



Job Demand Analysis					
Placement/Job Title:	Stormwater Engineer				
Division/Branch:	Infrastructure and Operations / Infrastructure Strategy				
Date of Assessment:	31 October 2012				
Assessment Completed By:	Human Resources Advisor 4 Urban Drainage Engineer				
Standard Hours:	9.00am to 5.00pm, Monday to Friday				
Variable Hours:	√ Overtime □ On Call □ Call Outs				
Breaks / Rest Periods:	1 hour lunch				

Environmental/Psychosocial Factors

The Stormwater Engineer is required to:

- Approximately 90% of work tasks are performed within an office environment.
- Approximately 10% of tasks are performed on site. This may include surveys and inspections of infrastructure and storm water channels.
- 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 also have to deal with complaints from members of the public and deal with these in an effective and time efficient manner.

Job Descriptions

The Stormwater Engineer is responsible for the management of Council's Drainage Networks. This includes managing the serviceability of existing networks and the strategic planning for future expansion of the network. The position is also a source of technical support to other branches and divisions within Council and for private works.

See Position Description for further information.

Physical Demands	Rarely 1-5%	Occasional 6-33%	Frequent 34-66%	Continuous 67-100%	Comments
Standing		x			Required when performing office based tasks and when attending site inspections.
Walking		X			Required within the office environment and when performing field surveys/site inspections. A variety of terrain is traversed on site, including even, uneven, sloped and

Physical	Rarely	Occasional	Frequent	Continuous	Comments
Demands	1-5%	6-33%	34-66%	67-100%	
					inclined surfaces.
Sitting					An adjustable ergonomic chair
					is available for use within the
				X	office environment. Sitting in
					the vehicle is also required
					when driving to/from site.
Climbing					May be required to access
	X				areas on site, to allow survey
					and/or inspection tasks to
Donding /					Occur.
Bending /					May be required to access areas on site and to survey
Stooping					and/or inspection tasks to
		X			occur. Also required on an
					occasional basis when using
					the dumpy level.
Squatting /					May be required to access
Crouching					areas on site, to allow survey
O rodoming	X				and/or inspection tasks to
					occur.
Kneeling					Rarely required, but may be
	V				needed when accessing areas
	X				on site, to allow survey and/or
					inspection tasks to occur.
Reaching					May be needed when
overhead	х				accessing areas on site, to
	^				allow survey and/or inspection
					tasks to occur.
Reaching at					Required when driving
waist level or					vehicles, moving equipment
below.					to/from site and when
			Х		performing survey and/or
					inspection tasks. Also required
					when performing computer
					based data entry and drafting
Crowling					tasks.
Crawling					Rarely required, but may be
	X				needed when accessing areas on site, to allow survey and/or
					inspection tasks to occur.
Trunk					Rarely required, but may be
Rotation					needed when lifting/carrying
. totalion					equipment, using equipment
	X				and accessing areas on site,
					to allow survey and/or
					inspection tasks to occur.
Repetitive					Bilateral fine motor actions are
Forearm,					required for computer based
hand and					data entry and drafting tasks,
finger				v	when using survey
movement				X	instruments, with manual
					writing and when driving. Also
					required when performing
					survey and/or inspections on

Physical Demands	Rarely 1-5%	Occasional 6-33%	Frequent 34-66%	Continuous 67-100%	Comments
					site.
Manual dexterity and handling	x				Carrying of equipment may be required to/from site.

Manual Handlin	g		
	Weight:	Frequency:	Comments:
Lifting	5-20 kg	Occasionally	Lifting of equipment is required to/from the vehicle and on site.
Carrying	5-20 kg	Occasionally	Carrying of equipment is required to/from the vehicle and on site.
Pushing/Pulling	Not required	Not applicable	Not applicable.

Tools Used			
Tool:	Weight:	Comments:	
Theodolite	15 kg	The theodolite is lifted/carried to and from the vehicle and around the site as required.	
Sign bases	15 kg	May be lifted/carried around the site as required.	
Tripod	5 kg	The tripod is lifted/carried to and from the vehicle and around the site as required.	
Pegs	5 kg	4-6 pegs (total weight 5 kg) may be carried at any one time.	
Crowbar	5 kg	Use to move objects and may be lifted/carried around d the site as required.	
Signs	5 kg	May be lifted/carried around the site as required.	
Dumpy level	5 kg	May be lifted/carried around the site as required.	
Hand tools	<1kg	A variety of hand tools may be used such as claw hammers, spirit levels and tape measures as required on site.	
* Note: Tools a	* Note: Tools are rarely used but may be required at times.		

Balance		
	Exposure to:	Comments:
Level ground	Yes	Within the office area and when performing site visits.
Uneven ground	Yes	When performing site inspections and survey tasks.
Unprotected heights or high levels	Yes	Climbing to heights may be required when surveying and/or inspecting bridges and the edges of culverts and deep pits.

Environmental Conditions		
	Exposure to:	Comments:
Inside work	Yes	When performing office based tasks.
Outside work	Yes	When performing site visits.
Night Work	Yes	Rarely but may be required for special
		projects
Extreme heat	Yes	
Extreme cold	Yes	Exposed to a variety of weather conditions.
Humid or wet	Yes	
Noise	Yes	Workers may be exposed to noise of

Environmental Conditions		
	Exposure to:	Comments:
		equipment when performing site visits. They may also be exposed to general traffic and plant noise when on site.
Vibration	Yes	Workers may be exposed to vibration if rollers and/or plant are operating nearby.
Mechanical hazards	Yes	The worker may be exposed to traffic, plant machinery and equipment/machinery when performing site visits.
Electrical hazards	Yes	The worker may be exposed to electrical hazards when performing site visits.
Risk of burns	No	Not applicable.
Radiant energy	Yes	When performing site inspections/visits in outside areas. Sun protection is worn.
Poor ventilation	No	Not applicable.
Moving objects	Yes	The worker may be exposed to traffic, plant machinery when performing site visits.
Sharp tools	No	Not applicable.
Cluttered or slippery floors	Yes	The worker may be exposed to muddy and/or slippery work environments when performing site inspections.
Elevated surfaces	Yes	The worker may be exposed to elevated surfaces when performing survey and/or inspection tasks on bridges.
Lighting	No	Not applicable.
Exposure to fumes/odours/ dusts/mists/ gases	Yes	Exposure to dust/odours may occur at site visits. Fumes from pipe systems.
Exposure to biological hazards	Yes	Exposure may occur at site visits such as the saleyards, landfill and sewerage areas.

Sensory/Communication				
	Required:	Comments:		
Vision	Yes	Vision is required when performing computer based and administrative duties. Vision is also required when driving to/from site, when performing survey/site inspections and when taking readings.		
Hearing	Yes	General liaison with other workers and members of the public is required and the worker also needs to be aware of surrounding traffic, plant and equipment when on site.		
Speech	Yes	General liaison with other workers and members of the public is required.		
Reading	Yes	Completion of paperwork as required.		
Writing	Yes	Completion of paperwork as required.		
Numerical ability	Yes	When calculating readings (a calculator is used) and for reporting purposes.		

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.