EIGG Mountain Wind Farm – Geotechnical Engineering Services

The objectives of this detailed geotechnical investigation and analysis is to identify geological hazards and risks, define the subsurface conditions, generate detailed foundation design and construction recommendations using site-specific soil conditions and inform assumptions across the entirety of the project site.

Borehole Drilling Program

Specific routes are planned and coordinated between WSP and RES to access the borehole locations in an efficient manner that minimizes the distance traveled on each parcel while also avoiding sensitive environmental areas, if any, such as wetlands. Existing site entrances are used when possible, and the routes are scouted prior to the drill rig mobilization.

Boreholes are drilled to a maximum depth of 15 meres (50 feet) utilizing hollow-stem augers, or mud rotary drilling technique to identify the subsurface conditions through observation of the recovered samples and drill cuttings. An example of the rig can be seen to the right. Borings are backfilled following completion of the drilling per local and provincial requirements. Coordinates of the boreholes are recorded using a hand-held GPS and confirmed with ArcGIS field maps, accurate to within approximately 3-5m

Piezometers

Standpipe piezometers (2” to 3” PVC pipe) are placed in the boreholes after the geotechnical boring is complete to measure the groundwater. A reading will be taken at the time of installation, approximately one month after installation, and once in spring of 2026 to capture the highest groundwater level. The pipes will extend approximately 1m above the ground and flagged with a bright ribbon for visibility. The picture to the right is an example of a standpipe piezometer.

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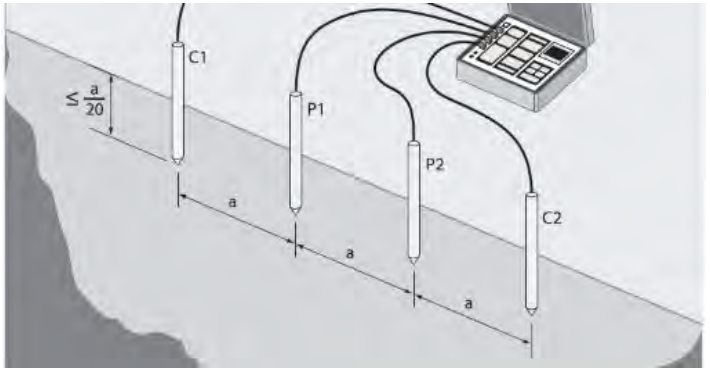

Electrical Resistivity Testing

This is a non- invasive test using very small metal pins that are inserted into the ground at a specified distance and connected via small wires to a device that measures the electrical resistivity properties of the ground. Testing will be conducted at all boring locations and span approximately 150m. The equipment will be installed and removed same day.

Laboratory Testing:

Representative soil and bedrock samples from the field programs are placed in properly sealed containers and submitted to WSP's CSA accredited laboratory located in Dartmouth, NS for index testing. The required laboratory tests will be conducted fully in-house whenever possible. If WSP is not certified to perform a required test, it will be subcontracted to a certified vendor.

WSP Contact

If you have any questions regarding the Geotechnical Program, please contact Clayton Rogers at (902) 478-6143.

Thank you from the WSP and RES team.