Traction Field Engineer

Position Description – Auckland Metro

Team:	Traction, Programme and Delivery	**Location:**	Auckland
Reports to:	Traction Engineering and Asset Manager		
Role Type:	Permanent		

About Us

KiwiRail's Role in Aotearoa, New Zealand

KiwiRail, a proud State-Owned Enterprise, delivers sustainable and inclusive growth for our customers, communities, and people.

For more than 150 years, rail in New Zealand has connected communities, delivered freight and passengers around the country, and showcased our spectacular scenery to the world. Our purpose—Hononga Whaikaha, Oranga mo Aotearoa (Stronger Connections, Better New Zealand)—speaks to connection with our customers and the future needs of their businesses, connection with the communities we serve and operate in, and connection with each other. KiwiRail is carrying this legacy into the future, delivering connected rail and shipping transport services that create economic, social, and environmental value for New Zealand and New Zealanders.

Our Workplace

At KiwiRail, our values define the behaviour we expect from everyone. We have a team of over 4500 people, and every connection we make with each other, our union partners, our customers and all our stakeholders must be of the highest standard.



Safety, health, and well-being are our number one priority, ensuring our people return home safe and healthy every day.

About the Role

Purpose of the role

KiwiRail is in a phase of significant transformation to modernise and grow our rail and Interislander ferry services in Aotearoa.

The Traction Field Engineer provides specialist engineering, asset management, and technical support for Auckland Metro's traction power assets, including overhead line equipment, substations, and bonding systems.

The role supports the safe, reliable, and efficient performance of traction assets by providing technical advice, undertaking engineering assurance, monitoring asset condition and maintenance performance, and supporting maintenance and renewal planning. The role works closely with contractors and KiwiRail teams to ensure work meets engineering, safety, and regulatory requirements and contributes to continuous improvement across the traction network.

Key Accountabilities

Within the area of responsibility, this role is required to:

- Provide specialist engineering and technical advice to support the safe, reliable, and compliant operation and maintenance of Auckland Metro traction assets.
- Monitor asset condition, performance, and maintenance information to identify risks, trends, and priorities for maintenance and renewal planning.
- Provide engineering assurance through inspections, audits, technical reviews, and commissioning support, ensuring identified deficiencies are addressed.
- Maintain accurate traction asset information, controlled technical documentation, drawings, and engineering records to support effective asset management.
- Monitor contractor performance and compliance with engineering, safety, installation, and maintenance requirements, taking action on identified issues.
- Identify and implement improvements to traction maintenance practices, technical processes, asset reliability, and operational efficiency.

Key challenges

- Balancing network availability and maintenance requirements with the need to maintain rigorous electrical, rail safety, and engineering standards in a live operational environment.
- Identifying emerging asset risks and making sound technical recommendations where asset condition, maintenance history, operational constraints, or available information may be incomplete.
- Coordinating technical requirements across KiwiRail teams, maintenance contractors, consultants, and suppliers to achieve consistent and compliant traction asset outcomes.

Key Relationships Here are the key relationships relevant to this role		Manage /Lead	Deliver to	Collaborate with	Advise or inform
Internal	Traction Manager – Auckland Metro		✓	✓	
	Traction and Electrical Engineering teams	✓			
	Signalling and Telecommunications Engineering, Network Services, Production, and Asset Engineering teams		✓	✓	
	Traction Maintenance Contractor		✓	✓	

External	Consultants and electrical contractors		✓		
	Electrical equipment suppliers		✓	✓	

What you will do to contribute

Health Safety and Wellbeing	• Prioritise safety when providing technical advice, planning field activities, and assessing traction asset risks. • Identify, assess, report, and support effective control of electrical, rail, and workplace hazards. • Follow applicable rail safety, electrical safety, and KiwiRail requirements and challenge unsafe behaviours when identified. • Use inspections and audits to identify safety risks and ensure corrective actions are appropriately addressed. • Consider the safety of employees, contractors, customers, and the public when recommending engineering or maintenance solutions. • Report and respond to safety incidents and emerging risks in accordance with KiwiRail requirements.
Customer Focus	• Prioritise safety when providing technical advice, planning field activities, and assessing traction asset risks. • Identify, assess, report, and support effective control of electrical, rail, and workplace hazards. • Follow applicable rail safety, electrical safety, and KiwiRail requirements and challenge unsafe behaviours when identified. • Use inspections and audits to identify safety risks and ensure corrective actions are appropriately addressed. • Consider the safety of employees, contractors, customers, and the public when recommending engineering or maintenance solutions. • Report and respond to safety incidents and emerging risks in accordance with KiwiRail requirements.
High Performing Teams Skills	• Consider asset lifecycle, reliability, maintenance, safety, and cost implications when developing technical recommendations. • Support effective maintenance and renewal planning using asset condition and performance information. • Monitor contractor delivery and identify issues that could affect quality, cost, programme, or asset performance. • Support fit-for-purpose technical solutions that balance operational requirements with whole-of-life asset outcomes. • Identify opportunities to improve productivity, reduce rework, and make maintenance practices more efficient.
Commercial Acumen	• Consider asset lifecycle, reliability, maintenance, safety, and cost implications when developing technical recommendations. • Support effective maintenance and renewal planning using asset condition and performance information.

	• Monitor contractor delivery and identify issues that could affect quality, cost, programme, or asset performance. • Support fit-for-purpose technical solutions that balance operational requirements with whole-of-life asset outcomes. • Identify opportunities to improve productivity, reduce rework, and make maintenance practices more efficient.
Engineering and Asset Management	• Consider asset lifecycle, reliability, maintenance, safety, and cost implications when developing technical recommendations. • Support effective maintenance and renewal planning using asset condition and performance information. • Monitor contractor delivery and identify issues that could affect quality, cost, programme, or asset performance. • Support fit-for-purpose technical solutions that balance operational requirements with whole-of-life asset outcomes. • Identify opportunities to improve productivity, reduce rework, and make maintenance practices more efficient.

Decision Making

The position is accountable for decisions regarding all project operational objectives and for the provision of advice to project team members and relevant stakeholders on day to day operational decisions.

Key decision-making requirements of the position include:

- Assessing traction asset condition and maintenance compliance
- Identifying technical and safety risks
- Providing recommendations for maintenance and corrective work
- Determining appropriate technical responses to routine field issues

Human Resources Delegations	Nil
Direct reports	Nil
Finance Delegations	Nil
Budget (operating and capital)	Nil
Travel Delegations	Nil
Statutory powers	Nil

Physical demands and the nature of work

This role is administration-based and requires:

- prolonged sitting and high computer usage
- limited walking, standing, twisting, bending (at the waist), crouching (bend knee)
- carrying of laptop and paperwork when alternating between home and office
- limited lifting of up to 7 kg archive boxes

Your role may include other tasks suited to your level, as your manager directs. This job description shows your current duties. We'll review and update it with you if your responsibilities change.

About you

Knowledge and experience

- You have at least three years' experience with traction systems across maintenance, construction, engineering design, asset management, or relevant technical support.
- You have relevant overhead line equipment or traction system experience and practical knowledge of overhead line equipment and traction power systems, including relevant electrical and rail engineering requirements.
- You understand occupational health and safety, electrical safety, and risk management requirements in an operational environment.
- You are skilled in analysing technical problems, asset condition, and maintenance information and developing practical recommendations.
- You have experience planning and coordinating technical work involving employees, contractors, and other stakeholders.
- You have experience with engineering drawings, technical documentation, asset information systems, and relevant computer-based engineering tools.

Ways of working / Work-related qualities

- You prioritise safety by identifying and addressing hazards and considering the wellbeing of others.
- You communicate clearly and confidently, adapting complex technical information for different audiences.
- You actively collaborate with colleagues and contractors and contribute positively to shared outcomes.
- You organise and prioritise work effectively and check technical work carefully for accuracy.
- You use sound judgement based on appropriate analysis and information and identify effective solutions when information is incomplete.

Other Requirements

- You can work outside normal hours, including nights and weekends, when required to support operational or maintenance activities.
- You can meet KiwiRail's applicable safety, medical, and drug and alcohol requirements.
- New Zealand electrical registration and registration as an Electrical Inspector under the Electricity Act are desirable where relevant to the work.

Qualifications

- You have a relevant tertiary electrical engineering qualification, or relevant experience.
- Additional professional or technical qualifications relevant to high-voltage traction systems, electrical inspection, or asset management are desirable.