

# Highway 91/17 Upgrade Project

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MONTHLY STATUS REPORT

Month Ending October 31, 2020

# 1. PROJECT DASHBOARD

Project Delivery Objectives		Overall Project	DB Contractor	Owners/Other Works	Comments
<b>Safety</b>	Take every reasonable step to ensure that the work is performed safely and in compliance with all applicable safety regulations, and in accordance with government policy.	●	●	●	Safety meetings and orientations ongoing.
<b>Budget</b>	Delivered within the approved budget.	●	●	●	The Project has an approved capital budget of \$260 million and continues to track on budget.
<b>Schedule</b>	Delivered within the approved schedule.	●	●	●	Permits issued for construction; some potential delays.
<b>Scope</b>	Deliver the approved scope.	●	●	●	Delivery of the specified components is on track.
<b>Indigenous Groups</b>	Continue to build and maintain a positive collaborative working relationship	●	●	●	Discussions and consultation with Indigenous groups ongoing.
<b>Environmental</b>	Ensure the work is performed in an environmentally responsible manner.	●	●	●	The Project will be delivered in accordance with the obligations identified in the Overview Environmental Effects Assessment.
<b>Community Benefits</b>	Incorporate the Community Benefits Objectives into the Project.	●	●	●	Community Benefits Objectives outlined in the Design-Build Agreement for implementation by the Design-Builder.
<b>Third Parties</b>	Continue to build and maintain positive relationships with Project Partners and other third parties.	●	●	●	Early and frequent engagement and advancing agreements with Project partners and other third parties.
<b>Stakeholder Engagement</b>	Continue to build and maintain positive relationships with the community, and other stakeholders.	●	●	●	Engagement with key Project partners is ongoing. Community and stakeholder engagement will continue.
<b>Quality</b>	Implement an effective Quality Management System.	●	●	●	Quality audits and reviews performed as required per the Quality Management Plan.

Status	Description
●	Not currently applicable, as the Project is in Procurement Phase
●	Managing some issues, negotiating resolution; required immediately
●	Managing some issues, negotiating resolution; required in the near term
●	Good progress

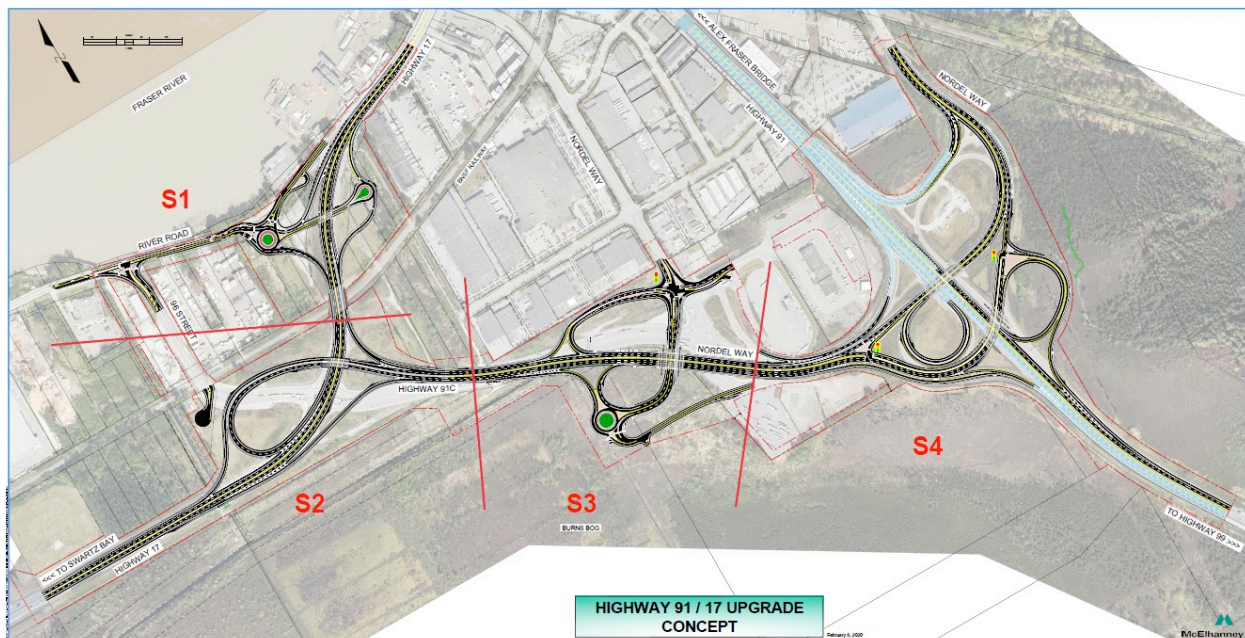
## 2. Introduction

### Project Overview

The Highway 91/17 & Deltaport Way Upgrade Project (the Program) is comprised of the Highway 91/17 Upgrade Project, as well as the 27B Avenue and Deltaport Way Improvements Project. The 27B Avenue and Deltaport Way improvements have been completed and will no longer be reported out on in subsequent monthly reports.

The Highway 91/17 Upgrade Project (the Project) is a subcomponent project of the broader Program and includes a combination of improvements to the existing Highway 91, Highway 17, and Highway 91 Connector corridors to improve travel safety and efficiency. These upgrades will improve local and commercial travel time and reliability in the area, reduce conflicts between commercial vehicles and other traffic, and support community and economic development. The Highway 91/17 components also complement the recently completed 72<sup>nd</sup> Avenue Interchange Project and the Alex Fraser Bridge Project.

A Design-Build Agreement between the BC Ministry of Transportation and Infrastructure (the Ministry), the BC Transportation Financing Authority (BCTFA), and Pacific Gateway Constructors General Partnership (the Design-Builder) was signed on December 13, 2019. As such, the Project has entered the implementation phase and a comprehensive Monthly Status Report will be prepared to report on progress, budget status, and risk.



## October 2020 Highlights

Project highlights this month include:

<b>Stakeholder Engagement</b>	<ul style="list-style-type: none"> <li>Ongoing public and stakeholder engagement to advise of Project activities including upcoming traffic and construction activities</li> </ul>
<b>Environment</b>	<ul style="list-style-type: none"> <li>Environmental protection measures continue to be in active construction areas.</li> <li>Design-Builder providing regular environmental submissions</li> </ul>
<b>Safety</b>	<ul style="list-style-type: none"> <li>Social distancing being followed for the staff required to work in the field as inspectors</li> </ul>
<b>Design</b>	<ul style="list-style-type: none"> <li>Ongoing development and review of Design-Builder detailed design</li> </ul>
<b>Construction</b>	<p>Segment 1 – River Road / Highway 17 Interchange</p> <ul style="list-style-type: none"> <li>River Road East – W01 Detour construction and implementation commenced</li> </ul> <p>Segment 2 – Highway 91C / Highway 17 Interchange</p> <ul style="list-style-type: none"> <li>Hwy 17 – 96<sup>th</sup> Street ditch drainage installed on south side</li> <li>Hwy 91C Detour C01 lane shift implemented</li> </ul> <p>Segment 3 – Highway 91C / Weigh Scale Interchange</p> <ul style="list-style-type: none"> <li>Hwy 91C Detour C01 lane shift – total detour implementation commenced</li> </ul> <p>Segment 4 – Highway 91 / Nordel Way interchange</p> <ul style="list-style-type: none"> <li>Detour E02 implemented – Hwy 91SB to Nordel Way EB loop</li> <li>Delta Nature Reserve boardwalk construction commenced</li> </ul>
<b>Traffic Management</b>	<ul style="list-style-type: none"> <li>Hwy 17 Eastbound (EB) nighttime slow lane closure</li> <li>Hwy 17 Westbound (WB) nighttime slow lane closure</li> <li>Hwy 91C nighttime lane closures</li> <li>Hwy 91 SB to Nordel Way EB loop lane closures</li> </ul>
<b>Quality</b>	<ul style="list-style-type: none"> <li>Ongoing implementation and review of quality system</li> </ul>

## 3. PROJECT DELIVERY

### Project Controls

<b>Completed this Month</b>	<ul style="list-style-type: none"> <li>Ongoing project control meetings</li> <li>Ongoing review of Risk Register</li> <li>Ongoing review of project schedule, scope and budget</li> </ul>
<b>Key activities for Next 3 months</b>	<ul style="list-style-type: none"> <li>Ongoing project control meetings</li> <li>Ongoing review of Risk Register</li> <li>Ongoing review of project schedule, scope and budget</li> </ul>

## 4. PROJECT DEVELOPMENT

### Communications and Stakeholder Engagement

<b>Completed this Month</b>	<ul style="list-style-type: none"><li>• Provided updates to interested stakeholder groups as requested</li><li>• Updated the Project webpage</li><li>• Reviewed contractor communications submittals</li><li>• Ongoing enquiry response</li><li>• Supported the Design-Builder with stakeholder engagement and public communications related to the Highway 99 preload removal work</li></ul>
<b>Key Activities for Next 3 months</b>	<ul style="list-style-type: none"><li>• Ongoing support to the Design-Builder for stakeholder engagement and public communications including the Delta Nature Reserve boardwalk relocation work and Highway 99 preload removal</li><li>• Continue to update Project webpage</li><li>• Ongoing enquiry response</li></ul>

### Environment

<b>Completed this Month</b>	<ul style="list-style-type: none"><li>• Ongoing regular weekly meetings with the Design-Builder regarding environmental components of the Project</li><li>• Ongoing securing, extension, and amendment of environmental and heritage permits</li></ul>
<b>Key Activities for Next 3 months</b>	<ul style="list-style-type: none"><li>• Securing, extension, and amendment of environmental and heritage permits as required</li><li>• Address concerns at construction interface locations at the Delta Nature Reserve</li><li>• Ongoing environmental oversight of Design-Builder's environmental mitigation measures</li><li>• Ongoing submission review in accordance with the DBA requirements</li></ul>

### Agriculture

<b>Completed this Month</b>	<ul style="list-style-type: none"><li>• Discussions ongoing with the Design-Builder and Project Agrologist for potential peat excavation in the Nordel Interchange (I/C) on former Delta Nature Reserve (DNR) land</li><li>• Agrologist engaged local farmers to determine interest in surplus material</li></ul>
<b>Key activities for Next 3 months</b>	<ul style="list-style-type: none"><li>• Construction methodology to be finalized and potential surplus material to be identified</li><li>• Determine any requirements to meet Agricultural Land Commission conditions and proceed with action items</li></ul>

### Indigenous Groups

<b>Completed this Month</b>	<ul style="list-style-type: none"><li>• Ongoing review and sharing of key project documents with Indigenous Groups</li><li>• Meetings ongoing with Design-Build contractor and Project team</li></ul>
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	<ul style="list-style-type: none"> <li>Continued communication with Indigenous groups regarding Project construction activities</li> </ul>
<b>Key Activities for Next 3 months</b>	<ul style="list-style-type: none"> <li>Responses to Indigenous Group comments on key project documents</li> <li>Ongoing consultation and engagement relating to geotechnical, environmental, and archaeological works</li> </ul>

## 5. DESIGN BUILD PROGRESS

### Safety

<b>Completed this Month</b>	<ul style="list-style-type: none"> <li>Pacific Gateway Constructors is the Prime Contractor on the Project Site</li> <li>Onsite safety training sessions held for all Project staff</li> </ul>
<b>Key Activities for Next 3 months</b>	<ul style="list-style-type: none"> <li>Construction activities and ongoing site safety training sessions as required</li> <li>Daily &amp; weekly safety briefings for active site crews</li> <li>Monthly mass safety meetings</li> </ul>
<b>Safety Incidents</b>	<ul style="list-style-type: none"> <li>No reported injuries</li> <li>Minor equipment damage reported on site</li> </ul>

### Design

<b>Completed this Month</b>	<ul style="list-style-type: none"> <li>Ongoing meetings with various regulatory agencies/stakeholders</li> <li>Continued development and review of design including, detour implementation, oversized vehicle accommodation, drainage, roadway, electrical, and bridge design</li> <li>Ongoing submission reviews to support Delta Nature Reserve Boardwalk construction</li> <li>Issued For Construction (IFC) Designs being received and reviewed</li> </ul>
<b>Key Activities for Next 3 months</b>	<ul style="list-style-type: none"> <li>Ongoing review of design submissions</li> <li>Ongoing meetings with various regulatory agencies/stakeholders</li> </ul>

### Construction

<b>Completed this Month</b>	<p><b>Segment 1 – River Road / Highway 17 Interchange</b></p> <ul style="list-style-type: none"> <li>River Road West – Watermain installation paused along River Road south side shoulder</li> <li>River Road East – Hwy 17 detour construction and implementation</li> </ul> <p><b>Segment 2 – Highway 91C / Highway 17 Interchange</b></p> <ul style="list-style-type: none"> <li>Hwy 91C north embankment fill</li> <li>Hwy 17 – 96<sup>th</sup> St ditch south side drainage installation</li> <li>Hwy 91C detour lane shift implementation</li> </ul> <p><b>Segment 3 – Highway 91C / Weigh Scale Interchange</b></p> <ul style="list-style-type: none"> <li>Hwy 91C Detour lane shift – total detour implementation</li> <li>Truck Parking utility work complete</li> </ul>
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	<ul style="list-style-type: none"> <li>• Weigh Station Interchange roundabout sand embankment placement</li> </ul>
	<p><b>Segment 4 – Nordel Way / Highway 91 Interchange</b></p> <ul style="list-style-type: none"> <li>• Hwy 91SB to Nordel Way EB loop detour implemented</li> <li>• DNR boardwalk construction commenced</li> <li>• Sand embankment started in south east quadrant</li> </ul>
<b>Key Activities for Next 3 months</b>	<p><b>Segment 1 – River Road / Highway 17 Interchange</b></p> <ul style="list-style-type: none"> <li>• Preload of Hwy 17 / River Road on-/off-ramp roundabout areas</li> <li>• River Road utility relocation construction</li> <li>• Excavation of existing Hwy 17 at Detour W01 for future overpass</li> </ul> <p><b>Segment 2 – Highway 91C / Highway 17 Interchange</b></p> <ul style="list-style-type: none"> <li>• Hwy 91C retaining wall and embankment fill construction on north side</li> <li>• Drainage construction in 96<sup>th</sup> Street ditch</li> </ul> <p><b>Segment 3 – Highway 91C / Weigh Scale Interchange</b></p> <ul style="list-style-type: none"> <li>• Hwy 91C retaining wall and embankment fill construction on north side</li> <li>• Cellular concrete fill on Fortis BC Right-of-Way</li> <li>• Weigh Station Interchange sand embankment placement including wick drain</li> <li>• Stone column installation at future Weigh Station Interchange structure.</li> </ul> <p><b>Segment 4 – Nordel Way / Highway 91 Interchange</b></p> <ul style="list-style-type: none"> <li>• Placement of Hwy 91 SB &gt; Nordel Way EB loop ramp preload.</li> <li>• Wildlife salvage in south west quadrant of Nordel Interchange</li> <li>• Preload placement in south east quadrant of Nordel interchange</li> <li>• DNR boardwalk construction completion</li> </ul>

## Traffic Management

<b>Completed this Month</b>	<ul style="list-style-type: none"> <li>• Nighttime lane closures Hwy 17 EB</li> <li>• Nighttime lane closures Hwy 17 WB</li> <li>• Nighttime lane closures Hwy 91C all lanes</li> <li>• Nighttime lane closures Hwy 91 SB loop to Nordel EB</li> </ul>
<b>Key Activities for Next 3 months</b>	<ul style="list-style-type: none"> <li>• Nighttime lane closures Hwy 91 SB and Hwy 91 SB to Nordel EB loop ramp for detour construction</li> <li>• Pending approvals of work plans, preload activities anticipated in all segments</li> </ul>

## Quality

<b>Completed this Month</b>	<ul style="list-style-type: none"> <li>• Ongoing monitoring of quality management system</li> <li>• Ongoing quality audits with Design-Builder</li> </ul>
<b>Key Activities for Next 3 months</b>	<ul style="list-style-type: none"> <li>• Ongoing implementation and monitoring of quality management system</li> <li>• Ongoing quality audits</li> </ul>

## 6. Milestones Achieved Date

The milestone dates shown in DBA Schedule 3 Appendix A have been updated in the October 2020 Works Schedule submitted by the Design-Builder as follows:

Activity Name	Milestone Date	Actual Start / Completion Forecast Start / Completion
<b>Construction Start</b>		
Highway 91 / Nordel Way Interchange	April 6, 2020	June 16, 2020
Delta Nature Reserve Boardwalk	July 2, 2020	
Highway 91C / Weigh Scale Interchange	April 6, 2020	August 14, 2020
Highway 91C/ Highway 17 Interchange	April 6, 2020	July 12, 2020
Highway 17 / River Road Interchange	April 6, 2020	May 8, 2020
<b>Construction Complete</b>		
Highway 91 / Nordel Way Interchange	September 15, 2022	November 17, 2022
Delta Nature Reserve Boardwalk	October 6, 2020	January 13, 2021
Highway 91C / Weigh Scale Interchange	March 15, 2023*	April 13, 2023
Highway 91C/ Highway 17 Interchange	March 15, 2023*	November 17, 2022
Highway 17 / River Road Interchange	October 4, 2021	November 3, 2021
Substantial Completion Date	November 30, 2022	April 13, 2023
Total Completion Date	May 31, 2023	July 19, 2023

*\*Design-Build Agreement allows for deferred paving of certain alignments within these segments due to potential weather implications in November.*



## 7. Site Photographs



S4: Delta Nature Reserve Peat excavation and backfilling underway - Taken October 1, 2020



S2: Existing EW Ditch running along the South side of Hwy 17. Taken October 5, 2020



S1: Concrete formwork in place for concrete pour of thrust block for water main install. Taken October 9, 2020



S2: Box culvert installation complete at 96 St. Ditch on North side of Hwy 17. Taken October 14, 2020



S1: Last length of 500mm dia. HDPE water main being lowered into place Taken October 20, 2020



Nordel Way EB. Taken October 28, 2020

## 8. Project Cost Report

- To date, \$84.9 million has been spent on the Project
- The approved capital Project budget is \$260 million