McFEELY DRIVE
SANITARY SEWER SYSTEM
PACIFIC BEACH INVESTMENTS

A pumping station and force main were installed to service a waterfront development in West Qualicum Beach. The components were designed for a flow of 21.6 l/s but the pumps initially installed have a capacity of 13.7 l/s. The 150 mm diameter polyethylene force main is 1,000 m long, of which 340 m were installed along the foreshore below high tide level. A second force main was installed in the same trench to serve an adjacent area within the Town of Qualicum Beach. The force mains carry concrete weights to prevent flotation. Gravity sewers were installed upstream of the pump station to service Phase 1 of the service area.

Twin force mains installed along the foreshore, with concrete weights to prevent flotation

Foreshore condition after force main installation

The pumping station wet well was constructed using 1800 mm diameter precast concrete segments and the well has a depth of 5.8 m. The top of the wet well is above the projected flood elevation for Georgia Strait. Duplex pumps were installed, each capable of pumping the peak flow. The station valves were housed in a separate 1800-mm diameter precast chamber, adjacent to the wet well.

The control kiosk includes a receptacle and transfer switch so that a portable generator can run the station during a power outage. The kiosk is also above the projected flood elevation.

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