

Project Name: Brandvlei water supply pipeline

ENVIRONMENTAL RATING SIGNIFICANCE KEY		
SIGNIFICANCE	RATING	Final Rating Score / Value range
Very Significant	Very High	13 to 16
Significant	High	9 to 12
Minor	Medium	5 to 8
Not Significant	Low	1 to 4

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Number	Aspect	Nature of Impact	Without Mitigation (Baseline)				Receiving Environment (Consequence)	Without Mitigation Score (Baseline)	Probability (Likelihood)	Extent	
			Probability (Likelihood)	Extent	Duration (Frequency)	Magnitude (Intensity/Severity)					
CONSTRUCTION PHASE											
1	Soil	On site erosion due to poor management of stormwater during construction	-8	-2	-2	-8	-8	-6	-4	-2	
2	Soil	Erosion and safety hazards associated with excavations that are left open before being back-filled	-8	-2	-4	-8	-4	-6	-2	-1	
3	Watercourse	Sedimentation of on-site drainage lines due to poor stormwater management	-8	-2	-8	-16	-4	-8	-1	-2	
4		Contamination of on-site drainage lines due to usage of construction chemicals	-2	-1	-8	-16	-4	-7	-2	-1	
5	Waste	Temporary increase in waste and litter in the receiving environment	-8	-4	-2	-8	-4	-6	-2	-1	
6		Clearance of indigenous vegetation from proposed site	-8	-2	-8	-8	-4	-5	-4	-2	
7	Terrestrial biodiversity	Protected & endangered plant species: Potential impact on treatment or protection	-2	-2	-8	-16	-4	-7	-4	-2	
8		Conservation priority: Potential impact on protected areas, DSMs, SSMs or Corridors of Endemism	-8	-2	-4	-4	-8	-6	-4	-2	
9		Landuse and cover: Potential impact on socio-economic activities	-2	-2	-2	-4	-4	-3	0	-2	
10		Connectivity: Potential loss of ecological migration corridors	-4	-4	-2	-4	-4	-4	-4	-2	
11		Encroachment of alien invasive vegetation in disturbed areas	-8	-2	-4	-4	-8	-6	-4	-2	
12		Fire risk: Potential risk of wild fires as a result of the activity	-4	-2	-2	-4	-4	-4	-4	-2	
13		Cumulative impacts: Cumulative impact associated with proposed activity	-2	-2	-2	-2	-2	-2	-1	-1	
14		The 'No Go' option: Potential impact associated with the No-Go alternative	0	-4	-8	-8	-8	-6	0	0	
15		Services	Increased demand for services impacting current services capacity (i.e. increased demand for water, electricity, sewage disposal)	0	-2	-16	-8	-4	-6	-4	-2
16		Impact on Cultural, Archaeological, Palaeontological, and Heritage	Artefacts may be discovered and/or damaged during the construction phase	-2	-4	-2	-4	-2	-3	-2	-2
17	Loss and/or damage to potential fossils and archaeological and historical sites	-2	-4	-2	-4	-2	-3	-2	-2		
18	Socio-economic	Creation of short term employment opportunities during the construction phase	8	2	2	4	2	4	8	2	
19	Dust	Dust will be generated during the construction of the proposed development which may impact drivers and commuters	-8	-4	-2	-8	-2	-5	-2	-4	
20	Visual	Site may become visually unappealing	-8	-2	-3	-4	-2	-4	-16	-2	
21	Noise	Noise will be generated by construction work	-8	-2	-2	-4	-4	-4	-4	-2	
22	Unsustainable sourcing of raw materials	Illegal sourcing of raw materials, such as gravel, sand, water etc. promoting illegal mining operations causing significant damage to the environment	-3	-4	-8	-8	-8	-7	-2	-1	
OPERATIONAL PHASE											
23	Sewage Management	Impact on watercourses due to inadequate sewage disposal	-8	-8	-8	-16	-8	-10	-4	-4	
24	Water supply	Increased pressure on water source for water supply	0	0	0	0	0	0	0	0	
25	Botanical	Encroachment of alien invasive vegetation throughout the site	-4	-2	-4	-8	-4	-5	-2	-2	
26	Socio-economic	Reduced vulnerability of municipal area to droughts - Higher availability of water for replacing bucket system toilets in the informal settlements, with water - system toilets	10	-2	-4	10	-4	2			

With Mitigation			With Mitigation Score (Impact Assessment)	Short Description of some Mitigation Measures / Enhancement Measures
Duration (Frequency)	Magnitude (Intensity Severity)	Receiving Environment (Consequence)		
-2	-4	-2	-3	
-2	-8	-2	-3	
-4	-8	-2	-4	
-2	-2	-2	-2	
-2	-4	-2	-3	
-2	-2	-4	-3	
-2	-4	-4	-4	
-2	-2	-2	-3	
-2	-2	-2	-3	
-1	-4	-4	-3	
-2	-2	-4	-3	
-2	-2	-2	-3	
-2	-2	-4	-3	
-1	-1	-1	-1	
0	0	0	0	
-8	-2	-4	-4	
-2	-2	-2	-2	
-2	-2	-2	-2	
2	4	2	4	
-2	-4	-2	-3	
-2	-1	-2	-3	
-2	-2	-4	-3	
-4	-8	-4	-4	
-2	-4	-4	-4	
0	0	0	0	
-4	-4	-1	-3	
			#DIV/0!	No mitigation required