

Role Description

Electrical Designer

Cluster	Transport for NSW
Agency	Transport for NSW
Division/Branch/Unit	Infrastructure and Place /Technical and Project Services/Engineering Services
Location	Various
Classification/Grade/Band	USS 7
Role Number	Various
ANZSCO Code	312311
PCAT Code	1229192
Date of Approval	July 2019
Agency Website	www.transport.nsw.gov.au

Agency overview

At Transport, we're passionate about making NSW a better place to live, work and visit. Our vision is to give everyone the freedom to choose how and when they get around, no matter where they live. Right now, we're delivering a \$51.2bn program – the largest Australia has ever seen – to keep people and goods moving, connect communities and shape the future of our cities, centres and regions. At Transport, we're also committed to creating a diverse, inclusive and flexible workforce, which reflects the community and the customers we serve.

Our organisation – Transport for NSW – is comprised of nine integrated divisions that focus on achieving community outcomes for the greater good and on putting our customers at the centre and our people at the heart of everything we do.

Primary purpose of the role

This role prepares road related electrical installation designs and cabling arrangements for traffic control signals and other electrical assets, prepare estimates for design and construction works and liaise with electrical utility authorities for access to services.

This role is also responsible for the design, review and assists project team activities, and building capability across the traffic signal design function.

Key accountabilities

- Prepare electrical designs on major road infrastructure projects, in compliance with policies, standards, technical directions, guidelines, procedures and agreed requirements and contribute to the management of technical risk in road design.

- Create and assess client briefs for concept and detail designs, providing advice to the external design service providers and project teams, as well as technical advice for improved road related electrical design solutions.
- Undertake reviews on internal and external designs, to ensure the consistent application of standards and technical excellence and provide technical advice for improved road related electrical design solutions. Inform others of the risks associated with departures from currently accepted design standards.
- Ensure relevant, timely and accurate information is provided to Traffic Signal Managers and Principal Engineer Road Design, to support decision making.
- Participate in the preparation of contract documentation and the administration and management of road-related electrical design contracts and participate in liaison, discussion and design advice in the offices of external design service providers.
- Contribute to improved design outcomes, by developing and maintaining constructive and collaborative relationships with internal and external stakeholders

Key challenges

- Collaborating with industry to increase engagement from conception to delivery, to improve the private sector's capacity to deliver cost effective products and solutions to meet Government requirements.
- Keeping abreast of current and emerging best practice, changes in legislation, and technology that affect road design operations and implementing policy and standards to meet these challenges.
- Collaborating on and implementing systems to facilitate closer working relationships with consultants, contractors and other government authorities associated with road design, road infrastructure and related activities.

Key relationships

Who	Why
Internal	
Road Design Engineering	<ul style="list-style-type: none"> • Collaborate and share relevant information
Project Development Branch	<ul style="list-style-type: none"> • Ensure that appropriate, timely and accurate advice is provided to colleagues, project managers, Engineering Services Manager, Director Technical Operations and Support, and Director Road Design to facilitate effective decision-making.
Work Team	<ul style="list-style-type: none"> • Promote a culture of innovation and creativity in electrical design within the team and develop improved road related electrical design solutions • Provide quality advice and feedback to improve design practices
External	
Contractors/ private sector design consultants	<ul style="list-style-type: none"> • Share information and facilitate closer working relationships with consultants, contractors and other government authorities to strengthen the private sector's capacity to increase skill sets in electrical design services and collaborate in the delivery of cost-effective products and solutions that meet TfNSW and government requirements
Industry partners	<ul style="list-style-type: none"> • Build professional expertise and networks • Exchange information, to stay up to date with the new technologies and

Role dimensions

Decision making

The role is accountable for the delivery of assigned work. The role is individually accountable for the quality, integrity and validity of the service provided within delegation.

Reporting line

The Electrical Designer reports to the Electrical Design Manager

Direct reports

Nil

Budget/Expenditure

Nil

Essential requirements

- Tertiary qualifications in electrical engineering or a related discipline.
- Proven ability to deliver competent road related electrical design services by working alone and with teams of specialist designers and engineers in a complex organisation, including managing high work volumes and meeting quality, schedule and cost expectations.
- Possess a current motor vehicle driver license and willingness to work outside regular working hours or to travel on occasion.





Capabilities for the role

The NSW Public Sector Capability Framework applies to all NSW public sector employees. The Capability Framework is available at www.psc.nsw.gov.au/capabilityframework

Capability summary

Below is the full list of capabilities and the level required for this role. The capabilities in bold are the focus capabilities for this role. Refer to the next section for further information about the focus capabilities.

NSW Public Sector Capability Framework

Capability Group	Capability Name	Level
 Personal Attributes	Display Resilience and Courage	Intermediate
	Act with Integrity	Intermediate
	Manage Self	Adept
	Value Diversity	Intermediate
 Relationships	Communicate Effectively	Intermediate
	Commit to Customer Service	Intermediate
	Work Collaboratively	Intermediate
	Influence and Negotiate	Intermediate
 Results	Deliver Results	Intermediate
	Plan and Prioritise	Intermediate
	Think and Solve Problems	Adept
	Demonstrate Accountability	Intermediate
 Business Enablers	Finance	Foundational
	Technology	Adept
	Procurement and Contract Management	Foundational
	Project Management	Intermediate

Focus capabilities

The focus capabilities for the role are the capabilities in which occupants must demonstrate immediate competence. The behavioural indicators provide examples of the types of behaviours that would be expected at that level and should be reviewed in conjunction with the role's key accountabilities.

NSW Public Sector Capability Framework

Group and Capability	Level	Behavioural Indicators
Personal Attributes Act with Integrity	Intermediate	<ul style="list-style-type: none"> Represent the organisation in an honest, ethical and professional way Support a culture of integrity and professionalism Understand and follow legislation, rules, policies, guidelines and codes of conduct Help others to understand their obligations to comply with legislation, rules, policies, guidelines and codes of conduct Recognise and report misconduct, illegal or inappropriate behaviour Report and manage apparent conflicts of interest
Personal Attributes Manage Self	Adept	<ul style="list-style-type: none"> Look for and take advantage of opportunities to learn new skills and develop strengths Show commitment to achieving challenging goals Examine and reflect on own performance Seek and respond positively to constructive feedback and guidance

NSW Public Sector Capability Framework

Group and Capability	Level	Behavioural Indicators
Relationships Communicate effectively	Intermediate	<ul style="list-style-type: none"> • Demonstrate a high level of personal motivation • Focus on key points and speak in 'Plain English' • Clearly explain and present ideas and arguments • Listen to others when they are speaking and ask appropriate, respectful questions • Monitor own and others' non-verbal cues and adapt where necessary • Prepare written material that is well structured and easy to follow by the intended audience • Communicate routine technical information clearly
Relationships Commit to Customer Service	Intermediate	<ul style="list-style-type: none"> • Support a culture of quality customer service in the organisation • Demonstrate a thorough knowledge of the services provided and relay to customers • Identify and respond quickly to customer needs • Consider customer service requirements and develop solutions to meet needs • Resolve complex customer issues and needs • Co-operate across work areas to improve outcomes for customers
Relationships Work Collaboratively	Intermediate	<ul style="list-style-type: none"> • Build a supportive and co-operative team environment • Share information and learning across teams • Acknowledge outcomes which were achieved by effective collaboration • Engage other teams/units to share information and solve issues and problems jointly • Support others in challenging situations
Results Deliver results	Intermediate	<ul style="list-style-type: none"> • Complete work tasks to agreed budgets, timeframes and standards • Take the initiative to progress and deliver own and team/unit work • Contribute to allocation of responsibilities and resources to ensure achievement of team/unit goals • Seek and apply specialist advice when required
Results Think and Solve Problems	Adept	<ul style="list-style-type: none"> • Research and analyse information, identify interrelationships and make recommendations based on relevant evidence • Anticipate, identify and address issues and potential problems and select the most effective solutions from a range of options • Participate in and contribute to team/unit initiatives to resolve common issues or barriers to effectiveness • Identify and share business process improvements to enhance effectiveness
Business Enablers Project Management	Intermediate	<ul style="list-style-type: none"> • Perform basic research and analysis which others will use to inform project directions • Understand project goals, steps to be undertaken and expected outcomes • Prepare accurate documentation to support cost or resource estimates • Participate and contribute to reviews of progress, outcomes and future improvements • Identify and escalate any possible variance from project plans