

## POSITION DESCRIPTION

### 1. POSITION DETAILS

<b>Position Title</b>	Project Engineer
<b>Business or Service Unit</b>	Asset Project Delivery
<b>Position Manager</b>	Project Engineering Manager
<b>Position Location</b>	Negotiable

### 2. POSITION PURPOSE

Provide engineering expertise to ensure optimal whole of life solutions are effectively identified, developed and implemented in response to identified project needs, applying WaterNSW project delivery frameworks and tools and to put safety first.

### 3. KEY ACCOUNTABILITIES

- (1) Actively live the WaterNSW values and ensure all activities are undertaken with the safety of people as the number one priority and at all times, role model safe behaviour.
- (2) Lead development and implementation of technical/engineering solutions under guidance of and on behalf of the project manager. Includes provision of timely accurate and complete technical support, advice reporting and recommendations to the project manager to minimise risk, environmental impact and ensure overall project objectives are met.
- (3) Manage identification of solutions options and selection of preferred or recommended options to meet project needs, including assessment of associated capital and operational costs and that key stakeholders (including Operations) are involved in decision-making.
- (4) Ensure project specification documentation is clear and comprehensive to enable consultants and contractors to effectively respond to requests for tender and to minimise number and nature of requests for information (RFIs).
- (5) Manage day to day interface with design consultants during development of solutions options, concept and detailed designs and REFs or EIAs where relevant.
- (6) Oversee the project design process ensuring all relevant engineering specifications and standards are met, appropriate inspection and test planning is in place. Lead design review meetings including HAZOP (Hazards and Operability Analysis) and CHAIR (Construction Hazard Assessment Implication Review). Ensure design optimisation and value engineering processes are undertaken and that recommendations are made and adopted where appropriate.
- (7) Regularly monitor work undertaken to ensure it complies with agreed scope and meets agreed requirements, including factory validation during production of technical components. Manage all requests for design or other engineering changes to ensure that they are reasonable, meet original project aims and are within defined scope.
- (8) Develop and then implement commissioning, testing and handover plans for all relevant projects, modify these in accordance with any approved change to ensure agreed solution is

effectively implemented and that operators have been trained in use where there is a change in operating practices.

- (9) Ensure drawings, operating and maintenance manuals and other relevant artefacts are produced in timely manner and meet specifications or other requirements of the business
- (10) Ensure that delivered solutions are operating satisfactorily and that defects identified during the defect period are addressed in a timely manner.
- (11) Provide technical support and recommend actions across all project phases to ensure that engineering designs meet operational requirements and engineering standards. Respond to technical RFIs from external parties and ensure appropriate mechanisms are in place for factory testing, where relevant.

#### **4. SIGNIFICANT EXTERNAL RELATIONSHIPS FOR WHICH THIS POSITION IS THE PRIMARY CONTACT**

- Design Consultants and contractors engaged in projects

#### **5. AUTHORITY LIMITS**

- As per *Standing Delegations* instrument from time to time.

#### **6. MANDATORY KNOWLEDGE, SKILLS AND QUALIFICATION REQUIREMENTS**

- Bachelor degree or higher tertiary institution in civil, mechanical or electrical engineering.
- Knowledge of PMBOK or Prince 2 methodologies
- Current NSW driver's Licence
- Knowledge of assets relevant to WaterNSW core asset base such as dams, water regulating structures, bridges roads, canals, embankments, buildings and cranes etc.
- Knowledge of regulatory requirements and standards including WHS as they relate to the design and delivery of engineering aspects of range of capital projects
- Ability to interpret, assess and review engineering designs, drawings and construction or other work methodologies to ensure compliance with standards and to meet required objectives.

#### **7. MANDATORY EXPERIENCE AND CAPABILITY (PROVEN AND DEMONSTRATED)**

- Demonstrated experience in managing the engineering and design aspects of multiple multi-disciplinary infrastructure projects
- Experience working collaboratively and making decisions with stakeholders to review, analyse, negotiate and implement technical solutions
- Demonstrated experience in determining appropriate solutions to technical challenges through evaluation of options
- Experience in development of technical specifications including interpretation of regulatory and other standards in developing those specifications.

#### **8. EXPERIENCE OR QUALIFICATIONS THAT WILL BE VIEWED FAVOURABLY**

- Post Graduate qualifications in project management or equivalent with experience in managing various forms of commercial arrangements to drive 'value for money' engineering outcomes.
- Experience in engineering design
- Experience in workshop facilitation

## **9. KEY CHALLENGES**

- Getting alignment and commitment of number of different, predominantly internal stakeholders to meet project objectives without direct line management authority to do so.
- Acceptance of approved solutions by operators who may be resistant to change
- Competing priorities and time pressures competing against pressure for r developing robust and cost effective solutions.

## **10. OTHER RELEVANT INFORMATION**