

Project Name: Grootdrink Housing Development

		Nature of Impact			Without Mitigation (Baseline)					With Mitigation					With Mitigation Score (Impact Assessment)
Number	Aspect	Impact	Probability (Likelihood)	Extent	Duration (Frequency)	Magnitude (Intensity/Severity)	Receiving Environment (Consequence)	Without Mitigation Score (Baseline)	Probability (Likelihood)	Extent	Duration (Frequency)	Magnitude (Intensity/Severity)	Receiving Environment (Consequence)	With Mitigation Score (Impact Assessment)	
CONSTRUCTION PHASE															
1	Botanical	Geology & soils	-4	-2	-2	-4	-2	-3	-2	-2	-2	-2	-2	-2	
2		Land-use and cover	-8	-2	-2	-4	-4	-4	-4	-2	-2	-4	-2	-3	
3		Vegetation status	-8	-2	-2	-4	-4	-4	-4	-4	-2	-2	-2	-2	
4		Conservation priority:	-8	-2	-2	-4	-4	-4	-4	-4	-2	-2	-2	-2	
5		Connectivity:	-8	-2	-2	-4	-4	-4	-4	-2	-2	-2	-2	-2	
6		Watercourses and wetlands	-8	-2	-2	-8	-8	-8	-6	-4	-2	-2	-4	-2	
7		Protected & endangered plant species:	-8	-4	-4	-4	-8	-8	-6	-2	-2	-2	-2	-2	
8		Invasive alien plant species	-4	-2	-2	-2	-2	-2	-3	-2	-2	-2	-2	-2	
9		Veld fire risk	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	
10		Cumulative impacts	-8	-2	-2	-4	-4	-4	-4	-4	-2	-2	-4	-2	
11	The "No-Go" option	-8	-2	-2	-8	-8	-8	-6	N/A	N/A	N/A	N/A	N/A		
12	Heritage	Lithic occurrences	-4	-2	-2	-2	-2	-3	-2	-2	-2	-2	-2	-2	
13		Groblershoop cemetery, situated outside of the development footprint.	-2	-2	-2	-4	-2	-3	-2	-2	-2	-2	-2	-2	
14	Palaeontology	Palaeontological significance (low)	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	
15		Cumulative impact of sewage and solid waste ending up in the drainage line	-8	-4	-2	-16	-4	-4	-7	-2	-2	-2	-4	-2	
16	Freshwater	Impact of graveyards on the drainage line riparian zone	-8	-4	-2	-8	-8	-6	-2	-2	-2	-4	-2	-3	
17		Animal husbandry (i.e. overgrazing and trampling)	-8	-4	-2	-8	-8	-6	-2	-2	-2	-2	-2	-2	
18	Soil	On site erosion due to improper management of stormwater during construction. Exposed platforms and trenches excavated for any pipeline are susceptible will be susceptible to erosion during the construction phase.	-8	-2	-2	-8	-8	-6	-4	-2	-2	-4	-2	-3	
19		Erosion and safety hazards associated with excavated pipelines which are not backfilled.	-8	-2	-4	-8	-4	-6	-2	-1	-2	-8	-2	-3	
20	Watercourse	Sedimentation of drainage line due to the uncontrolled stormwater runoff naturally flowing towards the drainage line.	-4	-2	-8	-8	-4	-6	-1	-2	-2	-8	-2	-3	
21	Waste	Insufficient number of toilets and / or inappropriate disposal of sewage generated during the construction phase.	-8	-4	-2	-8	-4	-6	-2	-1	-2	-4	-2	-3	
22		Temporary increase in waste and litter contaminating the receiving environment (including the Gariep Canal)	-8	-4	-2	-4	-4	-5	-4	-2	-2	-2	-4	-3	
23	Socio-economic	Creation of short-term employment opportunities during the construction phase.	8	2	2	4	2	4	8	2	2	4	2	4	
24	Dust	Dust will be generated during the construction of the proposed development which may impact drivers and commuters.	-8	-4	-2	-4	-2	-4	-2	-2	-2	-2	-2	-2	
25	Visual	Site may be not aesthetic amid natural background.	-4	-2	-4	-4	-2	-4	-2	-2	-2	-2	-2	-2	
26	Noise	Noise will be generated during the construction phase.	-8	-2	-2	-4	-4	-4	-4	-2	-2	-2	-4	-3	
27	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.	-8	-4	-8	-8	-8	-8	-2	-1	-4	-8	-4	-4	
OPERATION PHASE															
28	Water supply	Increased pressure on water source for water supply.	-8	-4	-1	-8	-8	-6	-4	-4	-1	-4	-4	-4	
29	Sewage management	Increased production of sewage which requires effective management	-16	-4	-8	-16	-8	-11	-8	-2	-2	-4	-2	-4	
30	Solid waste management	Increased pressure on municipal waste removal services and illegal dumping of waste	-16	-4	-8	-8	-8	-9	-8	-2	-2	-4	-2	-4	
DECOMMISSIONING AND CLOSURE PHASES															
31	Waste	Demolition of infrastructure resulting in waste accumulation on-site and surrounding area.	-16	-2	-4	-8	-4	-7	-4	-1	-2	-2	-4	-3	
32	Soil and water	Exposed soil becoming prone to erosion and sedimentation of the drainage line.	-8	-2	-8	-8	-4	-6	-2	-1	-2	-4	-4	-3	

ENVIRONMENTAL RATING SIGNIFICANCE KEY

Negative Impacts	Very Significant	Very High	>11 to -16
	Significant	High	>7 to -11
	Increasing Significance	Medium	>4 to -7
	Insignificant	Low	-2 to -4
Positive Impacts	Significant	High	10 to 16
	Increasing Significance	Medium	4 to <10
	Insignificant	Low	1 to <4