

50 Street CP Rail Grade Separation

- Requests approval of an amendment to Capital Profile 18-66-6503 50 Street CP Rail Grade Separation for additional funding of \$34.3 million.
- In the Fall of 2021, the City of Edmonton approved funding through Capital Profile 18-66-6503 50 Street CP Rail Grade Separation to advance the construction phase of the project for a total project budget of \$179.6 million.
- Administration has completed the tender phase and is seeking further funding for the construction phase of the project.
- An amendment to Capital Profile 18-66-6503 50 Street CP Rail Grade Separation is required to advance the award of the construction contract.

Project Background

50 Street provides access to adjacent developing industrial areas and functions as a major north-south commuter and goods movement corridor. Currently, the at-grade Canadian Pacific (CP) Railway crossing along 50 Street, north of the Sherwood Park Freeway, ranks among the top three priority locations to grade separate in the City of Edmonton based on delays, number of vehicles impacted, frequency of train crossings and other factors. On average, eight full trains cross the train tracks every day. Additionally, each day, on average, the train performs 25 back-and-forth movements, or shunts, to build trains. These movements contribute to long waits for the approximately 35,000 vehicles that cross the train tracks each day, where commuters can wait for an average of four minutes during these events, with some blockages lasting over 15 minutes.

The project scope includes grade separation of the CP Rail crossing of 50 Street north of Sherwood Park Freeway, and road widening of 50 Street from four lanes to six lanes between Sherwood Park Freeway and 90 Avenue (the Project). The Project will increase the capacity and reliability of the corridor to serve the increasing commuter and industrial traffic that uses 50 Street as a key goods movement route.

Conceptual planning for the Project was completed in 2010. In November 2017, an application was prepared for Federal funding under the National Trade Corridor Fund (NTCF). The funding application included a cost estimate of \$86.3 million.

In 2018, the City began the next stages of design, including concept validation and preliminary design of the Project. The concept validation included the extended consideration of two options: an underpass or an overpass. Further evaluation completed in 2019 recommended the overpass option.

In 2020, after the completion of the preliminary design, the project was advanced to the next stages of detailed design and construction. As part of the delivery method, a construction advisor was retained in Fall 2020 to act as a third party expert to provide a constructability perspective and provide value engineering, cost estimating and scheduling services.

With the design consultant and supporting construction advisor in place, design and cost estimates were further refined. Several risks were identified with the potential to impact the schedule, certain design elements, and construction sequencing/staging. These risks resulted in increases to the construction cost estimate that could not have been foreseen during concept planning and preliminary design. After re-evaluating all of the project costs and updating the construction cost estimate with the detailed design, the overall project cost was estimated to be \$145.3 million (completed in August 2021).

Most of the land acquisitions associated with this project are either complete or at their final stages. An agreement with CP Rail was reached and executed earlier this year. Early construction work including the detour road, drainage work on the northeast service road and some utility relocations have been advanced ahead of the main construction on 50 Street to mitigate project schedule risk.

Financial Update

The construction tender was issued in February 2022 and closed on March 11, 2022. The recommended tender bid received was higher than the estimated construction budget, resulting in an overall increase in the project budget to \$179.6 million from \$145.3 million (+23.6 per cent). As part of the tender evaluation process, Administration did retain a cost consultant to independently price and verify the tender results. The recommended tender bid is below the cost provided by the cost consultant. Both the cost consultant and engineering consultant have reviewed the tender results and are recommending the award of the contract.

There are several factors that have contributed to the increase in the overall project cost between the time of the initial estimates and the evaluation of tenders:

- Geopolitical conflicts including trade embargos and economic sanctions have placed a further strain on the world economy. The marketplace is in a state of reduced stability and is making commodity pricing unstable.
- Infrastructure investments as part of economic stimulus or recovery plans with climate change impacts are occurring across North America. As a result, the construction industry is experiencing increased demand for their resources with significant requirements for labour, material, and equipment.

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- And finally, the construction market continues to experience strains due to the ongoing COVID-19 pandemic. The COVID-19 pandemic continues to impact the supply chain for materials and delivery. Although largely impacting schedule delays, these impacts transpose into financial impacts in a marketplace experiencing inflation.

As further evidence of this, there are several commodities specific to this construction project that have experienced significant cost increases over the past several weeks. For example:

- Nickel prices (a key ingredient in stainless steel) have risen by 300 per cent over the last week leading up to tender close (mid-March).
- Fuel prices (including diesel) have risen by 25 per cent.
- Structural steel has increased in price by 54 per cent.
- The retaining wall material and labour costs have increased in price by 35 per cent.
- Underground drainage and utility services are in high demand resulting in a 10 to 15 per cent increase in prices.

All these factors combined, among others, have resulted in an increase in the budget requiring additional funding. These costs are based on the recommended closing tender bid. The project has been optimized to reduce project costs wherever possible.

COMMUNITY INSIGHT

Engagement for this project has been ongoing since concept planning to identify business and resident interests, business operations and future plans, and general input from the public. Public engagement and communications plans for the project were developed in alignment with the City's Public Engagement Policy C593. The "What We Heard" report was posted on the project website and communicated to participants.

Further discussions were undertaken with impacted property owners and residents through the concept validation and preliminary design phases. A public information session was held at The King's University on June 26, 2018, and was attended by 175 people.

Following the completion of preliminary design for the grade separation, additional information sessions were held, including:

- April 15, 2021 - Meeting held with business owners and operators in the project area which will be impacted by the overpass/roadway design or

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construction. Information gathered during these conversations provided the opportunity for two-way dialogue between the City and the stakeholder to share information and build an understanding of the project, timeline, impacts and any strategies which could help to mitigate impacts and concerns.

- April 19, 2021 - Meeting with adjacent residents to share information about the project and answer questions about impacts to those directly adjacent to the project.
- April 21, 2021 - A public information session to share information about the final design and answer questions from the public. Input shared by the public helped to inform the team about concerns and issues which were used to inform the project design and construction plans.
- May 10, 2021 - Meeting with the Kenilworth Community League Executive.
- Project update newsletters were distributed to homes and businesses in the project area multiple times during this project phase. This technique ensured information was shared directly with the target audiences. More information was available on the project website.

Further communication activities are planned for the surrounding residents and businesses to share updates as the project advances.