	ECT	ıre	Severity	tion	ent	billity	lence	VIIAL	SIGNIF	CANCE	NOITY
BP 1 - POTENTIAL IMPACT - CONSTRUCTION PHASE	ASPECT	ASPECT		Duration	Extent	Probability	Confidence	MITIGATION	Without Mitigation	With Mitigation	MITIGATION
 1.1 Soil Compaction and Erosion Activities: Clearing and grubbing Stripping of topsoil Creation of stormwater drainage systems Description: The compaction of soil may occur during the site preparation phase as a result of operating heavy machinery. Compaction of soil may result in the loss of soil viability which will affect the ability of the vegetation to recover. Compacted soil decreases infiltration and therefore increases the amount of surface runoff which will contribute to the rate of erosion. The removal of vegetation cover and exposure of underlying soil will increase the risk of erosion, particularly on steeper slopes as found downslope and to the west of the site. Erosion may result in the loss of viable topsoil and downstream impacts on the receiving water bodies. 	Surface Disturbance	Negative Direct	М	М	S	L	н	М	MEDIUM NEGATIVE	LOW NEGATIVE	6.4 6.7
 1.2 Soil Pollution Activities: Operation of machinery Description: The operation of heavy machinery during the stripping and clearing of the borrowpit may result in spillages of hydraulic oils due to breakdowns or spillages of diesel during refuelling in the field. Spillages may result in the pollution of soil which could affect soil viability. 	Hazardous Waste	Negative Direct	М	s	s	Р	М	н	MEDIUM NEGATIVE	LOW NEGATIVE	6.3 6.4 6.13 6.14
1.3 Air Pollution Activities: Clearing and grubbing	Emissions to Air (Gaseous) Emissions to Air (Particulate – Dust)	Negative Direct	М	S	S	D	н	М	MEDIUM NEGATIVE	LOW	6.5

SEVERITY: (Refer to Table 5.2) H = High; M = Medium; L = Low; + = Positive	DURATION: (Refer to Table 5.3) S = Short Term; M = Medium Term; L = Long Term; P = Permanent	EXTENT: (Refer to Table 5.3) S = Site; L = Local; R = regional; N = National	PROBABILITY: (Refer to Table 5.3) U = Unlikely; L = Likely; P = Possible; D = Definite
MITIGATION PROTENTIAL: (Refer to Table 5.4) H = High; M = Medium; L = Low			

DD 4 DOTENTIAL IMPACT. CONSTRUCTION BUASE	ECT	ure	arity	tion	ent	billity	lence	TION	SIGNIF	ICANCE	TION
BP 1 - POTENTIAL IMPACT - CONSTRUCTION PHASE	ASPECT	Nature	Severity	Duration	Extent	Probability	Confidence	MITIGATION	Without Mitigation	With Mitigation	MITIGATION
1.4 Surface Water Pollution (Dirty Water Runoff and Pollutants)											
 Clearing and grubbing Stripping of topsoil Stripping of overburden Creation of stormwater drainage systems Topsoil and overburden stockpiles Description: Without proper management, runoff from exposed soil surfaces and stockpiles is likely to become highly sedimented (ie carry a nigh sediment load). The compaction of surfaces and the creation of hard, impermeable surfaces will increase the amount of runoff generated. Stormwater runoff will ultimately enter the stormwater system on the site and then run off from an energy dissipater. If this was uncontrolled the sediment laden water might flow downhill and enter the Sipetu River directly. A stormwater management system is therefore proposed, with regular monitoring of downstream impacts. Spillages of hydrocarbons (such as hydraulic oils) may enter into surface water bodies if washed off site even though the closest drainage line is some distance downslope of the borrowpit.	Release to water (diffuse & point)	Negative Direct	L	М	L	Р	н	н	HIGH NEGATIVE	LOW NEGATIVE	6.3
Activities: Clearing and grubbing Description: The preparation of the site will involve the clearing of vegetation. The site currently consists of degraded grasslands. The site preparation will effectively result in the complete transformation of the site in terms of plant and animal habitat. The vegetation assessment indicated that the vegetation type affected by the mining areas is not unique and is in fact well represented in the surrounding areas. One may therefore assume that the loss of the vegetation on the footprint of the mining area will not have a significantly detrimental impact on the vegetation type as a whole. Notwithstanding this, an effort should be made to minimize the area of impact and to reestablish the vegetation as close to the original condition as possible, following completion of the mining operations.	Surface Disturbance	Negative Direct	M/L	L	S	D	н	М	MEDIUM NEGATIVE	LOW NEGATIVE	6.8
Activities: Clearing and grubbing Description: The removal of indigenous vegetation and the creation of disturbed surfaces is an open invitation for the invasion of alien plant species. Alien invader species such as Black Wattle have been recorded in the area. Invasive alien plants effectively out compete many of the indigenous species and ultimately lead to a loss of biodiversity. This impact must be managed throughout the life of the mine through the implementation of a detailed alien plant eradication programme.	Surface Disturbance	Negative Direct	М	L	S	L	н	н	MEDIUM NEGATIVE	LOW NEGATIVE	6.8
SEVERITY: (Refer to Table 5.2) H = High; M = Medium; L = Low; + = Positive DURATION: (Refer to Table 5.3) S = Short Term; M = Medium Term; L = Long Term; P = Permanent EXTENT: S = Site; L				National			PROBA U = Unl	ABILITY: (likely; L =	(Refer to Table 5.3 Likely; P = Possit	B) ble; D = Definite	

	1:	0	4	100	*	lity	исе	ION	SIGNIF	ICANCE	NOI
BP 1 - POTENTIAL IMPACT - <u>OPERATION</u> PHASE	ASPECT	Nature	Severity	Duration	Extent	Probability	Confidence	MITIGATION	Without Mitigation	With Mitigation	MITIGATION
2.6 Public Nuisance – Traffic Disruption Activities: • Transporting of material to construction sites Description: The transportation of material to the various construction sites along the DR08447 may result in traffic disruption. One should bear in mind, however, that there will already be disruption to traffic caused by the road construction activities and the transportation of material to site is unlikely to add significantly to this. There is generally little traffic along the DR08447 as it is a rural road.	Creation/disruption of access	Negative Direct	L	s	s	Р	н	L	LOW NEGATIVE	LOW NEGATIVE	6.15
2.7 Public Nuisance – Dust Generation Activities: Extraction of material Loading of material Transportation of material to site Description: Dust will be generated from excavation and loading of material as well as the exposure of bare soil within the borrowpit. Dust will be generated from the use of trucks to transport material to the construction sites.	Emissions to air - particulate	Negative Direct	L	м	L	L	м	М	MEDIUM NEGATIVE	LOW NEGATIVE	6.5
2.8 Public Nuisance – Noise Activities: Extraction of material Loading of material Transportation of material to site Blasting activities Description: Refer to Section 1.9. Infrequent larger noise events will occur when blasting. All surrounding communities will be informed of proposed blasts ahead of time. The project CLO will assist the Contractor in making sure all affected parties, and especially the Sipetu Hospital residents, are kept well informed in this regard.	Noise Disturbance	Negative Direct	М	М	L	D	М	М	MEDIUM NEGATIVE	MEDIUM – LOW NEGATIVE	6.6

SEVERITY: (Refer to Table 5.2) H = High; M = Medium; L = Low; + = Positive	DURATION: (Refer to Table 5.3) S = Short Term; M = Medium Term; L = Long Term; P = Permanent	EXTENT: (Refer to Table 5.3) S = Site; L = Local; R = regional; N = National	PROBABILITY: (Refer to Table 5.3) U = Unlikely; L = Likely; P = Possible; D = Definite
MITIGATION PROTENTIAL: (Refer to Table 5.4) H = High; M = Medium; L = Low			

	CT	re	Severity	ion	nt	oillity	ence	TION	SIGNIF	ICANCE	NOIL
BP 1 - POTENTIAL IMPACT - <u>OPERATION</u> PHASE	ASPECT	ASPECT Nature		Duration	Extent	Probability	Confidence	MITIGATION	Without Mitigation	With Mitigation	MITIGATION
2.9 Public Health and Safety Activities: Extraction of material Loading of material Transportation of material to site Blasting activities Description: Public health and safety may be at risk as a result of a number of aspects: generation of dust and noise, the operation of heavy earthmoving machinery of site, the creation of excavations and stockpiles as well as blasting events on site. The impacts of noise and dust generation on public health and wellbeing are discussed in the sections above. The erection of the security fence and presence of security staff as well as proper safety signage will minimize the safety risks posed to nearby residents and other members of the public. All surrounding communities will be informed of proposed blasts ahead of time. The project CLO will assist the Contractor in making sure all affected parties, and especially the Sipetu Hospital residents, are kept well informed in this regard.	E ii	Negative Direct	М	М	s	Р	М	н	MEDIUM – HIGH NEGATIVE	LOW NEGATIVE	6.12 6.14 6.15
2.10 Degradation of landscape value, aesthetic appeal or sense of place Activities: • Excavation of the material – expansion of the borrowpit Description: As the borrowpit is mined, it will grow in size extending as indicated in the development plan. This will have a visual impact, particularly as the borrowpit is all located within close proximity to an existing gravel road.	Surface disturbance, change in landform and topography	Negative Direct	М	L	L	D	М	М		MEDIUM NEGATIVE	6.3 6.5 6.6 6.8 6.9 6.10 6.11 6.13 6.14
2.11 Economic Development, income generation and social upliftment Activities: Procurement of goods and services Employment and training Description: Refer to Section 1.14.	Materials Consumption, recruitment and training	Positive Direct and Indirect	M+	м	R	Р	М	N/A	MEDIUM	POSITIVE	6.16 6.17

SEVERITY: (Refer to Table 5.2) H = High; M = Medium; L = Low; + = Positive	DURATION: (Refer to Table 5.3) S = Short Term; M = Medium Term; L = Long Term; P = Permanent	EXTENT: (Refer to Table 5.3) S = Site; L = Local; R = regional; N = National	PROBABILITY: (Refer to Table 5.3) U = Unlikely; L = Likely; P = Possible; D = Definite
MITIGATION PROTENTIAL: (Refer to Table 5.4) H = High; M = Medium; L = Low			

DD 4 DOTENTIAL IMPACT OF OCUPE DUACE	ECT	ure	arity	tion	ent	billity	Jence	ATION	SIGNIF	ICANCE	VTION
BP 1 - POTENTIAL IMPACT - <u>CLOSURE</u> PHASE	ASPECT	ASPECT	Severity	Duration	Extent	Probability	Confidence	MITIGATION	Without Mitigation	With Mitigation	MITIGATION
3.1 Soil Compaction and Erosion Activities: Shaping of the borrowpit Topsoiling Description: Refer to Section 1.1	Surface Disturbance	Negative Direct	М	М	s	L	н	М	MEDIUM NEGATIVE	LOW NEGATIVE	6.4 6.7
3.2 Soil Pollution Activities: Operation of machinery Description: Refer to Section 1.2	Hazardous Waste	Negative Direct	М	s	s	Р	М	н	MEDIUM NEGATIVE	LOW NEGATIVE	6.3 6.4 6.13 6.14
3.3 Air Pollution Activities: Shaping of the borrowpit Topsoiling Description: Refer to Section 1.3	(Gaseous) Emissions to Air (Particulate – Dust)	Negative Direct	М	s	s	D	н	М	MEDIUM NEGATIVE	LOW NEGATIVE	6.5
3.4 Surface Water Pollution (Dirty Water Runoff and Pollutants) Activities: Shaping of the borrowpit Topsoiling Description: Refer to Section 1.4	Release to water (diffuse & point)	Negative Direct	L	М	L	Р	н	н	MEDIUM – LOW NEGATIVE	LOW NEGATIVE	6.3 6.4
3.5 Spread of invasive alien species Activities: Spreading of topsoil Hydroseeding Description; Refer to Section 1.6	Surface Disturbance	Negative Direct	М	L	s	L	н	н	MEDIUM NEGATIVE	LOW NEGATIVE	6.8

SEVERITY: (Refer to Table 5.2) H = High; M = Medium; L = Low; + = Positive	DURATION: (Refer to Table 5.3) S = Short Term; M = Medium Term; L = Long Term; P = Permanent	EXTENT: (Refer to Table 5.3) S = Site; L = Local; R = regional; N = National	PROBABILITY: (Refer to Table 5.3) U = Unlikely; L = Likely; P = Possible; D = Definite
MITIGATION PROTENTIAL: (Refer to Table 5.4) H = High; M = Medium; L = Low			

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BP 1 - POTENTIAL IMPACT – <u>CLOSURE</u> PHASE	ASPECT	Nature	Severity	Duration	Extent	Probability	Confidence	MITIGATION	SIGNIF	ICANCE	MITIGATION
	ASI	Na	Sei	nn	ā	Prot	Conf	MITIG	Without Mitigation	With Mitigation	MITIE
3.6 Public Nuisance – Dust Generation Activities: Shaping of the borrowpit Spreading of topsoil Description: Dust will be generated from the shaping of the borrowpit as well as the spreading of the topsoil.	Emissions to air - particulate	Negative Direct	М	М	L	L	м	М	MEDIUM NEGATIVE	LOW NEGATIVE	6.5
3.7 Public Nuisance – Noise Activities: Shaping of the borrowpit Spreading of topsoil Description: Refer to Section 1.9.	Noise Disturbance	Negative Direct	М	М	L	D	м	М	MEDIUM NEGATIVE	MEDIUM – LOW NEGATIVE	6.6
3.8 Public Health and Safety Activities: • Shaping of the borrowpit • Spreading of topsoil Description: Public health and safety may be at risk as a result of a number of aspects: generation of dust and noise, the operation of heavy earthmoving machinery of site and the creation of excavations and stockpiles. The impacts of noise and dust generation on public health and wellbeing are discussed in the sections above. The erection of the security fence and presence of security staff as well as proper safety signage will minimize the safety risks posed to nearby residents and other members of the public.	Emissions to air Noise, surface disturbance, changes in landform, topography	Negative Direct	М	М	s	P	М	н		LOW NEGATIVE	6.12 6.14 6.15
3.9 Degradation of landscape value, aesthetic appeal or sense of place Activities: Shaping of the borrowpit Topsoiling Hydroseeding Description: This is an existing borrowpit. The final rehabilitation will result in an improvement to the visual impact of the site as the existing high vertical workface will have been removed.	Surface disturbance, change in landform and topography	Negative Direct	M+	P	s	D	М	N/A	MEDIUM	POSITIVE	6.3 6.5 6.6 6.8 6.9 6.10 6.11 6.13 6.14

SEVERITY: (Refer to Table 5.2) H = High; M = Medium; L = Low; + = Positive	DURATION: (Refer to Table 5.3) S = Short Term; M = Medium Term; L = Long Term; P = Permanent	EXTENT: (Refer to Table 5.3) S = Site; L = Local; R = regional; N = National	PROBABILITY: (Refer to Table 5.3) U = Unlikely; L = Likely; P = Possible; D = Definite
MITIGATION PROTENTIAL: (Refer to Table 5.4) H = High; M = Medium; L = Low			

DD 2 DOTENTIAL IMPACT CONSTRUCTION DUASE	ECT	ure	erity	ıtion	ent	billity	Jence	ATION	SIGNIF	ATION	
BP 2 - POTENTIAL IMPACT - CONSTRUCTION PHASE	ASPECT	Nature	Severity	Duration	Extent	Probability	Confidence	MITIGATION	Without Mitigation	With Mitigation	MITIGATION
1.1 Soil Compaction and Erosion Activities: Clearing and grubbing Stripping of topsoil Creation of stormwater drainage systems Description: The compaction of soil may occur during the site preparation phase as a result of operating heavy machinery. Compaction of soil may result in the loss of soil viability which will affect the ability of the vegetation to recover. Compacted soil decreases infiltration and therefore increases the amount of surface runoff which will contribute to the rate of erosion. The removal of vegetation cover and exposure of underlying soil will increase the risk of erosion, particularly on steeper slopes as found downslope and to the west of the site. Erosion may result in the loss of viable topsoil and downstream impacts on the receiving water bodies.	Surface Disturbance	Negative Direct	М	М	s	L	н	М	MEDIUM NEGATIVE	LOW NEGATIVE	6.4 6.7
Activities: Operation of machinery Description: The operation of heavy machinery during the stripping and clearing of the borrowpit may result in spillages of hydraulic oils due to breakdowns or spillages of diesel during refuelling in the field. Spillages may result in the pollution of soil which could affect soil viability.	Hazardous Waste	Negative Direct	М	s	s	P	М	н	MEDIUM NEGATIVE	LOW NEGATIVE	6.3 6.4 6.13 6.14
 Activities: Clearing and grubbing Stripping of topsoil Creation of stormwater drainage systems Stripping of overburden Description: Vehicle emissions (exhaust emissions) will be generated by the operation of plant on site. Dust will be generated from the use of machinery during the stripping of vegetation, topsoil and overburden. Exposed surfaces will contribute to atmospheric dust particularly during high wind conditions. Excessive exposure to dust will impact on human health. Lower levels may be considered of nuisance value. The impact on Public Health and Safety is discussed under Section 1.10 below. 	Emissions to Air (Gaseous) Emissions to Air (Particulate – Dust)	Negative Direct	М	S	S	D	н	М	MEDIUM NEGATIVE	LOW	6.5

SEVERITY: (Refer to Table 5.2) H = High; M = Medium; L = Low; + = Positive	DURATION: (Refer to Table 5.3) S = Short Term; M = Medium Term; L = Long Term; P = Permanent	EXTENT: (Refer to Table 5.3) S = Site; L = Local; R = regional; N = National	PROBABILITY: (Refer to Table 5.3) U = Unlikely; L = Likely; P = Possible; D = Definite
MITIGATION PROTENTIAL: (Refer to Table 5.4) H = High; M = Medium; L = Low			

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BP 2 - POTENTIAL IMPACT – <u>CONSTRUCT</u>	ASP ECT	Nature	Severity	Duration	Extent	Probability	Confidence	MITIGATION	Without Mitigation	With Mitigation	MITIGATION
.4 Surface Water Pollution (Dirty Water Runoff and Pollutant	s)										
Clearing and grubbing Stripping of topsoil Stripping of overburden Creation of stormwater drainage systems Topsoil and overburden stockpiles Cescription: Without proper management, runoff from exposed soil surfaces and stockpiles in high sediment load). The compaction of surfaces and the creation of hard, impunoff generated. Stormwater runoff will ultimately enter the diversion channel energy dissipater. A stormwater management system is therefore proposed, with spillages of hydrocarbons (such as hydraulic oils) may enter into surface water be brainage line is some distance downslope of the borrowpit.	permeable surfaces will increase the amount of downslope of the site and then run off from an regular monitoring of downstream impacts.	Negative Direct	L	М	L	P	н	н	MEDIUM – LOW NEGATIVE	LOW NEGATIVE	6.: 6.4
ctivities: Clearing and grubbing rescription: The site will involve the clearing of vegetation. The site curreparation will effectively result in the complete transformation of the site in tessessment indicated that the vegetation type affected by the mining areas is rurrounding areas. One may therefore assume that the loss of the vegetation or ignificantly detrimental impact on the vegetation type as a whole. Notwithstanding of impact and to reestablish the vegetation as close to the original condition perations.	erms of plant and animal habitat. The vegetation not unique and is in fact well represented in the n the footprint of the mining area will not have a ng this, an effort should be made to minimize the	Negative Direct	M/L	L	S	D	н	М	MEDIUM NEGATIVE	LOW NEGATIVE	6.3
Activities: Clearing and grubbing Description: The removal of indigenous vegetation and the creation of disturbed surfaces is species. Alien invader species such as Black Wattle have been recorded in the anany of the indigenous species and ultimately lead to a loss of biodiversity. This he mine through the implementation of a detailed alien plant eradication program	an open invitation for the invasion of alien plant rea. Invasive alien plants effectively out compete impact must be managed throughout the life of ime.	Surface Disturbance Negative Direct	М	L	S	L	Н	н	MEDIUM NEGATIVE	LOW	6.
SEVERITY: (Refer to Table 5.2) H = High; M = Medium; L = Low; + = Positive DURATION: (Refer to S = Short Term; M = P = Permanent)	to Table 5.3) Medium Term; L = Long Term; EXTENT: (Refer to S = Site; L = Local	to Table 5	5.3) gional; N =	National			PROBA U = Unl	BILITY: (ikely; L =	(Refer to Table 5.3 Likely; P = Possil	B) ble; D = Definite	

DD C POTENTIAL IMPACT CONSTRUCTION BUASE	ECT	ure	arity	tion	ent	billity	lence	ATION	SIGNIF	ICANCE	NOITY
BP 2 - POTENTIAL IMPACT - CONSTRUCTION PHASE	ASPECT	Nature	Severity	Duration	Extent	Probability	Confidence	MITIGATION	Without Mitigation	With Mitigation	MITIGATION
 1.7 Public Nuisance – Traffic Disruption Activities: Accessing the Site Fencing of the Site Description: Accessing the borrowpit may result in some disruption to traffic along the gravel public road. This will be short-lived and of low significance. Fencing of the site may impact slightly on pedestrian movement across the site. Considering that the site does not form part of an obvious thoroughfare nor is there any evidence of well used paths, this impact is unlikely to be significant. 	Creation/disruption of access	Negative Direct	L	s	s	Р	н	L	LOW NEGATIVE	LOW NEGATIVE	6.15
 1.8 Public Nuisance – Dust Generation Activities: Accessing the borrowpit Clearing and grubbing Stripping of topsoil Creation of stormwater drainage systems Stripping of overburden Description: Dust will be generated from the use of machinery to construct platforms and during the stripping of vegetation, topsoil and overburden. Exposed surfaces will contribute to atmospheric dust particularly during high wind conditions. 	Emissions to air - particulate	Negative Direct	L	М	s	L	М	М	MEDIUM NEGATIVE	LOW NEGATIVE	6.5
 1.9 Public Nuisance – Noise Activities: Accessing the site Clearing and grubbing Stripping of topsoil Stripping of overburden Creations of stormwater drainage systems Description: During the site establishment phase, noise will be generated primarily by heavy earthmoving machinery as the mining area is stripped of topsoil and overburden. As such the noise levels are likely to be those commonly experienced on any civils construction site. Activities will be limited to normal working hours. The impact of noise on mine workers' health will be addressed by the Mine Health and Safety Plan and will include the use of protective hearing devices. 	Noise Disturbance	Negative Direct	L	M	S	D	М	М	MEDIUM NEGATIVE	MEDIUM – LOW NEGATIVE	6.6

SEVERITY: (Refer to Table 5.2) H = High; M = Medium; L = Low; + = Positive	DURATION: (Refer to Table 5.3) S = Short Term; M = Medium Term; L = Long Term; P = Permanent	EXTENT: (Refer to Table 5.3) S = Site; L = Local; R = regional; N = National	PROBABILITY: (Refer to Table 5.3) U = Unlikely; L = Likely; P = Possible; D = Definite
MITIGATION PROTENTIAL: (Refer to Table 5.4) H = High; M = Medium; L = Low			

	CT	re	rity	ion	t i	oillity	ence	TION	SIGNIF	ICANCE	NOIL
BP 2 - POTENTIAL IMPACT - CONSTRUCTION PHASE	ASPECT	Nature	Severity	Duration	Extent	Probability	Confidence	MITIGATION	Without Mitigation	With Mitigation	MITIGATION
 Activities: Accessing the site Clearing and grubbing Stripping of topsoil Stripping of overburden Creations of stormwater drainage systems Description: Public health and safety may be at risk as a result of a number of aspects: generation of dust and noise, the operation of heavy earthmoving machinery on site and the creation of excavations and stockpiles. The impacts of noise and dust generation on public health and wellbeing are discussed in the sections above. The erection of the security fence and presence of security staff as well as proper safety signage, will minimize the safety risks posed to nearby residents and other members of the public and livestock. 	(D)	Negative Direct	М	М	s	Р	М	н	MEDIUM NEGATIVE	LOW NEGATIVE	6.12 6.14 6.15
 1.11 Degradation of landscape value, aesthetic appeal or sense of place Activities: Clearing and grubbing Stripping of topsoil Stripping of overburden Description: The site establishment phase will have a visual impact as vegetation and topsoil is stripped. The activities will be visible from some of the surrounding areas. The borrowpit is located in fairly close proximity to a few houses and is also adjacent to a gravel road and is therefore highly visible from that road. BP 2 is, however, an existing borrowpit with a high visual impact especially due to the fact that high vertical faces have been left after previous mining. The proposed mining activities will remove those vertical faces and therefore give the site an appearance more in harmony with the surrounding topography. Considering that the surrounding landuse is largely rural agricultural in nature, the site establishment activities are likely to be noticeable and therefore will have a significant impact on the aesthetic value of the landscape. This will be mitigated somewhat by minimizing cleared areas and by landscaping as per the proposed mine development plan. 	9	Negative Direct	М	L	L	D	М	М	MEDIUM NEGATIVE	LOW NEGATIVE	6.3 6.5 6.6 6.8 6.9 6.10 6.11 6.13 6.14
 1.12 Cultural Heritage Activities: Clearing and grubbing Stripping of topsoil Stripping of overburden Description: During site establishment there is the potential for the destruction of national heritage sites to be destroyed or damaged. However no sites of cultural importance were discovered within the area proposed for the BP 2 site during the Heritage Impact Assessment undertaken by eThembeni Cultural Heritage. Therefore the expansion of the borrowpit will not impact on such resources. A potential ancestral grave was discovered in the general area (see HIA document in APPENDIX A) but that falls outside of the proposed borrow area. 	Surface disturbance, change in landform and topography	Negative Direct	L	L	L	D	М	М	NON - SIGNIFICANT	NON - SIGNIFICANT	6.9

SEVERITY: (Refer to Table 5.2) H = High; M = Medium; L = Low; + = Positive	DURATION: (Refer to Table 5.3) S = Short Term; M = Medium Term; L = Long Term; P = Permanent	EXTENT: (Refer to Table 5.3) S = Site; L = Local; R = regional; N = National	PROBABILITY: (Refer to Table 5.3) U = Unlikely; L = Likely; P = Possible; D = Definite
MITIGATION PROTENTIAL: (Refer to Table 5.4) H = High; M = Medium; L = Low			

DD 2 DOTENTIAL IMPACT CONSTRUCTION DUASE	ECT	ure	erity	tion	ent	billity	Jence	MITIGATION	SIGNIFICANCE	ATION
BP 2 - POTENTIAL IMPACT - CONSTRUCTION PHASE	ASPECT	Nature	Severity	Duration	Extent	Probability	Confidence	MITIG/ POTEI	Without With Mitigation	MITIGATION
1.13 Change in Landuse Activities: • General mining activities Description: The expansion of the borrowpit will result in a temporary change of landuse which will be largely reinstated on closure.	Surface disturbance, change in landform and topography	Negative Direct	н	L	s	D	н	М	LOW NEGATIV	E 6.10
1.14 Economic Development, income generation and social upliftment Activities: Procurement of goods and services Employment and training Description: The site establishment phase is likely to require the use of generalized and specialized services. Preference will be given to local service providers and suppliers where possible and to the employment of local labour. Employment of local labour, use of existing SMME's based in the area, and the support of local businesses in the supply of goods and services will benefit the regional economy.	Materials Consumption, recruitment and training	Positive Direct and Indirect	M+	М	R	Р	М	N/A	MEDIUM POSITIVE	6.16 6.17

SEVERITY: (Refer to Table 5.2) H = High; M = Medium; L = Low; + = Positive	DURATION: (Refer to Table 5.3) S = Short Term; M = Medium Term; L = Long Term; P = Permanent	EXTENT: (Refer to Table 5.3) S = Site; L = Local; R = regional; N = National	PROBABILITY: (Refer to Table 5.3) U = Unlikely; L = Likely; P = Possible; D = Definite
MITIGATION PROTENTIAL: (Refer to Table 5.4) H = High; M = Medium; L = Low			

BP 2 - POTENTIAL IMPACT – OPERATION PHASE		erity	ntion	ent	billity	dence	ATION	SIGNIF	TICANCE	MITIGATION
ASP	Nat	Sev	Dura	Ext	Probe	Confi	MITIG, POTEI	Without Mitigation	With Mitigation	MITIG/
Surface Disturbance	Negative Direct	М	М	s	L	н	М	MEDIUM NEGATIVE	LOW NEGATIVE	6.4 6.7
Hazardous Waste	Negative Direct	М	s	s	P	М	н	MEDIUM NEGATIVE	LOW NEGATIVE	6.3 6.4 6.13 6.14
(Gaseous) Emissions to Air (Particulate – Dust)	Negative Direct	М	s	s	D	н	М	MEDIUM NEGATIVE	MEDIUM / LOW NEGATIVE	6.5
Release to water (diffuse & point)	Negative Direct	L	М	L	Р	н	н	MEDIUM – LOW NEGATIVE	LOW NEGATIVE	6.3 6.4
Surface Disturbance	Negative Direct	М	L	s	L	н	н	MEDIUM NEGATIVE	LOW NEGATIVE	6.8
	Release to water (Gaseous) Caseous) Emissions to Air (diffuse & point) (Particulate - Dust)	Release to water (Gaseous) Disturbance (diffuse & point) Negative Negative Direct (Gaseous) Hazardous Waste Surface Disturbance (Particulate – Dust) Negative Direct Negative Direct	Release to water (Gaseous) We Direct Negative Direct The solution of the continuation of the continuatio	Release to water (diffuse & point) (Gaseous) Emissions to Air (Particulate - Dust) Hazardous Waste (Particulate - Dust) Ruface Disturbance (Disturbance Direct Direc	Disturbance Release to water (diffuse & point) (Gaseous) Emissions to Air (Particulate - Dust) Hazardous Waste (Disturbance Disturbance Prince) Release to water (diffuse & point) Release to water (Diffuse & Disturbance (Diffuse & Disturbance) S T S S S T S S S No T Negative Direct Negative Direct N N N N N N N N	Disturbance Release to water (diffuse & point) (Gaseous) Emissions to Air (diffuse & point) Hazardous Waste (diffuse Direct (Particulate – Dust) Negative Direct (Particulate – Dust) T S S S S T S S S T S S S T T S S T T S S T T S S T T T S T T T T	Disturbance (Gaseous) We Direct (diffuse & point) We Direct (Particulate – Dust) Negative Direct (Particulate – Dust) Negative Direct (Particulate – Dust) Negative Direct Negative Direct Negative Direct Negative Direct Negative Direct Negative Dire	Disturbance Release to water (Gaseous) We Direct Negative Direct Dust) Negative Direct Negative Direct Negative Direct Negative Direct Direct Direct Dust) Negative Direct Negative Direct Negative Direct Negative Direct Dust) Maxima Direct Negative Direct Negati	Disturbance (diffuse & point) (Gaseous) We Direct (diffuse & point) (Gaseous) We Direct (diffuse & point) (Particulate - Dust) We Direct (diffuse & point) (Particulate - Dust) We Direct (diffuse & point) (Particulate - Dust) We Direct Negative Direc	Release to water (Gaseous) Release to water (Gaseous) Release to water (Giffuse & point) Regative Direct Negative Direct Direct Negative Direct Direc

SEVERITY: (Refer to Table 5.2) H = High; M = Medium; L = Low; + = Positive	DURATION: (Refer to Table 5.3) S = Short Term; M = Medium Term; L = Long Term; P = Permanent	S = Site; L = Local; R = regional; N = National	PROBABILITY: (Refer to Table 5.3) U = Unlikely; L = Likely; P = Possible; D = Definite
MITIGATION PROTENTIAL: (Refer to Table 5.4) H = High; M = Medium; L = Low			

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BP 2 - POTENTIAL IMPACT - <u>OPERATION</u> PHASE	ASPECT	Nature	Severity	Duration	Extent	Probability	Confidence	MITIGATION	Without Mitigation	With Mitigation	MITIGATION
2.6 Public Nuisance – Traffic Disruption Activities: • Transporting of material to construction sites Description: The transportation of material to the various construction sites along the DR08447 may result in traffic disruption. One should bear in mind, however, that there will already be disruption to traffic caused by the road construction activities and the transportation of material to site is unlikely to add significantly to this. There is generally very little traffic along the DR08447 as it is a rural road.)ú	Negative Direct	L	s	s	Р	н	L	LOW NEGATIVE	LOW NEGATIVE	6.15
2.7 Public Nuisance – Dust Generation Activities: Extraction of material Loading of material Transportation of material to site Description: Dust will be generated from excavation and loading of material as well as the exposure of bare soil within the borrowpit. Dust will be generated from the use of trucks to transport material to the construction sites.	Emissions to air - particulate	Negative Direct	L	М	L	L	М	М	MEDIUM NEGATIVE	LOW NEGATIVE	6.5
2.8 Public Nuisance – Noise Activities: Extraction of material Loading of material Transportation of material to site Blasting activities Description: Refer to Section 1.9. Infrequent larger noise events will occur when blasting. All surrounding communities will be informed of proposed blasts ahead of time. The project CLO will assist the Contractor in making sure all affected parties, and especially the residents of the closer houses, are kept well informed in this regard.	Noise Disturbance	Negative Direct	М	М	L	D	М	М		MEDIUM – LOW NEGATIVE	6.6

SEVERITY: (Refer to Table 5.2) H = High; M = Medium; L = Low; + = Positive	DURATION: (Refer to Table 5.3) S = Short Term; M = Medium Term; L = Long Term; P = Permanent	EXTENT: (Refer to Table 5.3) S = Site; L = Local; R = regional; N = National	PROBABILITY: (Refer to Table 5.3) U = Unlikely; L = Likely; P = Possible; D = Definite
MITIGATION PROTENTIAL: (Refer to Table 5.4) H = High; M = Medium; L = Low			

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BP 2 - POTENTIAL IMPACT - <u>OPERATION</u> PHASE	ASPECT	Nature	Severity	Duration	Extent	Probability	Confidence	MITIGATION	Without Mitigation	With Mitigation	MITIGATION
2.9 Public Health and Safety Activities: Extraction of material Loading of material Transportation of material Blasting activities Description: Public health and safety may be at risk as a result of a number of aspects: generation of dust and noise, the operation of heavy earthmoving machinery of site and the creation of excavations and stockpiles. The impacts of noise and dust generation on public health and wellbeing are discussed in the sections above. The erection of the security fence and presence of security staff as well as proper safety signage will minimize the safety risks posed to nearby residents and other members of the public. All surrounding communities will be informed of proposed blasts ahead of time. The project CLO will assist the Contractor in making sure all affected parties are kept well informed in this regard.	Emissions to air Noise, surface disturbance, changes in landform, topography	Negative Direct	м	М	s	P	М	н		LOW	6.12 6.14 6.15
2.10 Degradation of landscape value, aesthetic appeal or sense of place Activities: • Excavation of the material – expansion of the borrowpit Description: As the borrowpit is mined, it will grow in size extending as indicated in the development plans. This will have a visual impact, particularly as the borrowpit is all located within close proximity to an existing gravel road and some houses.	Surface disturbance, change in landform and topography	Negative Direct	м	L	L	D	М	М	HIGH – MEDIUM NEGATIVE	MEDIUM NEGATIVE	6.3 6.5 6.6 6.8 6.9 6.10 6.11 6.13 6.14
2.11 Economic Development, income generation and social upliftment Activities: Procurement of goods and services Employment and training Description: Refer to Section 1.14.	Materials Consumption, recruitment and training	Positive Direct and Indirect	M+	М	R	Р	М	N/A	MEDIUM	POSITIVE	6.16 6.17

SEVERITY: (Refer to Table 5.2) H = High; M = Medium; L = Low; + = Positive	DURATION: (Refer to Table 5.3) S = Short Term; M = Medium Term; L = Long Term; P = Permanent	S = Site; L = Local; R = regional; N = National	PROBABILITY: (Refer to Table 5.3) U = Unlikely; L = Likely; P = Possible; D = Definite
MITIGATION PROTENTIAL: (Refer to Table 5.4) H = High; M = Medium; L = Low			

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BP 2 - POTENTIAL IMPACT - CLOSURE PHASE			Extent	Probability	Confidence	MITIGATION	Without Mitigation	With Mitigation	MITIGATION		
3.1 Soil Compaction and Erosion Activities: Shaping of the borrowpit Topsoiling Description: Refer to Section 1.1	Surface Disturbance	Negative Direct	М	М	s	L	н	М	MEDIUM NEGATIVE	LOW NEGATIVE	6.4 6.7
3.2 Soil Pollution Activities: Operation of machinery Description: Refer to Section 1.2	Hazardous Waste	Negative Direct	М	s	s	Р	М	н	MEDIUM NEGATIVE	LOW NEGATIVE	6.3 6.4 6.13 6.14
3.3 Air Pollution Activities: Shaping of the borrowpit Topsoiling Description: Refer to Section 1.3	(Gaseous) Emissions to Air (Particulate – Dust)	Negative Direct	М	s	s	D	н	М	MEDIUM NEGATIVE	MEDIUM / LOW NEGATIVE	6.5
3.4 Surface Water Pollution (Dirty Water Runoff and Pollutants) Activities: Shaping of the borrowpit Topsoiling Description: Refer to Section 1.4	Release to water (diffuse & point)	Negative Direct	L	М	L	Р	н	н	MEDIUM – LOW NEGATIVE	LOW NEGATIVE	6.3 6.4
3.5 Spread of invasive alien species Activities: Spreading of topsoil Hydroseeding Description; Refer to Section 1.6	Surface Disturbance	Negative Direct	М	L	s	L	н	н	MEDIUM NEGATIVE	LOW NEGATIVE	6.8

SEVERITY: (Refer to Table 5.2) H = High; M = Medium; L = Low; + = Positive	DURATION: (Refer to Table 5.3) S = Short Term; M = Medium Term; L = Long Term; P = Permanent	EXTENT: (Refer to Table 5.3) S = Site; L = Local; R = regional; N = National	PROBABILITY: (Refer to Table 5.3) U = Unlikely; L = Likely; P = Possible; D = Definite
MITIGATION PROTENTIAL: (Refer to Table 5.4) H = High; M = Medium; L = Low			

BP 2 - POTENTIAL IMPACT - CLOSURE PHASE ASPECT		Severity	Duration	Extent	Probability	Confidence	MITIGATION	SIGNIF	ICANCE	MITIGATION	
	AS	N	Se	mQ	g	Prot	Con	POTI	Without Mitigation	With Mitigation	DITIM
3.6 Public Nuisance – Dust Generation Activities: Shaping of the borrowpit Spreading of topsoil Description: Dust will be generated from the shaping of the borrowpit as well as the spreading of the topsoil.	Emissions to air - particulate	Negative Direct	М	М	L	L	М	М	MEDIUM NEGATIVE	LOW NEGATIVE	6.5
3.7 Public Nuisance – Noise Activities: Shaping of the borrowpit Spreading of topsoil Description: Refer to Section 1.9.	Noise Disturbance	Negative Direct	М	М	L	D	М	М	MEDIUM NEGATIVE	MEDIUM – LOW NEGATIVE	6.6
3.8 Public Health and Safety Activities: Shaping of the borrowpit Spreading of topsoil Description: Public health and safety may be at risk as a result of a number of aspects: generation of dust and noise, the operation of heavy earthmoving machinery of site and the creation of excavations and stockpiles. The impacts of noise and dust generation on public health and wellbeing are discussed in the sections above. The erection of the security fence and presence of security staff as well as proper safety signage will minimize the safety risks posed to nearby residents and other members of the public.		Negative Direct	м	М	ø	Р	М	н		LOW NEGATIVE	6.12 6.14 6.15
3.9 Degradation of landscape value, aesthetic appeal or sense of place Activities: Shaping of the borrowpit Topsoiling Hydroseeding Description: This is an existing borrowpit. The final rehabilitation will result in an improvement to the visual impact of the site as the existing high vertical workface will have been removed.	Surface disturbance, change in landform and topography	Negative Direct	М+	Р	s	D	М	N/A	MEDIUM	POSITIVE	6.3 6.5 6.6 6.8 6.9 6.10 6.11 6.13 6.14

SEVERITY: (Refer to Table 5.2) H = High; M = Medium; L = Low; + = Positive	DURATION: (Refer to Table 5.3) S = Short Term; M = Medium Term; L = Long Term; P = Permanent	S = Site; L = Local; R = regional; N = National	PROBABILITY: (Refer to Table 5.3) U = Unlikely; L = Likely; P = Possible; D = Definite
MITIGATION PROTENTIAL: (Refer to Table 5.4) H = High; M = Medium; L = Low			

BP 5 - POTENTIAL IMPACT - CLOSURE PHASE	ASPECT Nature Severity Duration		Extent	Probability	Confidence	MITIGATION	SIGNIF	ICANCE	MITIGATION		
	ASI	Na	Sev	Dur	ğ	Prob	Conf	MITIG	Without Mitigation	With Mitigation	MITIG
3.6 Public Nuisance – Dust Generation Activities: Shaping of the borrowpit Spreading of topsoil Description: Dust will be generated from the shaping of the borrowpit as well as the spreading of the topsoil.	Emissions to air - particulate	Negative Direct	М	М	L	L	М	М	MEDIUM NEGATIVE	LOW NEGATIVE	6.5
3.7 Public Nuisance – Noise Activities: Shaping of the borrowpit Spreading of topsoil Description: Refer to Section 1.9.	Noise Disturbance	Negative Direct	М	М	L	D	М	М	MEDIUM NEGATIVE	MEDIUM – LOW NEGATIVE	6.6
3.8 Public Health and Safety Activities: • Shaping of the borrowpit • Spreading of topsoil Description: Public health and safety may be at risk as a result of a number of aspects: generation of dust and noise, the operation of heavy earthmoving machinery of site and the creation of excavations and stockpiles. The impacts of noise and dust generation on public health and wellbeing are discussed in the sections above. The erection of the security fence and presence of security staff as well as proper safety signage will minimize the safety risks posed to nearby residents and other members of the public.	Emissions to air Noise, surface disturbance, changes in landform, topography	Negative Direct	М	М	s	Р	М	н	MEDIUM NEGATIVE	LOW NEGATIVE	6.12 6.14 6.15
3.9 Degradation of landscape value, aesthetic appeal or sense of place Activities: • Shaping of the borrowpit • Topsoiling • Hydroseeding Description: This is an existing borrowpit. The final rehabilitation will result in an improvement to the visual impact of the site as the existing high vertical workface will have been removed.	Surface disturbance, change in landform and topography	Negative Direct	M+	Р	s	D	М	N/A	MEDIUM	POSITIVE	6.3 6.5 6.6 6.8 6.9 6.10 6.11 6.13 6.14

SEVERITY: (Refer to Table 5.2) H = High; M = Medium; L = Low; + = Positive	DURATION: (Refer to Table 5.3) S = Short Term; M = Medium Term; L = Long Term; P = Permanent	EXTENT: (Refer to Table 5.3) S = Site; L = Local; R = regional; N = National	PROBABILITY: (Refer to Table 5.3) U = Unlikely; L = Likely; P = Possible; D = Definite
MITIGATION PROTENTIAL: (Refer to Table 5.4) H = High; M = Medium; L = Low			

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BP 5 - POTENTIAL IMPACT - CLOSURE PHASE	ASPECT	Nature	Severity	Duration	Extent	Probability	Confidence	MITIGATION	Without Mitigation	With Mitigation	MITIGATION
3.1 Soil Compaction and Erosion Activities: Shaping of the borrowpit Topsoiling Description: Refer to Section 1.1	Surface Disturbance	Negative Direct	М	М	s	L	н	М	MEDIUM NEGATIVE	LOW NEGATIVE	6.4 6.7
3.2 Soil Pollution Activities: Operation of machinery Description: Refer to Section 1.2	Hazardous Waste	Negative Direct	М	s	s	Р	М	н	MEDIUM NEGATIVE	LOW NEGATIVE	6.3 6.4 6.13 6.14
3.3 Air Pollution Activities: Shaping of the borrowpit Topsoiling Description: Refer to Section 1.3	(Gaseous) Emissions to Air (Particulate – Dust)	Negative Direct	М	s	s	D	н	М	MEDIUM NEGATIVE	MEDIUM / LOW NEGATIVE	6.5
3.4 Surface Water Pollution (Dirty Water Runoff and Pollutants) Activities: Shaping of the borrowpit Topsoiling Description: Refer to Section 1.4	Release to water (diffuse & point)	Negative Direct	L	М	L	P	н	н	MEDIUM – LOW NEGATIVE	LOW NEGATIVE	6.3 6.4
3.5 Spread of invasive alien species Activities: Spreading of topsoil Hydroseeding Description: Refer to Section 1.6	Surface Disturbance	Negative Direct	м	L	s	L	н	н	MEDIUM NEGATIVE	LOW NEGATIVE	6.8

SEVERITY: (Refer to Table 5.2) H = High; M = Medium; L = Low; + = Positive	DURATION: (Refer to Table 5.3) S = Short Term; M = Medium Term; L = Long Term; P = Permanent	EXTENT: (Refer to Table 5.3) S = Site; L = Local; R = regional; N = National	PROBABILITY: (Refer to Table 5.3) U = Unlikely; L = Likely; P = Possible; D = Definite
MITIGATION PROTENTIAL: (Refer to Table 5.4) H = High; M = Medium; L = Low			

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BP 5 - POTENTIAL IMPACT - <u>OPERATION</u> PHASE	ASPECT	Nature	Severity	Duration	Extent	Probability	Confidence	MITIGATION	Without Mitigation	With Mitigation	MITIGATION
2.9 Public Health and Safety											
Extraction of material Loading of material Transportation of material to site Blasting activities Description: Public health and safety may be at risk as a result of a number of aspects: generation of dust and noise, the operation of heavy earthmoving machinery of site and the creation of excavations and stockpiles. The impacts of noise and dust generation on public health and wellbeing are discussed in the sections above. The erection of the security fence and presence of security staff as well as proper safety signage will minimize the safety risks posed to nearby residents and other members of the public. All surrounding communities will be informed of proposed blasts ahead of time. The project CLO will assist the Contractor in making sure all affected parties, and especially the residents of the closer houses, are kept well informed in this regard.	Emissions to air Noise, surface disturbance, changes in landform, topography	Negative Direct	М	М	s	P	М	н		LOW NEGATIVE	6.12 6.14 6.15
2.10 Degradation of landscape value, aesthetic appeal or sense of place Activities: • Excavation of the material – expansion of the borrowpit Description: As the borrowpit is mined, it will grow in size extending as indicated in the development plans. This will have a visual impact, particularly as the borrowpit is all located within close proximity to an existing gravel road.	Surface disturbance, change in landform and topography	Negative Direct	м	L	L	D	м	М	HIGH - MEDIUM NEGATIVE	MEDIUM NEGATIVE	6.3 6.5 6.6 6.8 6.9 6.10 6.11 6.13 6.14
2.11 Economic Development, income generation and social upliftment Activities: Procurement of goods and services Employment and training Description: Refer to Section 1.14.	Materials Consumption, recruitment and training	Positive Direct and Indirect	M+	М	R	P	М	N/A	MEDIUM	POSITIVE	6.16 6.17

SEVERITY: (Refer to Table 5.2) H = High; M = Medium; L = Low; + = Positive	DURATION: (Refer to Table 5.3) S = Short Term; M = Medium Term; L = Long Term; P = Permanent	EXTENT: (Refer to Table 5.3) S = Site; L = Local; R = regional; N = National	PROBABILITY: (Refer to Table 5.3) U = Unlikely; L = Likely; P = Possible; D = Definite
MITIGATION PROTENTIAL: (Refer to Table 5.4) H = High; M = Medium; L = Low			

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BP 5 - POTENTIAL IMPACT - <u>OPERATION</u> PHASE	ASPECT	Nature	Severity	Duration	Extent	Probability	Confidence	MITIGATION	Without Mitigation	With Mitigation	MITIGATION
 2.6 Public Nuisance – Traffic Disruption Activities: Transporting of material to construction sites Description: The transportation of material to the various construction sites along the DR081625 may result in traffic disruption. One should bear in mind, however, that there will already be disruption to traffic caused by the road construction activities and the transportation of material to site is unlikely to add significantly to this. There is generally very little traffic along the DR08125 as it is a rural road. 	Creation/disruption of access	Negative Direct	L	s	s	Р	н	L	LOW NEGATIVE	LOW NEGATIVE	6.15
 2.7 Public Nuisance – Dust Generation Activities: Extraction of material Loading of material Transportation of material to site Description: Dust will be generated from excavation and loading of material as well as the exposure of bare soil within the borrowpit. Dust will be generated from the use of trucks to transport material to the construction sites. 	Emissions to air - particulate	Negative Direct	L	М	L	L	М	м	MEDIUM NEGATIVE	LOW NEGATIVE	6.5
2.8 Public Nuisance – Noise Activities: Extraction of material Loading of material Transportation of material to site Blasting activities Description: Refer to Section 1.9. Infrequent larger noise events will occur when blasting. All surrounding communities will be informed of proposed blasts ahead of time. The project CLO will assist the Contractor in making sure all affected parties, and especially the residents of the closer houses, are kept well informed in this regard.	Noise Disturbance	Negative Direct	М	М	L	D	М	М		MEDIUM – LOW NEGATIVE	6.6

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SEVERITY: (Refer to Table 5.2) H = High; M = Medium; L = Low; + = Positive	DURATION: (Refer to Table 5.3) S = Short Term; M = Medium Term; L = Long Term; P = Permanent	EXTENT: (Refer to Table 5.3) S = Site; L = Local; R = regional; N = National	PROBABILITY: (Refer to Table 5.3) U = Unlikely; L = Likely; P = Possible; D = Definite
MITIGATION PROTENTIAL: (Refer to Table 5.4) H = High; M = Medium; L = Low			

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BP 5 - POTENTIAL IMPACT – <u>OPE</u>	RATION PHASE	ASPECT	Nature	Severity	Duration	Extent	Probability	Confidence	MITIGATION	Without Mitigation	With Mitigation	MITIGATION
2.1 Soil Compaction and Erosion Activities: Extraction of material Description: Refer to Section 1.1		Surface Disturbance	Negative Direct	М	М	s	L	н	М	MEDIUM NEGATIVE	LOW NEGATIVE	6.4 6.7
2.2 Soil Pollution Activities: Operation of machinery Description: Refer to Section 1.2		Hazardous Waste	Negative Direct	М	s	s	Р	М	н	MEDIUM NEGATIVE	LOW NEGATIVE	6.3 6.4 6.13 6.14
2.3 Air Pollution Activities: Extraction of material Loading of trucks Transportation of material Description: Refer to Section 1.3		(Gaseous) Emissions to Air	9	М	s	s	D	н	М	MEDIUM NEGATIVE	MEDIUM / LOW NEGATIVE	6.5
2.4 Surface Water Pollution (Dirty Water Runoff and Pollution) Activities: • Extraction of material Description: Refer to Section 1.4	tants)	Release to water (diffuse & point)	Negative Direct	L	М	L	Р	н	н	MEDIUM – LOW NEGATIVE	LOW NEGATIVE	6.3 6.4
2.5 Spread of invasive alien species Activities: Extraction of material Description; Refer to Section 1.6		Surface Disturbance	Negative Direct	М	L	S	L	н	н	MEDIUM NEGATIVE	LOW NEGATIVE	6.8
SEVERITY: (Refer to Table 5.2) H = High; M = Medium; L = Low; + = Positive DURATION: S = Short Te P = Permane	rm; M = Medium Term; L = Long Term; S	EXTENT: (Refer to Table 5.3) S = Site; L = Local; R = regional; N = National						PROBA U = Un	ABILITY: (likely; L =	(Refer to Table 5.3 Likely; P = Possit	B) ole; D = Definite	

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BP 5 - POTENTIAL IMPACT - CONSTRUCTION PHASE	ASPEC	Nature	Severity	Duration	Extent	Probability	Confidence	MITIGATION	Without Mitigation	With Mitigation	MITIGATION
1.13 Change in Landuse Activities: • General mining activities Description: The expansion of the borrowpit will result in a temporary change of landuse which will be largely reinstated on closure.	Surface disturbance, change in landform and topography	Negative Direct	н	L	s	D	н	М		LOW NEGATIVE	6.10
 1.14 Economic Development, income generation and social upliftment Activities: Procurement of goods and services Employment and training Description: The site establishment phase is likely to require the use of generalized and specialized services. Preference will be given to local service providers and suppliers where possible and to the employment of local labour. Employment of local labour, use of existing SMME's based in the area, and the support of local businesses in the supply of goods and services will benefit the regional economy. 	Materials Consumption, recruitment and training	Positive Direct and Indirect	M+	М	R	Р	М	N/A	MEDIUM	POSITIVE	6.16 6.17

SEVERITY: (Refer to Table 5.2) H = High; M = Medium; L = Low; + = Positive	DURATION: (Refer to Table 5.3) S = Short Term; M = Medium Term; L = Long Term; P = Permanent	EXTENT: (Refer to Table 5.3) S = Site; L = Local; R = regional; N = National	PROBABILITY: (Refer to Table 5.3) U = Unlikely; L = Likely; P = Possible; D = Definite
MITIGATION PROTENTIAL: (Refer to Table 5.4) H = High; M = Medium; L = Low			

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BP 5 - POTENTIAL IMPACT - CONSTRUCTION PHASE	ASPECT	Nature	Severity	Duration	Extent	Probability	Confidence	MITIGATION	Without Mitigation	With Mitigation	MITIGATION
1.10 Public Health and Safety											
 Activities: Accessing the site Clearing and grubbing Stripping of topsoil Stripping of overburden Creations of stormwater drainage systems Description: Public health and safety may be at risk as a result of a number of aspects: generation of dust and noise, the operation of heavy earthmoving machinery on site and the creation of excavations and stockpiles. The impacts of noise and dust generation on public health and wellbeing are discussed in the sections above. The erection of the security fence and presence of security staff as well as proper safety signage, will minimize the safety risks posed to nearby residents and other members of the public and livestock. 	Emissions to air, Noise, surface disturbance, changes in landform, topography		M	M	S	Р	М	Н	MEDIUM NEGATIVE	LOW NEGATIVE	6.12 6.14 6.15
1.11 Degradation of landscape value, aesthetic appeal or sense of place Activities: Clearing and grubbing Stripping of topsoil Stripping of overburden Description: The site establishment phase will have a visual impact as vegetation and topsoil is stripped. The activities will be visible from some of the surrounding areas. The borrowpit is located adjacent to a gravel road and is therefore highly visible from that road. BP 163/2 is, however, an existing borrowpit with a high visual impact especially due to the fact that high vertical faces have been left after previous mining. The proposed mining activities will remove those vertical faces and therefore give the site an appearance more in harmony with the surrounding topography. Considering that the surrounding landuse is largely rural agricultural in nature, the site establishment activities are likely to be noticeable and therefore will have a significant impact on the aesthetic value of the landscape. This will be mitigated somewhat by minimizing cleared areas and by landscaping where	face dis	Negative Direct	М	L	L	D	М	М	MEDIUM NEGATIVE	LOW NEGATIVE	6.3 6.5 6.6 6.8 6.9 6.10 6.11 6.13 6.14
 1.12 Cultural Heritage Activities: Clearing and grubbing Stripping of topsoil Stripping of overburden Description: During site establishment there is the potential for the destruction of national heritage sites to be destroyed or damaged. However no sites of cultural importance were discovered at the BP 5 site, or within its surrounds, during the Heritage Impact Assessment undertaken by eThembeni Cultural Heritage. Therefore the expansion of the borrowpit will not impact on such resources. 	Surface disturbance, change in landform and topography	Negative Direct	L	L	L	D	М	М	NON - SIGNIFICANT	NON - SIGNIFICANT	6.9

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SEVERITY: (Refer to Table 5.2) H = High; M = Medium; L = Low; + = Positive	DURATION: (Refer to Table 5.3) S = Short Term; M = Medium Term; L = Long Term; P = Permanent	EXTENT: (Refer to Table 5.3) S = Site; L = Local; R = regional; N = National	PROBABILITY: (Refer to Table 5.3) U = Unlikely; L = Likely; P = Possible; D = Definite
MITIGATION PROTENTIAL: (Refer to Table 5.4) H = High; M = Medium; L = Low			

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BP 5 - POTENTIAL IMPACT - CONSTRUCTION PHASE	ASP	Nature	Seve	Duration	Extent	Probability	Confidence	MITIG	Without Mitigation	With Mitigation	MITIGATION
 1.7 Public Nuisance – Traffic Disruption Activities: Accessing the Site Fencing of the Site Description: Accessing the borrowpit may result in some disruption to traffic along the gravel public road. This will be short-lived and of low significance. Fencing of the site may impact on pedestrian movement across the site. Considering that the site does not form part of an obvious thoroughfare nor is there any evidence of well used paths, this impact is unlikely to be significant. 	Creation/disruption of access	Negative Direct	L	S	S	Р	н	L	LOW NEGATIVE	LOW NEGATIVE	6.15
1.8 Public Nuisance – Dust Generation Activities: Accessing the borrowpit Clearing and grubbing Stripping of topsoil Creation of stormwater drainage systems Stripping of overburden Description: Dust will be generated from the use of machinery to construct platforms and during the stripping of vegetation, topsoil and overburden. Exposed surfaces will contribute to atmospheric dust particularly during high wind conditions.	Emissions to air - particulate	Negative Direct	L	М	S	L	М	М	MEDIUM NEGATIVE	LOW NEGATIVE	6.5
1.9 Public Nuisance – Noise Activities: Accessing the site Clearing and grubbing Stripping of topsoil Stripping of overburden Creations of stormwater drainage systems Description: During the site establishment phase, noise will be generated primarily by heavy earthmoving machinery as the mining area is stripped of topsoil and overburden. As such the noise levels are likely to be those commonly experienced on any civils construction site. Activities will be limited to normal working hours. The impact of noise on mine workers' health will be addressed by the Mine Health and Safety Plan and will include the use of protective hearing devices.	Noise Disturbance	Negative Direct	L	М	S	D	М	М	MEDIUM NEGATIVE	MEDIUM – LOW NEGATIVE	6.6

SEVERITY: (Refer to Table 5.2) H = High; M = Medium; L = Low; + = Positive	DURATION: (Refer to Table 5.3) S = Short Term; M = Medium Term; L = Long Term; P = Permanent	EXTENT: (Refer to Table 5.3) S = Site; L = Local; R = regional; N = National	PROBABILITY: (Refer to Table 5.3) U = Unlikely; L = Likely; P = Possible; D = Definite
MITIGATION PROTENTIAL: (Refer to Table 5.4) H = High; M = Medium; L = Low			

DD E DOTENTIAL IMPACT CONSTRUCTION DUASE	ECT	ure	Severity	tion	Extent	bility	Jence	MITIGATION	SIGNIF	ICANCE	ATION
BP 5 - POTENTIAL IMPACT - CONSTRUCTION PHASE	ASPECT	Nature	Seve	Duration	Ext	Probability	Confidence	MITIG/ POTEI	Without Mitigation	With Mitigation	MITIGATION
.4 Surface Water Pollution (Dirty Water Runoff and Pollutants)											
 Clearing and grubbing Stripping of topsoil Stripping of overburden Creation of stormwater drainage systems Topsoil and overburden stockpiles Description: Without proper management, runoff from exposed soil surfaces and stockpiles is likely to become highly sedimented (ie carry a igh sediment load). The compaction of surfaces and the creation of hard, impermeable surfaces will increase the amount of unoff generated. Stormwater runoff will ultimately enter the diversion channel downslope of the site and then run off from an inergy dissipater. A stormwater management system is therefore proposed, with regular monitoring of downstream impacts. Spillages of hydrocarbons (such as hydraulic oils) may enter into surface water bodies if washed off site even though the closest rainage line is some distance downslope of the borrowpit.	Release to water (diffuse & point)	Negative Direct	L	М	L	Р	н	Н	MEDIUM – LOW NEGATIVE	LOW NEGATIVE	6.3
Activities: Clearing and grubbing Description: The preparation of the site will involve the clearing of vegetation. The site currently consists of degraded grasslands. The site preparation will effectively result in the complete transformation of the site in terms of plant and animal habitat. The vegetation issuessment indicated that the vegetation type affected by the mining areas is not unique and is in fact well represented in the surrounding areas. One may therefore assume that the loss of the vegetation on the footprint of the mining area will not have a significantly detrimental impact on the vegetation type as a whole. Notwithstanding this, an effort should be made to minimize the area of impact and to reestablish the vegetation as close to the original condition as possible, following completion of the mining operations.	Surface Disturbance	Negative Direct	M/L	L	S	D	н	М	MEDIUM NEGATIVE	LOW NEGATIVE	6.8
Activities: • Clearing and grubbing Description: The removal of indigenous vegetation and the creation of disturbed surfaces is an open invitation for the invasion of alien plant species. Alien invader species such as Lantana camara and Black Wattle have been recorded in the area. Invasive alien plants effectively out compete many of the indigenous species and ultimately lead to a loss of biodiversity. This impact must be managed throughout the life of the mine through the implementation of a detailed alien plant eradication programme.	Surface Disturbance	Negative Direct	М	L	s	L	н	Н	MEDIUM NEGATIVE	LOW NEGATIVE	6.3
SEVERITY: (Refer to Table 5.2) H = High; M = Medium; L = Low; + = Positive DURATION: (Refer to Table 5.3) S = Short Term; M = Medium Term; L = Long Term; P = Permanent S = Site; L = Positive				Nationa	1				(Refer to Table 5.3 Likely; P = Possil		

DD 5 DOTENTIAL IMPACT CONSTRUCTION BUACE	ECT	ure	erity	tion	ant	billity	lence	TION	SIGNIF	ICANCE	TION
BP 5 - POTENTIAL IMPACT - CONSTRUCTION PHASE	ASPECT	Nature	Severity	Duration	Extent	Probability	Confidence	MITIGATION	Without Mitigation	With Mitigation	MITIGATION
1.1 Soil Compaction and Erosion											
Clearing and grubbing Stripping of topsoil Creation of stormwater drainage systems **Description:** The compaction of soil may occur during the site preparation phase as a result of operating heavy machinery. Compaction of soil may result in the loss of soil viability which will affect the ability of the vegetation to recover. Compacted soil decreases infiltration and therefore increases the amount of surface runoff which will contribute to the rate of erosion. The removal of vegetation cover and exposure of underlying soil will increase the risk of erosion, particularly on steeper slopes as found downslope and to the west of the site. Erosion may result in the loss of viable topsoil and downstream impacts on the receiving water bodies.	Surface Disturbance	Negative Direct	М	М	S	L	н	М	MEDIUM NEGATIVE	LOW NEGATIVE	6.4 6.7
 1.2 Soil Pollution Activities: Operation of machinery Description: The operation of heavy machinery during the stripping and clearing of the borrowpit may result in spillages of hydraulic oils due to breakdowns or spillages of diesel during refuelling in the field. Spillages may result in the pollution of soil which could affect soil viability. 	Hazardous Waste	Negative Direct	М	s	s	Р	М	н	MEDIUM NEGATIVE	LOW NEGATIVE	6.3 6.4 6.13 6.14
 Activities: Clearing and grubbing Stripping of topsoil Creation of stormwater drainage systems Stripping of overburden Description: Vehicle emissions (exhaust emissions) will be generated by the operation of plant on site. Dust will be generated from the use of machinery during the stripping of vegetation, topsoil and overburden. Exposed surfaces will contribute to atmospheric dust particularly during high wind conditions. Excessive exposure to dust will impact on human health. Lower levels may be considered of nuisance value. The impact on Public Health and Safety is discussed under Section 1.10 below. The higher "without mitigation" impact is due to the fairly close proximity of houses to the site. 	Emissions to Air (Gaseous) Emissions to Air (Particulate – Dust)	Negative Direct	М	S	S	D	н	M	HIGH - MEDIUM NEGATIVE	LOW NEGATIVE	6.5

SEVERITY: (Refer to Table 5.2) H = High; M = Medium; L = Low; + = Positive	DURATION: (Refer to Table 5.3) S = Short Term; M = Medium Term; L = Long Term; P = Permanent	EXTENT: (Refer to Table 5.3) S = Site; L = Local; R = regional; N = National	PROBABILITY: (Refer to Table 5.3) U = Unlikely; L = Likely; P = Possible; D = Definite
MITIGATION PROTENTIAL: (Refer to Table 5.4) H = High; M = Medium; L = Low			

BP 4 - POTENTIAL IMPACT - CLOSURE PHASE	ASPECT	Nature	Severity	Duration	Extent	Probability	Confidence	MITIGATION	SIGNIF	ICANCE	MITIGATION *
	ASI	ASI	Se		Ē	Prob	Conf	MITIG	Without Mitigation	With Mitigation	MITIG
3.6 Public Nuisance – Dust Generation Activities: Shaping of the borrowpit Spreading of topsoil Description: Dust will be generated from the shaping of the borrowpit as well as the spreading of the topsoil.	Emissions to air - particulate	Negative Direct	М	М	L	L	М	М	MEDIUM NEGATIVE	LOW NEGATIVE	6.5
3.7 Public Nuisance – Noise Activities: Shaping of the borrowpit Spreading of topsoil Description: Refer to Section 1.9.	Noise Disturbance	Negative Direct	М	М	L	D	М	М	MEDIUM NEGATIVE	MEDIUM – LOW NEGATIVE	6.6
3.8 Public Health and Safety Activities: Shaping of the borrowpit Spreading of topsoil Description: Public health and safety may be at risk as a result of a number of aspects: generation of dust and noise, the operation of heavy earthmoving machinery of site and the creation of excavations and stockpiles. The impacts of noise and dust generation on public health and wellbeing are discussed in the sections above. The erection of the security fence and presence of security staff as well as proper safety signage will minimize the safety risks posed to nearby residents and other members of the public.	Emissions to air Noise, surface disturbance, changes in landform, topography		М	М	s	Р	м	н	MEDIUM NEGATIVE	LOW NEGATIVE	6.12 6.14 6.15
3.9 Degradation of landscape value, aesthetic appeal or sense of place Activities: Shaping of the borrowpit Topsoiling Hydroseeding Description: This is an existing borrowpit. The final rehabilitation will result in an improvement to the visual impact of the site as the existing high vertical workface will have been removed.	Surface disturbance, change in landform and topography	Negative Direct	M+	Р	s	D	М	N/A	MEDIUM	POSITIVE	6.3 6.5 6.6 6.8 6.9 6.10 6.11 6.13 6.14

SEVERITY: (Refer to Table 5.2) H = High; M = Medium; L = Low; + = Positive	DURATION: (Refer to Table 5.3) S = Short Term; M = Medium Term; L = Long Term; P = Permanent	EXTENT: (Refer to Table 5.3) S = Site; L = Local; R = regional; N = National	PROBABILITY: (Refer to Table 5.3) U = Unlikely; L = Likely; P = Possible; D = Definite
MITIGATION PROTENTIAL: (Refer to Table 5.4) H = High; M = Medium; L = Low			

Hazardous Waste Surface Disturbance ASPECT	ive Direct Negative Direct Nature	Severity	Duration	S Extent	Probability	H Confidence	MITIGATION POTENTIAL	Without Mitigation MEDIUM NEGATIVE	With Mitigation LOW NEGATIVE	MITIGATION REF
Surface	Direct		М	S	L	н	М			
Hazardous Waste	ive Direct									
	Negative	М	S	s	Р	М	н	MEDIUM NEGATIVE	LOW NEGATIVE	6.3 6.4 6.13 6.14
(Gaseous) Emissions to Air (Particulate – Dust)	Negative Direct	М	s	s	D	н	М	MEDIUM NEGATIVE	MEDIUM / LOW NEGATIVE	6.5
Release to water (diffuse & point)	Negative Direct	L	М	L	Р	н	н	MEDIUM – LOW NEGATIVE	LOW NEGATIVE	6.3 6.4
Surface Disturbance	Negative Direct	м	L	s	L	н	н	MEDIUM NEGATIVE	LOW NEGATIVE	6.8
	Surface Disturbance (diffuse & point) (Gaseous Emissions to Water (diffuse & point) (Particulate –	Release to water (Gaseous) (diffuse & point) (Particulate — C Negative Negative Direct Direct	Surface Disturbance (diffuse & point) (Particulate – Negative Direct Dir	Surface Disturbance (diffuse & point) (Gaseous Emissions to Wagative Direct Direct Direct Direct Direct Direct Caseous	Pisturbance (diffuse & point) (Particulate – Negative Direct Direct Direct Orea Orea Orea Orea Orea Orea Orea Orea	Point (Gaseous (Gaseous diffuse & point) (Particulate – Negative Direct Direct Direct Oirect Direct Direct Direct Oirect	Release to water (Gaseous diffuse & point) (Particulate – Negative Direct Direc	Posturbance (diffuse & point) (Gaseous diffuse & point) (Particulate – Negative Direct	Pelease to water (Gaseous to (Inffuse & point) (Particulate - Ve Direct	Belease to water (diffuse & point) Negative

SEVERITY: (Refer to Table 5.2) H = High; M = Medium; L = Low; + = Positive	DURATION: (Refer to Table 5.3) S = Short Term; M = Medium Term; L = Long Term; P = Permanent	EXTENT: (Refer to Table 5.3) S = Site; L = Local; R = regional; N = National	PROBABILITY: (Refer to Table 5.3) U = Unlikely; L = Likely; P = Possible; D = Definite
MITIGATION PROTENTIAL: (Refer to Table 5.4) H = High; M = Medium; L = Low			

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BP 4 - POTENTIAL IMPACT - <u>OPERATION</u> PHASE	ASPE		Severity	Duration	Extent	Probability	Confidence	MITIGATION	Without Mitigation	With Mitigation	MITIGATION
 2.9 Public Health and Safety Activities: Extraction of material Loading of material Transportation of material to site Blasting activities Description: Public health and safety may be at risk as a result of a number of aspects: generation of dust and noise, the operation of heavy earthmoving machinery of site and the creation of excavations and stockpiles. The impacts of noise and dust generation on public health and wellbeing are discussed in the sections above. The erection of the security fence and presence of security staff as well as proper safety signage will minimize the safety risks posed to nearby residents and other members of the public. All surrounding communities will be informed of proposed blasts ahead of time. The project CLO will assist the Contractor in making sure all affected parties are kept well informed in this regard. 	Emissions to air Noise, surface disturbance, changes in landform, topography	Negative Direct	М	М	S	P	M	н	MEDIUM – HIGH NEGATIVE	LOW NEGATIVE	6.12 6.14 6.15
2.10 Degradation of landscape value, aesthetic appeal or sense of place Activities: • Excavation of the material – expansion of the borrowpit Description: As the borrowpit is mined, it will grow in size extending as indicated in the development plans. This will have a visual impact, particularly as the borrowpit is all located within close proximity to an existing gravel road.	Surface disturbance, change in landform and topography	Negative Direct	м	L	L	D	М	М	HIGH – MEDIUM NEGATIVE	MEDIUM NEGATIVE	6.3 6.5 6.6 6.8 6.9 6.10 6.11 6.13 6.14
2.11 Economic Development, income generation and social upliftment Activities: Procurement of goods and services Employment and training Description: Refer to Section 1.14.	Materials Consumption, recruitment and training	Positive Direct and Indirect	M+	М	R	Р	М	N/A	MEDIUM	POSITIVE	6.16 6.17

SEVERITY: (Refer to Table 5.2) H = High; M = Medium; L = Low; + = Positive	DURATION: (Refer to Table 5.3) S = Short Term; M = Medium Term; L = Long Term; P = Permanent	EXTENT: (Refer to Table 5.3) S = Site; L = Local; R = regional; N = National	PROBABILITY: (Refer to Table 5.3) U = Unlikely; L = Likely; P = Possible; D = Definit
MITIGATION PROTENTIAL: (Refer to Table 5.4) H = High; M = Medium; L = Low			

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BP 4 - POTENTIAL IMPACT - <u>OPERATION</u> PHASE	ASPECT	Nature	Severity	Duration	Extent	Probability	Confidence	MITIGATION	Without Mitigation	With Mitigation	MITIGATION
2.6 Public Nuisance – Traffic Disruption Activities: • Transporting of material to construction sites Description: The transportation of material to the various construction sites along the DR08163 may result in traffic disruption. One should bear in mind, however, that there will already be disruption to traffic caused by the road construction activities and the transportation of material to site is unlikely to add significantly to this. There is generally very little traffic along the DR08163 as it is a rural road.	ē	Negative Direct	L	s	s	Р	н	L	LOW NEGATIVE	LOW NEGATIVE	6.15
2.7 Public Nuisance – Dust Generation Activities: Extraction of material Loading of material Transportation of material to site Description: Dust will be generated from excavation and loading of material as well as the exposure of bare soil within the borrowpit. Dust will be generated from the use of trucks to transport material to the construction sites.	Emissions to air - particulate	Negative Direct	L	М	L	L	М	М	MEDIUM NEGATIVE	LOW NEGATIVE	6.5
2.8 Public Nuisance – Noise Activities: Extraction of material Loading of material Transportation of material to site Blasting activities Description: Refer to Section 1.9. Infrequent larger noise events will occur when blasting. All surrounding communities will be informed of proposed blasts ahead of time. The project CLO will assist the Contractor in making sure all affected parties, and especially the nearest residents, are kept well informed in this regard.	Noise Disturbance	Negative Direct	М	M	L	D	М	М	MEDIUM NEGATIVE	LOW NEGATIVE	6.6

SEVERITY: (Refer to Table 5.2) H = High; M = Medium; L = Low; + = Positive	DURATION: (Refer to Table 5.3) S = Short Term; M = Medium Term; L = Long Term; P = Permanent	EXTENT: (Refer to Table 5.3) S = Site; L = Local; R = regional; N = National	PROBABILITY: (Refer to Table 5.3) U = Unlikely; L = Likely; P = Possible; D = Definite
MITIGATION PROTENTIAL: (Refer to Table 5.4) H = High; M = Medium; L = Low			

BP 4 - POTENTIAL IMPACT - <u>OPERATION</u> PHASE		ECT	ure	arity	tion	ent	bility	lence	MIJON	SIGNIF	ATION	
		ASPECT	ASPECT	Severity	Duration	Extent	Probability	Confidence	MITIGATION	Without Mitigation	With Mitigation	MITIGATION
2.1 Soil Compaction and Erosion Activities: Extraction of material Description: Refer to Section 1.1	A Dynardin of the Charge of th	Surface Disturbance	Negative Direct	М	М	S	L	Н	М	MEDIUM NEGATIVE	LOW NEGATIVE	6.4 6.7
2.2 Soil Pollution Activities: • Operation of machinery Description: Refer to Section 1.2	was a ser manufactor of expectal generation of oils) and offer. Use these services and stocked on the security femore at the manufactor of the security femore of the security	Hazardous Waste	Negative Direct	М	s	s	P	М	н	MEDIUM NEGATIVE	LOW NEGATIVE	6.3 6.4 6.13 6.14
2.3 Air Pollution Activities: • Extraction of material • Loading of trucks • Transportation of material Description: Refer to Section 1.3	Alle M 9 ST M HE MAN TO ST	(Gaseous) Emissions to Air	9	М	s	s	D	Н	М	MEDIUM NEGATIVE	MEDIUM / LOW NEGATIVE	6.5
2.4 Surface Water Pollution (Dirty Activities: • Extraction of material Description: Refer to Section 1.4	Water Runoff and Pollutants)	Release to water (diffuse & point)	Negative Direct	L	М	L	P	н	Н	MEDIUM – LOW NEGATIVE	LOW NEGATIVE	6.3 6.4
2.5 Spread of invasive alien species Activities: Extraction of material Description: Refer to Section 1.6	estative the destruction of milestal factors and to be destruction of a contract of the BP 4 also, or what the milestal factors are also the factors and the factors are also the factors are also the factors are also the factors are also the factors and the factors are also the factors are	Surface Disturbance	Negative Direct	М	L	S	L	н	н	MEDIUM NEGATIVE	LOW NEGATIVE	6.8
SEVERITY: (Refer to Table 5.2)	DURATION: (Refer to Table 5.3)	EXTENT: (Refer to	Table 5.3					PPOR	ABILITY	(Refer to Table 5.)	2)	

SEVERITY: (Refer to Table 5.2)
H = High; M = Medium; L = Low; + = Positive

MITIGATION PROTENTIAL: (Refer to Table 5.4)
H = High; M = Medium; L = Low

DURATION: (Refer to Table 5.3)
S = Short Term; M = Medium Term; L = Long Term;
P = Permanent

EXTENT: (Refer to Table 5.3)
S = Site; L = Local; R = regional; N = National
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U = Unlikely; L = Likely; P = Possible; D = Definite