

Glen Dhu Wind Farm | Design

Shear Wind Inc.



Description

Meco was contracted by Shear Wind Inc. to undertake a geotechnical investigation of soil, rock and groundwater conditions for the development of thirty wind turbine towers located in Barney's River, NS.

The purpose of the work was to establish the required information to design wind turbine foundations and access roads. The deliverable was a report describing the thickness and characteristics of each soil layer with a recommendation of the type of foundation that should be constructed at each site.

Meco was also contracted to develop the sediment, erosion and control (SEC) plan for the project. Work included controlling the hydrology and drainage along all the access roads of each wind turbine site, designing the hydraulic openings under the bridge locations to pass a 1:100 year flow. Construction drawings showing the plan layout, and sections of the access roads were developed with the required grades and thicknesses for the sub-base and road topping layers.

Responsibility on Project: Conduct the geotechnical investigation and document the findings and observations in a report outlining three different types of foundations that would be suitable for the specific site. Produce the construction drawings showing the road location and layout along with the drainage system. All required quantities for construction were obtained as well.

Relevance of Project: This project demonstrates Meco's ability and knowledge in the fields of geotechnical and foundation engineering, as well as hydrology and civil design.