

Motions Road 11kV Overhead Improvement Project

*Project: 11kV Overhead Improvement Project
Client: Vector Limited, Auckland City Council, Auckland Zoo, Jesmond Construction
Location: Motions Road, Western Springs, Auckland
Contract Value: \$ 1.2 Million*

As a result of the decision by the Museum of Transport and Technology (MOTAT) to extend their tramline from the Auckland Zoo to MOTAT's Aviation and Rail museum in Motions Road, Vector agreed to covert their overhead lines to underground to make this extension possible.

Vector awarded Electrix the contract to convert these lines, which also included liaising with the Auckland Zoo, MOTAT, Tapac, Western Springs College and Metrowater.

The project involved trenching about 750 meters in hard volcanic rock, hauling High Voltage and Low Voltage cables, installing 36 Streetlights, a 300kVA transformer, a SDAF3 Switch and 2 SDAF's. In addition to this Electrix was also tasked with the design, manufacturing and installation of a steel duct crossing for the Motions Road Creek.

The work site posed several challenges. The area proved to have some of the hardest volcanic rock encountered in Auckland. For this Electrix used a Vermeer Rocksaw and an Attommic rock drill to a smaller extent. Electrix was also employed to write a special methodology to protect Vector assets during an impact rolling exercise by Jesmond Construction in preparation for the MOTAT Tram track.

Due to incubators and water pumps running at Auckland Zoo, they could not afford a power interruption during the cut-over. For this Electrix deployed a no-break switch and generator, which guaranteed an uninterrupted power supply.

This high profile project was completed to Vector and all the stakeholders satisfaction, without any lost time injuries.



Landscape Before Project



Landscape After Project

Electrix Limited
2 George Bourke Drive,
Mt. Wellington
Auckland
PO Box 1688, Auckland
New Zealand
Phone: +64-9-270 1700
Fax: +64-9-270 1701