Job Demand Analysis

Placement/Job Title:	Reticulation Team Member
Division/Branch:	Infrastructure and Operations / Water Supply and Sewerage
Date of Assessment:	10 October 2012
Assessment Completed By:	Human Resources Advisor 4 Supervisor Reticulation
Standard Hours:	7.00am to 3:30pm, Monday to Friday
Variable Hours:	☑ Overtime ☑ On Call ☑ Call Outs
Breaks / Rest Periods:	30 minute lunch break

Environmental/Psychosocial Factors

- Depending on work demands-can work alone or on teams.
- Is exposed to all weather conditions and may work in uneven/sloped terrain and slippery/muddy ground surfaces (gum boots are available for use). The work area may be surrounded by water and hazards may be present. Snakes, spiders and other vermin may also be present in the vicinity of the work area.
- May be required to perform overtime and may be called out for emergency situations. However, this is only required on an intermittent basis.
- Works on a rotating on call roster.

Job Descriptions

Maintain and repair Water and Sewer reticulation assets to ensure their availability for operational usage.

Please see corresponding position description for further information.

Physical Demands	Rarely 1-5%	Occasional 6-33%	Frequent 34-66%	Continuous 67-100%	Comments
Standing			X		To carry out duties on site.
Walking				X	To carry out duties on site.
Sitting		X			Monitoring plants functions, doing computer work, driving between work sites and operating plant.
Bending/ Stooping			X		Carrying out labouring duties.
Squatting/ Crouching			X		Fitting pipes and installing metres.
Kneeling		X			Fitting pipes and installing metres.

Reaching overhead		**X**			Open valves with key, hoses.
Reaching waist level/below waist level			**X**		Take samples, access levers, driving between sites. Required when turning valves on and off.
Trunk Rotation			**X**		Work around railings, accessing controls or components in confined spaces. Digging when working on gradient, digging deep holes working on roads and footpaths.
Repetitive forearm, hand and finger movements		**X**			Smaller bits such as screws, nails etc, hoses, rods, levers, ladders.
Manual dexterity and handling			**X**		A wide variety of tools, pumps, hoses, equipment.

Manual Handling			
	Weight	**Frequency**	**Comments**
Lifting	Up to 20kg	Frequent	Hand and power tools, materials as required. Floor to waist ~ usually 20kg. Waist to shoulder ~usually 5kg.
	>20kg	Occasionally	Supervisor Reticulation reports sewer manhole lids weight up to 80kg, a team lift is used for this where possible. For heavier items such as pipes and fittings lifting aids are used. Truck is fitted hyab and cranes are available.
Carrying	Up to 20kg	Frequent	Hoses, tools, pipes and fittings short distances.
	>20kg	Occasionally	Team lifts are utilised where possible and trolleys are available for use.
Pushing/Pulling	Over 25kg	Frequent	Open and close valve levers. Pulling sewer truck hoses.
This position falls into the heavy physical demand category.			

Tools Used		
Tool:	**Weight:**	**Comments:**
Shovel	2kg	Bilateral cylindrical grasp.
Ratchet	0.5kg	Pneumatic version would save lots of body wear and tear.
Angle grinder	1kg	Bilateral grasp.
Pumps and attachments	20-30kg	Two person lift.
Crow bar	6kg	Bilateral grasp.
Probe	2kg	Bilateral grasp.
Broom	2kg	Bilateral grasp-trench needs to be dug out properly to allow ease.

Quick cut petrol saw	10kg	Bilateral grasp.
Wacker packer	20kg	Bilateral grasp.
De-scalers	1kg	Bilateral grasp-push and pull to slide across.
Stand pipe	8kg	Nil
Lay flat hose	5-20kg	Nil
Oxyacetylene	60kg	Fitted on truck. A portable set is available if needed.
Generator	15kg	Permanently remains on truck.

Balance		
	Exposure to:	**Comments:**
Level ground	Yes	When doing office work.
Uneven ground	Yes	When working on job sites, when working in the bush or slanted surfaces, on dirt roads or around open trenches.
Unprotected high levels	Yes	When climbing into confined spaces or climbing up reservoirs and pump stations.

Environmental Conditions		
	Exposure to:	**Comments:**
Inside work	Yes	In buildings, reservoirs and pump stations.
Outside work	Yes	On job sites.
Night Work	Yes	Required when on call and when called out for emergency response.
Extreme heat	Yes	Exposure to the weather elements.
Extreme cold	Yes	
Humid or wet	Yes	
Noise	Yes	When operating equipment or when on a job site.
Vibration	Yes	Occasionally when using tools.
Mechanical hazards	Yes	May be encountered when staff are slinging pipes.
Electrical hazards	Yes	Exposed to electrical hazards when changing water metres and digging holes due to underground electricity.
Risk of burns	Yes	When soldering. Also risk of chemical burn when working with sewerside. With exposure to oxyacetylene and hot pipes.
Radiant energy	Yes	Sun exposure.
Poor ventilation	Yes	When working in confined space.
Moving objects	Yes	When encountering vehicles, traffic or plant.
Sharp tools	Yes	Possible with some hand tools-stanley knives poly cutters.
Cluttered or slippery floors	Yes	Occasionally while on the job site.
Elevated surfaces	Yes	When climbing ladders or around open trenches.
Lighting	Yes	May encounter lighting difficulties at night.
Exposure to fumes/odours/ dusts/mists/gases	Yes	When working around the sewer. Often digging and cutting pipes around underground gas.

		Gas detectors are used when working in sewers. PPE supplied.
Exposure to biological hazards	Yes	Sharps and raw sewage

Sensory/Communication		
	Required:	**Comments:**
Vision	Yes	Most activities, examine parts or gauges closely, determine the quality of the product, some computer information, distances have to be judged when raising and lowering objects.
Hearing	Yes	Colleagues in person, and via phone or radio. Machinery noises, alarms.
Speech	Yes	Colleagues in person, and via phone or radio.
Reading	Yes	Computer screens, gauges, instructions, correspondence.
Writing	Yes	Short notes or readings.
Numerical ability	Yes	Required to take measurements of depth and length.

This Job Demand Analysis has been assessed and approved by the relevant Supervisor and corresponding Manager within Dubbo Regional Council. This Job Demand Analysis will be implemented on 8 April 2013.