About the Conveyance Project



Urgent need identified by Liquid Waste Management Plan

Upgrade to pipes + pump stations

Protect estuary, beach + Baynes Sound

Move pipes inland away from water

Construction start spring 2023





Timeline to date

2018: Liquid Waste Management Plan process begins, includes a Public Advisory Committee with Lazo area represented



Jan. 2019: Long list of options presented to the public for feedback May 2020: Shortlist of conveyance options approved by Sewage Commission



Fall 2020: Shortlist of options presented to the public for feedback, including direct outreach with Lazo area residents. Feb. 2021: Preferred Route option approved by Sewage Commission

Mar./May 2021: Webinars provided for Lazo area residents



July 2021: Borrowing approved via an Alternate Approval Process

Fall/Winter 2021: Planning/ assessment for route design, outreach to right-of-way property owners Early Feb. 2022: Info sessions with Lazo area residents, groundwater policy shared



Late Feb. 2022: Sewage Commission final decision on scope of work



Route Updates

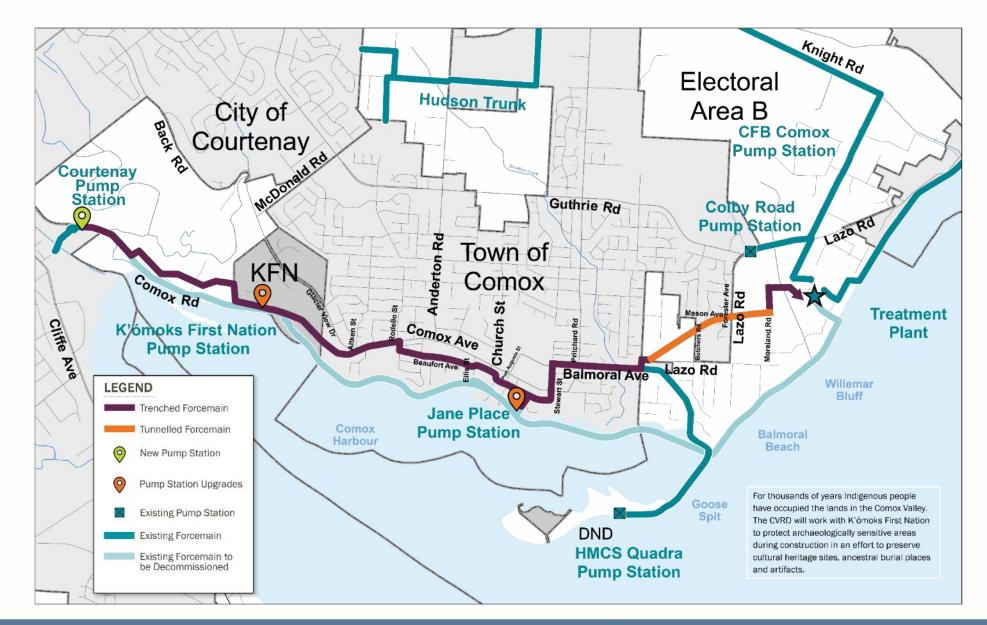
Rebuild/relocate Courtenay Pump Station

Move away from archeological significant area

Trenching/cut and cover at Comox Hill

Move portion from Comox Avenue to Beaufort Avenue

Consider further options for Lazo Marsh







Lazo Area Outreach: What we've heard 66 **Neighbourhood and** 66 property impacts **Aquifer Protection** 99 66 66 Leak detection Impact to wells and emergency

99

response



and groundwater

99



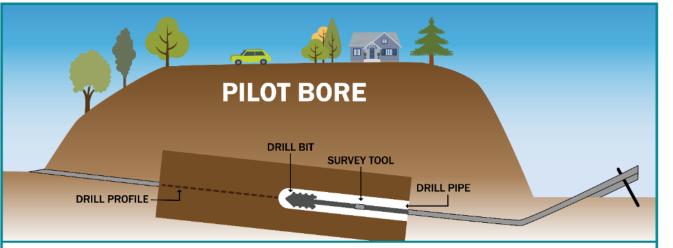
What we've been working on



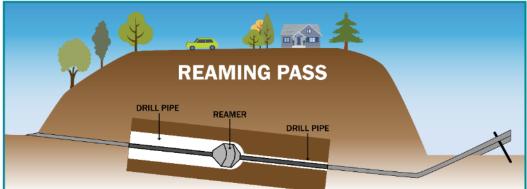
- ✓ Retain engineer and drilling experts
- ✓ Detailed review of hydraulics
- ✓ Continued groundwater assessment
- ✓ Refine route map to avoid wells, reduce right-of-way and lay-down impacts
- ✓ Update cost estimates to use High Density
 Polyethelene Pipe (HDPE) and gravity flow at Lazo Hill
- ✓ Additional geotechnical testing



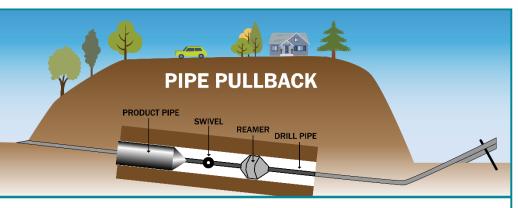
About Horizontal Directional Drilling (HDD)



1. Pilot bore: A process called a pilot bore established the underground path for the new sewer pipe.



2. Reaming Passes: The contractor will enlarge the tunnel to the final pipe size using multiple passes of a reamer. A bentonite-based drilling fluid 'Mud' keeps the borehole stabilized – the drilling mud is collected and recycled.



3. Pipe Pullback: The pipeline is assembled at surface in a long single string and is then pulled through the tunnel into its final position.

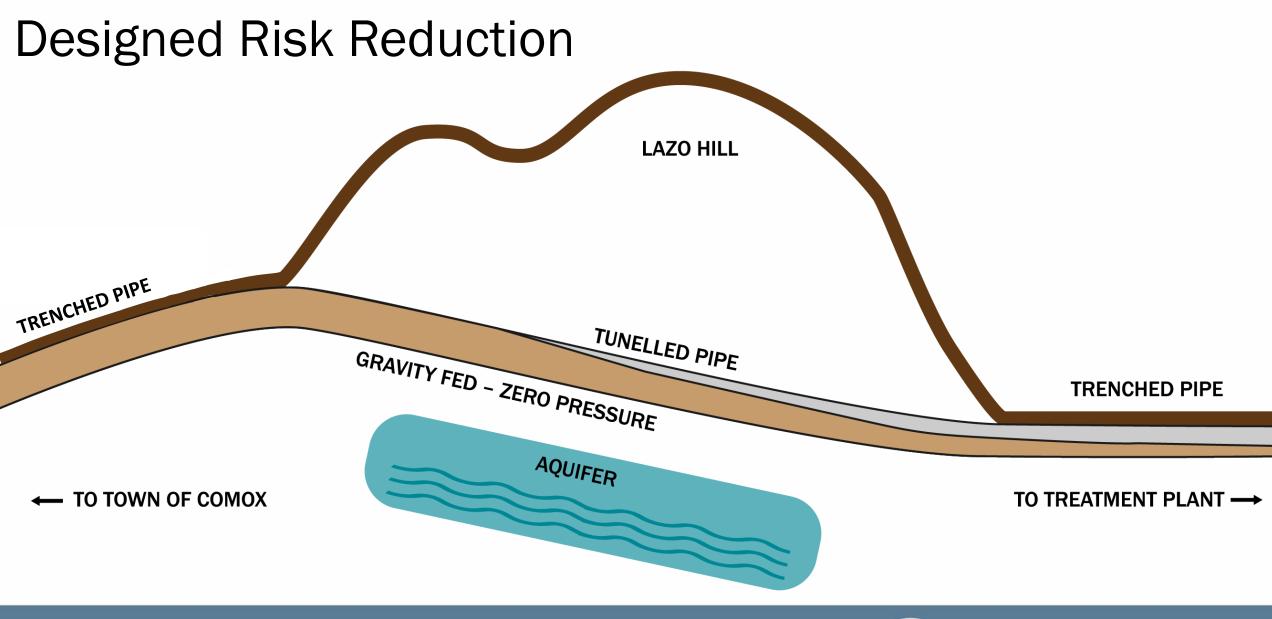


Lazo Hill Alignment

- ✓ Single shorter HDD Line
- ✓ Minimum 20m offset from all deep groundwater wells
- ✓ Impacts fewer properties
- ✓ Reduces disruption from lay-down area
- ✓ Update to HDPE
- ✓ Gravity flow through Lazo Hill
- $\checkmark\,$ Locate pipe out of aquifer

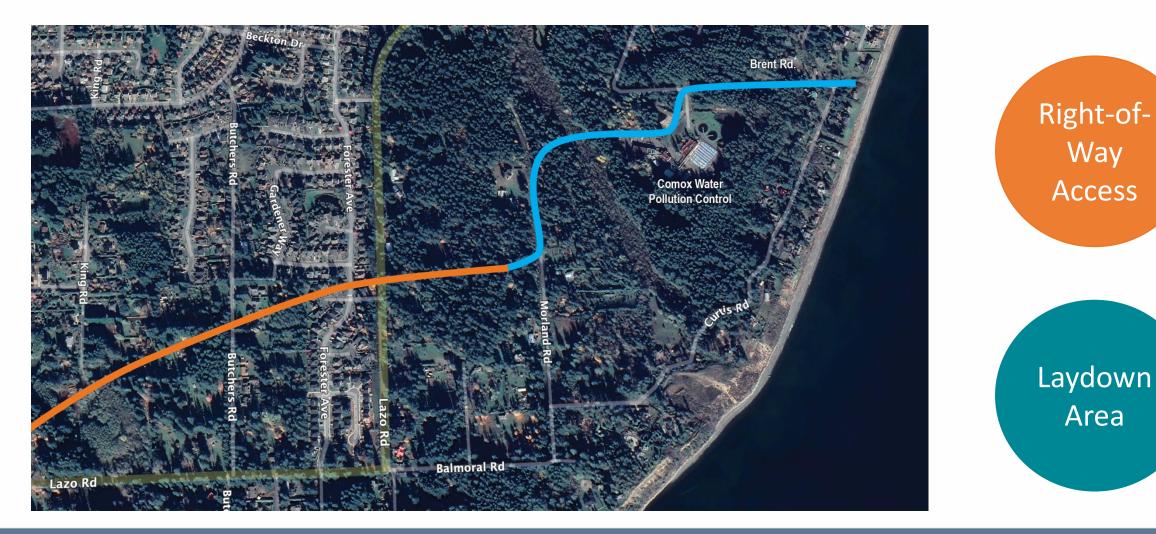






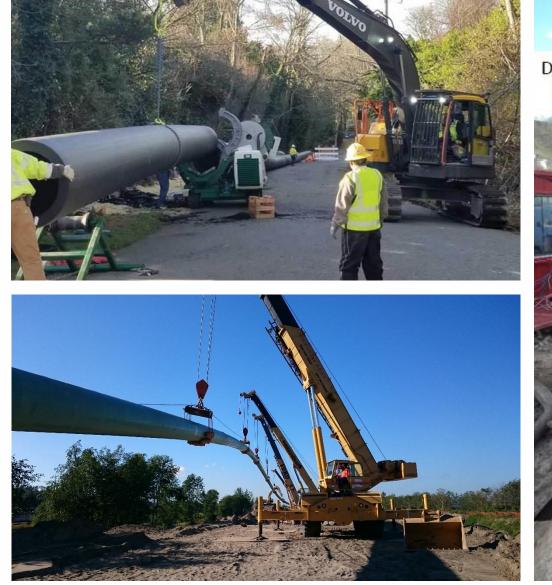


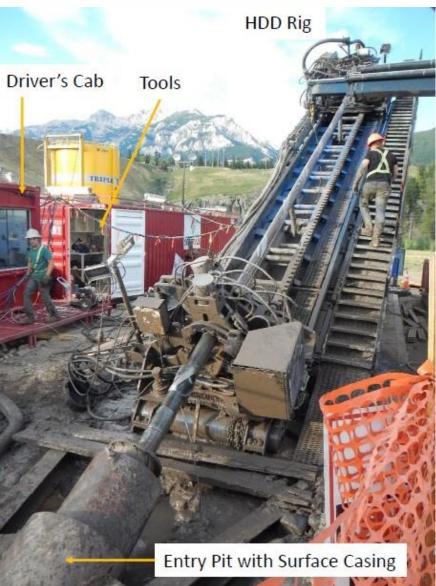
Property Impacts





Examples of Activity







Groundwater Protection Policy

Groundwater/Aquifer Protection

CONCERN

Risk Management

Impact on Properties

Monitoring program for groundwater quality

Design + build a well engineered pipe that can withstand seismic events

Utilize acoustic leak detection

Repair a leak as quickly as possible, in the extremely unlikely event one should occur

COMMITMENT

Provide all reasonable assistance should well be contaminated

FULL POLICY AT www.connectcvrd.ca/conveyanceproject



Timeline Ahead

