

CAPITAL LINE SOUTH EXTENSION UPDATE

RECOMMENDATION

1. That the April 14, 2023, Integrated Infrastructure Services report IIS01679, be received for information.
2. That Attachment 1 of the April 14, 2023, Integrated Infrastructure Services report IIS01679, remain private pursuant to sections 16 (disclosure harmful to business interest of a third party), 24 (advice from officials), 25 (disclosure harmful to economic and other interests of a public body) and 27 (privileged information) of the *Freedom of Information and Protection of Privacy Act*.

Requested Council Action	Information only		
ConnectEdmonton's Guiding Principle	ConnectEdmonton Strategic Goals		
CONNECTED This unifies our work to achieve our strategic goals.	Urban Places		
City Plan Values	Access, Live		
City Plan Big City Move(s)	A Community of Communities	Relationship to Council's Strategic Priorities	Mobility Network
Corporate Business Plan	Transforming for the future		
Council Policy, Program or Project Relationships	<ul style="list-style-type: none"> • The City Plan • Mass Transit Network 		
Related Council Discussions	<ul style="list-style-type: none"> • IIS00553 Capital Line South Extension, Executive Committee, June 14, 2021 		

Executive Summary

- The business case and federal funding contributions for the Capital Line South LRT Extension (CLSE) from Century Park to Ellerslie Road were approved by the Government of Canada in April 2022, providing for total approved project funding of \$1.085 billion.

CAPITAL LINE SOUTH LRT EXTENSION UPDATE

- Preliminary engineering and design have continued to advance, and project requirements are being further developed and refined.
- The Request for Qualifications (RFQ) was issued in June 2022 and closed in September 2022 with two qualified bidders shortlisted.
- The Request for Proposals (RFP) is anticipated to launch in March or April 2023, and is expected to conclude in Q4 2023.
- Major construction along the alignment is anticipated to commence in spring 2024.
- Due to significant economic pressures and market uncertainty, estimated project costs have escalated. Ongoing work is being done to identify efficiencies to keep projected costs within the approved project funding, while also achieving the vision of the approved LRT Network Plan.
- The project aligns directly with Council's priorities of improving transit service, climate resilience and regional prosperity.
- It is recommended that Attachment 1 remain private as it contains commercially sensitive information that the City is obligated to keep confidential, advice from officials, information that would be harmful to the City's economic interests and information that is the subject of legal privilege pursuant to the *Freedom of Information and Protection of Privacy Act*.

REPORT

Project Background

In September 2016, the City of Edmonton received funding through the Government of Canada's Public Transit Infrastructure Fund (PTIF) to support a number of transit projects including an update to the preliminary design of the Capital Line South LRT (Century Park to Allard/Desrochers).

The original Concept Plan for the 4.5-kilometre south segment of the Capital Line (Century Park to Ellerslie Road) was approved by Council in 2008, followed by initial preliminary design work completed in 2010. In 2017, the preliminary design was updated to assess and incorporate new information such as updated planning and design requirements, new policies, land use and development potential and further public engagement. This work led to various recommended amendments to the Capital Line South Concept Plan that City Council formally approved on January 22, 2019. Work on the preliminary design was completed in March 2020.

In September 2020, Administration prepared a business case for the project and submitted it to the Government of Alberta. In 2021, the Government of Alberta approved the business case for the project, approved the provincial funding share (effective March 2021) and referred the business case to Infrastructure Canada for consideration under the Investing in Canada Infrastructure Plan (ICIP) grant program. After City Council endorsed the project in June 2021, the project received approval from the Federal Treasury Board in April 2022, securing the federal funding commitment and allowing the project to advance to procurement.

Following Treasury Board approval, the City re-engaged the team to advance the procurement process.

The project scope approved through the business case includes the following components:

CAPITAL LINE SOUTH LRT EXTENSION UPDATE

- 4.5 kilometre high-floor LRT extension from the existing Century Park station to the new Heritage Valley North station;
- Two new stations (a neighbourhood station at Twin Brooks and a station at Heritage Valley North);
- LRT underpass at the 23 Avenue crossing;
- LRT bridges over Blackmud Creek and Anthony Henday Drive;
- Stage 1 of a new Operations and Maintenance Facility (OMF) to store up to 70 Light Rail Vehicles (“LRVs”);
- Integration with the Heritage Valley Park & Ride facility and parking stall expansion; and
- 24 high-floor LRVs.

The project continues to support Council’s priorities of transit, climate resilience and regional prosperity. Administration anticipates the extension of the Capital Line from Century Park to Ellerslie Road (Heritage Valley North) will attract an additional 9,100 daily riders in 2030, 2,500 of which will be new passengers who previously used a different mode of transportation such as a single-occupancy vehicle. The project will provide improved access to the regional transportation network by providing residents with more choices to live, work and play in close proximity to rapid transit. The project is ultimately expected to reduce Greenhouse Gas (GHG) emissions by 78 tonnes per day in 2050, or an overall reduction of 270,000 tonnes of carbon dioxide equivalent (tCO₂e) from 2030 to 2050. The project will also result in 9,500 jobs (full-time equivalents in the engineering and construction industry).

Procurement Update

When the business case was prepared in 2020, the economic challenges associated with COVID-19, including inflation, supply chain disruptions and labour availability had not fully materialized. Consequently, a number of issues emerged that were recognized as having a significant potential impact on the procurement of the project. In response, Administration reviewed the delivery model assumptions and assessment to determine whether the originally identified procurement model, Construction Management at Risk (CMAR), was the most appropriate procurement model within the context of these changing conditions.

The result of this work was completed in November 2021, with a recommended change to a Design-Build delivery model, given it could better address the increasing concerns regarding cost certainty and risk transfer while providing additional benefits regarding innovation and integration.

Following funding approval and confirmation of the recommended delivery model, Administration identified a procurement process and schedule, as well as further developed the preliminary design, cost estimate and supporting documentation in preparation to go to market.

In June 2022, a Request for Qualifications (RFQ) was issued to identify and shortlist qualified proponents. As of the time of this report, it is anticipated the Request for Proposals (RFP) will be issued to the two shortlisted bidders on March 31, 2023. The procurement period is anticipated to last approximately seven months, with the technical and financial submissions from bidders due in Q4 2023. The extended procurement timeline allows engagement with the prequalified contractors to ensure scope and risks are as clear as possible before finalizing their submission.

CAPITAL LINE SOUTH LRT EXTENSION UPDATE

Allowing time for contract close, contractor mobilization and detailed design, major construction is anticipated to start along the alignment in spring 2024.

Cost Estimate

As part of the initial business case completed in 2020, a cost estimate, which identified a project budget of \$1.085 billion, was submitted as part of the funding application to the Government of Canada, and subsequently approved. As noted above, the period following the funding application in late 2020 until final approval in April 2022 witnessed considerable disruption to economic conditions, including:

- significant inflation;
- supply chain disruption;
- commodity price volatility; and
- increased competition for skilled labour.

In response, the cost estimate was refreshed to understand the impacts of these issues. The outcome of the updated estimate was that the forecasted project costs had escalated beyond the initial estimate and approved project funding. Before proceeding to the RFP stage of procurement, Administration has been assessing the project scope to reduce the project cost estimate within the available funding.

To address budget pressures, a number of actions have been taken to build the project to the approved budget, including:

1. undertaking a close review of the project scope to identify elements that can be re-scoped to reduce cost;
2. identifying non-critical scope components that can be deferred to a later date; and
3. incorporating scope ladders into the contract, where feasible, to provide flexibility in pricing.

Table 1 below identifies changes implemented to keep the project budget within the approved available funding.

Table 1: Capital Line South Extension - Revised Business Case Scope Elements

Item	Change	Type of Change	Description
1	Heritage Valley North Station	Business Case Scope	<ul style="list-style-type: none"> ● Elevated Heritage Valley North Station in order to have an elevated crossing at Ellerslie Road for the future extension to the hospital. ● Heritage Valley Park & Ride expansion from 1,100 to 1,900 parking stalls.
		Scope Reduction	<ul style="list-style-type: none"> ● At-grade Heritage Valley North Station and at-grade Ellerslie Road crossing based on land use and traffic assessment. ● Deferral of Heritage Valley Park & Ride expansion to a future project.
2	LRV order	Business Case Scope	<ul style="list-style-type: none"> ● 24 high-floor LRVs – included spares; was based on preliminary service requirement assumptions.
		Scope Deferral	<ul style="list-style-type: none"> ● Reduce LRV order to minimum service requirement and spares. LRV procurement will include pricing for an additional vehicles option that could be exercised if funding is available.
3	Operations and Maintenance	Business Case Scope	<ul style="list-style-type: none"> ● Stage 1 of OMF was to include storage for up to 50 LRVs, light maintenance area, wash bays and ROW equipment storage area.

CAPITAL LINE SOUTH LRT EXTENSION UPDATE

	Facility (OMF)	Scope Deferral	<ul style="list-style-type: none"> • Reduce storage garage to capacity for 40 LRVs and include storage track in the wash bays for 20 LRVs. • Defer the originally planned light maintenance area, and repurpose the ROW equipment storage area into a light maintenance area for up to 6 LRVs. • Incorporate subsequent expansions of the OMF into future projects.
--	----------------	----------------	--

Administration has met with federal and provincial funding partners and reviewed these scope changes. The funding partners have acknowledged the changes make sense from a scope and budget perspective and market conditions, but they also advised that implementing changes that do not align with the approved project scope will require federal Treasury Board approval and formal amendments to the funding agreement. Moreover, pending this approval, any expenditures associated with new scope elements would not be eligible for reimbursement. Additional information is contained in Attachment 1.

Other measures being undertaken to reduce projected costs include:

- Proposed adjustment to the Design-Build Agreement to provide for sharing of potential costs due to escalation between the Design-Builder and the City.
- Further analysis of underlying economic conditions, risk allowances and contingency assumptions to align with evolving market conditions and risk distribution in the chosen procurement method.

With the above scope revisions and other measures, along with further development of the preliminary engineering, a more precise understanding of the project requirements and anticipated costs has been developed. This is expected to provide bidders with more detail, and reduce excessive pricing premiums to cover design uncertainty, escalation and other project risk factors, with the objective of encouraging more competitive bids.

While these measures are intended to support the procurement of the project within budget, there remains risk due to ongoing economic uncertainty and evolving market conditions that may continue to impact projected costs adversely. As the project progresses, the project team will work with the proponents to manage project affordability, closely monitor evolving market conditions and respond to emerging issues.

Budget/Financial Implications

On April 6, 2022, funding to support the Capital Line South LRT Extension project was approved through the ICIP. The federal contribution is \$418 million, while the provincial matching portion is \$324 million. The City has committed \$343 million and is responsible for any cost overruns. This funding approval included the City's request to transfer \$60 million of previously approved federal and provincial funds from the Metro Line LRT Extension project (NAIT to Blatchford) to the Capital Line South LRT Extension project. This transfer was completed to provide a larger budget for the Operations and Maintenance Facility that will be used to support both the Metro Line and Capital Line.

COMMUNITY INSIGHT

During concept planning and the preliminary design process, there were a number of engagements with the public and stakeholders, including open houses, online surveys, stakeholder meetings, indigenous consultation, a formal Community Advisory Committee (CAC) and internal staff engagement activities. This engagement has been an essential part of the development of the Capital Line South and helped inform the preliminary design. Public engagement programs were undertaken for the Capital Line South Concept Plan (2008) and preliminary design (2010). Further public engagement was completed between 2017-2018 and public information sessions were held in September 2018.

Most recently, in September 2022, the project team was invited to provide a project update at a community townhall in Twin Brooks hosted by Councillor Rice. Furthermore, a public survey was conducted from mid-December 2022 to late January 2023 to gather public feedback and provide education about the project. Approximately 1,800 participants responded to the survey. A summary of the survey results is anticipated to be posted on the project website by the end of March 2023.

In January 2023, members of the project team resumed hosting the CAC - made up of representatives from the community leagues along the alignment and diverse members from the general community - to provide a general project update and answer questions. The committee will continue to meet quarterly for the duration of the project to share information and provide community insight.

The purpose of the CAC is to share timely project updates and gather diverse community perspectives from those who live along the Capital Line South alignment. This committee is not a decision-making body, but rather a way to continue hearing from the communities along 111 Street that will encounter increased construction activity as the project gets built.

GBA+

The Capital Line South Extension is an important part of the LRT expansion portion of the Infrastructure Planning and Development 2022 City Priority and will assist the City in continuing to make transformational impacts. These transformational changes will be key to achieving the vision of the approved LRT Network Plan and providing multi-modal, universal access as the city grows to a population of 2 million as envisioned by The City Plan.

ATTACHMENT

1. Funding Agreement Update (PRIVATE)