

DESIGN UPDATE 2022

Highway 7 Widening - 266th Street to 287th Street

SUMMER 2022



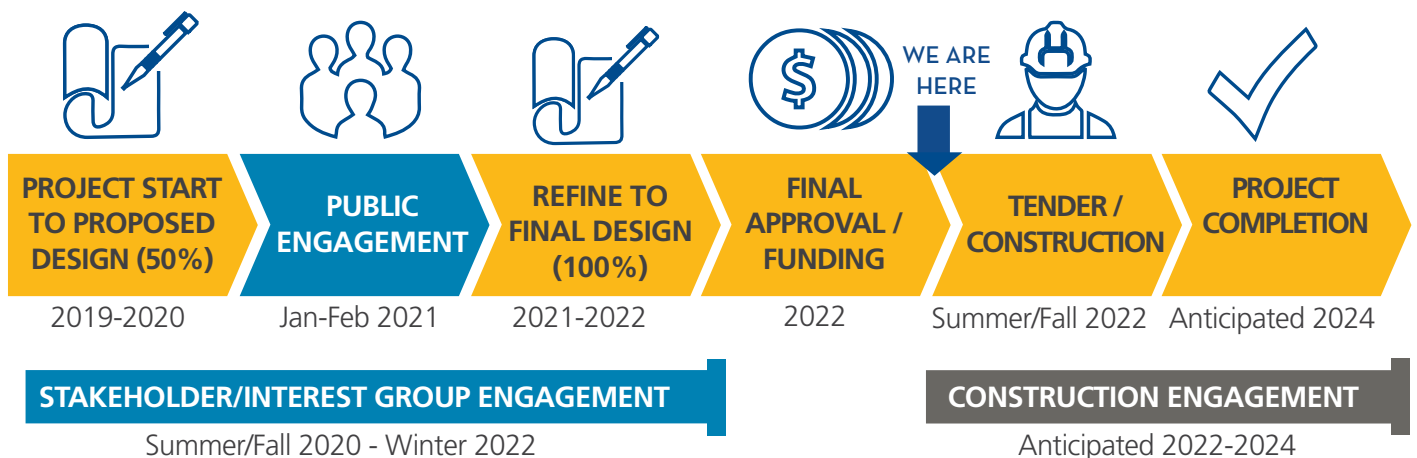
The BC Ministry of Transportation and Infrastructure is upgrading a four-kilometre segment of Highway 7 from 266th to 287th Street in Maple Ridge from an undivided two-lane highway to four lanes. We'd like to share an update about the design since we engaged the public in winter 2021 at the 50% design; how public, stakeholder, and interest group input was considered during design development; and next steps.

ABOUT THE PROJECT

With over 24,000 vehicles traveling on Highway 7 each day, safety and efficiency are concerns on this busy east-west connector. Along with being an important community link, the route is well-used for tourism, business activities, and movement of goods related to port and rail. Investing in infrastructure upgrades is important to help increase safety, capacity, reliability, and efficiency for all road users between the communities of Maple Ridge and Mission and beyond.

OUR PROCESS

Since we engaged the public in winter 2021, design development has progressed significantly. Public input, along with technical analysis, stakeholder and interest group coordination, and cost considerations have helped shape the current design. As we approach the next steps, we'd like to share what's changed and how input was considered in the process. The project is now in final stages of development and is anticipated to begin construction this fall.



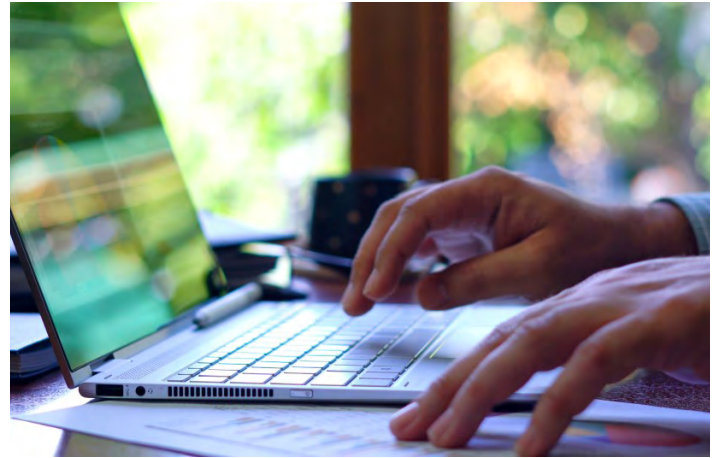
engage.gov.bc.ca/highway7widening266-287

DESIGN CONSIDERATIONS

Throughout design development, the Ministry has worked to develop a design that considers project constraints and balances multiple stakeholder, interest group, and community needs. This segment of highway faces multiple constraints for highway infrastructure development including the adjacent CP rail line; Whonnock, York, and Potter Creeks and environmental considerations; steep slopes and other ground conditions; nearby utilities including BC Hydro infrastructure; private properties; and Kwantlen First Nation land. Maintaining access for local business, commercial, and industrial operations, emergency services, and public transportation routes; meeting municipal and regional objectives; and understanding community and interest group desires have also been important.

ENGAGEMENT PROCESS

Public engagement has been an integral part of the design development process. Over the past two years, the Ministry has engaged with multiple stakeholders, interest groups, local Indigenous communities, and the public to understand concerns, key issues, and potential opportunities for this segment.



HOW INPUT WAS CONSIDERED

Public input was considered, along with key project constraints, technical stakeholder and interest group input, technical analysis, local and regional planning and policies, and cost considerations to refine the design. Balancing stakeholder and interest group needs was a key factor in developing a design that improves safety, reliability, and efficiency for highway users.

The following pages summarize the design and how we addressed concerns during design development, or will continue to collaborate on during implementation.



Read the Engagement Summary

To learn more about what we heard during the public and stakeholder engagement process, please read the Public & Stakeholder Engagement Summary (Summer 2022).



WHAT'S CHANGED SINCE THE 50% DESIGN?

River Road South (Industrial Area)

- ▶ Jug-handle that functions as the West turnaround for all road users
- ▶ New signalized intersection (west of 266th St.) for safer access to area
- ▶ River Road South will be municipal standard (e.g., paved)

Kwantlen First Nation Lands

- ▶ Unsignalized intersection to provide safer access to Kwantlen IR #1
- ▶ Further environmental enhancement measures identified to avoid, reduce, and mitigate environmental impacts to fish-bearing streams based on consultation

287th Street Intersection

- ▶ Refined east turnaround to minimize property impacts
- ▶ Left-turn signalization upgrade from Highway 7 eastbound to northbound on 287th Street to address concerns about safety



Ongoing Consultation

- ▶ Ongoing consultation with local, regional, and provincial government and agencies, local Indigenous communities, and key stakeholders to further understand long-term active transportation needs and other planning objectives

272nd Street & River Road North

- ▶ Removed proposed roundabout to limit project footprint and reconfigured (see next page)
- ▶ Refined 272nd Street intersection to improve safety and highway access
- ▶ Parking available on River Road to access local businesses

280th Street Intersection

- ▶ Intersection improvements to provide safer access for pedestrians to safely access existing transit stop
- ▶ Improved intersection for safer highway access



RIVER ROAD SOUTH: WEST OF SPILSBURY ROAD TO 266th STREET

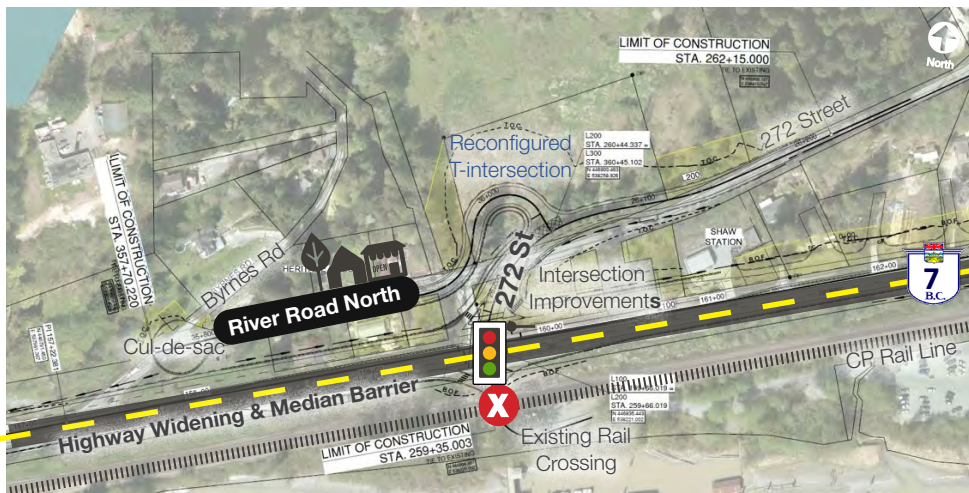


River Road South provides access to many local businesses and commercial / industry operations that exist north of the Fraser River.

Highlights

- ▶ Designated River Road South as the west turnaround to improve movements for all vehicles.
- ▶ Allowed the signalized eastern intersection to provide full movements; however, the western intersection will be restricted to right-in / right-out due to continuous median barrier
- ▶ Engaged local businesses, commercial/industrial stakeholders, and emergency services to understand concerns and current operations
- ▶ Added a new signalized intersection at River Road South (west of 266th Street) including right and left-turn lanes
- ▶ Upgraded River Road South to a municipal road standard

272nd STREET & RIVER ROAD NORTH



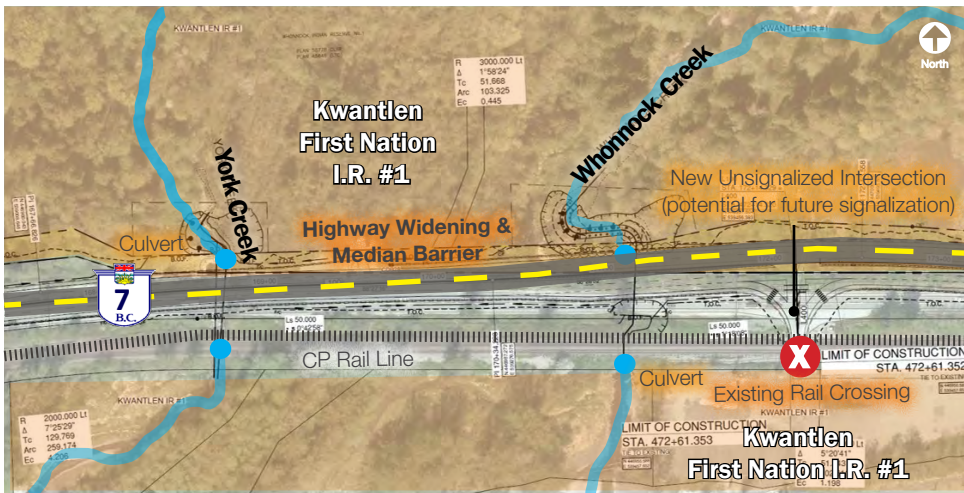
Originally proposed as the west turnaround, 272nd Street and River Road North was reconfigured as a T-intersection to limit property impacts and address steep slope challenges. The West turnaround will now be River Road South loop. This area features residential properties including heritage properties, small businesses, and the Canada Post office.

Highlights

- ▶ Refined intersection to T-intersection to improve safety and efficiency for drivers entering and exiting the highway — the intersection will support residents and large truck and trailer deliveries for businesses
- ▶ Re-designated River Road as a local road (jurisdictional change from regional road) with a cul-de-sac at end of Byrnes Road
- ▶ Added parking on River Road North to support businesses
- ▶ Limited impacts to heritage properties
- ▶ Added a pick-up sensor on south side of 272nd Street to reduce rail conflicts
- ▶ Considered input from property owners for lighting design and noise mitigation



KWANTLEN FIRST NATION LANDS: 272nd STREET TO IR #1



This segment features high environmental values. Engagement with Kwantlen First Nation was ongoing throughout design development through a separate, parallel process that promoted relationship building, reconciliation, and environmental protection.

Highlights

- ▶ Consulted with environmental organizations and Kwantlen First Nation to identify opportunities to enhance habitats and avoid, reduce, or mitigate potential impacts on riparian areas including fish-bearing streams at York and Whonnock Creeks (and other sensitive wetland areas)
- ▶ Added culverts to provide better capacity for high water flows and allow wildlife passage
- ▶ Added an unsignalized intersection at IR #1 to provide safer access (with potential for future signalization by Kwantlen First Nation based on their long-term goals)

WHONNOCK/IR #1 TO 280th STREET



The segment between Whonnock and Kwantlen First Nations IR #1 and 280th Street is mainly private properties. There were only minor refinements to the design for this section based on technical analysis and consultation with property owners and other stakeholders.

Highlights

- ▶ Ensured private property driveway accesses are maintained for most properties with slightly increased slopes
- ▶ Maintained the concrete median barrier through this stretch which will limit left turns to properties and turnarounds will need to be used
- ▶ Added wider shoulders to allow vehicles to pull off the traveled lane



280th STREET INTERSECTION



The area around 280th Street features mostly private properties and some businesses. The 280th Street intersection includes a transit stop.

Highlights

- ▶ Improved safety and access for pedestrians to walk to and from the existing bus stop with refined pedestrian crossings and 'quadrant islands'
- ▶ Slightly relocated the bus stop to the west side of 280th Street
- ▶ This section is the start of the split grade median wall (i.e., westbound lanes will be higher than eastbound lanes)

EAST TURNAROUND: 287th STREET INTERSECTION



The 287th Street area will function as the east turnaround. The design of the jug-handle turnaround was refined to minimize impacts to private properties. The intersection will include an upgraded left-turn signal from Highway 7 northbound onto 287th Street to address stakeholder concerns about safety.

Highlights

- ▶ Refined east turnaround jug-handle design to minimize property impacts
- ▶ Made minor intersection improvements for safety
- ▶ Maintained a split grade median retaining wall (i.e., westbound lanes will be higher than eastbound lanes) to avoid impacts to the BC Hydro transmission tower (ongoing consultation with BC Hydro)
- ▶ Maintaining ongoing collaboration with other utility providers to relocate infrastructure and address current and future infrastructure needs
- ▶ Reviewed stakeholder concerns with the City of Maple Ridge and will continue to collaborate with the City on the 287th Street intersection

GENERAL

- ▶ Highway widening to this segment will provide overall improvements to paving, lighting, road markings, and signage that will resolve many of the current issues stakeholders and the public identified such as safety, poor sight lines, road function, and access.
- ▶ Highway upgrading will also provide some operational improvements such as maintenance that will further improve safety.

ACTIVE TRANSPORTATION

- ▶ Public feedback identified that some community members were concerned about the adequacy of active transportation (cycling, walking, rolling) provisions in the design originally proposed as a 2.0 m wide paved shoulder. The Ministry undertook consultation to understand concerns; viewed statistics, planning policy, and design approach; and investigated the potential of a 3.0 m wide, continuous, bi-directional multi-use path. Significant physical project constraints, technical issues, planning considerations, and overall corridor safety made the possibility of a continuous 3.0 m multi-use path challenging; however, does not preclude active transportation enhancements in future projects outside the project. Through this process, sustainable transportation has been recognized as warranting a broader corridor plan in the near future and planning is in process to identify needs as funding becomes available.
- ▶ The current design will include a 2.0 m wide paved shoulder that is consistent with the other parts of the corridor, and meets provincial guidelines for active transportation.
- ▶ The Ministry is committed to working internally, as well as with transportation and mobility groups, TransLink, Metro Vancouver, Kwantlen First Nation, and the City of Maple Ridge during future planning processes to address active and sustainable transportation needs.

RAIL CROSSINGS

- ▶ Rail crossings in the Highway 7 vicinity are maintained by CP Rail. No changes to at-grade crossings are anticipated other than improved signals and control arms at 272nd Street (within Ministry-owned right-of-way). There will be ongoing consultation with CP Rail.

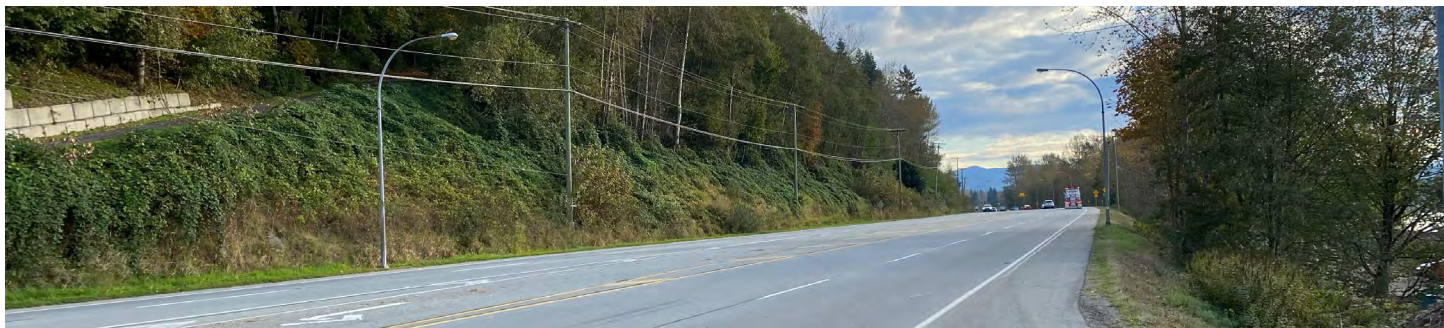
ONGOING COLLABORATION

- ▶ The Ministry had extensive consultation with the City of Maple Ridge and will continue to collaborate with the City as well as Metro Vancouver, Kwantlen First Nation, industry stakeholders, and interest groups to continue to build synergies and collaborate on long-term planning and policy development in the region.

Summary of Improvements

- ▶ **Widening the highway** from two lanes to four lanes between 266th Street and 287th Street to improve efficiency and reliability
- ▶ **Installation of a new centre median barrier** on the existing four-lane highway from west of Spilsbury Road to 266th Street to reduce risks of vehicle crossovers and improve safety
- ▶ **Two strategically located vehicle turnarounds** to maintain safe and efficient access along corridor:
 - » **West turnaround at** Highway 7 and River Road South (fully signalized)
 - » **East turnaround at** Highway 7 and 287th Street area
- ▶ **Highway shoulders widened** to 2.0 m in both directions along the segment to provide safer options for cyclists and pedestrians
- ▶ **Intersection improvements** at three signalized intersections; a new signalized intersection at west turnaround; and a new unsignalized intersection:
 - » River Road North / 272nd Street improvements
 - » 280th Street improvements
 - » 287th Street improvements
 - » New signal at River Road South (west of 266th Street)
 - » New unsignalized intersection at Kwantlen First Nation IR #1 (opportunity for future signalization by Kwantlen)
- ▶ **Adequate gaps** along the segment will allow vehicles to safely access or exit the highway

NEXT STEPS



ANTICIPATED CONSTRUCTION

The design recently underwent an independent road safety audit process which is standard for highway design development projects. The Ministry has now put the project out for tender which means it is inviting potential contractors through a competitive process to submit bids to construct the project. Construction will begin Fall 2022 following contract award.

PROJECT FUNDING

The total project budget is \$106.41 million. The Province of B.C. is contributing \$77.2 million, with the Government of Canada contributing up to \$29.2 million through the New Building Canada Fund, Provincial-Territorial Infrastructure Component – National and Regional Projects.

QUESTIONS

If you have questions about the project, please get in touch through our project mailbox: Hwy7.266to287@gov.bc.ca



Ministry of Transportation and Infrastructure

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