

May 19, 2020

Portside Road overpass and Blundell Road widening

Technical fact sheet

Project overview

The Vancouver Fraser Port Authority is upgrading roadways in the Fraser Richmond Industrial Lands. This location and its connections to major transportation routes and facilities make it a popular industrial area for warehouses and transload businesses that pack and unpack shipping containers moving to and from the port. This corridor has some of the highest and most concentrated activity in the Greater Vancouver area for moving goods from terminals to rail lines and trucks, and off to other destinations. Information contained within this fact sheet is current as of April 2020 and the reader should be aware that the port authority's approach to the project or information within the fact sheet may have evolved since this date and will not be confirmed until commencement of the procurement process. The project is further described on the project website, which contains general project information, current as of February 2020:

www.portvancouver.com/portsideblundellupgrades

Funding and project partners include the Government of Canada, the Vancouver Fraser Port Authority, Canadian National Railway (CN) and the City of Richmond. The project value is estimated at \$95 to \$100 million.

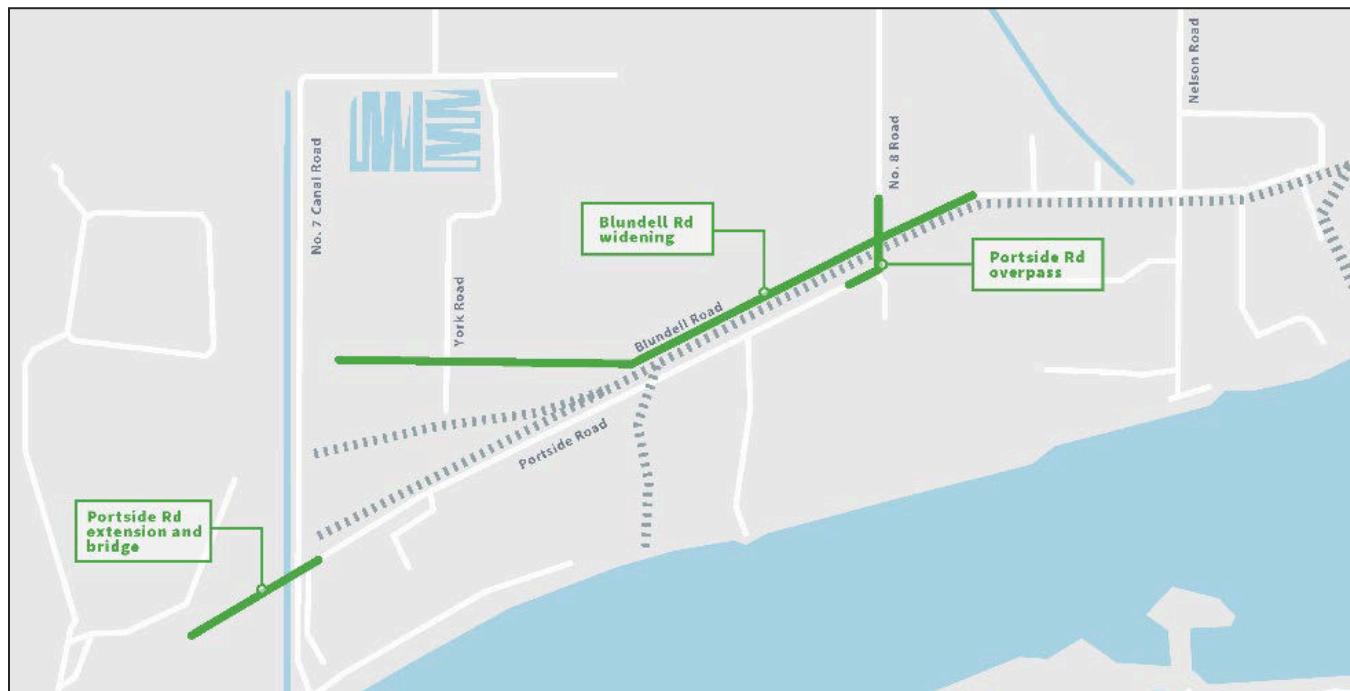


Figure 1: Project location

General arrangement drawings for the three project components, Portside Road overpass, Blundell Road widening, and Portside Road extension and bridge are provided as Attachment 1.



Figure 2: Project rendering

Procurement strategy and timeline

- Three delivery models are under consideration: Early Contractor Involvement (ECI), Design-Build (DB) and Progressive Design-Build.
- Delivery model selection will not be finalized until the start of procurement.
- A schedule extension of potentially one year is currently being evaluated by the port authority and reflected in the dates shown below

Milestone	Target date (subject to change)
RFQ issuance	Q2 2021
RFQ close	Q3 2021
RFP issuance	Q3 2021
RFP close	Q4 2021
Notice of award / selection of preferred proponent	Q4 2021
Construction start	Q1 2022
Construction completion	Q3 2024

Advance works

- The port authority is currently investigating opportunities of advanced works for this project involving relocation of utilities, construction of detours and installation of a temporary railway crossing.

Technical challenges and risks

- **Geotechnical conditions** – The native organic and fine-grained overbank sediments and landfill waste in the project area are generally weak, and moderately to highly compressible. Increases in loading in these sediments due to grade changes, structural loads, or reduced groundwater pressures will likely result in consolidation settlement. The weak nature of the underlying organic soils and landfill waste will likely require staged filling with settlement and pore pressure monitoring to limit the risk of failure. The organic soils will likely limit the height of embankments constructed using mineral fill. Alluvial sand deposits are likely liquefiable under seismic loading. This may require ground improvement at structures and high embankments. Geotechnical investigations will be completed by the end of July 2020, COVID-19 situation permitting. A factual report will be provided outlining geotechnical considerations for proponents.
- **Environmental issues and permits** – Wildlife considerations are included in the construction schedule. Plans are in place to mitigate project effects to protected species. Contaminated soils and groundwater are expected in the project area. Following further environmental assessment, mitigation plans will be implemented for the construction phase. Archaeological assessment(s) will be completed due to the moderate potential for unrecorded archaeological materials within the project area. A plan will be developed and implemented in consultation with Indigenous groups to address potential project-related effects on cultural and archaeological resources.
- **Third party utilities** – Protection and relocation of numerous small-diameter utility systems (FortisBC gas distribution, TELUS fibre optic, BC Hydro distribution), and City of Richmond water, sanitary, and storm lines within the project area. A utility corridor will be designed to accommodate existing utilities' relocation.
- **Traffic management during construction** – A road access detour for the construction of the overpass structure and its associated ramps will likely need to be designed and implemented to mitigate traffic affects to port authority tenants and subtenants in the area. This road access detour will require a temporary rail at-grade crossing. Engagement with these stakeholders will be ongoing as part of development of the detour design.