

## World class water services for a better life

Position Title	Principal Engineer, Mechanical & Hydraulic		
Position Number(s)	006003	Manager Title	Manager, Engineering Capital
Business Group	Business Services	MoR Title	Senior Manager, Engineering
Business Unit	Engineering	Direct Report's Title(s)	N/A

## What is the unique purpose of the role?

Act as subject matter specialist (SMS) for Mechanical & Hydraulic matters within the Corporation by providing technical leadership to the Mechanical & Hydraulic Engineering team, delivering a high level technical investigation, design, audit and advisory services related to all aspects of water and wastewater standards and infrastructure.

## What does the role do?

The key accountabilities unique to this role are:

Key Accountabilities	Accountability Details (2-8 per accountability)
Contribute effectively to the team ensuring efforts are aligned toward achieving team goals	<ul style="list-style-type: none"><li>• Implement the direction set by your people leader.</li><li>• Complete specific tasks allocated.</li><li>• Collaborate effectively to ensure team goals are achieved by providing input into decision making and problem solving.</li><li>• Actively contribute to creating a culture of service excellence.</li></ul>
Put safety above all else	<ul style="list-style-type: none"><li>• Be aware of and apply roles and responsibilities in accordance with WHS Roles and Responsibilities Procedure.</li><li>• Take responsibility for the safety and wellbeing of yourself and others including your own fitness for work (e.g. under the influence of drugs, alcohol and/or fatigue).</li><li>• Contribute to 'Industry leading WHS performance across the entire corporation.</li><li>• Drive an increased awareness in the Safety in Design (SID) process through coordination of an effective SID consultation and delivery plan with resources from Asset Management, Program/Project Management, WHS, Operations, Design and Construction in order to achieve safe design outcomes.</li><li>• Consult the business as the technical practitioner So Far As Is Reasonably Practicable (SFAIRP) about how to ensure that health and safety risks arising from design throughout asset life cycle is eliminated or minimised.</li></ul>

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Key Accountabilities	Accountability Details (2-8 per accountability)
Mechanical & Hydraulic Engineering Design Capability	<ul style="list-style-type: none"> <li>• Provide specialist design and technical auditing of SA Water projects to meet time and budget constraints.</li> <li>• Act as a Subject Matter Specialist (SMS) in Mechanical &amp; Hydraulic discipline matters across the Corporation.</li> <li>• Provide the technical lead on <i>Safety in Design</i> (SiD) matters for the Mechanical &amp; Hydraulic discipline team.</li> <li>• Provide input into the technical development requirements for Mechanical &amp; Hydraulic discipline engineering team.</li> <li>• Ensure the SAW "Safety in Design" process is incorporated into engineering activities.</li> <li>• Ongoing technical development and support for the business's intellectual property in the field of Smart Water Networks <ul style="list-style-type: none"> <li>◦ Hydraulic Modelling, Mass balancing and interpretation of analytical data</li> <li>◦ Sensors, Valves &amp; Smart Meters (Flow/pressure/Acoustics/Transients/PRV)</li> <li>◦ Water and Waste Water Network reconfiguration</li> <li>◦ Odour Modelling, monitoring and Sensing</li> <li>◦ IOT/IT/OT</li> </ul> </li> </ul>
Customer Service	<ul style="list-style-type: none"> <li>• Provide timely, accurate, appropriate and adequate information and documentation to customers, with a focus on minimising delays and providing cost effective solutions.</li> <li>• Seek and initiate value add initiatives for the Mechanical &amp; Hydraulic discipline team to satisfy customers' needs.</li> <li>• Provide input on the allocation of design and support resources for Mechanical &amp; Hydraulic discipline deliverables to best satisfy the customer's requirements.</li> <li>• Carry out training/workshop presentations, as required.</li> </ul>
People and Culture	<ul style="list-style-type: none"> <li>• Work effectively within the Mechanical &amp; Hydraulic discipline engineering team, with other technical disciplines and their Principal Engineers and across multi-disciplinary teams from our technical partners.</li> <li>• Regular participation in all one on one and team meetings.</li> <li>• Management of the Mechanical &amp; Hydraulic discipline Knowledge Base.</li> <li>• Provide the lead technical role in hosting Mechanical &amp; Hydraulic discipline Forums</li> <li>• Provide timely, accurate, appropriate and adequate information and documentation to minimise delays and provide cost effective solutions.</li> <li>• Consultation with key stakeholders to ensure engineering outcomes meet business partners expectations.</li> </ul>

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Key Accountabilities	Accountability Details (2-8 per accountability)
Technical Standards	<ul style="list-style-type: none"> <li>Lead the review and update of SA Water's technical standards and guidelines for Mechanical &amp; Hydraulic discipline components of SA Water infrastructure.</li> <li>Ensure SA Water's technical standards and guidelines are best for business solutions that meet Asset Management's asset design life requirements, while providing cost effective, fit for purpose outcomes.</li> <li>Conduct site audits to ensure compliance to standards.</li> <li>Educate project managers, contractors and regional personnel on SA Water requirements.</li> </ul>
Innovation	<ul style="list-style-type: none"> <li>Determine suitability of new and emerging technologies and recommend they are adopted by the Corporation where benefits are identified.</li> <li>Keep up to date with industry best practice in all matters Mechanical &amp; Hydraulic for the technical discipline.</li> </ul>

## Knowledge, skills and experience the role requires

Criteria which will be used for recruitment and selection for this role (maximum of 6):

Foundation Knowledge, Skills, Experience and Qualifications	Essential or Desirable
Tertiary Mechanical or Hydraulic Engineering qualification	Essential
Post graduate qualifications	Desirable
Affiliation and Recognition of discipline expertise by Engineers Australia	Desirable
Detailed knowledge of Mechanical & Hydraulic engineering procedures and practices as applied to the water industry and large engineering organisations and leading expert function as SME	Essential
Extensive experience in the provision of investigation, option, concept and detailed design of Mechanical & Hydraulic discipline installations associated with the water industry at a high professional level and auditing of designs prepared by others	Essential
Demonstrated experience in the execution of novel, complex and critical engineering investigations and designs in Mechanical & Hydraulic discipline engineering	Essential
Experience in the development and ongoing review of technical and infrastructure standards	Essential

## Who you work with

Key Stakeholder Relationships critical to the success of this role (maximum of 6):

- SA Water Engineering, Asset Management, Operations, Procurement and Capital Planning & Delivery and Major Land Development
- Specialist professional/technical staff
- Project managers/contract administrators
- Engineering consultants and contractors
- Equipment suppliers
- Other government agencies

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## Special conditions

Does the role have any unique requirements?

- Flexible hours and some after hours as required, some intra and interstate travel (mandatory)

**Your PD outlines what the requirements of your role are. The behaviours you demonstrate are equally as important and form part of your PD.**

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