Geomatics Surveyor

Reports to:	Engineering Geology Team Leader	**Position Status:**	Permanent
Unit:	Science Operations – Geological Systems	**Location:**	Avalon, Lower Hutt
Department:	Surface Geosciences	**Team:**	Engineering Geologyst
Direct Reports:	Nil	**Budget & Delegated Authority:**	Refer to Delegated Financial Authority Policy
Career Step:	6	**Job Family:**	Science & Research or Research Lab & Field Technology
Career Path:	Research or Specialist	**Date:**	June 2026

Role Purpose

To deliver and provide advice on surveying and geomatics research and applications, including the collection, storage, processing, and delivery of spatial data describing the Earth's surface. To apply technologies such as GIS, remote sensing, AI, and conventional surveying methods to manage, map, and analyse data for landslide and other geohazard research and commercial projects in New Zealand and overseas. To support local and international geohazard response activities. To support or lead the generation and delivery of research outputs and commercial outcomes for Earth Sciences New Zealand's clients. Experience in bathymetric surveying and associated data processing is desirable and may be applied to support oceanographic projects.

Position Priorities and Responsibilities

Scientific Research/Technical Support

- Provide geomatics and surveying expertise for research and/or consulting activities, focused on measuring the deformation of the ground at various temporal- and spatial-resolutions.
- Plan, collect, process, and blend field-based, near- and remotely sensed geospatial datasets, using a range of geodetic systems including Global Navigation Satellite System (GNSS), in-situ deformation sensors, terrestrial and airborne lidar, Synthetic Aperture Radar (SAR), optical imagery, and data from other remote- and near-sensing methods.
- Develop innovative processing methods/pipelines/workflows to collect the data, clean and analyse geospatial data, and then use it to develop different ground deformation products, for use in research and/or consulting projects.
- Provide support for bathymetric data acquisition and processing as required.

Commercial

- Contribute to the delivery of commercial projects, particularly related to the planning, collection,

processing, and analysis of geomatic and hydrographic data, and reporting of results.

- Contribute professional advice and commercial outcomes for clients, particularly in landslide hazard and surveying applications.
- Support or lead the identification and contracting of commercial business opportunities.

Equipment Maintenance and Training

- Maintain and service surveying equipment and other Engineering Geology equipment.
- Provide training and support to staff on data acquisition, cleaning and processing pipelines.

Geohazard Event Response

- Provide technical support for the successful execution of local and international landslide or other geohazard response activities.

Responsibilities of all Employees

- Comply with all Earth Sciences New Zealand policies, procedures and frameworks, and act in line with the organisational values.
- Contribute to our healthy and safe workplace by following HSW expectations outlined in and integrated into our operational practises and HSW frameworks, including undertaking HSW training and participating in health-monitoring programmes relevant to your work.
- Work effectively as a team member by fostering good relationships and supporting others, providing coverage of other functions as required and ensuring workloads are evenly spread.
- Have the flexibility to adapt and develop as the organisation and its environment evolves.

Key Working Relationships

Internal	External
• Earth Sciences NZ Science Geodynamics Team, Paleoseismology Team, Ocean Geoscience Team, and GeoNet.	• Infrastructure owners and operators, community groups including iwi, geotechnical consultants, local and regional councils, Toitū Te Whenua Land Information New Zealand, School of Surveying University of Otago, and surveying equipment and software providers.

Person Specification

Qualifications and Experience

Essential

- Degree in surveying, geomatics, or equivalent qualification.
- At least 3 years of relevant experience surveying or in geomatics research.
- Able to acquire a full driver licence.

Desirable

- Postgraduate degree in geomatics or related topic area.
- At least 5 years of relevant experience surveying or in geomatics research.
- Experience with bathymetric surveying, including multibeam acquisition and/or processing

Skills, Knowledge and Attributes

- Knowledge of GNSS technology, coordinate systems and datums.
- Knowledge of remote-sensing equipment and data platforms (e.g. total stations, GNSS/GPS, LiDAR, SAR, optical imagery).
- Skilled in geospatial analysis, including geographic information system (GIS) and 3D point clouds.
- Ability to safely plan and execute terrestrial field surveys in urban and remote environments.
- Willingness to undertake multi-day fieldwork trips, including occasional multi-week trips (e.g. offshore marine surveys).
- Excellent data management skills.
- Excellent written and verbal communication skills, with a track-record of technical report writing.
- Good analytical and problem-solving skills.
- Ability to work independently.
- Flexible and adaptable team player.
- Excellent time management and organisational skills.