

# Monthly Status Report

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**Reporting Period**

**August 2023**

**SIP-TIC-PCO-RPT-00019 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 tube 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). The Project will also include new pedestrian and cycling 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 B.C. Transportation Financing Authority. The estimated cost of the Project including planning, construction, and financing during construction is \$87.5 million.







The Project is being 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 the approved schedule.		<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 August 2023 was \$1.17 million.</li> <li>Total Project spending to date is \$27.2 million.</li> <li>The Project is forecasted to be delivered within the approved 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 Project's health and safety program and performed site visits.</li> <li>There have been zero lost time injuries on the Project to date.</li> <li>Lost Time Injury Frequency Rate (LTIFR) for the Project is zero, which is less than the WorkSafeBC 2022 rate of 1.63 for Heavy Construction (Bridge, Overpass, or Viaduct Construction or Repair).</li> </ul>
	Quality	Implement an effective Quality Management System.		<ul style="list-style-type: none"> <li>Continued reviewing quality documentation, including Inspection and Test Plans and correlated check-sheets.</li> <li>Continued monitoring of the 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>The necessary 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 when required.</li> </ul>

		Objectives	Project Status	Comments
	<b>Design and Construction</b>	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"> <li>The Project design has been finalized by the Design-Builder.</li> <li>Technical Working Group meetings take place when needed to discuss design related topics.</li> <li>Construction Working Group meetings take place weekly with Design-Builder.</li> <li>Temporary retaining wall construction is ongoing. The settlement period for several areas of new road alignment is ongoing.</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 Design-Build Agreement (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>Continued 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>Continued engagement with IIGs to achieve targets for Indigenous contracting opportunities.</li> <li>Continued to engage with IIGs on permitting, environmental plans, economic development opportunities, cultural awareness and recognition, and construction monitoring.</li> </ul>
	<b>Third Parties</b>	Continue to build and maintain positive relationships and collaborate on Project requirements with the City of Richmond and owners of interfacing infrastructure.	●	<ul style="list-style-type: none"> <li>Continued bi-weekly meetings with the City of Richmond on Project activities.</li> <li>Continued bi-weekly meetings with TransLink and the Coast Mountain Bus Company.</li> <li>Continued weekly meetings with Design Builder and Telus regarding Phase 2 Utility relocation work.</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>Continued to provide information to community organizations, businesses, and residents that are in close proximity to the Project.</li> <li>Facilitated a meeting with the Traffic Advisory Committee.</li> <li>Shared Project information at pop-up events in communities related to the Highway 99 Tunnel Program.</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>• Executed Design-Build Agreement (April 2022)</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> <li>• Construction began (July 2022)</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. Monthly Highlights and Three Month Lookahead

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### 4.1 Safety

<b>Scope:</b>	<ul style="list-style-type: none"><li>• Manage Project Occupational Health and Safety (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>• 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>• The total number of incidents and accidents documented on the health and safety log for the month was one. The incident involved minor damage to a light duty construction vehicle; no injury or impact to the Project was recorded.</li><li>• The Lost Time Injury Frequency Rate (LTIFR) for the Project is zero, which is less than the WorkSafeBC 2022 rate of 1.63 for Heavy Construction (Bridge, Overpass, or Viaduct Construction or Repair).</li><li>• Continued site monitoring, and reviewed documents and statistics submitted by the Design-Builder.</li><li>• Conducted a Primary Safety Requirement Audit of the Contractor on August 1, 2023, with no issues identified.</li><li>• Reviewed the Design-Builder's Job Hazard Analysis for soil nail wall installation.</li></ul>
<b>Three-Month Lookahead:</b>	<ul style="list-style-type: none"><li>• Prepare a Request for Proposals (RFP) for Safety Advisor Consultant Services.</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><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>
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<b>Monthly Highlights:</b>	<ul style="list-style-type: none"> <li>• Reviewed the Design-Builder's quality documentation including the Quality Audit Program, Inspection and Testing Plans, including checklists), and correlated Work Method Statement items for upcoming work.</li> <li>• Conducted a prefabrication meeting with the Project team for precast girders and shop visits.</li> <li>• Monitored the Design-Builder's site activities, including field inspections and testing.</li> <li>• Conducted a Site Surveillance Audit related to soil nails installation and shotcrete placement.</li> <li>• Conducted Site Surveillance Audit relating to steel pile placement.</li> </ul>
<b>Three-Month Lookahead:</b>	<ul style="list-style-type: none"> <li>• Continue to review the Design-Builder's updated quality documentation (i.e., inspection and testing plans and checklists) for upcoming work.</li> <li>• Monitor and conduct surveillance of the Design-Builder's site activities, including inspections and testing.</li> <li>• Conduct Site Surveillance Audits of the Project work based on the Design-Builder's schedule.</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 opportunities 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>• Continued to follow up on the Water Sustainability Act (WSA) Section 11 change approval amendment to accommodate final drainage and related designs.</li> <li>• Completed Archaeological spot monitoring at the south-east quadrant and prepared a monitoring report.</li> <li>• Reviewed the Design-Builder's monthly and weekly environmental reports.</li> <li>• Reviewed a site planting plan that included seed mix selections.</li> <li>• Applied for a City of Richmond Watercourse Crossing permit.</li> <li>• Reviewed surface water quality monitoring data from the Design-Builder and the Independent Environmental Monitor.</li> </ul>

	<ul style="list-style-type: none"> <li>Continued to monitor and review the effectiveness of the recycled concrete aggregate material mitigation.</li> </ul>
<b>Three-Month Lookahead:</b>	<ul style="list-style-type: none"> <li>Continue to monitor and support archaeological spot-monitoring events.</li> <li>Continue to follow up on WSA Section 11 change approval amendment application.</li> <li>Complete the City of Richmond’s Watercourse Crossing permit application process.</li> <li>Review the Design-Builder’s environmental work plans.</li> <li>Continue to monitor and review recycled concrete aggregate material mitigation effectiveness.</li> </ul>

#### 4.4 Design and Construction

<b>Scope:</b>	<ul style="list-style-type: none"> <li>Provide technical advice to the Project Team on a broad range of Project issues, and inputs into the Design-Build Agreement (DBA).</li> <li>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.</li> </ul>
<b>Monthly Highlights:</b>	<ul style="list-style-type: none"> <li>Participated in weekly Technical Working Group and Construction Working Group meetings with the Design-Builder to progress design and construction items.</li> <li>Reviewed the Design-Builder’s updated design submittals including: <ul style="list-style-type: none"> <li>Highway 99 (NB Loop ramp and Bus Lane Closure) Detour</li> </ul> </li> <li>Reviewed the Design-Builder’s updated construction Work Method Statements and associated Traffic Control Plans. Monitored the Design-Builder’s on-site construction activities: <ul style="list-style-type: none"> <li>Soil nail wall anchor and shotcrete panel installation at east and west abutments</li> <li>Preload placement and compaction at the southeast embankment and northwest quadrant</li> <li>Phase 2 utility relocates for Telus and Shaw lines</li> <li>Culvert extension in the southeast quadrant</li> </ul> </li> </ul>



<b>Three-Month Lookahead:</b>	<ul style="list-style-type: none"> <li>• Monitor the Design-Builder’s on-site construction activities: <ul style="list-style-type: none"> <li>○ Installation of Phase 2 temporary walls (soil nail and lock block)</li> <li>○ Traffic detour for the northbound loop ramp and southbound bus lane closure</li> <li>○ Pile driving for bridge foundation</li> <li>○ Pile concrete pour</li> <li>○ Drainage excavation for the new Steveston Highway onramp</li> <li>○ Placement of fill and preload materials along the new ramp alignments</li> <li>○ Civil works for electrical relocation at the east intersection</li> <li>○ Reversible Lane Control System cable and cabinet relocations</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>• Continued 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>• Continued meetings between the Design-Builder and the IIGs.</li> <li>• Continued Project 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 with 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, planting, and construction monitoring opportunities.</li> <li>• Conduct cultural recognition workshops and discussions with IIGs tentatively for fall 2023.</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> <li>• Engagement with the City and TransLink on 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> </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> </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> <li>○</li> </ul> </li> </ul>
<b>Three-Month Lookahead:</b>	<ul style="list-style-type: none"> <li>• Complete reviews of the Design-Builder submittals and design packages by the City of Richmond and TransLink.</li> <li>• Continue to support the Design-Builder in obtaining relevant permits for upcoming work including Watercourse Crossing Permits.</li> <li>• Monitor Phase 2 utility relocation works (Telus) on Steveston Highway.</li> </ul>

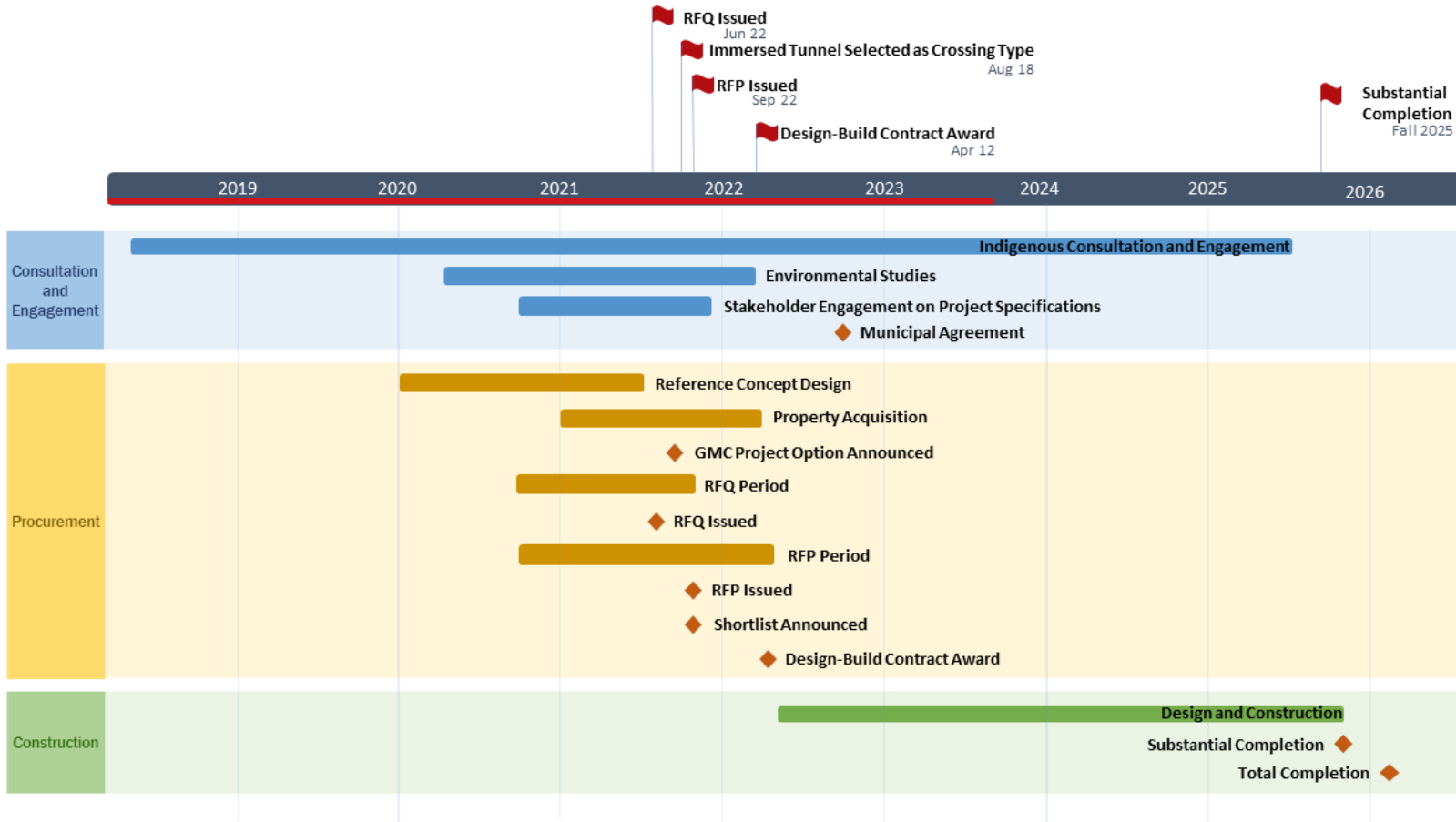
## 4.7 Public and Stakeholder Engagement

<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>• Prepared a construction notification related to an upcoming northbound on-ramp closure for Highway 99.</li> <li>• Facilitated a meeting with the Traffic Advisory Committee.</li> <li>• Shared Steveston Project information at public events in communities related to Fraser River Tunnel Project.</li> </ul>
<b>Three-Month Lookahead:</b>	<ul style="list-style-type: none"> <li>• Create renderings to be used for public communications.</li> <li>• Prepare and distribute construction notices related to traffic impacts on Steveston Highway.</li> </ul>

- Complete in-person visits to nearby stakeholders to provide a Project update and notification related to the loop ramp closure/detour.

## 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

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**FIGURE 1 – PLACEMENT OF PRELOAD MATERIAL ON THE SOUTHBOUND OFF RAMP**



**FIGURE 2 – TEMPORARY SOIL NAIL WALL AT EXISTING BRIDGE ABUTMENT**