

POSITION DESCRIPTION

REF 1329 ENGINEER (STRUCTURAL) NATIONAL OFFICE

Salary Scale	\$42,000.00 - \$47,250.00 per annum	Position Type	Established
Structure:	Department:	Infrastructure Delivery SBU	
	Sub – Section	Design	
Location:	National Office		

About Our Organisation

The Water Authority of Fiji is a corporate body established under the Water Authority of Fiji Act 2007 to make provision for the effective management and administration of the Water and the sewerage systems.

We are responsible for providing access to quality drinking water and wastewater services to over 154,000 residential and non-residential metered customers in the urban areas of Fiji and also setting up water supply systems in rural areas.

Position Objective

The Engineer will analyse and support the formulation of various water and wastewater development plans, (especially structural engineering aspects) and associated engineer's designs required for the safe execution of key engineering objectives and outcomes. This position reports to the Manager - Design.

Key Accountabilities

- 1. Robust engineering services provided
 - Efficient and effective planning process fully assisted
 - Timely preparation of PSIP submissions to attain capital funding including business cases effectively contributed to
 - Improvements to water and wastewater conveyance and treatment systems effectively assisted through quality engineering expertise in the following areas:
 - Development and establishment of the Planning & Design Guidelines for the Water Authority of Fiji
 - Water and Wastewater Master Plans for the identified growth centres in the country further developed, reviewed and updated
 - Development of the Annual Programme and 3-5 year Capital Works Program for Water and Wastewater Schemes nationwide, fully assisted.



- Client interaction, stakeholder consultation and liaising with statutory authorities ensured
- Hydraulic Investigation of existing water and waste water system completed
- Project initiation and planning works effectively and efficiently delivered with compliance to internal and legislative/regulatory requirements maintained at all times
 - Site visitation effectively carried out
 - Collecting relevant data from WAF's internal business units completed in a timely manner
 - Meeting with relevant stakeholders and feedback documented and where appropriate actioned
 - Population and demand projected
 - Data analysis correctly done for informed decision making
 - Project Proposal developed
 - Work schedules prepared and submitted for approval
 - Engineers estimates prepared in a timely manner
- Project initiation administrative matters executed efficiently and associated documents developed in full compliance with WAF's "Project Delivery Framework" i.e. Problem Statements and Business Cases
 - Complete and accurate tender documents prepared, which shall include the following key elements:
 - Design calculations; especially structural engineering related works
 - Engineering Drawings & Specifications
 - Scoping of works
 - Preparing bill of quantities
 - Preparing engineers estimate
 - Terms and conditions
 - Particular conditions
 - Schedule of works and work plan
 - Robust tender evaluation carried out as and when required and in full compliance with WAF policies/procedures, and completed within price validity period



- Contract document prepared accurately and collaboratively with the Legal Department, within the price validity period
- Procurement of materials effectively carried out in in full compliance with WAF policies/procedures, and approved timelines, including but not limited to:
 - List of materials to procure identified and prepared
 - Stock Order Forms completed
 - Quotations and/or Tenders evaluated
 - Internal Requisition Orders completed
 - Delivery Dockets completed and logged
- Quality, timely and relevant preparation for detailed engineering design report and construction documents including plans and specifications ensured. This includes but is not limited to the successfully delivery of the following:

o Survey Works

- Area and route to survey identified
- Site walkover with survey team completed and managed. Site inspection and quality control according to WAF specification completed in a timely manner and according to pre-determined schedules
- Instruction given for proceeding survey

Data Collection

- Pressure and flow monitoring using data loggers completed
- Ultrasonic flow sensor for obtaining sewer flow rates completed in a timely manner
- Hydrological data from Hydrology team collected
- GPS capturing of assets and locations for analysis completed in a timely manner.
- As-built drawings and it's verification.

Drafting

- Drafts of engineering drawings completed through instructions and guidance
- Standard drawings according to WSA and AS/NZ standards prepared and submitted for proposals



Analysis

- Continuous hydraulic analysis of water and waste water system carried out
- Detail design report prepared
- water and waste water modelling using H20 Map and Sewer Gems carried out
- structural engineering modelling and analysis
- Overall technical direction and expertise to team of design engineers provided to ensure department deliverables are achieved
- Design, computations, and evaluation associated with water supply and wastewater network and planning projects completed accurately in a timely manner
- Risk Management principles to be incorporated in project design and documentation to minimize variation during construction period
 - scope, schedules, work breakdown structure (WBS), budgets etc projected accurately and incorporated
- Project and Contract supervision effectively carried out, including but not limited to the timely delivery of the following:
 - o progress meeting conducted
 - Meeting minutes prepared
 - Payment claims assessed and prepared
 - o Fortnight updates to management prepared accurately and in a timely manner
- Project administration, including writing reports, gathering information, drafting proposals, drafting correspondence, tracking projects, and completing project progress reports coordinated and completed
- 3. Timely, relevant and compliant reporting
 - Reports assigned to the role is prepared with stipulated time frame and checked for accuracy of content and quality of content and form before it is forwarded to the Manager Planning
 - Reports provided include but not limited to:
 - Weekly progress reports on tasks provided
 - Timely and quality progress of monthly reports ensured
 - Outstanding action items followed up and a bring up system to follow through information and documents due to the Planning team is ensured



- Superiors provided with useful information combined with analysis and interpretation, for the purpose of decision making
- Ad-hoc information request by superiors addressed in a timely manner

5. Human capital management

- Effective oversight and on-the-job training for direct reports delivered
- Direct reports are highly motivated and productive
- Training needs for direct reports effectively monitored in partnership with the supervisors and appropriately addressed in consultation with the HR Department
- Relevant performance measures established for direct reports timely performance appraisals carried out and action items (for both strengths and weaknesses) resolved in consultation with the HR Department and other relevant parties
- Effective contribution to the HR Recruitment function for relevant WAF positions ensured. This shall include but not be limited to being a member of relevant recruitment interview panels
- Disciplinary actions carried out in consultation with the HR Department and in full compliance with all relevant laws, legislations and internal requirements

6. Teamwork and cooperation

- Cooperation within the team and greater function / department encouraged
- Cooperation across functions / departments ensured
- Collaboration and leadership to achieve relevant organisational targets and goals
- Other related duties assigned by the Manager Planning and Design and General Manager Planning,
 Design and Construction effectively and efficiently addressed

7. Organisational values upheld, and values demonstrated at all times

- Support toward the alignment of deliverables to organisational values and strategic directions ensured
- Organisational values and good corporate and governance practices are complied with in delivering outcomes ensured



Position Specification

Competencies

QUALIFICATION REQUIREMENT

Degree in Engineering

EXPERIENCE, SKILLS, & ABILITIES

- At least three (3) years of sound & practical engineering experience in design and/or construction of treatment plants, and/or equivalent facilities.
- Relevant knowledge of engineering principles related to water and waste water infrastructure sector, analysis, design, scoping and specification; especially structural engineering work aspects.
- Experience in engineering and design relevant to water and waste water infrastructure sector;
 especially structural engineering work aspects.
- Relevant experience in planning, design, and construction of water/wastewater infrastructure
- Demonstrated analytical and problem-solving skills with an ability to think strategically and holistically
- Demonstrated experience in formulating and implementing planning and design policies and guidelines
- Good computer skills in network analysis using software's such as the Autodesk Suite (Civil 3d, Electrical, Plant, etc.), Solidworks, Infoworks, Bentley Water Gems & Sewer Gems, SWMSS, EPANet, MapInfo and Advanced skills in Microsoft office package.

WHERE TO SEND YOUR APPLICATION

Typed applications of no more than three (3) pages must include the curriculum vitae in chronological order and the names of 2 referees with certified copies of relevant certificates and separate application for different positions. Briefly state how you meet the knowledge, experience, skills and abilities for the position applied.

INCOMPLETE & LATE APPLICATIONS WILL NOT BE CONSIDERED. ONLY SHORTLISTED CANDIDATES WILL BE CONTACTED.

Applications should be marked "Confidential REF: 1329 Engineer (Structural) National Office" and should be received no later than **5pm on 26 January 2024** and could be:

Mailed to:		Hand delivered to:		Emailed to:
The Manager Human Resources	or	Human Resources Unit	or	hr.recruit@waf.com.fj
Water Authority of Fiji		Level 3, Manohan Building		