



# Senior Water Engineer

## Position Description – Engineering & Asset Management

Team:	Engineering Design – Civil	Location:	Auckland/ Wellington/ Christchurch
Reports to:	Engineering Design Lead – Civil		
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

We're looking for a Senior Water Engineer to lead the design, maintenance, and assurance of civil infrastructure assets across our network in particular water and drainage-related assets. This role plays a key part in delivering technical excellence and supporting long-term asset performance, contributing to core engineering functions including design, technical advice, asset strategy, standards development, and compliance.

You'll work closely with internal teams, consultants, contractors, and stakeholders to deliver safe, sustainable, and cost-effective water engineering solutions.

### Key Responsibilities

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

- Manage the design and delivery of water infrastructure projects using internal and external resources, ensuring high-quality engineering outcomes.
- Lead investigations, scoping, design, approvals and oversee the delivery of new works, upgrades, and maintenance of:
  - **Water Assets:** stormwater associated infrastructure including subgrade treatment and
  - **Interface Assets:** water-related infrastructure at road-rail crossings and pedestrian corridors including underground services within the rail corridor
- Provide expert technical advice on third party water asset design, maintenance, and upgrades within the rail corridor.
- Support the business in identifying, understanding, and managing risks associated with water infrastructure.
- Contribute to the continuous improvement of water engineering standards, practices, and risk management frameworks.

### Key challenges

- Balancing technical excellence with cost-effective solutions in a complex rail environment.
- Managing stakeholder expectations across diverse internal and external parties.
- Navigating regulatory requirements and environmental constraints in water infrastructure projects.

Key Relationships		Manage /Lead	Deliver to	Collaborate with	Advise or inform
Here are the key relationships relevant to this role					
Internal	Engineering and Asset Management staff	✓	✓	✓	✓
	Asset Engineers	✓	✓	✓	✓
	Field & Technical Engineers	✓	✓	✓	✓
	Rail Operations staff			✓	✓
External	Consultants	✓	✓	✓	✓
	Contractors	✓		✓	✓
	Suppliers	✓	✓	✓	✓
	Relevant Authorities			✓	✓

## What you will do to contribute

<b>Health Safety and Wellbeing</b>	<ul style="list-style-type: none"> <li>• Prioritise safety in all engineering activities, identifying and mitigating hazards.</li> <li>• Ensure compliance with rail safety standards and statutory requirements.</li> <li>• Promote a culture of Zero Harm across all projects and teams.</li> <li>• Lead by example in safety behaviours and reporting of incidents or risks.</li> <li>• Support the development of safe design practices and engineering controls.</li> </ul>
<b>Customer Focus</b>	<ul style="list-style-type: none"> <li>• Build strong relationships with internal and external customers to understand their needs.</li> <li>• Deliver engineering solutions that enhance customer satisfaction and service delivery.</li> <li>• Provide timely and professional advice to stakeholders.</li> <li>• Actively seek feedback to improve engineering outcomes.</li> </ul>
<b>High Performing Teams Skills</b>	<ul style="list-style-type: none"> <li>• Collaborate effectively with multidisciplinary teams and external partners.</li> <li>• Share technical knowledge and mentor junior engineers.</li> <li>• Contribute to a positive team culture that values respect, inclusion, and continuous improvement.</li> <li>• Support team goals and adapt to changing priorities.</li> </ul>
<b>Commercial Acumen</b>	<ul style="list-style-type: none"> <li>• Apply sound judgement in balancing cost, risk, and service levels in asset decisions.</li> <li>• Support the development of business cases and project scoping.</li> <li>• Ensure engineering solutions align with KiwiRail's financial and operational objectives.</li> <li>• Monitor project budgets and contribute to cost-effective delivery.</li> </ul>
<b>Technical Excellence</b>	<ul style="list-style-type: none"> <li>• Maintain up-to-date knowledge of civil and water engineering practices.</li> <li>• Lead technical reviews and ensure quality assurance across design outputs.</li> <li>• Contribute to the development and review of KiwiRail technical standards.</li> <li>• Drive innovation and continuous improvement in engineering solutions.</li> </ul>

## Key Accountabilities

The Senior Water Engineer is responsible for day-to-day technical and operational decisions related to water and drainage related engineering design, maintenance, and assurance.

Key accountability requirements of the position include:

- Accountable for the quality, safety, and compliance of water and drainage-related engineering designs and solutions.
- Responsible for ensuring engineering deliverables meet KiwiRail standards and statutory requirements.
- Own the development and implementation of effective asset management strategies for water and drainage-related infrastructure.
- Ensure risks related to water and drainage-related assets are identified, communicated, and appropriately mitigated.
- Maintain oversight of technical standards and contribute to their continuous improvement.
- Lead technical decision-making and provide assurance across design, maintenance, and renewal activities

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

### Physical demands and the nature of work

This role is physically demanding and requires:

- extended periods of standing and walking while performing manual tasks
- regular lifting and carrying of items weighing up to 20 kg independently
- occasional lifting of items up to 45 kg with assistance or equipment
- working in various weather conditions and environments
- exposure to mechanical equipment, electrical systems, vibration and noise
- ability to work in confined spaces and at heights using ladders/lifts
- capability to respond to emergency callouts and work extended shifts
- manual dexterity and hand-eye coordination for operating tools/equipment
- protective equipment usage including safety boots, hard hats, eye/ear protection

*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 10+ years of professional experience in water and drainage engineering.
- You're skilled in drainage design, hydrology, flood modelling, and water quality assessment.
- You've worked on coastal and river protection projects.
- You understand asset management principles and engineering assurance processes.
- You've prepared and submitted council consent applications.
- You've used engineering analysis tools and asset databases.

### Ways of working / Work-related qualities

- You prioritise safety and act with integrity.
- You communicate clearly and tailor your message to different audiences.
- You stay calm and adaptable in changing environments.
- You collaborate effectively and support team success.
- You seek out learning opportunities and apply feedback to improve.

### Other Requirements

- You can pass regular drug and alcohol screenings.
- You hold a current and valid NZ driver's licence.

### Qualifications

- You have a relevant tertiary qualification in Civil Engineering that will satisfy Engineering New Zealand accreditation.
- You are a Chartered Engineer or working towards chartership (desirable).
- A postgraduate qualification in Civil Engineering (desirable).