

Construction Method:
Horizontal Directional Drilling



Project: Wastewater Force Main Replacement

Location: Nehalem, OR

Date: 2013-2016

Job Scope:

- ❖ Trenchless Feasibility Study
- ❖ HDD Alignment Study and Profile
- ❖ Pullback and Stress Calculations
- ❖ Geotechnical Risk Evaluation
- ❖ HDD Specifications
- ❖ Submittal Review and RFI Response



Project Description:

Staheli Trenchless Consultants designed and evaluated the construction feasibility of the installation of a 18-inch wastewater force main for Nehalem Bay Wastewater Agency. The upgrade included 1,400 feet of pipeline installed beneath the environmentally sensitive Nehalem River and Highway 101. After review of the geotechnical conditions and project constraints, STC designed a horizontal directional drill to install the new force main.

Challenges for the project design included navigating geotechnical conditions ranging from very soft soils to challenging gravels, auger boring under Highway 101, and reducing impacts to the surrounding residents and business, and the Nehalem River. STC evaluated trenchless constructability in the planning phase, developing a feasible alternative for the installation of the new force main that would meet project parameters while keeping cost and risk low. Construction of the HDD crossing was successfully completed in December 2016.

Reference: Rob Peacock, Project Manager, Kennedy Jenks Consultants 503.423.4019