Shortlist Option 1: Overland Forcemain

This option would see a trench dug along existing roadways, with a new pipe installed between the Courtenay Pump Station and the sewage treatment plant (see image below for route). This means installing pipe up and over the Comox Road and Lazo Road hills. It also includes:

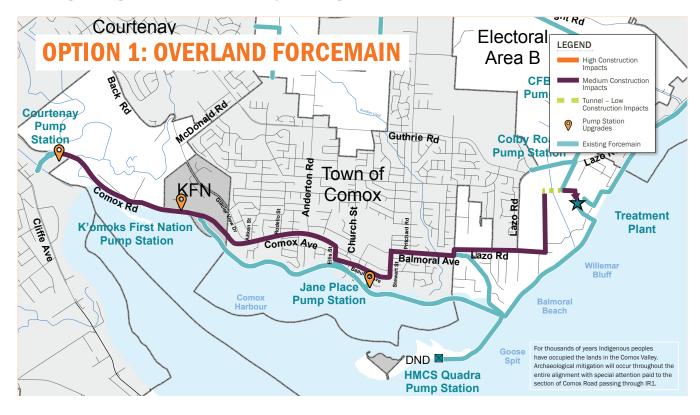
- Replacement of the Courtenay Pump Station to accommodate the high-pressure pumps needed to push wastewater up over the two hills
- Upgrades to the K'ómoks First Nation and Jane Place pump stations
- Tunneling beneath the Lazo Marsh
- *Our engineering consultants are currently reviewing whether this option could be delivered in phases.



Cost to Build: \$65M

Cost to Run and Maintain (30-Year): \$17M

Cost Per Household: \$240/ household for 20 years



Route Impacts:

The proposed route for Option 1 would follow Comox Road through K'ómoks First Nation IR1 land and into the Town of Comox, where it would continue along Comox Ave, turning south on Ellis, then east on Beaufort Avenue, north on Stewart St, and then east on Balmoral and Lazo Road, and up Morland Road to connect to the treatment plant on Brent Road.

Anticipated construction impacts include:

• Medium impact: The entire construction route

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would see single-lane alternating traffic at multiple locations through route.

- Archaeological Mitigation: Along the entire alignment but especially on Comox Road through IR1.
- Low impact: Tunnelling in Lazo Marsh has the potential for increased traffic, noise in surrounding areas.



Shortlist Option 2: Tunnel Forcemain

This option combines 'cut and cover' construction (trenching) with directional drilling (a type of tunneling). The trench would be dug, with pipe installed, along existing roadways for much of the route, but tunneling would be used to go through rather than over the Comox and Lazo Road hills. It also includes:

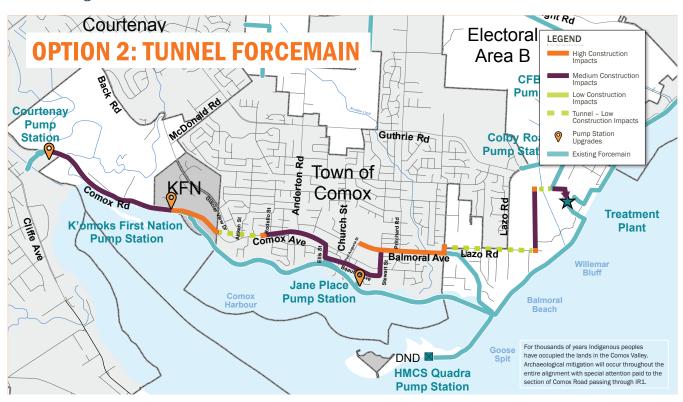
- Upgrades to all three pump stations on the route: Courtenay, K'ómoks First Nation and Jane Place
- Tunneling beneath the Lazo Marsh



Cost to Build: \$58M

Cost to Run and Maintain (**30-Year**): \$13M

Cost Per Household: \$210/ household for 20 years



Route Impacts:

The proposed route for Option 2 would follow a similar route as Option 1 - however the work at Comox Hill and Lazo Hill would include tunneling, rather than trenches. This would mean reduced roadway work in those areas, but additional impacts in areas around the tunnel entry/ exit locations.

Anticipated construction impacts include:

 High impact: Comox Road (Dyke Road) from K'ómoks First Nation pump station to the bottom of Comox Hill due to single lane alternating traffic for an extended period. Balmoral (from Port Augusta to Pritchard) and small sections at

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the top of Comox Hill and the end of Lazo and Morland would see periods of local traffic only.

- Medium impact: Comox Road (Dyke Road) from Courtenay Pump Station to K'ómoks First Nation pump station and on Comox Ave, Ellis, Beaufort, Stewart, Morland and Brent Road - single lane alternating as work progresses.
- · Archaeological Mitigation: Along the entire alignment but especially along Comox Road through IR1.
- Low impact: Tunnel areas at Comox Hill, Lazo Hill and Lazo Marsh with Increased traffic, noise in surrounding areas.



Shortlist Option 3: Phased Tunnel Forcemain

This option uses the combined trench-and-tunneling route of Option 2 but breaks the project into two phases. Phase 1 would include the stretch between Marina Park and the treatment plant. Phase 2 would replace the pipe between Courtenay Pump Station and Marina Park in 15-20 years. It also includes:

- Upgrades to all three pump stations on the route: Courtenay, K'ómoks First Nation and Jane Place
- A temporary line from a tie-in at Marina Park to the new forcemain on Beaufort Ave for 15-20 years until Phase 2 of the project is introduced
- A new line from Jane Place to new forcemain
- Lowest immediate cost to build
- Tunneling beneath the Lazo Marsh

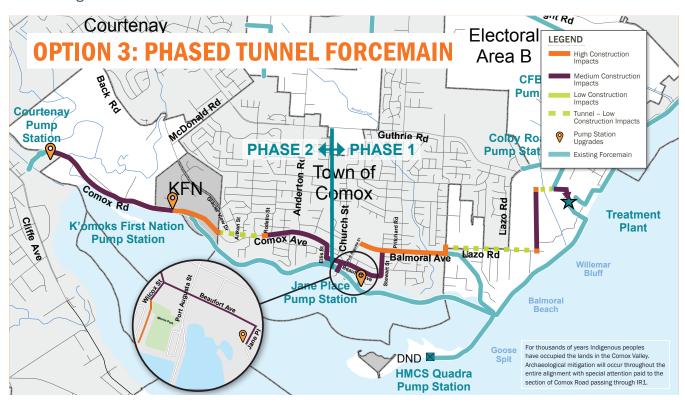


Cost to Build: \$43M

Cost to Run and Maintain: \$13M

Cost Per Household: \$160/ household (until Phase 2)

Phase 2 Capital Cost (to be implemented in 15-20 years): \$18M



Route Impacts:

The proposed route for Option 3 is the same as Option 2 - however only the work between Marina Park and the Sewage Treatment Plant would be undertaken at this time, with construction on the remainder of the route to occur in 15-20 years. Construction in the first phase would be focused between Marina Park, Jane Place/ Beaufort Ave, Balmoral Ave and Lazo/Brent Roads.

Anticipated construction impacts include:

High impact: Balmoral (from Stewart to Pritchard)

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and small sections at the end of Lazo and Morland would see periods of local traffic only. Marina Park parking lot would see high impact with limited disruption to boat ramp access.

- Medium impact: Wilcox, Beaufort, Jane Place and Morland Ave would see single lane alternating traffic.
- Low impact: Lazo/Brent Road areas: Increased traffic, visible and active equipment, noise in surrounding areas.

