

IMPACT RATING

ASPECT	IMPACT RATING										
<p>Status of the impact: A statement of whether the impact is positive (a benefit), negative (a cost), or neutral.</p>											
Direct impacts	Impacts that are caused directly by the activity and generally occur at the same time and at the place of the activity. These impacts are usually associated with the construction, operation or maintenance of an activity and are generally obvious and quantifiable.										
Indirect impacts	Impacts of an activity are indirect or induced changes that may occur as a result of the activity. These types of impacts include all the potential impacts that do not manifest immediately when the activity is undertaken, or which occur at a different place as a result of the activity.										
Cumulative impacts	Impacts that result from the incremental impact of the proposed activity on a common resource when added to the impacts of other past, present or reasonably foreseeable future activities. Cumulative impacts can occur from the collective impacts of individual minor actions over a period of time and can include both direct and indirect impacts.										
<p>Nature of the impact: The evaluation of the nature is impact specific. Most negative impacts will remain negative, however, after mitigation, significance should reduce:</p> <ul style="list-style-type: none"> • Positive. • Negative. 											
<p>Extent: A description of whether the impact would occur on a scale limited to within the site (local), limited to within 5 km of the site (area); on a regional scale i.e., City of Tshwane Metropolitan Municipality & Gauteng (region); or would occur at a national or international scale.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tbody> <tr> <td>Local</td> <td>1</td> </tr> <tr> <td>Area</td> <td>2</td> </tr> <tr> <td>Region</td> <td>3</td> </tr> <tr> <td>National</td> <td>4</td> </tr> <tr> <td>International</td> <td>5</td> </tr> </tbody> </table>		Local	1	Area	2	Region	3	National	4	International	5
Local	1										
Area	2										
Region	3										
National	4										
International	5										
<p>Duration: A prediction of whether the duration of the impact would be Immediate and once-off (less than one month), more than once, but short term (less than one year), regular, medium term (1 to 5 years), Long term (6 to 15 years), Project life/permanent (> 15 years, with the impact ceasing after the operational life of the development or should be considered as permanent).</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tbody> <tr> <td>Immediate</td> <td>1</td> </tr> <tr> <td>Short term</td> <td>2</td> </tr> <tr> <td>Medium term</td> <td>3</td> </tr> <tr> <td>Long term</td> <td>4</td> </tr> <tr> <td>Project life/permanent</td> <td>5</td> </tr> </tbody> </table>		Immediate	1	Short term	2	Medium term	3	Long term	4	Project life/permanent	5
Immediate	1										
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ASPECT		IMPACT RATING
Severity(extent +duration + intensity)		
<p>Intensity: This provides an order of magnitude of whether or not the intensity (magnitude/size/frequency) of the impact would be negligible, low, medium, high or very high. This is based on the following aspects:</p> <ul style="list-style-type: none"> • an assessment of the reversibility of the impact (permanent loss of resources, or impact is reversible after project life). • whether or not the aspect is controversial. • an assessment of the irreplaceability of the resource loss caused by the activity (whether the project will destroy the resources which are easily replaceable, or the project will destroy resources which are irreplaceable and cannot be replaced). • the level of alteration to the natural systems, processes or systems. 		
Negligible	The impact does not affect physical, biophysical or socio-economic functions and processes.	1
Low/potential harmful	The impact has limited impacts on physical, biophysical or socio-economic functions and processes.	2
Medium/slightly harmful	The impact has an effect on physical, biophysical and socio-economic functions and processes, but in such a way that these processes can still continue to function albeit in a modified fashion.	3
High/Harmful	Where the physical, bio-physical and socio-economic functions and processes are impacted on in such a way as to cause them to temporarily or permanently cease.	4
Very high/Disastrous	Where the physical, bio-physical and socio-economic functions and processes are highly impacted on in such a way as to cause them to permanently cease.	5
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Incidence (frequency + probability)		
<p>Frequency: This provides a description of any repetitive, continuous or time-linked characteristics of the impact: Once Off (occurring any time during construction or operation); Intermittent (occurring from time to time, without specific periodicity); Periodic (occurring at more or less regular intervals); Continuous (without interruption).</p>		
Once Off	Once	1
Rare	1/5 to 1/10 years	2
Frequent	Once a year	3
Very frequent	Once a month	4
Continuous	≥ Once a day/ per shift	5

ASPECT	IMPACT RATING											
Probability of occurrence: A description of the chance that consequences of that selected level of severity could occur during the exposure.	Highly unlikely The probability of the impact occurring is highly unlikely due to its design or historic experience.	1										
	Improbable The probability of the impact occurring is low due to its design or historic experience.	2										
	Probable There is a distinct probability of the impact occurring	3										
	Almost certain It is most likely that the impact will occur	4										
	Definite The impact will occur regardless of any prevention measures	5										
	Risk rating	<p>The risk rating is calculated based on input from the above assessments. The incidence of occurrence is calculated by adding the Extent of the impact to the duration of the impact. The Severity of the impact is calculated based on input from the extent of the impact, the duration and the intensity.</p> <p>Risk = Severity (extent +duration + intensity) x Incidence (frequency + probability)</p> <p>Significance: The significance of the risk based on the identified impacts has been expressed qualitatively as follows:</p> <ul style="list-style-type: none"> ○ low – the impact is of little importance/insignificant, but may/may not require minimal management ○ medium - the impact is important, management is required to reduce negative impacts to acceptable levels. ○ high - the impact is of great importance, negative impacts could render development options or the entire project unacceptable if they cannot be reduced to acceptable levels and/or if they are not balanced <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="background-color: yellow; text-align: center;">Low risk</td> <td style="background-color: lightgreen; text-align: center;">Medium risk</td> <td style="background-color: red; text-align: center;">High risk</td> <td style="background-color: lightblue; text-align: center;">Medium positive</td> <td style="background-color: blue; text-align: center;">High positive</td> </tr> <tr> <td style="text-align: center;">0-50</td> <td style="text-align: center;">51-100</td> <td style="text-align: center;">101 - 150</td> <td style="text-align: center;">51-100</td> <td style="text-align: center;">101 - 150</td> </tr> </table> <p>by significant positive impacts, management of negative impacts is essential.</p>		Low risk	Medium risk	High risk	Medium positive	High positive	0-50	51-100	101 - 150	51-100
Low risk	Medium risk	High risk	Medium positive	High positive								
0-50	51-100	101 - 150	51-100	101 - 150								

THE CONSTRUCTION OF THE PROPOSED RESIDENTIAL DEVELOPMENT AND RELATED INFRASTRUCTURE ON DERDEPOORTPARK EXTENSION 44 ON PORTIONS 426 AND 679 OF THE FARM DERDEPOORT 326-JR, CITY OF TSHWANE (COT) METROPOLITAN MUNICIPALITY

IMPACT ASSESSMENT RATINGS: CONSTRUCTION PHASE

Impact	Status	Extent	Duration	Severity	Frequency	Probability of occurrence	Significance without mitigation		Significance with mitigation
Impact on ecosystem threat status	Negative	1	5	2	1	1	16	LOW	LOW
Impact on explicit subtypes in the vegetation	Negative	1	4	3	1	5	48	LOW	LOW
Impact on overall ecosystem diversity	Negative	1	5	2	1	1	16	LOW	LOW
Impact on any changes to the threat status of ecosystems in the CBA	Negative	1	5	2	1	1	16	LOW	LOW
Hydrological impacts	Negative	2	3	3	3	5	64	MEDIUM	LOW
Erosion	Negative	2	5	3	3	3	60	MEDIUM	LOW
Infestation of alien invasive species	Negative		5	3	5	5	100	MEDIUM	MEDIUM
Pollution of surface and groundwater due to sewer spills	Negative	2	3	5	2	2	40	LOW	LOW

IMPACT ASSESSMENT RATINGS: OPERATIONAL PHASE

Impact	Status	Extent	Duration	Severity	Frequency	Probability of occurrence	Significance without mitigation		Significance with mitigation
Erosion	Negative	1	2	3	2	3	30	LOW	LOW
Infestation of alien invasive species	Negative	1	2	5	3	5	64	MEDIUM	MEDIUM
Hydrological impacts	Negative	1	2	3	5	3	48	LOW	LOW
Pollution due to raw sewerage spillages	Negative	3	5	5	2	2	52	MEDIUM	LOW