



**PATTULLO BRIDGE
REPLACEMENT**



transportation
investment
corporation

Monthly Status Report

Reporting Period
November 2023

1. Introduction

1.1 Project Overview

The Pattullo Bridge is a key connection between the communities of Surrey and New Westminster.

The new toll-free four-lane bridge will provide important improvements for everyone using the bridge, including people who are driving, cycling, or walking, as well as communities on either side of the bridge.

The new bridge will provide:

- A safer crossing for all bridge users with modern, wider lanes, separated by a centre median barrier.
- Dedicated walking and cycling lanes, separated from traffic by a barrier on both sides of the bridge.
- Better connections to, from and near the bridge.

The new bridge is scheduled to open in 2024. The existing bridge will remain in use until the new bridge is open to traffic. Once the new bridge is open, the existing bridge will be removed.

Additional information and updates about the Project can be found on the Project's website <https://www.pattullobridgereplacement.ca>.

1.2 Project Delivery

Transportation Investment Corporation (TI Corp), a provincial Crown corporation, is delivering and overseeing this \$1.377 billion Project. The Project is being delivered under B.C.'s Community Benefits Agreement and the Project workforce is being provided by B.C. Infrastructure Benefits Inc.

The Fraser Crossing Project Corporation (Contractor) has been selected to design and build the new bridge. The Province will own and maintain the new bridge when it is complete.

The Project represents a significant investment in multi-modal transportation mobility improvements and supports provincial and regional strategies, environmental objectives, and the economic development of transportation services in the region.

1.3 Project Goals








Measure specific data to confirm the following Project goals and objectives are being met in accordance with the Project's **Performance Measurement Plan**:

1. Provide a **structurally sound bridge crossing** to maintain a critical local and regional connection;
2. **Improve safety for all users** with modern lane widths, road curvature, centre median barrier and separated pedestrian and cycling lanes; and
3. **Improve connectivity, reliability and modal choice** while supporting environmental objectives.

The Project represents a significant investment in multi-modal transportation mobility improvements and supports provincial and regional strategies, environmental objectives, and the economic development of transportation services in the region.

2. Project Update

2.1 Project Dashboard

		Objectives	Project Status	Comments
Project Delivery	Scope	Project delivered within the approved scope.		<ul style="list-style-type: none"> The Project includes a new four-lane bridge, improved connections to, from and near the bridge and dedicated walking and cycling lanes and is on track to be delivered within the approved scope.
	Schedule	Project delivered within the approved schedule.		<ul style="list-style-type: none"> Schedule-related risks are being monitored. The Project has been subjected to significant challenges including supply chain issues. The Contractor is actively working to mitigate impacts.
	Budget	Project delivered within the approved budget of \$1.377 billion.		<ul style="list-style-type: none"> Project spending for the month of November 2023 was \$8.0 million. Total Project spending to date is \$800.0 million. Budget related risks and issues, including inflationary and schedule pressures, are being monitored. The Project is currently within budget.
	Safety	Ensure that Project work is performed safely and in compliance with all applicable safety regulations, and in accordance with government policy.		<ul style="list-style-type: none"> Monitored the implementation of the health and safety program and provided on-site monitoring. There have been 6 lost time injuries on the Project to date. Lost Time Injury Frequency Rate (LTIFR) for the Project is 0.59 which is less than the WorkSafeBC 2022 rate of 1.7* for heavy construction (Bridge, Overpass, or Viaduct Construction or Repair). * Injury rate data reflects Large Employer 100+ Person Years employer size.
	Quality	Implement an effective Quality Management System.		<ul style="list-style-type: none"> Continued monitoring the structural steel fabrication, including steel component testing. Continued to review quality record packages of fabricated components
	Environmental	Ensure our work is performed in an environmentally responsible manner.		<ul style="list-style-type: none"> Continued discussions with the Contractor and Identified Indigenous Groups (IIGs) on environmental offsetting requirements for the existing bridge demolition Fisheries Act Authorization (FAA). Continued discussions between the Contractor, Project, and environmental regulators on environmental performance and permitting.
	Archaeology	Ensure the work is performed in a manner that meets the standards of the Heritage Conservation Act.		<ul style="list-style-type: none"> Continued to progress the archaeological field program in collaboration with Indigenous Groups.

	Design and Construction	Provide design and technical oversight, coordinate and manage activities on site and conduct compliance reviews.	●	<ul style="list-style-type: none"> • The Project team continued to closely monitor final design progress. • Continued work in-river on pier S1 tower segments, upper cross beam top slab, lower cross beam bearing installation, main bridge pier table erection, and N1 pier column construction. • Continued work on-land piers in New Westminster and Surrey. • Completed quality re-inspection activities for structural steel Shipment 2. • The Construction team continued daily site monitoring and reporting.
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		Objectives	Project Status	Comments
	Community Benefits	Work collaboratively with BC Infrastructure Benefits Inc. (BCIB) to successfully implement the Community Benefits Agreement (CBA).	●	<ul style="list-style-type: none"> • Ongoing coordination and collaboration with BCIB to implement the CBA. • Discussions regarding current and future Project workforce requirements continued to progress.
Partners/Stakeholders	Indigenous Groups	Continue to build and maintain a positive collaborative working relationship.	●	<ul style="list-style-type: none"> • Continued to engage with the IIGs in relation to Project permitting, habitat offsetting planning, bridge demolition planning, Project participation, and opportunities. • Continued consultation on mitigation measures, in accordance with permit conditions of the Environmental Assessment Certificate (EAC) and the Vancouver Fraser Port Authority's Project and Environmental Review (PER) Project permit.
	Third Parties	Continue to build and maintain positive relationships and secure agreements with Project partners and other third parties.	●	<ul style="list-style-type: none"> • Working closely with municipalities on traffic management, roadway conditions and construction activities. • Continued handover/transfer agreement discussions regarding the existing bridge with TransLink. • Working closely with utilities and railway companies on design and construction activities and obtaining required permits.
	Public and Stakeholder Engagement	Continue to build and maintain positive relationships with the community and other stakeholders.	●	<ul style="list-style-type: none"> • Continued engagement with local businesses, stakeholders, residents, and the public. • Ongoing website and social media updates.

Status	Description
●	Managing critical issues, negotiating resolution; action required immediately
●	Managing some issues, negotiating resolution; action required in the near term
●	Managing day to day operations

3. Project Documents and Achievements to Date

Project Delivery	Project Planning and Development	<ul style="list-style-type: none"> • Completion of three phases of public consultation (2013-2016) • Executed Design-Build-Finance Agreement (February 2020) • Project Overview Report (May 2020) • Project Report (July 2020)
	Environmental	<ul style="list-style-type: none"> • Environmental Assessment Certificate (EAC) (April 2019) • Port and Environmental Review (PER) Permit (May 2019) • Canadian Navigable Waters Act Approval (November 2020) • Water Sustainability Act (WSA) Change Approval (November 2020) • Water Sustainability Act Short Term Use Approval (December 2020) • Fisheries Act Authorization (February 2021)
	Community Benefits	<ul style="list-style-type: none"> • Community Benefits Agreement (July 2018) • BCIB Health and Safety Program (May 2019) • BCIB-AIRCC Enabling Agreement Executed (July 2019) • Project Definition: Pattullo Bridge Replacement Project (July 2019) BCIB-Contractor Agreement Executed (February 2020) • BCIB-Subcontractor Agreement Executed (February 2020)
Partners/Stakeholders	Third Parties	<ul style="list-style-type: none"> • CN Master Agreement (May 2019) • City of Surrey Municipal Agreement (September 2019) • City of New Westminster Municipal Agreement (September 2019) • Metro Vancouver Accommodation Agreement (December 2019) • Construction and land licenses acquired from Vancouver Fraser Port Authority; VFPA demolition license finalized (December 2019) • CP Grade Separation Construction Agreement (January 2020) • Shaw Telecommunications Facilities Relocation Agreement (March 2020) • Zayo Telecommunications Facilities Relocation Agreement (March 2020) • CP Overpass Crossing and Maintenance Agreement (December 2020) • TransLink Consent Agreement for in-river works (December 2020) • MOTI-FortisBC Energy Inc. Pipeline Removal Agreement (February 2023) • MOTI-TransLink Pattullo Bridge Decommissioning Agreement (May 2023)

4. Monthly Highlights and Three Month Lookahead

4.1 Safety

Scope:	<ul style="list-style-type: none"> Establish Occupational Health and Safety (OH&S) Project delivery objectives and performance measures. Manage Project OH&S activities. Monitor relevant OH&S performance metrics. Ensure the Project complies with relevant WorkSafeBC regulations and government requirements.
Monthly Highlights:	<ul style="list-style-type: none"> Continued to receive health and safety updates and incident reports from BCIB and the Contractor. 13 incidents were documented in the health and safety log for the month. None of the incidents resulted in a Lost Time Injury. Lost Time Injury Frequency Rate (LTIFR) for the Project is 0.59 which is less than the WorkSafeBC 2022 rate of 1.7* for heavy construction (Bridge, Overpass, or Viaduct Construction or Repair). * Injury rate data reflects Large Employer 100+ Person Years employer size.
Three Month Lookahead:	<ul style="list-style-type: none"> Update Safe Work plans and Safe Job procedures as required. Continue to deliver training on the Job Hazard Assessment and Risk Mitigation Plan. Conduct OH&S audits as and when required.

4.2 Quality

Scope:	<ul style="list-style-type: none"> Establish quality management Project objectives and performance measures. Manage Project quality management activities. Monitor relevant quality management performance metrics.
Monthly Highlights:	<ul style="list-style-type: none"> Continued review and discussion on quality records for the Project. Continued structural steel fabrication activities, including auditing and steel and weld testing. 9 Non-conformity Reports (NCRs) were initiated in the month related to concrete, material manufacture/fabrication, structural steel works, pre-cast deck panels manufacture and traffic management. To date there have been a total of 390 NCRs (43 open and pending, 1 void, and 346 closed). The established Project quality control programs continued to review testing results and identify any steel and structural component fabrication contractual non-compliances for remediation/resolution.
Three Month Lookahead:	<ul style="list-style-type: none"> Continue steel fabrication quality monitoring, surveillance auditing, and initiate inspections and tests as required. Continue review of the Contractor's Inspection and Test Plans and associated records. Continue review of quality-related submittals.

4.3 Environmental

<p>Scope:</p>	<ul style="list-style-type: none"> • Manage follow-up and compliance actions required under the Environmental Assessment Certificate (EAC) and the Port's Project and Environmental Review (PER) permit as well as other necessary environmental permits. • Liaise with regulators on matters related to EAC and PER permit conditions and commitments made through the environmental assessment process and Management Plans. • Oversee outstanding environmental permits, permit amendments and associated environmental studies, monitoring, and compliance processes for existing bridge demolition. • Supporting consultation on permit related matters including Project offsetting.
<p>Monthly Highlights:</p>	<ul style="list-style-type: none"> • Ongoing conversations between the Contractor, Province, and environmental regulators on the Project's environmental requirements. • Conducted geotechnical investigations in Brownsville Park to support access requirements. • Tested water and soil at Cumberland Point to support anticipated Project offsetting requirements. • 96 environmental non-compliances were reported for the month of November, in relation to non-reportable spills to land, invasive species management, and erosion sediment control by the Independent Environmental Monitor (IEM). The majority of spills were minor and cleaned up appropriately, except for a spill on a barge used for soil densification, which is now subject to a VFPA order. • VFPA issued a stop work order related to the barge, which was removed from site for repair. • The EAO issued a warning letter related to access management and construction wastewater containment. The Province provided supporting documentation noting compliance with the EAC condition.
<p>Three Month Lookahead:</p>	<ul style="list-style-type: none"> • Continue to liaise with regulators on follow-up actions and commitments arising from the required Project permits, approvals, VFPA order, and EAO warning letter. • Continue working with the Contractor and environmental regulators to ensure the Project's permitting requirements are met, including increasing environmental oversight and auditing, enhancing training for workers, and adding additional environmental compliance personnel and auditing specialists. • Continue to support consultation efforts for existing bridge demolition, FAA, and Project offsetting. • Continue to develop offsetting concept design and function at the Qiqeyt and Cumberland Point sites along with reviewing technical data at the Cumberland site. • Securing a long-term access agreement with Metro Vancouver for the Cumberland Point site in New Westminster. • Review EAC Amendment for additional lands to support bridge demolition as well as the Demolition Environmental Management Plan (DEMP) and other Environmental Management Plans and permitting updates.

4.4 Archaeology

Scope:	<ul style="list-style-type: none"> Managing, directing, and undertaking all archaeological work, including Archaeology Impact Assessment (AIA), Systematic Data Recovery (SDR), and archaeological monitoring in consultation with Indigenous Groups.
Monthly Highlights:	<ul style="list-style-type: none"> Ongoing archeological monitoring across Project sites in both New Westminister and Surrey. Continued monitoring at Agnes Street and Dufferin Street for Multi-Use Pathway (MUP) pile works; at the heritage wall along Columbia; for utility works along Agnes, McBride, and Columbia streets; and for the Royal Ave overpass demolition works. Continued monitoring across Project sites in both New Westminister and Surrey.
Three Month Lookahead:	<ul style="list-style-type: none"> Continue archaeological monitoring and archaeological investigations as required. Continue to liaise with regulators on follow-up actions and commitments from required Project permits and approvals. Finalize preparations for the existing bridge demolition AIA. Plan archaeological support for habitat offsetting.

4.5 Design and Construction

Scope:	<ul style="list-style-type: none"> Travel demand forecasting, traffic operations modelling, traffic data collection, and other related engineering services in support of the Project. Review the final bridge design including roadways, associated structures, drainage, and utilities. Compliance reviews during construction. Provide oversight of Contractor on-site activities throughout the Project's lifecycle. Management of the Project's schedule, scope, and progress.
Monthly Highlights:	<ul style="list-style-type: none"> Continued progress on the remaining final design drawings and Issued For Construction (IFC) drawings. The Project team continues to closely monitor design progress. Advanced in-river S1 tower with stay anchor box install; 27 of 33 segments on east leg, and 26 of 33 segments on west leg are complete. Upper cross beam and top slab in progress. Lower cross beam bearing installation and pier table steel erection is in progress. Advanced on-land piers S2, S4, S5, S6, SR1, SR3 and SR4 pier column and pier cap works. Continued to engage with CN for permit and prepared temporary works for upcoming structural steel girder erection for south approach. Continued to engage with CN Rail (CN), Canadian Pacific Kansas City (CPKC), Metro Vancouver for north approach girder erection permits and preparation of temporary works, and started to erect temporary support tower on Front Street. Continued Old Yale Road Overpass and approach embankment construction. Advanced King George Boulevard retaining wall and expanded polystyrene embankment to footing construction stage. Completed the New Westminister East Columbia exit ramp and MUP micro-piling, foundation substructure concrete pours ongoing and are approximately 75% complete. Precast deck panel fabrication ongoing at offsite facility for the main bridge.

Three Month Lookahead:	<ul style="list-style-type: none"> • Complete monthly riverbed monitoring surveys. • Continue reviewing final design packages. • Continue monitoring work at pier locations in both New Westminster and Surrey. • Continue monitoring structural steel girder installation on South Approach, S1 tower and upper cross beam construction, permanent bearing installation, pier table erection for main bridge spans, and N1 foundation pier column construction. • Monitor off-site precast panel fabrication activities for the main bridge. • Begin detailed design of soft landscaping for the Project.
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4.6 Indigenous Groups

Scope:	<ul style="list-style-type: none"> • Consultation and engagement with the Identified Indigenous Groups (IIGs) as set out in the EAC. • Engagement with Indigenous Groups on Project opportunities and benefits including Project agreements and contracting opportunities.
Monthly Highlights:	<ul style="list-style-type: none"> • Facilitation of working group meetings with IIGs. • Continued to progress Indigenous Art and Cultural Recognition (IACR) opportunities through a phased approach.
Three Month Lookahead:	<ul style="list-style-type: none"> • Continue meetings with IIGs on archaeology, habitat offsetting and bridge demolition planning. • Continue meetings with the Indigenous Marine Users Working Group.

4.7 Third Parties

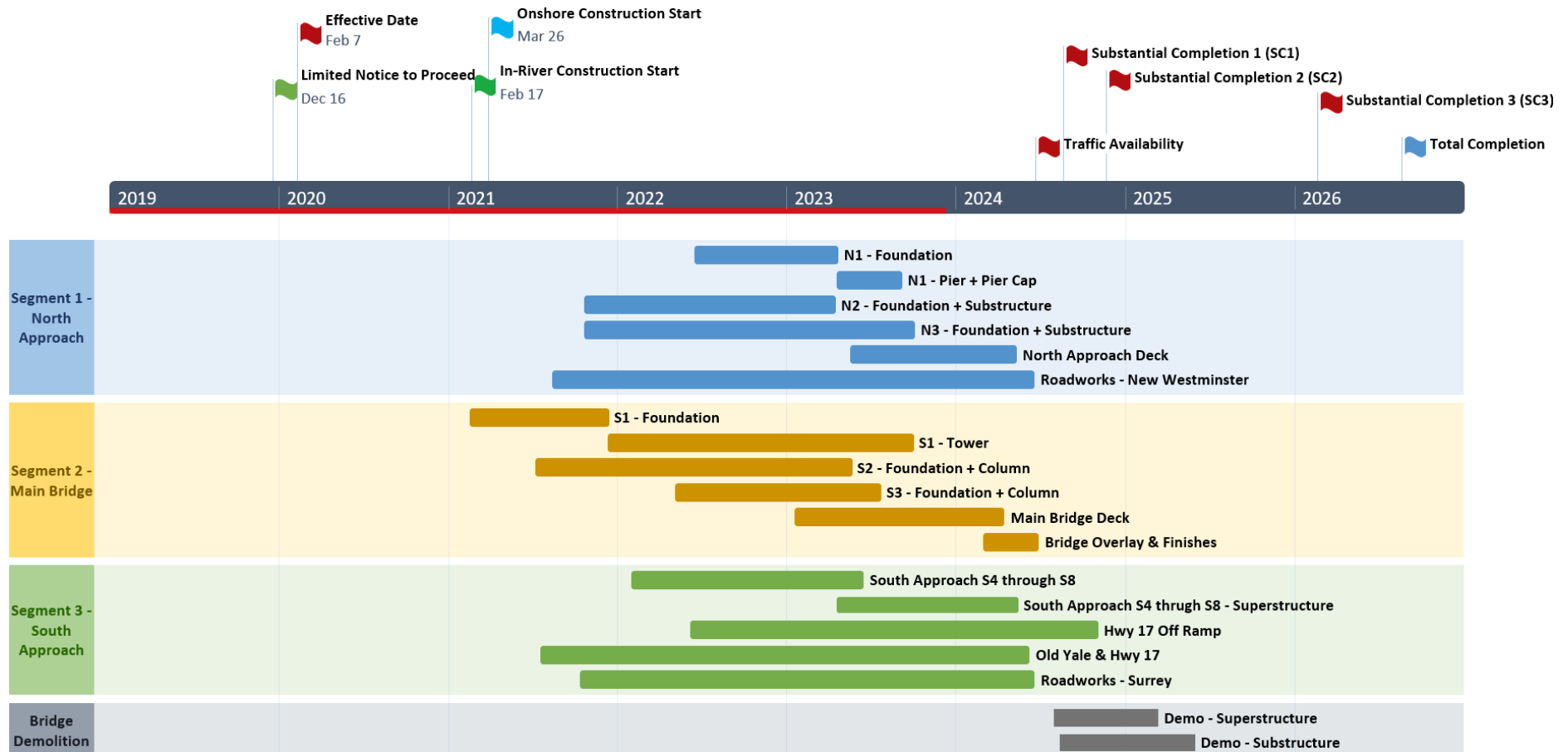
Scope:	<ul style="list-style-type: none"> • Engage with municipalities (City of New Westminster and City of Surrey) for the Project implementation phase. • Municipal Agreements. • Railway Construction and Crossing Agreements. • Utility Agreements. • TransLink Agreement.
Monthly Highlights:	<ul style="list-style-type: none"> • Continued meeting biweekly with both the City of Surrey and the City of New Westminster and continued to work closely with both cities on design/construction coordination and traffic management activities. • Continued working closely with utilities and railway companies on design and construction activities. • Continued coordination with CN, Canadian Pacific Kansas City, and Metro Vancouver for pier N1 to pier N2 girder erection, and with CN for girder erection over CN Rail Bridge, and over CN Brownsville spur between piers S3 and S4. • Continued coordination with Southern Railway of British Columbia Limited to execute crossing agreements along the new south exit ramp, Highway 17, and Bridge Road corridor.
Three Month Lookahead:	<ul style="list-style-type: none"> • Continue to engage with municipalities on the Project's design and construction plans. • Continue to work with railways to finalize agreements.

4.8 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">• Continued to provide updates regarding Project work including notification distribution to residents, businesses, and stakeholders. Notifications are posted to the website, emailed to local resident and business associations, and sent to the email subscription list.• Oversaw development and distribution of various public and stakeholder notifications and social media posts regarding construction activities, including an overnight closure of the Pattullo Bridge, and a 24-hour closure of Highway 17 in Surrey.• Continued outreach to businesses in Surrey and New Westminister regarding upcoming construction activities and traffic pattern changes.
Three Month Lookahead:	<ul style="list-style-type: none">• Ongoing engagement with the public, residents, and key stakeholders in New Westminister and Surrey regarding upcoming construction work and traffic pattern changes.• Continue regular meetings with resident groups, business associations, the Traffic Advisory Committee, active transportation groups and the Woodlands Working Group.• Continue to provide Project construction activity updates via social media platforms.• Distribute construction notifications and respond to public inquiries.

5. Schedule

The following schedule depicts the contractual deliverables, milestones and associated dates and timelines for the implementation phase of the Project.



6. Project Photos

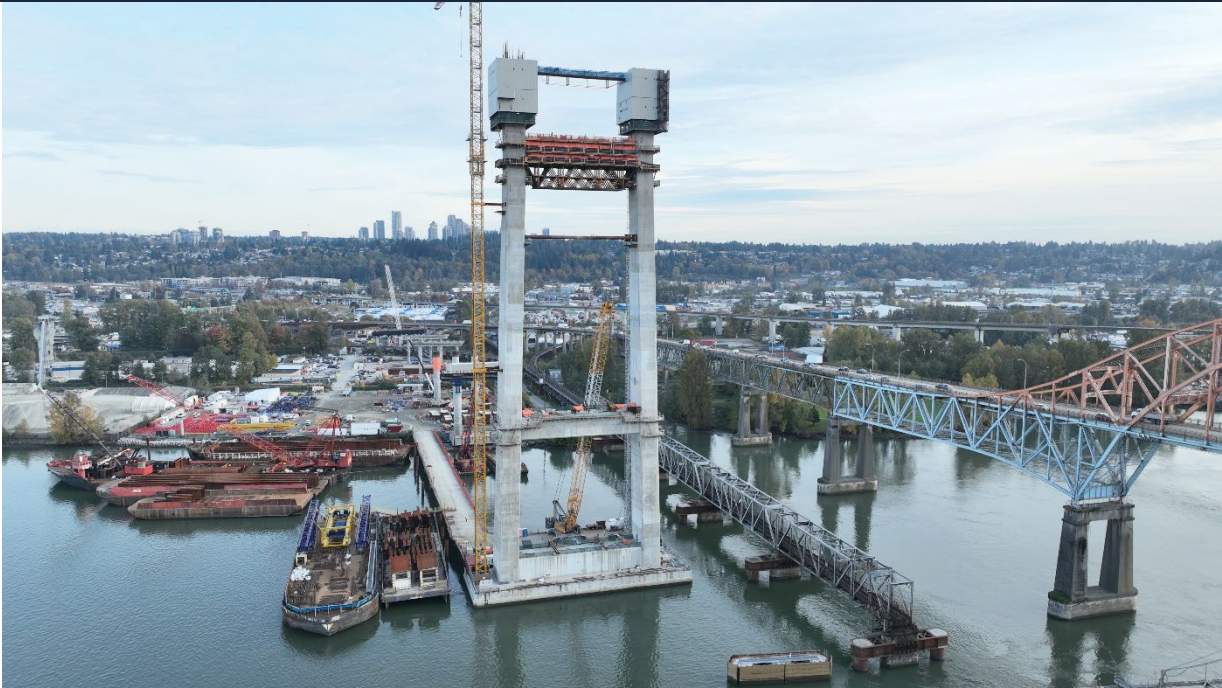


Figure 1 – Aerial of ongoing Pier S1 Tower Construction



Figure 2 – Aerial of the Surrey site showing pier S2 to the south abutment.



Figure 3: Aerial of the Pattullo Bridge Replacement Project in the Fraser River

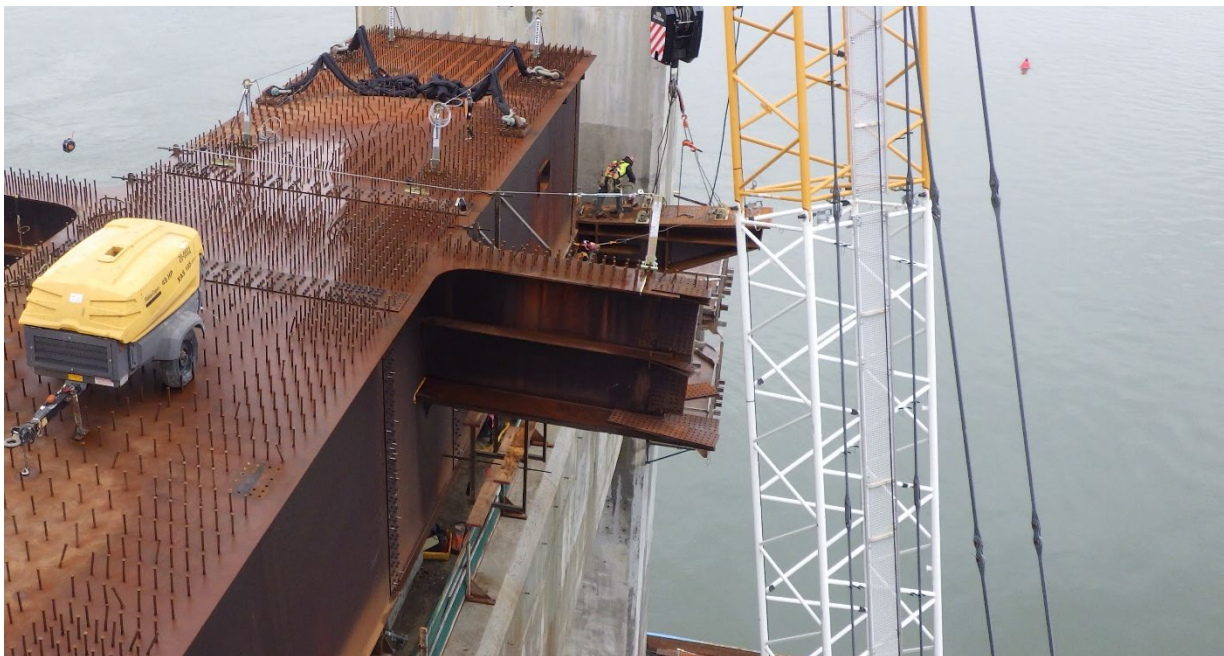


Figure 4: Pier table steel installation on the lower cross beam of S1 Tower