**Senior CAD Designer**

# Position Description – Engineering

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| **Team:** | Engineering Design – Support | **Location:** | Auckland or Wellington |
| **Reports to:** | Engineering Design Support 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 Senior CAD Designer supports KiwiRail’s Engineering team in delivering high-quality railway infrastructure designs and managing digital engineering systems. This role contributes to technical excellence, continuous improvement, and stakeholder satisfaction by producing and maintaining 2D and 3D design documentation, supporting document control systems, and driving best practice in CAD and BIM processes. It plays a key part in ensuring KiwiRail’s design outputs meet industry standards and operational needs.

## Key Accountabilities

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

* Produce, review, and amend 2D and 3D designs using CAD and BIM systems.
* Maintain and improve document management systems and design processes.
* Deliver training and peer support to promote best practice in CAD design.
* Manage external design support resources to ensure cost-effective outcomes.
* Develop and maintain CAD libraries and technical drawing standards.
* Perform quality assurance and peer reviews of internal and external design outputs.

## Key challenges

* Balancing design quality and efficiency across multiple engineering disciplines.
* Ensuring consistency and compliance with evolving industry standards and digital engineering practices.
* Managing external resources and integrating their outputs into KiwiRail systems.

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| Key Relationships Here are the key relationships relevant to this role | | Manage /Lead | Deliver  to | Collaborate with | Advise  or inform |
| Internal | Engineering Managers |  | ✔ | ✔ | ✔ |
| Engineering Staff |  | ✔ | ✔ | ✔ |
| Operational Engineers |  | ✔ | ✔ | ✔ |
| CPAD |  | ✔ | ✔ | ✔ |
| Asset Management |  |  | ✔ | ✔ |
| External | Consultants |  | ✔ | ✔ | ✔ |
| Contractors |  | ✔ | ✔ | ✔ |

# What you will do to contribute

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| Health Safety  and Wellbeing | * Prioritise safety in all design activities and workplace interactions. * Identify and mitigate engineering safety risks in design outputs. * Comply with rail safety standards and statutory requirements. * Lead by example in safety conversations and practices. * Promote a culture of wellbeing and safe work environments. |
| Customer Focus | * Deliver design outputs that meet customer and stakeholder expectations. * Collaborate with internal teams to understand operational needs. * Respond promptly to feedback and incorporate improvements. * Ensure documentation supports customer-focused service delivery. * Maintain strong relationships with external partners to align outcomes. |
| High Performing  Teams Skills | * Provide mentoring and peer support to CAD operators and engineers. * Collaborate respectfully and constructively across the Engineering team. * Share knowledge and contribute to team learning and development. * Support leadership and stand in for colleagues when needed. * Foster a positive and inclusive team culture. |
| Commercial Acumen | * Manage external design support within budget and scope. * Ensure design systems and processes are cost-effective and scalable. * Support project costing and estimating activities. * Understand the financial impact of design decisions. * Recommend improvements that enhance value and reduce waste. |
| Digital Engineering and Digital Excellence | * Maintain up-to-date knowledge of CAD and BIM technologies. * Develop and document technical drawing standards and processes. * Drive innovation in design systems and digital engineering practices. * Ensure design outputs align with KiwiRail’s strategic goals. * Support the transition to industry best practice in digital design. |

## 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:

* Design production, document control, and training delivery decisions.
* This includes determining appropriate design methods, managing external support within approved scope, and recommending improvements to systems and processes.

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| 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 4+ years of experience in CAD operation.
* You’ve worked in engineering environments with 2D and 3D modelling.
* You’re familiar with ISO or equivalent quality systems.
* You’ve used survey data in design contexts.
* You’re proficient in Microsoft Office and CAD/BIM tools.
* You understand engineering design terminology and processes.

## Ways of working / Work-related qualities

* You prioritise safety and act with integrity.
* You communicate clearly and tailor messages to different audiences.
* You collaborate effectively and support team success.
* You stay calm under pressure and adapt to changing priorities.
* You take ownership of goals and seek continuous improvement.
* You use sound judgement and pay attention to detail.

## Other Requirements

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

## Qualifications

* You have a recognised qualification in technical drawing or equivalent experience.
* A diploma in design or engineering is desirable.
* Affiliation with Engineering NZ or equivalent is preferred.