



Green Line Board **Report**

ISC: Unrestricted
Report GLB2022-0445
Item 8.1

Green Line Board February 2022 Progress Report

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1 Executive Summary

1.1 February Highlights

The market sounding and procurement strategy is being developed and ongoing refinement continues to ensure a balanced and reasonable procurement strategy that is attractive to the market.

The Beltline Downtown Utility Relocation Project (BDURP) team continues to prepare for deep utility and third-party utility construction in Beltline East which is expected to ramp up in early April 2022.

Preparation of Phase 1 Design-Build-Finance (DBF) procurement documents will continue in anticipation of release of Request for Qualifications (RFQ) by the end of Q1 2022.

1.2 Project Status Dashboard

Functional Area	Overall Program Status	Last Month's Status	Comments
Health & Safety	●	●	<p>There were no safety incidents with Green Line personnel, consultants and contractors in February.</p> <p>The Green Line 2022 safety targets and objectives were approved, posted and reviewed with all Green Line personnel.</p>
Environmental	●	●	The Climate Lens Resilience Assessment and Greenhouse Gas (GhG) Mitigation Assessments were submitted to the Provincial and Federal Governments in February.
Stakeholder Relations	●	●	<p>Pre-construction planning and stakeholder outreach continue to ensure impacted stakeholders are informed in advance of construction. Construction notices with a detailed map are shared on the Green Line website.</p> <p>Green Line CEO participated in the 21st Annual Partnering with Industry Symposium to discuss capital projects and opportunities with more than 400 local industry professionals.</p>
Schedule	●	●	The execution of the BDURP Guaranteed Maximum Price (GMP) contract for Beltline East and Construction Manager (CM) General Expenses is ongoing and construction is expected to start in April 2022. Completion milestones are on track.



Functional Area	Overall Program Status	Last Month's Status	Comments			
Cost			The team continues to proactively monitor various risk items including BDURP and escalation. Effective mitigation measures continue to be implemented.			
Quality			Green Line 2022 Quality Objectives have been reviewed and approved. An orientation of the Program Quality Management Plan will be conducted in March 2022 for the new Green Line directors.			
LEGEND*:	On Plan	At Risk	Off Plan	Not Started	Not Applicable	N/A

*Definition of legend for the dashboard in Appendix 1

1.3 Project Highlights

Project	Summary of Status this Month	March Look Ahead
Phase 1	Preparation of procurement documents are ongoing. Discussions with major Proponents interested in competing in the Phase 1 Design-Build-Finance (DBF) procurement are ongoing.	Continue with Phase 1 DBF procurement document preparation Continue RFQ preparation to go to market by the end of Q1 2022. Phase 1 DBF procurement strategy to be presented to Green Line Board.
Enabling Works	The BDURP team is working with PCL on the Beltline East GMP, including utility relocation scope and costs. Work continues with third-party utilities to plan for Spring 2022 construction.	The BDURP team will continue to work with PCL to finalize the Beltline East revised GMP. The BDURP team will continue to work with third party utility providers for commencement of on-site civil work in April 2022. The deep utility tender package for Downtown and West Beltline is scheduled to be tendered in early April 2022.
LRV	Coordination with the LRV vendor is ongoing.	Completion of the Initial Infrastructure Interface Package to inform the Phase 1 DBF procurement.



1.3 Financial Summary as of end of February 28, 2022

Construction, Land & Other Assets	Committed	Cost to Date	Cost Year to Date
Owner's Cost	67,365,375	67,165,375	1,889,289
Design and Engineering	278,129,361	241,339,265	4,887,999
Construction, Land & Other Assets	485,362,704	403,380,194	860,064
Bus Rapid Transit	3,330,276	3,330,276	36,369
Grand Total	834,187,716	715,215,110	7,673,721

*Details on specific inclusions in Appendix 1.

1.4 Milestone Schedule

The next phase of work is focused on three important areas to mitigate risk for future Phase 1 construction:

- Advancing to the award of the Phase 1 DBF contract
- Relocating downtown utility conflicts
- Land acquisition

Near term milestones and achievements for the project include:

- March 2022 – Completion of LRV Infrastructure Interface Package
- End of Q1 2022 – Phase 1 DBF RFQ – Issue to Market
- April 2022 – BDURP– Construction to begin

1.5 Risk Management

Below are some of the key-risk items that continue to be addressed by the team:

- Vacancies within the Senior Leadership team:
 - Most key vacancies in the Senior Leadership team have been successfully filled and recruitment is underway to fill the remaining role.
 - Corporate and Green Line Program-specific onboarding is underway for newly hired Directors and leadership positions.
- Competing pressure in the North American marketplace may limit the pool of qualified teams interested in participating in the Phase 1 DBF procurement:
 - Steps are being taken to improve the Phase 1 DBF procurement process and documents based on feedback received through market sounding in December 2021 to make the procurement more balanced, reasonable and attractive to the market. Market sounding will continue through the pre-procurement phase to continually evaluate and mitigate any associated risks.
- Market trends:
 - Continuing to assess market changes. Regular due diligence is ongoing with external consultants to ensure alignment with current market trends.

The risk register and mitigation strategies are continuously reviewed and updated through the Risk Management process.



2 Health and Safety

2.1 Overall Program

There were no safety incidents on the Green Line project for the month of February 2022 and no significant impact on productivity due to COVID-19.

The February Safety Focus focused on working safely in the cold including using ice cleats and having winter survival kits in work and personal vehicles.

Green Line 2022 Safety targets and objectives were finalized, approved and signed by the CEO and shared with all Green Line staff.

The team continued to provide oversight to ensure safety compliance by Green Line staff, consultants and contractors at various project sites as well as to observe any public activity issues along the alignment.

Overall Program Metrics

The following chart contains the recorded incidents for the rolling 12-month period as of February 28, 2022:

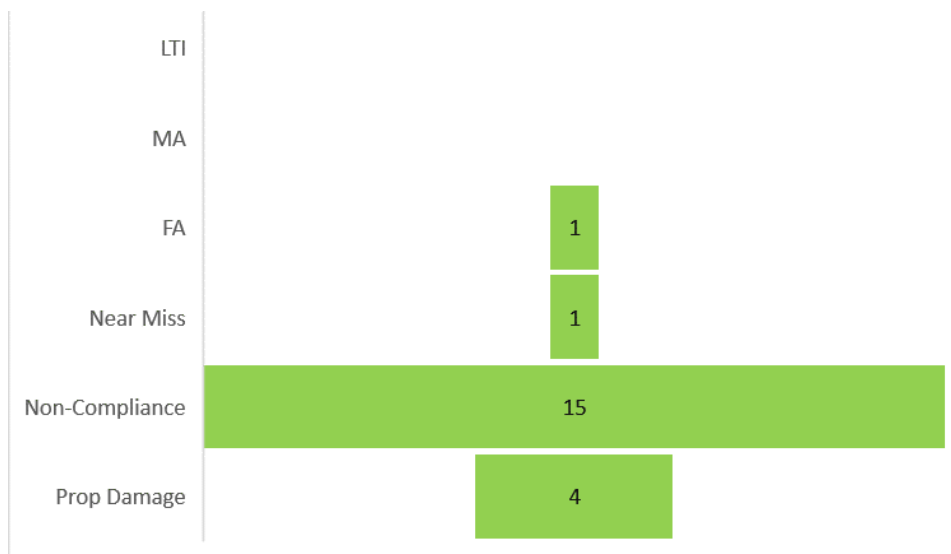


Table 1: Green Line Safety Incident Frequency Statistics

Performance Indicator		GL City Staff	Contractors	GL City Staff & Contractors
TRIFR: Total Recordable Injury Frequency Rate (MA +LTI)	per 200,000 hrs	●	●	●
	per 1,000,000 hrs	●	●	●
LTIFR: Lost Time Injury Frequency Rate	per 200,000 hrs	●	●	●
	per 1,000,000 hrs	●	●	●

** Statistics based on rolling 12-month period from February 28, 2021 to February 28, 2022*



Table 2: Overview of Safety Metrics for the 2022 Calendar Year as of February 28,2022.

Metric	February	2022 YTD Incidents	Days since Last incident
Lost Time Incident	0	0	1034
Medical Aids	0	0	706
First Aids	0	0	262
Near Misses	0	0	274
Safety Non-Compliance	0	1	32
Property Damages	0	0	291



Appendix 1 – Dashboards Legends

	On Plan	At Risk	Off Plan
Health and Safety	Zero LTIs or Scheduled monthly site inspections completed with < 2 missed or Joint OH&S committee meetings and inspections on track or Green Line COR Internal Maintenance Audit completed with minor findings or all mandatory training complete	One LTI or ≤5 scheduled site inspection not completed or missed a Joint OH&S committee meeting or inspection or Green Line COR Internal Maintenance Audit completed with major findings or <90% mandatory training not completed	More than one LTI or >5 scheduled site inspections not completed or multiple Joint OH&S committee meetings or inspection not completed or Green Line COR Internal Maintenance Audit failed or less than 75% mandatory training complete
TRIFR: Total Recordable Injury Frequency Rate (MA +LTI)	Per 200,000 hrs <0.12 Per 1,000,000 hrs <0.60	Per 200,000 hrs ≥0.12 Per 1,000,000 hrs ≥0.60	Per 200,000 hrs >0.30 Per 1,000,000 hrs <1.50
LTIFR: Lost Time Injury Frequency Rate	Per 200,000 hrs <0.00 Per 1,000,000 hrs <0.00	Per 200,000 hrs ≥0.00 Per 1,000,000 hrs ≥0.00	Per 200,000 hrs >0.13 Per 1,000,000 hrs <0.65
Environmental	Overall environmental requirements are progressing as defined and work plans and budgets are being accurately managed	Specific environmental management subjects are being addressed and progressing; reliance on other project disciplines, information and inputs to complete the work may cause temporary delays	Failing to meet contractually required environmental obligations causing delays and complications for the Contractor and/or Owner
Stakeholder Relations	Minimal risk of reputational damage or Localized stakeholder issues	Moderate risk of reputational damage or Multiple stakeholder issues that require urgent action	Severe risk of reputational damage or Major risk with funding partners



Schedule	SPI \geq 1.0 or No change to critical activities/milestones	SPI 0.9-0.99 or Delay of critical milestones by less than 4 weeks	SPI $<$ 0.9 or Critical activities delayed by more than 4 weeks
Cost	CPI \geq 1.0 or Costs forecast within the Budget excluding retained contingency	CPI 0.95-0.99 or Costs forecast to be over Budget and $<$ 30% retained contingency	CPI $<$ 0.95 or Cost forecast to be $>$ Budget + 30 % retained contingency
Quality	Quality requirements adequate/defined or in progress or Audits performed per plan with no/minor findings or NCR identification and resolution are with expectations	Quality requirements not adequate/defined in at least one area or Audits performed per plan with one or more major findings or NCR identification and resolution are not trending downward	Quality requirements not adequate/defined in multiple areas or Audits not performed or performed with many major findings or Significant non-conformance with contract terms

Financial Summary Legend

Owner's Costs: Include City of Calgary Staff Time, Communications, Software, and General Corporate Overheads and Inter- Business Unit costs.

Design & Engineering: Includes all Owner's Engineer costs as well as general Project Consultants costs.

Construction, Land & Other Assets: Includes Land, Enabling Works, and Quick Win build costs.

Bus Rapid Transit: Includes all costs related to the Bus Rapid Transit work for Green Line.

Committed Costs represent issued PO values only for Design & Engineering and Construction, Land & Other Assets. For Owner's Costs and Bus Rapid Transit these are primarily costs incurred to date.