Nature and Consequences of impact	Duration / Frequency of activity likely to cause impact	Geographical Extent	Severity (level of damage caused) if impact were to occur	Probability of impact without mitigation	Significance before application of Mitigation Measures	Will activity cause irreplaceable loss of resources?	Mitigation	Probability of impact after mitigation	Significance after application of Mitigation Measures
A score of between 1 and 5 is rated as low.	0 = No impact 1 = short term / once off 2 = medium term / during operation 3 = long term / permanent	1 = point of impact / restricted to site 2 = local / surrounding area	0 = No impact 1 = minor; 3 = medium 5 = major	0 = No impact 1 = Low 2 = Medium 3 = High	1 - 5 = low. 6 - 10 = medium. 11 -14 = high.	10 = Yes 0 = No	0 = No impact -5= can be fully mitigated - 3 = can be partially mitigated -1 = unable to be mitigated	0 = No impact 1 = Low 2 = Medium 3 = High	1 - 5 = low. 6 - 10 = medium. 11 -14 = high.
	Α	В	С	D	Significance	E	F	G	Significance
Construction									
1. The increased risk to pedestrians and livestock due to construction activities.	1	1	1	3	6	0	-5	0	1
On site erosion due to improper management of stormwater by the contractor during construction.		1	1	2	5	0	-5	1	1
2. Dusty conditions generated during the construction of the bridge.	1	1	1	2	5	0	-5	1	1
 Increase in heavy truck traffic along the P303 Road as construction vehicles travel to the site for construction activities, impacting existing traffic conditions and pedestrians. 	1	2	1	2	6	0	-5	0	1
 Impact on any unidentified existing services on site. 	1	2	1	1	5	0	-3	1	3
5. Emissions from construction vehicles associated with the proposed structures at RC1, RC2, and RC4.	1	2	1	3	7	0	-3	1	5
 Temporary increase in waste and litter due to the construction process associated with the construction of the tributary of the Bazangoma Rivers. 	1	2	1	3	7	0	-5	0	2
Insufficient number of toilet facilities on site.	1	2	3	3	9	0	-5	0	4
 Inappropriate disposal of toilet waste resulting in the contamination of the environment. 	1	2	0	3	6	0	-5	0	1
9. Generation of noise associated with the construction.	1	2	0	3	6	0	-5	0	1
10. Damage to property, fences, or cultivated land during construction.	1	2	1	3	7	0	-5	1	3
11. Unsustainable sourcing of raw materials such as gravel, sand, water etc. which could result in the promotion of illegal mining operations which can cause significant damage to the environment.	1	3	3	3	10	0	-5	0	5
12. Positive impacts due to potential for local employment.	0	0	0	0	0	0	0	0	0
13. Positive impacts for the community include potential for local employment.	0	0	0	0	0	0	0	0	0
14. Improved safety along the P303 Road.	0	0	0	0	0	0	0	0	0

Nature and Consequences of impact	Duration / Frequency of activity likely to cause impact	Geographical Extent	Severity (level of damage caused) if impact were to occur	Probability of impact without mitigation	Significance before application of Mitigation Measures	Will activity cause irreplaceable loss of resources?	Mitigation	Probability of impact after mitigation	Significance after application of Mitigation Measures
The following table rates impacts after the application of mitigation measures and operates on a scale of 0-14. A score of between 1and 5 is rated as low. A score of between 6 and 10 is rated as medium. A score of between 11 and 14 is rated as high.	0 = No impact 1 = short term / once off 2 = medium term / during operation 3 = long term / permanent		0 = No impact 1 = minor; 3 = medium 5 = major	0 = No impact 1 = Low 2 = Medium 3 = High	1 - 5 = low. 6 - 10 = medium. 11 -14 = high.	10 = Yes 0 = No	0 = No impact - 5= can be fully mitigated - 3 = can be partially mitigated -1 = unable to be mitigated	0 = No impact 1 = Low 2 = Medium 3 = High	1 - 5 = low. 6 - 10 = medium. 11 -14 = high.
	A	В	C	D	Significance	E	F	G	Significance
Construction									
 There is the potential for erosion to take place within the tributaries of the Bazangoma and Mpipambi Rivers resulting in downstream sedimentation of this eroded material. This is attributed to the clearing and the operation of the construction site within the tributaries of the Bazangoma and Mpipambi Rivers. 	1	2	1	3	7	0	-3	1	5
 There is the potential for sedimentation to take place within the tributaries of the Bazangoma and Mpipambi Rivers due to the temporary crossing. The sedimentation may be minor to continual usage of the crossing or major due to a complete failure of crossing 	1	2	1	3	7	0	-3	1	5
3. The habitat for fauna living within the construction footprint will be modified due to the excavation and construction activities taking place within the tributaries of the Bazangoma and Mpipambi Rivers.	1	1	3	2	7	0	-3	1	5
4. Clearing of the two pipe culvert sites (RC1 and RC2) resulting in the loss of vegetation within the Paulpietersburg Moist Grassland. There will be clearing of up to 79.36m2 of vegetation for the construction of the two pipe culverts.	1	2	1	3	7	0	-5	0	2
 Removal of alien invasive vegetation found within the pipe culvert construction sites. 		0	0	0	0	0	0	0	0
6. Careless operation by the contractor within the tributaries of the Bazangoma and Mpipambi Rivers resulting in damage to these River tributaries, i.e. the riverbed, banks and riparian zones within the construction footprint and adjacent areas	1	1	3	1	6	0	-5	0	1
 Disturbance of the sites (RC1 and RC2) due to construction activities resulting in the encroachment of alien vegetation into disturbed areas i.e. Castor Oil. 	1	1	3	1	6	0	-5	1	2

8. Positive impacts for the community include potential for local employment. Operation									
 Flood events overtopping the pipe culvert structures (located at RC1 and RC2) damaging the structure integrity of the structures, and making the way impassable for vehicles and pedestrians. 	2	2	3	3	10	0	-5	0	5
 Potential alteration of flow dynamics within the tributaries of the Bazangoma and Mpipambi Rivers due to poor placement of the pipe culvert components. 	3	2	3	1	9	0	-5	1	5
 Blockages of the proposed pipe culverts at RC1 and RC2 impeding flow of the tributaries of the Bazangoma and Mpipambi Rivers, resulting in flooding or drying out of tributaries of the Bazangoma and Mpipambi Rivers. 	2	2	3	3	10	0	-5	0	5
4. An increase in hardened surfaces due to pipe culvert designs may increase stormwater runoff resulting in increased erosion of nearby areas and impacting on the tributaries of the Bazangoma and Mpipambi Rivers.	1	1	1	3	6	0	-3	1	4
 The new pipe culverts will improve the connectivity across the tributaries of the Bazangoma and Mpipambi Rivers. 		0	0	0	0	0	0	0	0
6. Improved storm water management associated with the pipe culverts will prevent further scouring and erosion of the banks associated with the tributaries of the Bazangoma and Mpipambi Rivers.	0	0	0	0	0	0	0	0	0

Nature and Consequences of impact	Duration / Frequency of activity likely to cause impact	Geographical Extent	Severity (level of damage caused) if impact were to occur	Probability of impact without mitigation	Significance before application of Mitigation Measures	Will activity cause irreplaceable loss of resources?	Mitigation	Probability of impact after mitigation	Significance after application of Mitigation Measures
operates on a scale of 0-14. A score of between 1and 5 is rated as low. A score of between 6 and 10 is rated as	0 = No impact 1 = short term / once off 2 = medium term / during operation 3 = long term / permanent	1 = point of impact / restricted to site 2 =	0 = No impact 1 = minor; 3 = medium 5 = major	0 = No impact 1 = Low 2 = Medium 3 = High	1 - 5 = low. 6 - 10 = medium. 11 -14 = high.	10 = Yes 0 = No	0 = No impact - 5= can be fully mitigated - 3 = can be partially mitigated -1 = unable to be mitigated	0 = No impact 1 = Low 2 = Medium 3 = High	1 - 5 = low. 6 - 10 = medium. 11 -14 = high.
	Α	В	С	D	Significance	E	F	G	Significance
Construction									
 There is the potential for erosion to take place within the tributary of the Bazangoma River and associated Channelled Valley Bottom wetland resulting in downstream sedimentation of this eroded material due to clearing and the operation of the construction site within the tributary of the Bazangoma River. 	1	2	1	3	7	0	-3	1	5
 There is the potential for erosion to take place within the Channelled Valley Bottom wetland resulting in downstream sedimentation of this eroded material due to clearing and the operation of the construction site within the Channelled Valley Bottom wetland. 	1	1	1	3	6	0	-3	1	4
3. There is the potential for sedimentation to take place within the tributary of the Bazangoma River and the associated Channelled Valley Bottom wetland due to the temporary crossing. The sedimentation may be minor to continual usage of the crossing or major due to a complete failure of crossing	1	2	1	3	7	0	-3	1	5
4. The habitat for fauna living within the construction footprint will be modified due to the excavation and construction activities taking place within the tributary of the Bazangoma River and associated Channelled Valley Bottom wetland.	1	2	1	3	7	0	-3	1	5
5. Clearing of the realigned RC4 Bridge site resulting in the loss of vegetation within the Paulpietersburg Moist Grassland (Gm 15) vegetation type. There will be clearing of up to 559m2 of vegetation for the construction of RC4 Bridge.	1	2	1	3	7	0	-5	1	3
Removal of alien invasive vegetation found within the Bridge construction site.	0	0	0	0	0	0	0	0	0

7. Careless operation by the contractor within the tributaries of the Bazangoma River and associated Channelled Valley Bottom wetland resulting in damage to the tributaries of the Bazangoma River and associated Channelled Valley Bottom wetland i.e. the riverbed, banks and riparian zones within the construction footprint and adjacent areas	1	2	1	2	6	0	-5	1	2
 Disturbance of the RC4 Bridge site due to construction activities resulting in the encroachment of alien vegetation into disturbed areas i.e. Castor Oil. 	1	2	1	2	6	0	-5	1	2
Operation									
 Flood events overtopping the Bridge at RC4, damaging the structure integrity of the bridge, and making the way impassable for vehicles and pedestrians. 	2	2	3	3	10	0	-5	0	5
 Potential alteration of flow dynamics within the tributaries of the Bazangoma River and associated Channelled Valley Bottom wetland due to poor placement of the piers. 	3	2	1	3	9	0	-5	1	5
 Blockages of the proposed Bridge at RC4 impeding flow of the tributary of the Bazangoma River, resulting in flooding or drying out of tributary of the Bazangoma River and the associated Channelled Valley Bottom wetland. 	2	2	3	3	10	0	-5	0	5
4. An increase in hardened surfaces due to a larger bridge design may increase stormwater runoff resulting in increased erosion of nearby areas and impacting on the tributaries of the Bazangoma River and the associated Channelled Valley Bottom wetland.	1	1	1	3	6	0	-3	1	4
 The new Bridge at RC4 will improve the connectivity across the tributary of the Bazangoma River and the Channelled Valley Bottom wetland. 	0	0	0	0	0	0	0	0	0
 Improved storm water management associated with the proposed Bridge at RC4 will prevent further scouring and erosion of the banks associated with the tributary of the Bazangoma River and the associated Channelled Valley Bottom wetland. 	0	0	0	0	0	0	0	0	0