

CRAIG BAY TRUNK SEWER

CITY OF PARKSVILLE



Foreshore Section in front of Resorts

The City of Parksville required a connection from the Craig Bay area to the municipal sanitary sewage collection system. The Craig Bay Trunk Sewer incorporates two major pump stations and 8600 m of gravity sewer and force main. The system was designed to serve a population of 18,500.

A gravity main was installed along the Craig Bay foreshore, in the inter-tidal zone. This main was a 300-mm diameter concrete pipe 1,100 m long, installed on a concrete cradle for stability and weight. Manholes had watertight lids and the tops were buried below the surface of the beach for esthetic reasons in this tourist and resort area.

Since there is a significant variation in flows from summer (the tourist season) to the winter, each pump station was served by twin forcemains. This allowed the City to use one or both mains as required by the flows, and to maintain self-cleansing velocities in these mains. Forcemains were 200-mm and 300-mm diameter, PVC and high-density polyethylene.

At Craig Bay part of the pipe alignment passed through an area that had evidence of aboriginal settlement dating back 2000 to 3000 years. To prevent disturbance of this area, a 900-mm steel pipe, 100 m long was driven under the site at a depth of 6.0 m. A 400-mm gravity sewer and two 200-mm force mains were installed inside this steel pipe.

A gravity sewer was installed below the bed of the Englishman River. The sewer was 750-mm ductile iron and the river was 50 m wide at the crossing location. A cofferdam system was used to install the pipe in one half of the river bed while flow was diverted through the other half.

The project included 4750 m of gravity sewer, up to 600-mm diameter, to depths of 4.5 m. The sewer passed through a nature reserve where strict environmental controls were required. Pipe augering was required at two major highway crossings



Crossing the Englishman River