

Monthly Status Report

Reporting Period

December 2022

SIP-TIC-PCO-RPT-00012 R0

1. Introduction

1.1 Project Overview

The Steveston Interchange Project (the Project) is a component of the Highway 99 Tunnel Program and will be delivered in advance of the new immersed tunnel project.

The Project will address many of the safety, congestion, and mobility challenges at the interchange for all modes of travel, as follows:

- Upgrade the interchange to be consistent with modern design standards.
- Reduce vehicle queues for northbound off-ramp traffic and transit to Steveston.
- Improve mobility for east-west traffic on Steveston Highway.
- Improve transit operations at the interchange.
- Provide new cycling and pedestrian connections along Steveston Highway across Highway 99.

The Project will replace the existing two-lane overpass structure at Steveston Highway and Highway 99 with a new structure(s) of five lanes that accommodates two eastbound lanes and three westbound lanes (including a left turn lane) and new pedestrian and cyclist infrastructure, as well as improved connections to and from the overpass.

The replacement overpass is designed to integrate with the new eight-lane immersed tube tunnel replacing the existing George Massey Tunnel along Highway 99.

Additional information and updates about the Project can be found on the Highway 99 Tunnel Program website: <https://www.highway99tunnel.ca/project-overview>.

1.2 Project Delivery

Transportation Investment Corporation, a Provincial Crown Corporation, is delivering and overseeing the Project on behalf of the Ministry of Transportation and Infrastructure and the BC Transportation Financing Authority. The estimated cost of the Project including planning, construction, and financing during construction is \$87.5 million.





The Project will be delivered through a Design-Build (DB) contract model and is currently in the implementation phase. Flatiron Constructors Canada Limited, comprised of Flatiron Constructors Canada Limited and Urban Systems Ltd., was selected as the Design-Builder on April 12, 2022. Construction on the Project began in 2022 and is expected to be completed in fall 2025.

1.3 Project Goals




- Support sustainability of Fraser River communities
- Facilitate increased share of sustainable modes of transportation
- Enhance regional goods movement and commerce
- Support a healthy environment

2. Project Update

2.1 Project Dashboard

		Objectives	Project Status	Comments
Project Delivery	Scope	Project delivered within approved scope.		<ul style="list-style-type: none"> The Project will replace the existing two-lane overpass structure at Steveston Highway and Highway 99 with a new structure(s) of five lanes that accommodates two eastbound lanes and three westbound lanes (including a left turn lane) and new pedestrian and cyclist infrastructure, as well as improved connections to and from the overpass. The Project is within the approved scope and on track.
	Schedule	Project delivered within approved schedule of interchange open in 2025.		<ul style="list-style-type: none"> The Project is on schedule for the new interchange to be operational in fall 2025.
	Budget	Project delivered within approved budget of \$87.5 million.		<ul style="list-style-type: none"> Project spending for the month of December 2022 was \$0.2 million. Total Project spending to date is \$17.0 million; the Project is forecasted to be delivered within budget.
	Safety	Ensure that Project work is preformed safely, in compliance with all applicable safety regulations, and in accordance with government policy.		<ul style="list-style-type: none"> Occupational Health and Safety (OH&S) requirements for the Project are defined within the Project Management Plan and the Design-Build Agreement (DBA). Lost Time Injury Frequency Rate (LTIFR) for the Project remains at 0. The average Injury Rate for Bridge, Overpass, or Viaduct Construction or Repair from 2021 is 1.2 per WorkSafeBC.
	Quality	Implement an effective Quality Management System.		<ul style="list-style-type: none"> The Design Builder's Project's quality policies, procedures, roles, responsibilities, and authorities are documented in the Construction Quality Management Plan and compliance to the Plan will be monitored through ongoing audits of the Project work. Provided comments on the Design-Builder's Quality Audit Plan and Program. Ongoing review of Inspection and Test Plans.
	Environmental	Ensure Project work is performed in an environmentally responsible manner.		<ul style="list-style-type: none"> Permits and authorizations are in place for the Project as listed in Section 3: Project Documents and Achievements

		Objectives	Project Status	Comments
				to Date. Additional regulatory authorizations will be obtained by the Design-Builder as required.
	Design and Construction	Development of a reference concept, technical requirements/specifications, and related technical studies for the Project and manage activities on-site.	●	<ul style="list-style-type: none"> Final Design is under development by the Design-Builder. The Technical Team continues to participate in weekly Technical Working Group and Construction Working Group meetings with the Design-Builder. The Design-Builder is currently exploring various options for a permanent laydown area for the Project. Tree Clearing and earthworks have started on site.
	Community Benefits	Successfully implement the Special Project Needs Agreement (SPNA).	●	<ul style="list-style-type: none"> The Design-Builder and its sub-contractors are required to carry out the Project in accordance with the SPNA. Apprenticeship, trainee, and equity employment targets are included in the DBA with incentive payments for exceeding the targets. The Design-Builder's Community Benefits Plan is in place.
Partners/Stakeholders	Indigenous Groups	Continue to build and maintain positive collaborative working relationships with the Identified Indigenous Groups (IIGs).	●	<ul style="list-style-type: none"> The Project Team continues to consult and engage with the Identified Indigenous Groups (IIGs) on design, permitting, environmental plans, economic development opportunities, cultural awareness and recognition, and construction monitoring.
	Third Parties	Continue to build and maintain positive relationships and reach agreement on Project requirements with City of Richmond and owners of interfacing infrastructure.	●	<ul style="list-style-type: none"> A Municipal Agreement (MA) with the City of Richmond has been finalized and fully executed. The Project Team and Design-Builder continue to meet on a weekly basis with City of Richmond staff regarding the Project. Utility relocation designs are under development. The Project Team and Design-Builder continue to meet with TransLink and the Coast Mountain Bus Company bi-weekly.
	Public and Stakeholder Engagement	Continue to build and maintain positive relationships with the community and other stakeholders.	●	<ul style="list-style-type: none"> The Project Team is providing information to community organizations, businesses, and residents that are in close proximity to the Project. The Project Team presented at a City of Richmond Council meeting. The Project Team and Design-Builder prepared a notice related to an upcoming utility relocation.

Status	Description
	Managing critical issues and negotiating resolution – action required immediately.
	Managing some issues and negotiating resolution – action required in the near term.
	Stay the course – no action required.

3. Project Documents and Achievements to Date

Project Delivery	Project Planning and Development	<ul style="list-style-type: none"> • GMC Business Case (April 2021) • Cost Report (April 2021) • GMC Relationship Review Process Description (April 2021) • Request for Qualifications Issued (June 2021) and Closed (August 2021) • Request for Proposals Issued (September 2021) • Project Management Plan (October 2021) • Executed Design-Build Agreement (April 2022)
	Environmental	<ul style="list-style-type: none"> • Agricultural Land Commission (ALC) Approval (October 2021) • Fisheries and Oceans Canada (DFO) – Letter of Advice (October 2021) • Heritage Conservation Act (HCA) – Inspection Permit (November 2021) • Water Sustainability Act (WSA) – Order for Change Approval of Section 11 Permit (November 2021)
	Design and Construction	<ul style="list-style-type: none"> • Reference concept design developed (August 2021)
	Community Benefits	<ul style="list-style-type: none"> • Special Project Needs Agreement (SPNA) (June 2021)
Partners/Stakeholders	Indigenous Groups	<ul style="list-style-type: none"> • Ongoing engagement and consultation.
	Third Parties	<ul style="list-style-type: none"> • BC Hydro Protocol Agreement (December 2018)
	Public and Stakeholder Engagement	<ul style="list-style-type: none"> • Presentations to various stakeholders (2021 – ongoing)

4. December Highlights and Three Month Lookahead

4.1 Safety

Scope:	<ul style="list-style-type: none">• Establish Occupational Health and Safety (OH&S) Project delivery and set achievable performance measures.• Manage Project OH&S activities using a collaborative and proactive management approach.• Monitor relevant OH&S performance metrics by setting measurable targets and objectives in the form of key performance leading and lagging indicators.• Ensure the Project complies with relevant Federal and Provincial Acts and Regulations and Municipal Codes and By-laws, as well as applicable best industry practice guidelines.• Identify specific health and safety roles and responsibilities and ensure compliance.• Outline relevant health and safety management processes and activities to ensure health and safety of workforce and public is always safeguarded.
Monthly Highlights:	<ul style="list-style-type: none">• Total number of recorded incidents and accidents documented on the health and safety log for the month was 0.• Lost Time Injury Frequency Rate (LTIFR) for the Project remains at 0, which is below the WorkSafeBC average of 1.2 for <u>Bridge, Overpass, or Viaduct Construction or Repair</u>.• Continue to build processes for physical site monitoring and auditing, to oversee compliance with the DBA and legislative requirements.
Three-Month Lookahead:	<ul style="list-style-type: none">• Develop a critical risks protocol and hazard map for the Project.• Develop a “Don’t Walk By” initiative.

4.2 Quality

Scope:	<ul style="list-style-type: none">• Establish quality management Project objectives and performance measures.• Monitor the Design-Builder’s quality management activities.• Review and monitor the Design-Builder’s Quality Management System documentation, including plans.• Conduct Quality Management System and Site Surveillance audits of the Project work.• Monitor the Design-Builder’s internal and external audits, including audit reports.• Monitor the Design-Builder’s Non-Conformity Tracking System.• Monitor the Design Builder’s site activities.
---------------	--

Monthly Highlights:	<ul style="list-style-type: none"> • Reviewed the Design-Builder’s quality submittals including the Quality Management Procedures and Audit Program. • Reviewed the Design-Builder's quality documentation (Inspection and Testing Plans and checklists) for upcoming work. • Revised the Quality Management System Audit Program to reflect the Design-Builder’s current Quality Management System status. • Conducted a Province Quality Management System Audit on Urban Systems and its subcontractors.
Three-Month Lookahead:	<ul style="list-style-type: none"> • Ongoing review of the Design-Builder’s updated quality documentation (i.e., Inspection and Testing Plans and checklists) for upcoming work. • Revise and implement the Province’s Quality Management System Audit Schedule. • Conduct Quality Management System and Site Surveillance audits of the Project work. • Monitor the Design-Builder’s internal and external audits including audit reports. • Monitor the Design-Builder’s Non-Conformity Tracking System. • Monitor the Design Builder’s site activities. • Identify and implement continuous improvement initiatives.

4.3 Environmental

Scope:	<ul style="list-style-type: none"> • Manage follow-up and compliance actions required under relevant environmental regulations and permits. • Liaise with regulators and stakeholders on matters related to the Project commitments made through the environmental assessment and public engagement processes. • Manage outstanding environmental permits and associated environmental studies, monitoring, and compliance processes.
Monthly Highlights:	<ul style="list-style-type: none"> • Monitored Design-Builder discussions with private property owners and City of Richmond regarding potential site office and laydown locations, including permitting requirements. • Reviewed Design-Builder’s monthly and weekly Environmental reports. • Continued discussions with IIGs on planting and seed selections. • Monitored erosion and sediment control measures planning and implementation at northeast and southeast quadrants. • Assisted the Design-Builder in continued discussions with the IIGs regarding tree salvage.

Three-Month Lookahead:	<ul style="list-style-type: none"> • Finalize the Archaeological workplan. • Review City of Richmond permitting requirements. • Ensure the drainage design has been reviewed for potential permit amendment requirements. • Review the Design-Builder’s Environmental Work Plans.
-------------------------------	---

4.4 Design and Construction

Scope:	<ul style="list-style-type: none"> • Provide technical advice to the Project Team on a broad range of Project issues, and inputs into the DBA. • Oversee compliance with the design and construction requirements of the DBA, including undertaking reviews and audits, on-site monitoring, and other engagement with the Design-Builder, as needed.
Monthly Highlights:	<ul style="list-style-type: none"> • Participated in weekly Technical Working Group and Construction Working Group meetings with the Design-Builder to progress design and construction items. • Participated in coordination meetings with the Design-Builder and the utility owners to progress utility relocation designs: <ul style="list-style-type: none"> ○ BC Hydro Distribution Line – relocation design completed ○ Bell Fibre Optic Line – relocation design under development ○ City of Richmond Fibre Optic Line – completed • Reviewed the Design-Builder’s design submittals including: <ul style="list-style-type: none"> ○ Final Design Package 1 updates (i.e., Early Works – Preload, Ground Improvements, Utility Coordination), and ○ Settlement Monitoring Plan • Reviewed the Design-Builder’s updated construction Work Method Statements and associated Traffic Control Plans for: <ul style="list-style-type: none"> ○ Clearing and topsoil stripping, ○ Site access, excavation, and trenching, ○ BC Hydro pole relocation support, ○ Tree clearing and grubbing, and ○ Placement of fills. • Monitored the Design-Builder’s on-site construction activities: <ul style="list-style-type: none"> ○ Tree clearing and vegetation removal activities around the existing bridge structure, including the loop ramp, and ○ Highway 99 westbound to northbound onramp alignment cut to grade.
Three-Month Lookahead:	<ul style="list-style-type: none"> • Review the Design-Builder’s submittals including the Intelligent Traffic System Implementation Plan, updated Manual Counterflow Plan, and the Final Design packages.

	<ul style="list-style-type: none"> • Install cameras for the Project Team’s monitoring of the Project site. • Monitor the Design-Builder’s on-site construction activities: <ul style="list-style-type: none"> ○ City of Richmond watermain shutoff, ○ Utility relocations (BC Hydro Distribution Line, Bell Fibre, City of Richmond Fibre), ○ Tree clearing and vegetation removal within City of Richmond jurisdiction, ○ Temporary access road and retaining wall construction, ○ Fill placement and ditch construction, and ○ Installation of stone columns and ground improvements.
--	---

4.5 Indigenous Groups

Scope:	<ul style="list-style-type: none"> • Consultation and engagement with the Identified Indigenous Groups (IIGs) on the design, Project logistics, permitting, environmental plans, economic development opportunities, cultural awareness and recognition, and construction monitoring.
Monthly Highlights:	<ul style="list-style-type: none"> • Continued engagement on environmental plans and permitting. • Ongoing discussions with IIGs to support Project activities, including cultural awareness and recognition, mentorship opportunities for Indigenous youth, site visits, and construction and archaeological monitoring opportunities. • Ongoing initial and follow-up meetings between the Design-Builder and the IIGs.
Three-Month Lookahead:	<ul style="list-style-type: none"> • Continue engagement on site visits, Indigenous construction monitoring opportunities and building monitoring capacity, to inform agreements with interested IIGs. • Ongoing meetings between TI Corp and IIGs to develop a scope for Indigenous Cultural Awareness and Recognition opportunities to inform development of the Indigenous Cultural Awareness and Recognition Plan. • Continue engagement on environmental plans and permitting. • Facilitate further discussions between the Design-Builder and IIGs, as needed. • Discuss and develop job shadowing and mentorship opportunities for Indigenous youth.

4.6 Third Parties

Scope:	<ul style="list-style-type: none"> • Project-specific Municipal Agreement (MA) with the City of Richmond (the City). • Engagement with the City and TransLink on future construction impacts, stakeholder concerns, and other inputs to the Project.
---------------	--

Monthly Highlights:	<ul style="list-style-type: none"> • City of Richmond: <ul style="list-style-type: none"> ○ Ongoing weekly meetings between the Project Team, the Design-Builder, and City staff. ○ Continued engagement with the City and the Design-Builder regarding the watermain design, City watermain shutoff, decommissioning, and reinstallation plan. ○ Continued engagement with the City and the Design-Builder regarding the fibre optic relocation works, including impacts to affected municipal buildings. ○ Continued engagement with the City and the Design-Builder regarding the upcoming tree removals. ○ Provided a Project update to Richmond’s Mayor and Council on December 12, 2022. • TransLink and Coast Mountain Bus Company (CMBC): <ul style="list-style-type: none"> ○ Ongoing bi-weekly meetings between the Project Team, the Design-Builder, TransLink, and CMBC. ○ Continued engagement with TransLink and CMBC regarding upcoming traffic impacts related to transit infrastructure and pedestrian access. • Utilities: <ul style="list-style-type: none"> ○ Regular coordination meetings with impacted utility companies regarding utility relocation designs. ○ Received the Highway Use Permits for the BC Hydro distribution line relocation from the Ministry of Transportation and Infrastructure.
Three-Month Lookahead:	<ul style="list-style-type: none"> • Continue to facilitate reviews of the Design-Builder submittals and design packages by the City and TransLink. • Monitor the City’s watermain shutoff to allow for construction activities to occur in the vicinity. • Monitor the BC Hydro distribution line relocation work on site.

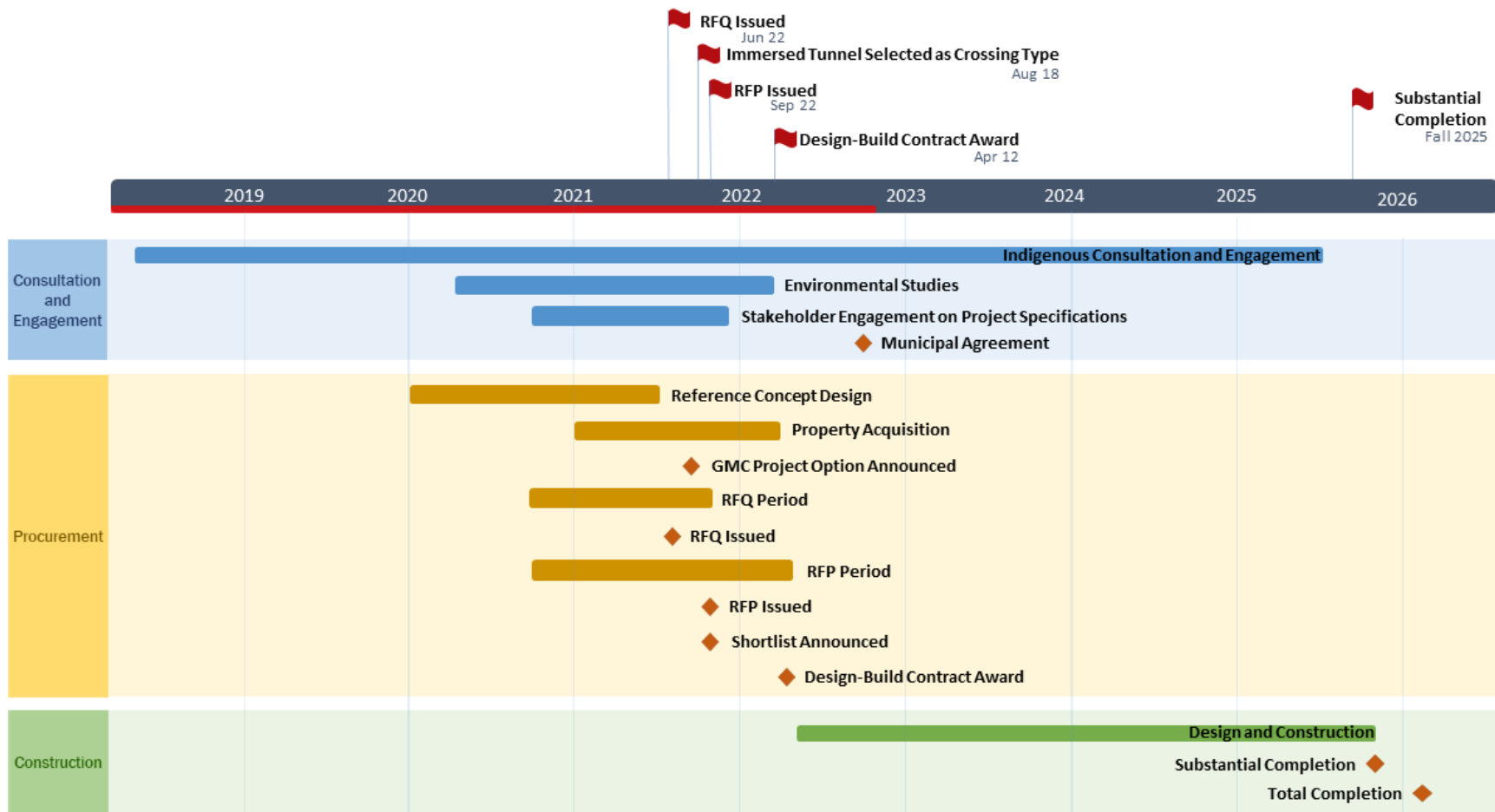
4.7 Public and Stakeholder Engagement

Scope:	<ul style="list-style-type: none"> • Manage ongoing public and stakeholder communications and engagement.
Monthly Highlights:	<ul style="list-style-type: none"> • Met weekly with the Design-Builder to ensure public impacts are considered and to review planned communications methods. • The Project Team presented a Project update at a City of Richmond Council meeting.

	<ul style="list-style-type: none"> • The Project Team and Design-Builder developed an initial draft of a construction notice for an upcoming utility relocation. • The Project Team and the Design-Builder held an incident communications scenario.
Three-Month Lookahead:	<ul style="list-style-type: none"> • Finalize materials for the next Traffic Advisory Committee meeting. • Share public communications on utility relocations and ground improvements. • Finalize materials for an upcoming presentation to stakeholders.

5. Schedule

The following schedule depicts deliverables, milestones and associated dates and timelines for the procurement phase of the Project, as well as anticipated construction timelines.



6. Project Photos

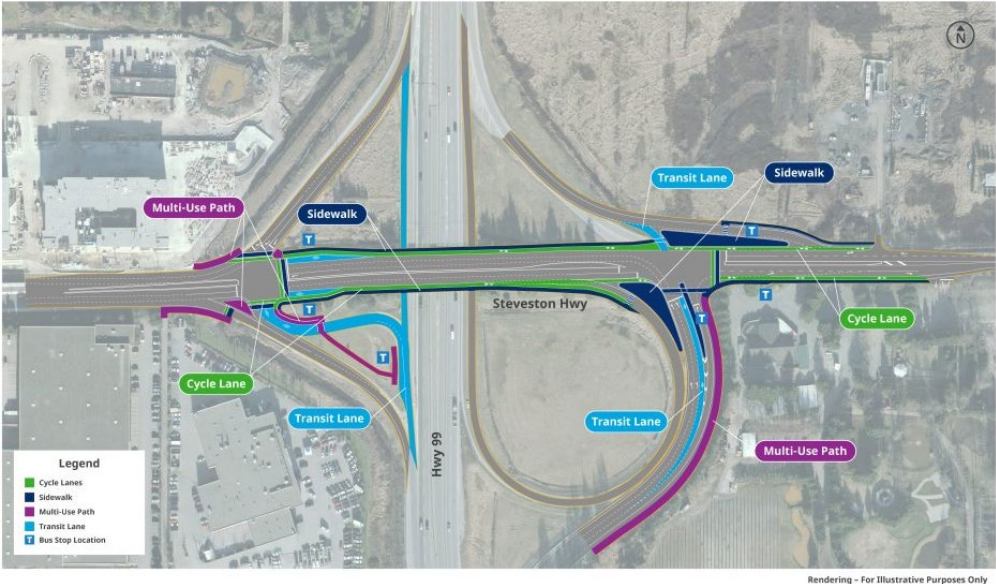


FIGURE 1 – DESIGN RENDERING



FIGURE 2 – SOUTHWEST QUADRANT POST TREE CLEARING