Role Description Senior Digital Engineering Manager



Cluster	Regional NSW
Agency	Department of Regional NSW
Division/Branch/Unit	Public Works Advisory and Regional Development
Classification/Grade/Band	Clerk Grade 11/12
Location	Coffs Harbour
ANZSCO Code	135199
PCAT Code	1119192
Date of Approval	May 2021
Agency Website	nsw.gov.au\regionalnsw

Agency overview

The Department of Regional NSW was formed in 2020 as a central agency for regional issues. The Department is responsible for building resilient regional economies and communities, strengthening primary industries, managing the use of regional land, overseeing the state's mineral and mining resources and ensuring government investment in regional NSW is fair and delivers positive outcomes for local communities and businesses.

In its central agency role, Public Works Advisory (PWA) supports local and state government agencies to deliver critical infrastructure initiatives by providing expert advisory, planning, delivery and support services.

Every day we help shape the ambitious projects that bring progress to more people in NSW. From forging a more sustainable relationship with the land around us to engineering the big ideas of the future. In every challenge, we see the chance to build stronger and more connected communities. We do this by developing solutions that show creativity and grassroots ingenuity, providing impartial advice and support at all levels of government and the private sector, and partnering with experts to maximise the benefits of our knowledge and experience.

Primary purpose of the role

Leads a team of internal specialist team in collaboration with clients and consultants to support best practice digital design and delivery, across the project and asset lifecycle and develops and delivers a coordinated digital engineering strategy and framework for PWA. The role assesses the organisation's current digital capabilities, tools and processes in collaboration with the Senior Manager Business Systems & Project Controls, asset management leads, Principal Engineers, and Principal Surveyor and implements a digitisation roadmap in conjunction with the Executive Team.

Key accountabilities

• Lead business development with senior Government stakeholders to identify new opportunities for digital engineering services or improvements.



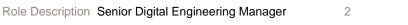
- Lead PWA's assessment and adoption of the latest technologies and oversee product licenses and accounts; run related transformation and change management activities and ongoing training regimes.
 E.g. facilitating a transition to a preferred software platform.
- Develop and manage (including compliance) project BIM, 3D CAD, GIS, asset management and other technical standards and data conventions in accordance with relevant corporate strategy, standards and guidelines, such as: metadata standards, information architecture (storage location and accessibility), content naming convention standards, version control standards, quality control standards, user accessibility, technology accessibility, training – for authors and relevant non-technical stakeholders.
- Establish relationships, protocols and contract specifications with clients, consultants, builders, and internal PWA teams to ensure a cohesive and integrated approach to the procurement of services.
- Lead in the transition of projects into operation, helping/advising key client functions, oversee operations, asset management and maintenance, including data visibility and reporting against KPIs.
- Implement and manage cloud-based systems that simplify access to project data and documentation, allowing for real-time collaboration and file sharing with internal and external stakeholders
- Represent PWA at industry forums and technical groups, including thought leadership development, to drive cross-Government collaboration and improvement initiatives, and position PWA as a thought leader in digital engineering and asset management.

Key challenges

- Building a coordinated "best in class" function to support key growth areas across PWA such as asset management, sustainability, digital engineering, program assurance and management, engineering emergency management, precinct and development assurance.
- Assist the development of consistent standards and conventions across agencies/councils and suppliers.

Who	Why
Internal	
Director Business Operations	 Provide strategic and operational advice Escalate issues and provide solutions Deliver tasks assigned
Senior Manager Project Controls & Business Systems, Principal Surveyor, Principal Engineers, Senior Construction Project Managers	 Work in partnership with Senior Manager Project Controls & Business Systems to deliver improved, integrated solutions and consistency of practice for PWA
Digital Project Controls Manager	Ensure integration of data and processes
QSE Manager	 Ensure staff, client and contractor/consultant system experience and reporting is seamless and optimised
External	
Stakeholders and clients	 Develop and maintain effective relationships to facilitate outcomes Provide advice and solutions to dovetail systems/data flows for ongoing and strategic programs
Supplier	Liaise with suppliers

Key relationships





Why

- Partner with suppliers to deliver continuous improvement initiatives
- Coordinate external drafting and design consultants to supplement PWA's workforce

Role dimensions

Decision making

This role has autonomy and makes decisions that are under their direct control. It refers decisions that require significant change to program outcomes or timeframes or are likely to escalate or require submission to a higher level of management to the Director. This role is fully accountable for the delivery of work assignments on time and to expectations in terms of quality, deliverables and outcomes. This role submits reports, business cases and other forms of written advice with minimal input from the Director.

Reporting line

Director, Business Operations

Direct reports

Approximately 5; TBC

Budget/Expenditure

As per the DRNSW Financial Delegations

Essential requirements

- Degree and/or equivalent experience in engineering, architecture or a related discipline.
- Minimum 10-15 years relevant experience in digital software and related platforms.
- Strong technical knowledge of 3D CAD, BIM, GIS, Collaboration and Spatial authoring applications and associated platforms and information management.
- Demonstrated capability developing and supporting the integration of multiple complex BIM, CAD and GIS models, and experience in establishment of project data structures and information management protocols, including in the asset management space.
- A strong level of technical knowledge relating to digital standards and demonstrated capability on large infrastructure projects.

Capabilities for the role

The <u>NSW public sector capability framework</u> describes the capabilities (knowledge, skills and abilities) needed to perform a role. There are four main groups of capabilities: personal attributes, relationships, results and business enablers, with a fifth people management group of capabilities for roles with managerial responsibilities. These groups, combined with capabilities drawn from occupation-specific capability sets where relevant, work together to provide an understanding of the capabilities needed for the role.

The capabilities are separated into focus capabilities and complementary capabilities.

Focus capabilities

Focus capabilities are the capabilities considered the most important for effective performance of the role. These capabilities will be assessed at recruitment.

The focus capabilities for this role are shown below with a brief explanation of what each capability covers and the indicators describing the types of behaviours expected at each level.

oability up/sets	Capability name	Behavioural indicators	Level
Personal Attributes	Manage Self Show drive and motivation, an ability to self-reflect and a commitment to learning	 Act as a professional role model for colleagues, set high personal goals and take pride in their achievement Actively seek, reflect and act on feedback on own performance Translate negative feedback into an opportunity to improve Take the initiative and act in a decisive way Demonstrate a strong interest in new knowledge and emerging practices relevant to the organisation 	Advanced
e lationships	Work Collaboratively Collaborate with others and value their contribution	 Recognise outcomes achieved through effective collaboration between teams Build cooperation and overcome barriers to information sharing, communication and collaboration across the organisation and across government Facilitate opportunities to engage and collaborate with stakeholders to develop joint solutions Network extensively across government and organisations to increase collaboration Encourage others to use appropriate collaboration approaches and tools, including digital technologies 	Advanced
Results	Deliver Results Achieve results through the efficient use of resources and a commitment to quality outcomes	 Use own and others' expertise to achieve outcomes, and take responsibility for delivering intended outcomes Make sure staff understand expected goals and acknowledge staff success in achieving these Identify resource needs and ensure goals are achieved within set budgets and deadlines Use business data to evaluate outcomes and inform continuous improvement Identify priorities that need to change and ensure the allocation of resources meets new business needs 	Adept



		Ensure that the financial implica	-	
		priorities are explicit and budge	Advanced	
	Think and Solve Problems	Undertake objective, critical and		
	Think, analyse and consider the	accurate conclusions that recog		
	broader context to develop	contextual issues	mise and manage	
	practical solutions	Work through issues, weigh up	alternatives and	
		identify the most effective soluti		
		collaboration with others		
		Take account of the wider busir	less context	
		when considering options to res		
		Explore a range of possibilities		
		alternatives to contribute to sys		
		business improvements		
		Implement systems and proces	ses that are	
		underpinned by high-quality res		
		analysis		
		Look for opportunities to design	innovative	
		solutions to meet user needs ar	nd service	
		demands		
		Evaluate the performance and e	effectiveness of	
		services, policies and programs	against clear	
		criteria		
	Technology	Champion the use of innovative	e technologies in Advanced	
- Č*	Understand and use available	the workplace		
Business	technologies to maximise	Actively manage risk to ensure		
Enablers	efficiencies and effectiveness	cyber security and acceptable u	ise of technology	
		policies		
		Keep up to date with emerging	-	
		technology trends to understand		
		application can support busines		
		Seek advice from appropriate s		
		experts on using technologies t business strategies and outcom		
		Actively manage risk of breache		
		records, information and knowle		
		management systems, protocol	-	
	Inchiro Direction and Burness	Promote a sense of purpose, a	· · · · ·	
	Inspire Direction and Purpose	to understand the strategic dire		
	Communicate goals, priorities	organisation and the needs of c		
People Management	and vision, and recognise	stakeholders		
	achievements	Translate broad organisational	strategy and	
		goals into tangible team goals a		
		links for the team		
		Ensure that team objectives and	d outcomes lead	
		to the implementation of govern		
		and create value for customers	-	
		Work to remove barriers to achi	eving goals	
	Optimise Business Outcomes		Advanced	



Manage people and resources effectively to achieve public value	•	Engage in strategic and operational workforce planning that effectively uses organisational resources to achieve business goals
	•	Resolve any barriers to recruiting and retaining people of diverse cultures, backgrounds and experiences
	•	Encourage team members to take calculated risks to support innovation and improvement
	٠	Align systems and processes to encourage improved performance and outcomes

Complementary capabilities

Complementary capabilities are also identified from the Capability Framework and relevant occupation-specific capability sets. They are important to identifying performance required for the role and development opportunities.

Note: capabilities listed as 'not essential' for this role are not relevant for recruitment purposes however may be relevant for future career development.

apability oup/sets	Capability name	Description	Level
	Display Resilience and Courage	Be open and honest, prepared to express your views, and willing to accept and commit to change	Adept
Personal	Act with Integrity Be ethical and professional, and uphold and prom the public sector values		Intermediate
Attributes	Value Diversity and Inclusion	Demonstrate inclusive behaviour and show respect for diverse backgrounds, experiences and perspectives	Foundational
Relationships	Communicate Effectively	Communicate clearly, actively listen to others, and respond with understanding and respect	Adept
	Commit to Customer Service Provide customer-focused services in line with public sector and organisational objectives		Adept
	Influence and Negotiate	Gain consensus and commitment from others, and resolve issues and conflicts	Adept
—/	Plan and Prioritise	Plan to achieve priority outcomes and respond flexibly to changing circumstances	Adept
Results	Demonstrate Accountability	Be proactive and responsible for own actions, and adhere to legislation, policy and guidelines	Adept
×.	Finance	Understand and apply financial processes to achieve value for money and minimise financial risk	Intermediate
Business Enablers	Procurement and Contract Management	Understand and apply procurement processes to ensure effective purchasing and contract performance	Adept
	Project Management	Understand and apply effective planning, coordination and control methods	Adept
	Manage and Develop People	Engage and motivate staff, and develop capability and potential in others	Intermediate







