware of the risks associated with operating equipment and restricted sightlines including the necessary measures to prevent these types of incidents.

Safety Reporting

Green Line Safety Incident Frequency				
Performance Indicator		Green Line & City Staff	Contractors	Green Line, City Staff & Contractors
TRIFR: Total Recordable Injury Frequency Rate	per 200,000 hrs			
*Statistics based on a rolling 12-month period from September 30, 2022, to September 30, 2023.				



3.0 Environmental

As part of the Development Phase, Green Line and BTC continue to discuss additional due diligence requirements and this work will be completed by December 2023. Field work for fish habitat assessments and bathymetry in the Bow and Elbow Rivers was completed in September 2023.

Green Line and BTC met with Alberta Environment and Protected Areas on September 18, 2023, to discuss the proposed soil management approach for the Green Line. Green Line and BTC also met with Alberta Environment and Protected Areas on September 12, 2023, to discuss wetland compensation at the Maintenance & Storage Facility.