

**Construction Method:**  
**Horizontal Directional Drilling**



**Project:** Rockaway Beach Effluent Pump Station and Outfall Project

**Location:** Rockaway Beach, Oregon

**Project Description:**

Staheli Trenchless Consultants provided design review services for the construction of a 14-inch 4,200-foot HPDE ocean outfall using horizontal directional drilling. STC reviewed and evaluated the geotechnical investigation report and preliminary design, and prepared detailed geotechnical and construction considerations to be incorporated into the final design of the proposed outfall. Highlights of the project included a 60-foot elevation difference between entry and exit locations, challenging gravel layers, and crossings underneath Highway 101 and the P.T.B. Railroad.

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