

# Monthly Status Report

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**Reporting Period**

**May 2023**

**SIP-TIC-PCO-RPT-00016 R0**

# 1. Introduction

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## 1.1 Project Overview

The Steveston Interchange Project (the Project) is a component of the Highway 99 Tunnel Program and is being 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 by:

- Upgrading the interchange to be consistent with modern design standards.
- Reducing vehicle queues for northbound off-ramp traffic and transit to Steveston.
- Improving mobility for east-west traffic on Steveston Highway.
- Improving transit operations at the interchange.
- Providing 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 five-lane structure 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 Steveston Interchange 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"> <li>The Project will replace the existing two-lane overpass structure at Steveston Highway and Highway 99 with a new five-lane structure 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.</li> <li>The Project is within the approved scope.</li> </ul>
	Schedule	Project delivered within approved schedule of interchange open in 2025.	●	<ul style="list-style-type: none"> <li>The Project is on schedule for the new interchange to be operational in fall 2025.</li> </ul>
	Budget	Project delivered within approved budget of \$87.5 million.	●	<ul style="list-style-type: none"> <li>Project spending for the month of May 2023 was \$1.7 million.</li> <li>Total Project spending to date is \$23.4 million; the Project is forecasted to be delivered within budget.</li> </ul>
	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"> <li>Monitored the implementation of the health and safety program and performed site visits.</li> <li>There have been zero (0) lost time injuries on the Project to date.</li> <li>Lost Time Injury Frequency Rate (LTIFR) for the Project is 0 which is less than the WorkSafeBC 2021 rate of 1.2 for Bridge, Overpass, or Viaduct Construction or Repair.</li> </ul>
	Quality	Implement an effective Quality Management System.	●	<ul style="list-style-type: none"> <li>Ongoing review of quality documentation, including Inspection and Test Plans and correlated check-sheets.</li> <li>Ongoing monitoring of Design-Builder's Quality Records, Nonconformity Reports/Log, and Opportunity for Improvement Log.</li> </ul>
	Environmental	Ensure Project work is performed in an environmentally responsible manner.	●	<ul style="list-style-type: none"> <li>Permits and authorizations are in place for the Project as listed in Section 3: Project Documents and Achievements to Date. Additional regulatory authorizations will be obtained by the Design-Builder, as required.</li> </ul>
	Design and Construction	Development of a reference concept, technical requirements/specifications,	●	<ul style="list-style-type: none"> <li>Final Design for the Project is under development by the Design-Builder.</li> </ul>

		Objectives	Project Status	Comments
		and related technical studies for the Project and manage activities on-site.		<ul style="list-style-type: none"> <li>The Technical Team participates in weekly Technical Working Group and Construction Working Group meetings with the Design-Builder.</li> <li>Major earthworks and structural foundation work is underway.</li> </ul>
	<b>Community Benefits</b>	Successfully implement the Special Project Needs Agreement (SPNA).	●	<ul style="list-style-type: none"> <li>The Design-Builder and its sub-contractors are required to carry out the Project in accordance with the SPNA.</li> <li>Apprenticeship, trainee, and equity employment targets are included in the DBA with incentive payments for exceeding the targets.</li> <li>The Design-Builder's Community Benefits Plan is in place and quarterly reporting is provided.</li> </ul>
<b>Partners/Stakeholders</b>	<b>Indigenous Groups</b>	Continue to build and maintain positive collaborative working relationships with the Identified Indigenous Groups (IIGs).	●	<ul style="list-style-type: none"> <li>The Project Team continues to consult and engage with Identified Indigenous Groups (IIGs) on permitting, environmental plans, economic development opportunities, cultural awareness and recognition, and construction monitoring.</li> <li>Working with IIGs to achieve targets for Indigenous contracting opportunities.</li> </ul>
	<b>Third Parties</b>	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"> <li>The Project Team and Design-Builder continue to meet on a bi-weekly basis with City of Richmond staff regarding the Project.</li> <li>The Project Team and Design-Builder continue to meet with TransLink and the Coast Mountain Bus Company bi-weekly.</li> </ul>
	<b>Public and Stakeholder Engagement</b>	Continue to build and maintain positive relationships with the community and other stakeholders.	●	<ul style="list-style-type: none"> <li>The Project Team is providing information to community organizations, businesses, and residents that are in close proximity to the Project.</li> <li>The Project Team and Design-Builder prepared and distributed one public notification related to a nighttime Highway 99 closure and detour.</li> <li>The Project Team and Design-Builder held two presentations with stakeholders.</li> </ul>

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

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

## 4. May Highlights and Three Month Lookahead

### 4.1 Safety

<b>Scope:</b>	<ul style="list-style-type: none"> <li>• Establish Occupational Health and Safety (OH&amp;S) Project delivery standards and set achievable key performance indicators.</li> <li>• Manage Project OH&amp;S activities using a collaborative and proactive management approach with all principal stakeholders.</li> <li>• Monitor relevant OH&amp;S performance metrics by setting measurable targets and objectives in the form of key performance leading and lagging indicators.</li> <li>• 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.</li> <li>• Identify specific health and safety roles and responsibilities and ensure continued compliance.</li> <li>• Outline relevant health and safety management processes and activities to ensure health and safety of workforce and public is always safeguarded.</li> </ul>
<b>Monthly Highlights:</b>	<ul style="list-style-type: none"> <li>• Total number of recorded incidents and accidents documented on the health and safety log for the month was two. These were both from sub-contractors’ activities.</li> <li>• Lost Time Injury Frequency Rate (LTIFR) for Project remains at zero, which is below the WorkSafeBC average of 1.2 for Bridge, Overpass, or Viaduct Construction or Repair.</li> <li>• Continued site monitoring, and review of submitted Prime Contractor documents and statistics.</li> <li>• Updated TI Corp’s inspection process and established an audit schedule for review of the Design-Builder’s safety performance.</li> </ul>
<b>Three-Month Lookahead:</b>	<ul style="list-style-type: none"> <li>• Develop a robust tracking system for daily key performance indicators.</li> <li>• Refining health and safety audit schedule to address ongoing Project works.</li> </ul>

### 4.2 Quality

<b>Scope:</b>	<ul style="list-style-type: none"> <li>• Monitor the Design-Builder’s Project Quality Management System performance.</li> <li>• Monitor the Design-Builder’s site activities, including inspections and testing.</li> <li>• Monitor the Design-Builder’s internal and external audits, including audit reports.</li> <li>• Conduct Quality Management System and Site Surveillance Audits of the Project work.</li> <li>• Monitor the Design-Builder’s Non-Conformity Tracking System, Non-Conformity Reports, and Opportunity for Improvement Log.</li> </ul>
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	<ul style="list-style-type: none"> <li>Review the Design-Builder’s quality documentation, including Inspection and Test Plans and correlated check-sheets.</li> <li>Monitor the Design-Builder’s Quality Control and Quality Assurance activities.</li> </ul>
<b>Monthly Highlights:</b>	<ul style="list-style-type: none"> <li>Reviewed the Design-Builder's quality documentation (Inspection and Testing Plans) and correlated items in Work Methods and checklists for upcoming work.</li> <li>Revised the Quality Management System Audit Schedule to reflect the Design-Builder’s current Quality Management System status and planned site activities.</li> <li>Conducted Site Surveillance Audit – Placement of Fills.</li> </ul>
<b>Three-Month Lookahead:</b>	<ul style="list-style-type: none"> <li>Ongoing review of the Design-Builder’s updated quality documentation (i.e., Inspection and Testing Plans and checklists) for upcoming work.</li> <li>Implement the Province’s Quality Management System Audit Schedule.</li> <li>Monitor the Design-Builder’s site activities, including inspections and testing.</li> <li>Conduct Site Surveillance Audits of the Project work.</li> <li>Conduct Quality Management System Audits on the Design-Builder.</li> <li>Monitor the Design-Builder’s internal and external audits including audit reports.</li> <li>Monitor the Design-Builder’s Non-Conformity Tracking System.</li> <li>Identify and implement continuous improvement initiatives.</li> <li>Monitor the Design-Builder’s Opportunity for Improvement Log.</li> </ul>

### 4.3 Environmental

<b>Scope:</b>	<ul style="list-style-type: none"> <li>Manage follow-up and compliance actions required under relevant environmental regulations and permits.</li> <li>Liaise with regulators and stakeholders on matters related to the Project commitments made through the environmental and public engagement processes.</li> <li>Manage outstanding environmental permits and associated environmental studies, monitoring, and compliance processes.</li> </ul>
<b>Monthly Highlights:</b>	<ul style="list-style-type: none"> <li>Supported the Design-Builder to review permit requirements for the new site office and laydown location.</li> <li>Reviewed the Design-Builder’s monthly and weekly Environmental reports.</li> <li>Prepared responses to Identified Indigenous Groups’ comments on Planting Plan and seed selections.</li> <li>Reviewed surface water quality monitoring data from the Design-Builder and the Independent Environmental Monitor.</li> <li>Continued to monitor and review Recycled Concrete Aggregate Material mitigation effectiveness.</li> <li>Supported Design-Builder to prepare for Water Sustainability Act Section 11 permit amendment application.</li> </ul>

**Three-Month  
Lookahead:**

- Schedule archaeological chance find training for the Design-Builder’s site personnel.
- Ensure the drainage design has been reviewed for potential permit amendment requirements.
- Continue to work with the Design-Builder to obtain WSA Section 11 Permit amendment for the final drainage designs.
- Review the Design-Builder’s Environmental Work Plans.
- Continue to monitor water quality of Recycled Concrete Aggregate Material runoff.

## 4.4 Design and Construction

**Scope:**

- Provide technical advice to the Project Team on a broad range of Project issues, and inputs into the Design-Build Agreement (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:**

- Participated in weekly Technical Working Group and Construction Working Group meetings with the Design-Builder to progress design and construction items.
- Reviewed the Design-Builder’s updated design submittals including:
  - Final Design Package 3 (Civil & Structural)
  - Final Design Package 4 (Electrical)
  - Final Pavement Design Report
  - Driven Pile Specifications
  - Lightweight Fill Specifications
- Reviewed the Design-Builder’s updated construction Work Method Statements and associated Traffic Control Plans for:
  - Ground improvements (stone columns)
  - Demolition and abandonment of utility and pavement structures
  - Site Office Laydown (new location)
  - Drainage Structures
- Monitored the Design-Builder’s on-site construction activities:
  - Placement of fill and preload material along new northbound onramp alignment
  - Placement of fill at NW bridge embankment
  - Stone column installation
  - Settlement and vibration monitoring and surveying



<b>Three-Month Lookahead:</b>	<ul style="list-style-type: none"> <li>• Review the Design-Builder’s submittals including the Intelligent Traffic System Implementation Plan and the Final Design packages.</li> <li>• Monitor the Design-Builder’s on-site construction activities: <ul style="list-style-type: none"> <li>○ Installation of stone columns and ground improvement</li> <li>○ Installation of Phase 2 Temporary Walls</li> <li>○ Pile driving for bridge foundation</li> <li>○ Placement of fill and preload materials along new ramp alignments</li> <li>○ Remaining third party utility relocations and connections</li> <li>○ Removal of preload from bridge embankments and Steveston Highway to Highway 99 on-ramp</li> </ul> </li> </ul>
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## 4.5 Indigenous Groups

<b>Scope:</b>	<ul style="list-style-type: none"> <li>• 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.</li> </ul>
<b>Monthly Highlights:</b>	<ul style="list-style-type: none"> <li>• Continued engagement on environmental plans and permitting.</li> <li>• Updated the Cultural Recognition Plan to reflect expected timelines, opportunities, and responsibilities.</li> <li>• 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.</li> <li>• Ongoing meetings between the Design-Builder and the IIGs.</li> <li>• Continued procurement discussions between the Design-Builder and the IIGs.</li> </ul>
<b>Three-Month Lookahead:</b>	<ul style="list-style-type: none"> <li>• Coordinate additional site visits with interested IIGs.</li> <li>• Continue ongoing meetings between TI Corp and IIGs to develop a scope for Indigenous Cultural Awareness and Recognition opportunities, which will inform the implementation of the Indigenous Cultural Awareness and Recognition Plan.</li> <li>• Continue engagement on environmental plans and permitting, landscaping and planting, and construction monitoring opportunities.</li> <li>• Facilitate further discussions between the Design-Builder and IIGs, as needed.</li> <li>• Discuss and develop job shadowing and mentorship opportunities for Indigenous youth.</li> </ul>

## 4.6 Third Parties

<b>Scope:</b>	<ul style="list-style-type: none"> <li>• Project-specific Municipal Agreement (MA) with the City of Richmond (the City).</li> </ul>
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	<ul style="list-style-type: none"> <li>Engagement with the City and TransLink on future construction impacts, stakeholder concerns, and other inputs to the Project.</li> </ul>
<b>Monthly Highlights:</b>	<ul style="list-style-type: none"> <li>City of Richmond: <ul style="list-style-type: none"> <li>Ongoing bi-weekly meetings between the Project Team, the Design-Builder, and City of Richmond staff</li> <li>Engagement on Final Design Package 3 (Civil &amp; Structural), including follow-up discussions related to drainage.</li> </ul> </li> <li>TransLink and Coast Mountain Bus Company (CMBC): <ul style="list-style-type: none"> <li>Ongoing bi-weekly meetings between the Project Team, the Design-Builder, TransLink, and CMBC.</li> <li>Engagement on Final Design Package 3 (Civil &amp; Structural), including follow-up discussions related to the Project’s bus stop designs.</li> </ul> </li> <li>Utilities: <ul style="list-style-type: none"> <li>Coordinated regular meetings with impacted utility companies regarding utility relocation designs and construction logistics.</li> </ul> </li> </ul>
<b>Three-Month Lookahead:</b>	<ul style="list-style-type: none"> <li>Close-out the reviews of the Design-Builder submittals and design packages by the City and TransLink.</li> <li>Continue to support the Design-Builder in obtaining relevant permits for upcoming work including Watercourse Crossing Permits.</li> <li>Monitor BC Hydro phase 2 utility relocation works on Steveston Highway.</li> </ul>

## 4.7 Public and Stakeholder Engagement

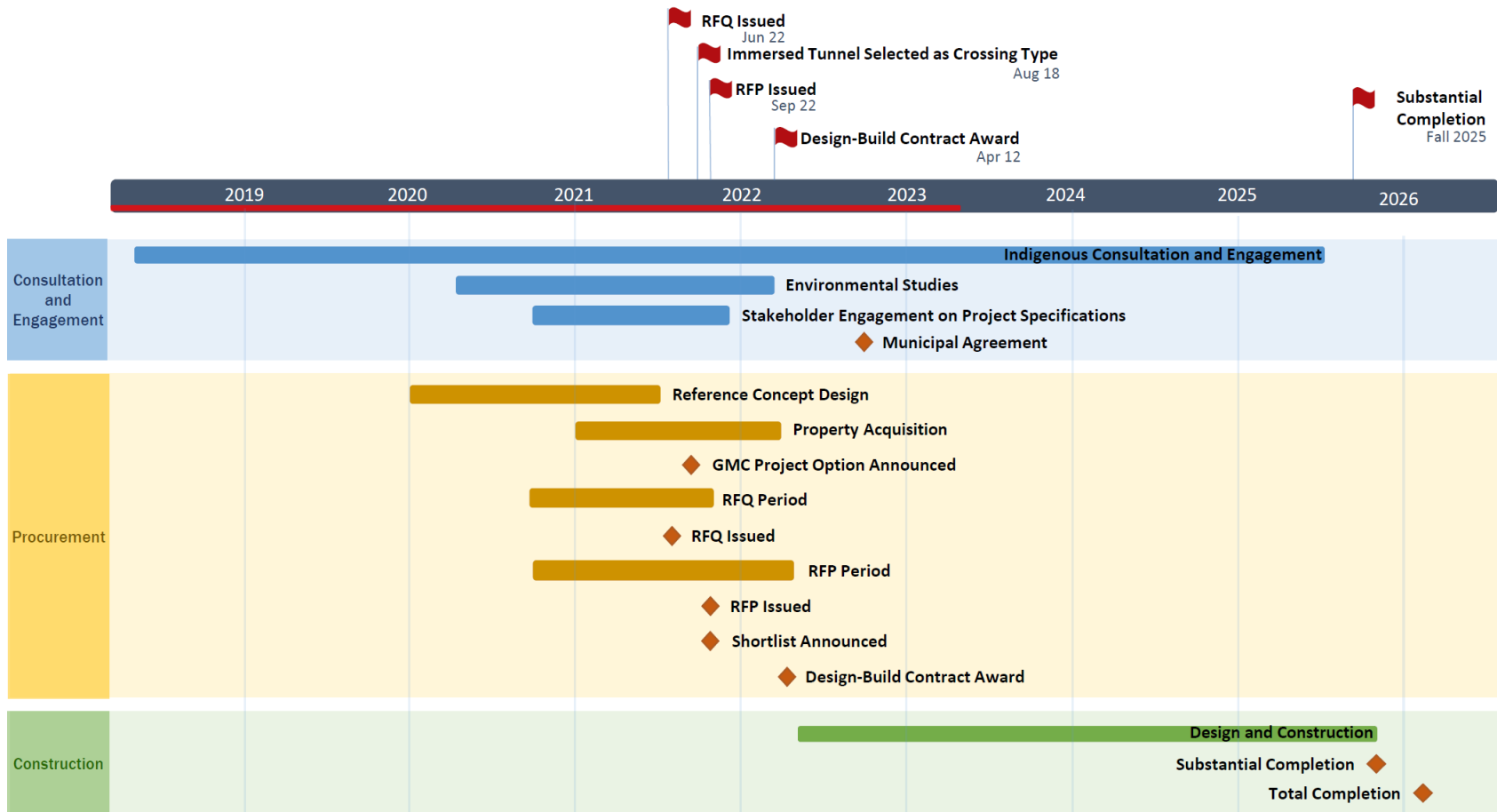
<b>Scope:</b>	<ul style="list-style-type: none"> <li>Overseeing and managing ongoing communications and engagement with the public and stakeholders.</li> <li>Development and implementation of communication strategies.</li> <li>Creation of compelling content and messaging, and the cultivation of relationships with key stakeholders.</li> </ul>
<b>Monthly Highlights:</b>	<ul style="list-style-type: none"> <li>Conducted weekly meetings with the Design-Builder to assess potential public impacts and review proposed communication approaches.</li> <li>Circulated one construction notification related to a full Highway 99 overnight closure and detour.</li> <li>Prepared a construction notification related to the Project’s new permanent site office setup.</li> <li>Prepared a construction notice on upcoming pile driving activities.</li> <li>Hosted two presentations for the Traffic Advisory Committee (TAC) and the Western Quadrant stakeholders.</li> </ul>

**Three-Month  
Lookahead:**

- Share public communications regarding pile driving activities.
- Share a Project update postcard through Canada Post.
- Create and place Project update display boards in the Highway 99 Tunnel Program Community Office.
- Create renderings to be used for public communications.

## 5. Schedule

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



# 6. Project Photos

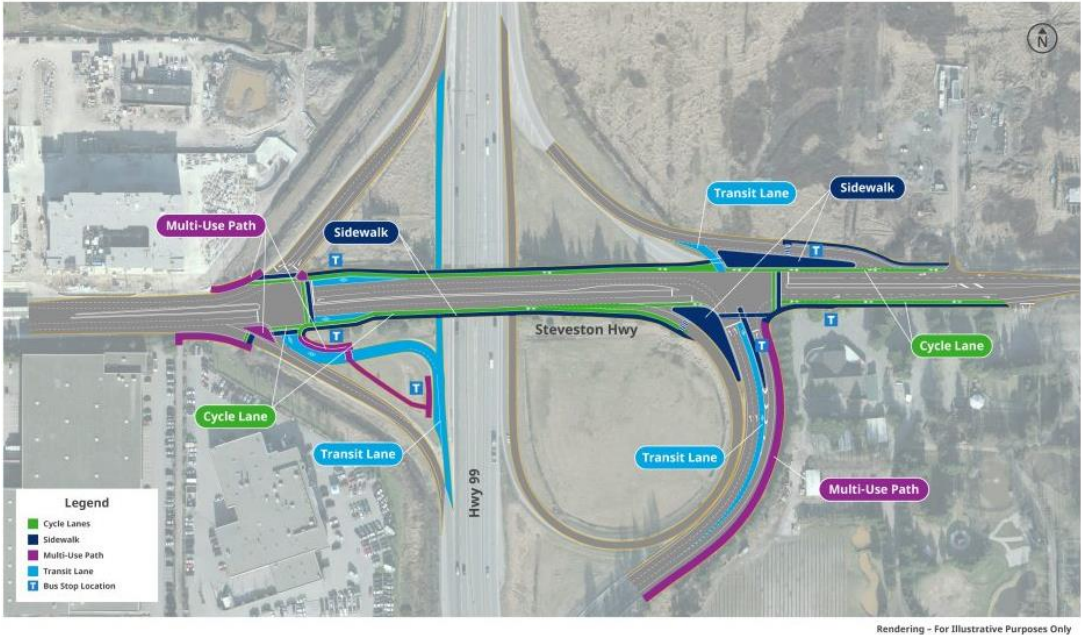


FIGURE 1 – DESIGN RENDERING

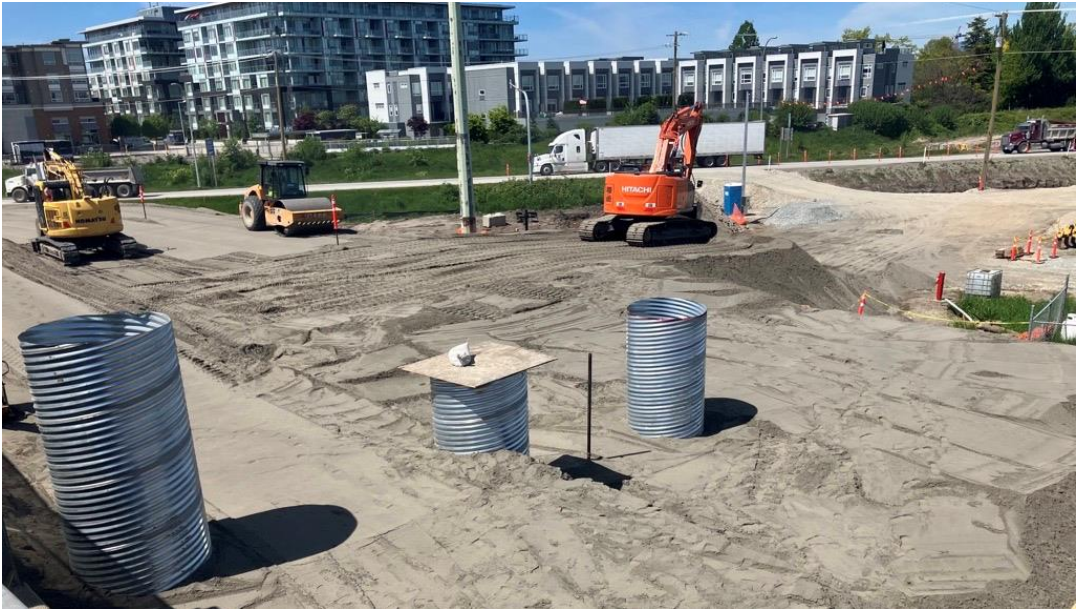


FIGURE 2 – PLACEMENT OF BACKFILL AT BRIDGE ABUTMENTS



**FIGURE 3 – INSTALLATION OF STONE COLUMNS**