



## Green Line Board

### April 2023 Public Progress Report

#### 1.0 Executive Summary

In April, the Green Line Board approved the Development Phase Agreement and selected Bow Transit Connectors (BTC) as Green Line's Development Partner. BTC brings together Barnard Constructors of Canada, LP, Flatiron Constructors Canada Ltd, and WSP Canada Inc, along with their financial advisor EllisDon Capital Inc. Collectively they will bring shared expertise in underground, above-ground structures, and LRT design and construction to deliver Phase 1 of the Green Line LRT Project.

Delivery Partner (CSIX) onboarding activities, including planning, resourcing, and mobilization, continued in April, and the full Technical Advisory Services Team has been onboarded in preparation for the Development Phase.

On April 6, 2023, the Eau Claire Land Use / Area Redevelopment Plan (ARP) amendments were presented at Calgary Planning Commission (CPC), receiving unanimous support. The application is proceeding to the May 16 Council Public Hearing with CPC's recommendation for Council approval.

As planned, the LRV Preliminary Design Review (PDR) was completed on April 28. CAF LRV schedule performance is being closely monitored and managed.

Ongoing utility relocation works in Downtown and the Beltline continued through April (see detailed list of work in [Section 1.1](#)). The installation of new sanitary and storm lines along Olympic Way, between 12 Avenue and 11 Avenue S.E. were completed in April, and Enmax completed duct bank installation work along Bow River Pathway, west of 2 Street S.W.

#### 1.1 April Construction Highlights

Construction activities in Beltline and Downtown continued during the month of April. Green Line continues to work to minimize construction impacts to the travelling public and coordinate construction activities among third-party utilities, PCL who is managing BDURP construction activities on behalf of Green Line, and The City's Mobility business unit.

Shallow utility relocation work (such as third-party telecom, electricity, and gas utilities) continues within Beltline and Downtown, in addition to engineering design works for the remaining shallow utility work. Deep utility relocation works in Beltline include City sanitary, water and stormwater utilities.



Looking north at deep utility relocation work in Olympic Way S.E., north of 11 Avenue S.E.



Looking west at Enmax vault installation at 2 Street S.W. and 5 Avenue S.W.

The following utility relocation work in the Beltline and Downtown continued during April with a look ahead at planned construction activity for the month of May:

<b>Beltline</b>		
<b>Construction activity</b>	<b>April</b>	<b>May</b>
Installation of deep utilities on 12 Avenue, east of 5 Street S.E.	Underway	Continues
Installation of a new sanitary and storm manhole on Olympic Way, north of 12 Avenue S.E.	Underway	Continues
Installation of a new sanitary and storm lines along Olympic Way, between 12 Avenue and 11 Avenue S.E.	Completed	-
Installation of a new feedermain along Olympic Way, between 12 Avenue and 11 Avenue S.E.	Started	Continues
Installation of new sanitary and storm lines at Olympic Way and 4 <sup>th</sup> Street intersection.	Started	Continues
Enmax Transmission Line relocation work in 10 Avenue S.W. between 2 Street S.W. and MacLeod Trail S.E.	Underway	Continues
<b>Downtown</b>		
<b>Construction activity</b>	<b>April</b>	<b>May</b>
Telus duct bank relocation work on 4 Avenue between 1 Street and 2 Street S.W.	Underway	Continues
Enmax duct bank relocation works at: <ul style="list-style-type: none"> <li>7 Avenue between 2 Street and 1 Street S.W.</li> <li>1 Street between 7 Avenue and 2 Avenue S.W.</li> </ul>	Underway	Expected Completion
Enmax vault installations on 5 Avenue S.W.: <ul style="list-style-type: none"> <li>east of 2 Street S.W.</li> <li>west of 2 Street S.W.</li> </ul>	Underway	Expected Completion
Telus duct bank installation work on 6 Avenue between 1 Street and 2 Street S.W.	Underway	Continues
Enmax duct bank installation work along Bow River Pathway, west of 2 Street S.W.	Completed	-



## 1.2 Program Status Dashboard

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

Functional Area	April Status	March Status	Comments
Health & Safety			<ul style="list-style-type: none"> <li>There were two property damage incidents in April 2023 on Third-Party Utility sites.</li> <li>GL 2023 Safety Targets &amp; Objectives were reviewed by management, approved, and shared with all GL personnel.</li> <li>The GL Safety Audit Action Plan was finalized, reviewed by management, and sent to the City Audit Facilitator to advance continual opportunities for improvement identified in the External COR Audit report.</li> </ul>
Stakeholder Relations			<ul style="list-style-type: none"> <li>Connected with 427 businesses, residents, and key partners in April 2023 (380 in March 2023).</li> <li>Green Line curated a display in City Hall called “The Past, Present and Future of Light Rail Transit in Calgary.”</li> </ul>
Schedule			<ul style="list-style-type: none"> <li>Phase 1 DBF-DP on-boarding activities are on schedule.</li> <li>BDURP construction key milestones are on schedule.</li> </ul>
Cost			<ul style="list-style-type: none"> <li>Green Line continues to proactively monitor program costs.</li> <li>Appropriate mitigation measures for key risks continue to be identified and implemented.</li> </ul>
Quality			<ul style="list-style-type: none"> <li>Program Quality Management Plan implementation continued with ongoing oversight of design quality management, BDURP construction works, and LRV Supply project quality compliance.</li> </ul>

\*Definitions of the dashboard statuses can be found online in the [Monthly board report and financial summary legend](#).

## 1.3 Financial Summary as of April 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	\$86,435,296	\$85,955,669	\$5,989,551
Design & Engineering	\$297,068,246	\$280,837,462	\$12,338,227
Construction, Land & Other Assets	\$542,546,833	\$474,893,148	\$19,130,225
Bus Rapid Transit	\$4,972,677	\$4,972,677	\$329,381
<b>Grand Total</b>	<b>\$931,023,052</b>	<b>\$846,658,956</b>	<b>\$37,787,384</b>

\*Details on specific inclusions can be found online in the [Monthly board report and financial summary legend](#).



## 1.4 Milestone Schedule

Upcoming milestones and achievements for the Green Line program include:

Achievements Completed	Upcoming Milestones
<p><b>April 28, 2023</b> – Phase 1 DBF-DP Development Phase began, BTC announced as Green Line Development Partner.</p> <p><b>April 28, 2023</b> – LRV Preliminary Design Review (PDR) was completed on April 28. LRV Final Design Review (FDR) is progressing.</p> <p><b>April 2023</b> – LRV Inspection and Testing completed. Roof water tightness testing, underframe, and carbody inspections undertaken.</p>	<p><b>May 2023</b> – LRV Axle journal bearing testing</p> <p><b>May 16 2023</b> – Public Hearing of Council on Eau Claire Land Use / Area Redevelopment Plan (ARP) amendments</p> <p><b>May 25, 2023</b> – Subject to Board approval, 78 Ave Project first negotiation proponent selected</p> <p><b>Q4 2023</b> – aiming for LRV Final Design Review (FDR) completion</p>

## 1.5 Risk Management

Risks are continually monitored by Green Line, some key risk items from April 2023 that are being addressed are:

- Green Line continues to monitor financial market changes due to the current economic climate. Regular external due diligence is ongoing to identify, evaluate and validate information and assumptions.
- Utility relocation works in Beltline and Downtown are ongoing in busy traffic corridors, which has a potential to impact travelling public and pedestrians. Green Line continues to proactively engage and notify stakeholders of potential construction related impacts (e.g., road closures) and is working 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.

## 1.6 Stakeholder Relations

BDURP construction continued in Beltline and Downtown with coordinated traffic and pedestrian detours in place to maintain area access. Traffic detours to facilitate transmission line work in Beltline West, resulted in delays for vehicles exiting parkades on 10 Avenue S.W. and 9 Avenue S.W. The team worked collaboratively with the Third Party Utility and the City's Mobility team to adjust the detour, including traffic signal timing, and improve traffic flow during peak travel times. Detours for this work will continue until July and will recommence post-Stampede.

Green Line continues to collaborate with Third Party Utilities to ensure impacted businesses are prepared, that access is being maintained, and business operations are considered during construction planning. For example, construction sequencing and the installation of a temporary loading area for coach and guest drop off/pick up have been implemented to support Westin Calgary hotel during construction.

On April 13, Green Line attended the Riverbend Community Association's Annual General Meeting to provide a project update, including the upcoming 78th Avenue Project construction in Ogden. On April 18, Green Line provided an update at Calgary Municipal Land Corporation's semi-annual Community Partner's meeting. On



April 26, Green Line met with representatives from Downtown property management companies to provide a monthly construction outlook. The responses at each of these events continues to be positive as people are eager to be kept informed.

In addition to the four construction notices sent to 79 stakeholders in Beltline and Downtown during the month of April, direct stakeholder outreach for April 2023 is summarized below.

Outreach Activity	Activity (April)
Business outreach*	320
Residential/property outreach*	59
Key stakeholder/partner meetings	48
Email/social/311 requests	12
Information sessions/events	9

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

Green Line curated a display in City Hall called “The Past, Present and Future of Light Rail Transit in Calgary.” It showcases the history of Calgary’s CTrain system from its humble beginnings in 1981 to the future additions of Green Line and expansions of the Red and Blue Lines. To help promote this display an animated video showing the growth of the CTrain system was shared on our social media channels.

Green Line also attended SUPERTRAIN over the weekend of April 15-16, which is Canada’s largest model train show. There were 11,600 visitors to the event and Green Line spoke to thousands of Calgarians about the project.

## 2.0 Health & Safety

Green Line monitors safety compliance by Green Line staff, consultants, and contractors at construction sites. The Green Line office move to First Tower occurred safely with all emergency equipment put in place and all staff provided orientation to emergency procedures, muster point and equipment locations.

The following two property damage incidents occurred in April 2023:

- The first incident occurred on April 15 in Downtown at the intersection of 4 Avenue and 1 Street S.W. when a traffic signal communication line was severed. This had resulted in a short-term disruption to a traffic signal. As-built information was found to be incorrect and locate did not identify the presence of the communication line. In general, as-built information related to infrastructure in Downtown is old and not reliable. Green Line is working with The City Business Unit to determine preventive actions.
- The second incident occurred on April 21 in Downtown when a Third Party Utility contacted street light cable on 7 Avenue and 1 Street S.W. Same condition as noted above.



All incidents are being investigated and Green Line is following-up with the respective contractor and Third-Party utilities to identify and understand the root causes that led to these incidents and implement measures to address them moving forward. Safety remains a focus for Green Line as BDURP construction activity continues in the Beltline and Downtown areas.

The Green Line 2023 Safety Targets & Objectives were reviewed at the Annual Safety Management Review meeting. They were subsequently signed off and shared with all Green Line personnel.

### Safety Audit

The safety audit action plan was finalized in April based on the opportunities for improvement identified in the external 2022 COR audit report and was reviewed by management prior to submitting to the Audit Facilitator.

Green Line has retained the services of an external consultant to perform a safety audit. The audit is expected to be completed in May.

Green Line staff continues to work with an external consultant to audit the CM Contractor's Safety Management System.

### Safety Reporting

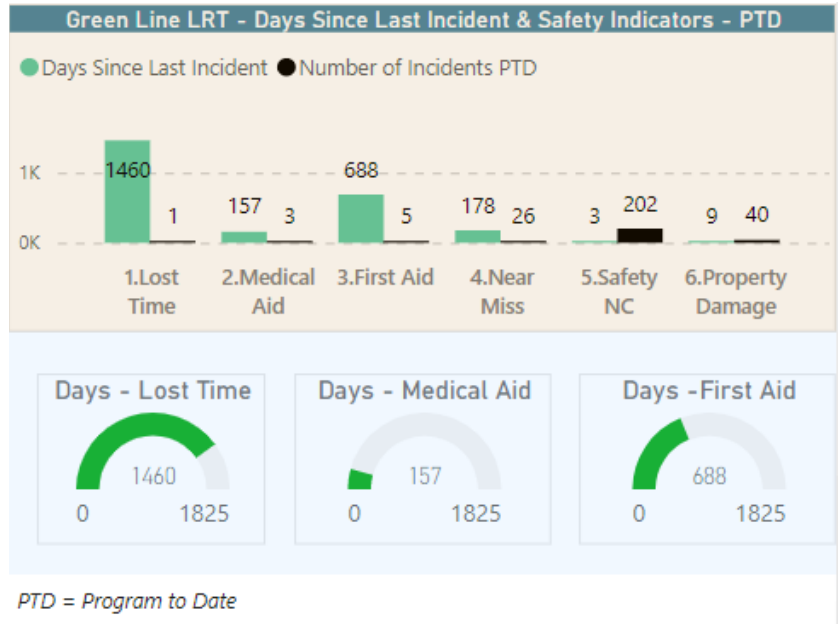


Table 2: Green Line Safety Incident Frequency Statistics				
Performance Indicator		Green Line & City Staff	Contractors	Green Line, City Staff & Contractors
TRIFR: Total Recordable Injury Frequency Rate	per 200,000 hrs	●	●	●

*\*Statistics based on a rolling 12-month period from April 30, 2022, to April 30, 2023.*