



## **Basic Assessment Report in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended, and the Environmental Impact Assessment Regulations, 2014 (Version 1)**

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### **Kindly note that:**

1. This **Basic Assessment Report** is the standard report required by GDARD in terms of the EIA Regulations, 2014.
2. This application form is current as of 8 December 2014. It is the responsibility of the EAP to ascertain whether subsequent versions of the form have been published or produced by the competent authority.
3. **A draft Basic Assessment Report must be submitted, for purposes of comments within a period of thirty (30) days, to all State Departments administering a law relating to a matter likely to be affected by the activity to be undertaken.**
4. **A draft Basic Assessment Report (1 hard copy and two CD's) must be submitted, for purposes of comments within a period of thirty (30) days, to a Competent Authority empowered in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended to consider and decide on the application.**
5. Five (5) copies (3 hard copies and 2 CDs-PDF) of the final report and attachments must be handed in at offices of the relevant competent authority, as detailed below.
6. The report must be typed within the spaces provided in the form. The size of the spaces provided is not necessarily indicative of the amount of information to be provided. The report is in the form of a table that can extend itself as each space is filled with typing.
7. Selected boxes must be indicated by a cross and, when the form is completed electronically, must also be highlighted.
8. An incomplete report may lead to an application for environmental authorisation being refused.
9. **Any report that does not contain a titled and dated full colour large scale layout plan of the proposed activities including a coherent legend, overlain with the sensitivities found on site may lead to an application for environmental authorisation being refused.**
10. The use of "not applicable" in the report must be done with circumspection because if it is used in respect of material information that is required by the competent authority for assessing the application, it may result in the application for environmental authorisation being refused.
11. No faxed or e-mailed reports will be accepted. Only hand delivered or posted applications will be accepted.
12. Unless protected by law, and clearly indicated as such, all information filled in on this application will become public information on receipt by the competent authority. The applicant/EAP must provide any interested and affected party with the information contained in this application on request, during any stage of the application process.
13. Although pre-application meeting with the Competent Authority is optional, applicants are advised to have these meetings prior to submission of application to seek guidance from the Competent Authority.

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### **DEPARTMENTAL DETAILS**

Gauteng Department of Agriculture and Rural Development  
Attention: Administrative Unit of the of the Environmental Affairs Branch  
P.O. Box 8769  
Johannesburg  
2000

Administrative Unit of the of the Environmental Affairs Branch  
Ground floor Diamond Building  
11 Diagonal Street, Johannesburg

Administrative Unit telephone number: (011) 240 3377  
Department central telephone number: (011) 240 2500

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(For official use only)

<b>NEAS Reference Number:</b>						
<b>File Reference Number:</b>						
<b>Application Number:</b>						
<b>Date Received:</b>						

If this BAR has not been submitted within 90 days of receipt of the application by the competent authority and permission was not requested to submit within 140 days, please indicate the reasons for not submitting within time frame.

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Is a closure plan applicable for this application and has it been included in this report?

**NO**

If not, state reasons for not including the closure plan.

<b>Not applicable</b>
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Has a draft report for this application been submitted to a competent authority and all State Departments administering a law relating to a matter likely to be affected as a result of this activity?

**YES**

Is a list of the State Departments referred to above attached to this report including their full contact details and contact person?

If no, state reasons for not attaching the list.

**YES**

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Have State Departments including the competent authority commented?

**NO**

If no, why?

<b>It is anticipated that the competent authority and all the identified stakeholders will comment after reviewing this draft report.</b>
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# SECTION A: ACTIVITY INFORMATION

## 1. PROPOSAL OR DEVELOPMENT DESCRIPTION

Project title (must be the same name as per application form):

**Proposed shopping complex on portion 179 and part of portion 139 of the farm Rietfontein 301 IQ**

Select the appropriate box

The application is for an upgrade of an existing development

The application is for a new development

Other, specify

Does the activity also require any authorisation other than NEMA EIA authorisation?

 **NO**

If yes, describe the legislation and the Competent Authority administering such legislation

**Not Applicable**

If yes, have you applied for the authorisation(s)?

 **NO**

If yes, have you received approval(s)? (attach in appropriate appendix)

 **NO**

## 2. APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES

List all legislation, policies and/or guidelines of any sphere of government that are applicable to the application as contemplated in the EIA regulations:

Title of legislation, policy or guideline:

Administering authority:

Promulgation Date:

<b>National Environmental Management Act, 1998 (Act No. 107 of 1998 as amended).</b>	<b>National &amp; Provincial</b>	<b>27 November 1998</b>
<b>National Environmental Management: Waste Act, 2008 (Act No.59 of 2008)</b>	<b>National &amp; Provincial</b>	<b>10 March 2009</b>
<b>National Environmental Management: Air Quality Act, 2004 (Act 39 of 2004)</b>	<b>National &amp; Provincial</b>	<b>24 February 2005</b>
<b>National Heritage Resource Act No. 25 of 1999</b>	<b>South African Heritage Resource Agency</b>	<b>28 April 1999</b>
<b>The Occupational Health and Safety Act no.85 of 1993</b>	<b>Department of Health</b>	<b>23 June 1993</b>

Description of compliance with the relevant legislation, policy or guideline:

Legislation, policy or guideline	Description of compliance
<b>National Environmental Management Act, 1998 (Act No. 107 of 1998 as amended).</b>	<b>The project triggers activities in Listing Notice I Regulation R983, which requires a basic assessment to be conducted.</b>
<b>National Environmental Management: Water Act 1998 (Act 36 of 1998)</b>	<b>The proposed development may be impeding on a valley bottom wetland/perennial river. Specialist confirmations will serve as a guideline on a way forward.</b>
<b>National Environmental Management: Waste Act, 2008 (Act No.59 of 2008)</b>	<b>The Environmental Management Programme (EMPr) will give guidance on how all waste generated on site be dealt with.</b>

<b>National Environmental Management: Air Quality Act, 2004 (Act 39 of 2004)</b>	<b>No Atmospheric Emission License is required for the site, mitigation measures to control air pollution and dust must be implemented to ensure compliance with this Act. Measures will include regular dust suppression (watering).</b>
<b>National Environmental Management: Biodiversity Act, 2004 (Act No.10 of 2004)</b>	<b>There is a high possibility that fauna and flora found on site may be impacted upon. Specialist input will be use as a way forward guideline.</b>
<b>The development will comply with Provincial and National legal requirements and frameworks.</b>	

### 3. ALTERNATIVES

Describe the proposal and alternatives that are considered in this application. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity could be accomplished. The determination of whether the site or activity (including different processes etc.) or both is appropriate needs to be informed by the specific circumstances of the activity and its environment.

The no-go option must in all cases be included in the assessment phase as the baseline against which the impacts of the other alternatives are assessed. **Do not** include the no go option into the alternative table below.

**Note:** After receipt of this report the competent authority may also request the applicant to assess additional alternatives that could possibly accomplish the purpose and need of the proposed activity if it is clear that realistic alternatives have not been considered to a reasonable extent.

Please describe the process followed to reach (decide on) the list of alternatives below

- **There were no site alternatives considered for this project. The site is currently vacant and with visibly disturbed and fragmented vegetation.**
- **There are no layout alternatives considered for this project, however, Biodiversity Specialist recommendations will be incorporated into all the planning phases of the project to ensure that resultant impacts are minimal.**
- **Technology alternatives for noise and designs associated with the proposed project for both construction and operation phase will be considered.**

Provide a description of the alternatives considered

No.	Alternative type, either alternative: site on property, properties, activity, design, technology, energy, operational or other(provide details of "other")	Description
1	Proposal	<p><b>General project description:</b></p> <p><b>The property is situated to the north-west of the total filling station situated at the Volta Road intersection with the K43 Road in the Lenasia area. It is situated to the south-east of the existing Lenasia Extension II on the same area on which the township Lenasia Extension I6 has previously been approved. The property is situated in Region G, Ward 8.</b></p> <p><b>The proposed development will entail a shopping complex which will include shop buildings, Fencing; Parking bays; Access roads; and Services such as water, sewer and electricity will be connected to already existing municipal lines.</b></p>

	<b>Design alternative</b>	Consideration of different designs for aesthetic purposes or different construction materials in an attempt to optimise local benefits and sustainability would constitute design alternatives. Designs are assumed to have different impacts, generally, the design alternatives could be incorporated into the project proposal and be part of the project description and need not be evaluated as separate alternatives.
	<b>Process alternative</b>	Not alternatives considered at this stage.
	<b>Technology alternatives</b>	Technology alternatives for noise levels associated with the project during the construction phase will be taken into consideration. Best construction techniques for limitation of dust and to address air pollution issues and erosion will also be considered.
	<b>Energy</b>	Solar lighting along the walkways and drive ways, fitted with LED bulbs, this type of lighting not only provides outstanding illumination, but are also energy efficient, long lasting, and economical. The traditional solar powered lighting involves long cable runs. New technology allows for solar panels, batteries, and light fittings to be located together at the head of poles reducing runs and making fittings more secure and robust.
	<b>No go alternative</b>	The no go alternative was not considered at this stage since the development is aimed at aiding with the local economic development (temporary employment during construction) and permanent employment during the operation phase and provision of access to a nearest shopping centre.

In the event that no alternative(s) has/have been provided, a motivation must be included in the table below.

**There were no site alternatives considered; the site is vacant with enough space to accommodate the proposed shopping centre and there will be minimal resultant environmental impacts since the site is already transformed (footpaths, illegal dumping, veld fires), should all mitigation measures be effectively implemented during the construction and operation phase. Trade offs are also attributed to the positive economic benefits (temporary employment during construction phase) and permanent employment during operation phase.**

#### 4. PHYSICAL SIZE OF THE ACTIVITY

Indicate the total physical size (footprint) of the proposal as well as alternatives. Footprints are to include all new infrastructure (roads, services etc), impermeable surfaces and landscaped areas:

Proposed activity (*Total environmental (landscaping, parking, etc.) and the building footprint*)

**Alternatives:**

Alternative 1 (if any)

Alternative 2 (if any)

**Size of the activity:**

**± 3.957 hectares**

Ha/ m<sup>2</sup>

or, for linear activities:

Proposed activity

**Alternatives:**

Alternative 1 (if any)

Alternative 2 (if any)

**Length of the activity:**

m/km

Indicate the size of the site(s) or servitudes (within which the above footprints will occur):

Proposed activity

**Size of the site/servitude:**

**±3.957 hectares**

**Alternatives:**

Alternative 1 (if any)

Alternative 2 (if any)

<b>Not Applicable</b>
<b>Not Applicable</b>

Ha/m<sup>2</sup>

**5. SITE ACCESS**

**Proposal**

Does ready access to the site exist, or is access directly from an existing road?

<b>YES</b>	
	m

If NO, what is the distance over which a new access road will be built

Describe the type of access road planned:

**Access will be gained through the already existing Volta Street (designs will be incorporated for the proposed access internal roads)**

Include the position of the access road on the site plan (if the access road is to traverse a sensitive feature the impact thereof must be included in the assessment).

**Alternative 1**

Does ready access to the site exist, or is access directly from an existing road?

YES	NO
	m

If NO, what is the distance over which a new access road will be built

Describe the type of access road planned:

**Not applicable**

Include the position of the access road on the site plan. (if the access road is to traverse a sensitive feature the impact thereof must be included in the assessment).

**Alternative 2**

Does ready access to the site exist, or is access directly from an existing road?

YES	NO
	m

If NO, what is the distance over which a new access road will be built

Describe the type of access road planned:

**Not applicable**

Include the position of the access road on the site plan. (if the access road is to traverse a sensitive feature the impact thereof must be included in the assessment).

**PLEASE NOTE: Points 6 to 8 of Section A must be duplicated where relevant for alternatives**

Section A 6-8 has been duplicated

**0**

Number of times

(only complete when applicable)

**6. LAYOUT OR ROUTE PLAN**

A detailed site or route (for linear activities) plan(s) must be prepared for each alternative site or alternative activity. It must be attached to this document. The site or route plans must indicate the following:

- the layout plan is printed in colour and is overlaid with a sensitivity map (if applicable);
- layout plan is of acceptable paper size and scale, e.g.
  - A4 size for activities with development footprint of 10sqm to 5 hectares;
  - A3 size for activities with development footprint of > 5 hectares to 20 hectares;
  - A2 size for activities with development footprint of >20 hectares to 50 hectares);
  - A1 size for activities with development footprint of >50 hectares);
- The following should serve as a guide for scale issues on the layout plan:
  - A0 = 1: 500
  - A1 = 1: 1000
  - A2 = 1: 2000
  - A3 = 1: 4000
  - A4 = 1: 8000 (±10 000)
- shapefiles of the activity must be included in the electronic submission on the CD's;
- the property boundaries and Surveyor General numbers of all the properties within 50m of the site;
- the exact position of each element of the activity as well as any other structures on the site;
- the position of services, including electricity supply cables (indicate above or underground), water supply pipelines, boreholes, sewage pipelines, septic tanks, storm water infrastructure;
- servitudes indicating the purpose of the servitude;
- sensitive environmental elements on and within 100m of the site or sites (including the relevant buffers as prescribed by the competent authority) including (but not limited thereto):
  - Rivers and wetlands;
  - the 1:100 and 1:50 year flood line;
  - ridges;
  - cultural and historical features;
  - areas with indigenous vegetation (even if it is degraded or infested with alien species);
- Where a watercourse is located on the site at least one cross section of the water course must be included (to allow the position of the relevant buffer from the bank to be clearly indicated)

**FOR LOCALITY MAP (NOTE THIS IS ALSO INCLUDED IN THE APPLICATION FORM REQUIREMENTS)**

- the scale of locality map must be at least 1:50 000. For linear activities of more than 25 kilometres, a smaller scale e.g. 1:250 000 can be used. The scale must be indicated on the map;
- the locality map and all other maps must be in colour;
- locality map must show property boundaries and numbers within 100m of the site, and for poultry and/or piggery, locality map must show properties within 500m and prevailing or predominant wind direction;
- for gentle slopes the 1m contour intervals must be indicated on the map and whenever the slope of the site exceeds 1:10, the 500mm contours must be indicated on the map;
- areas with indigenous vegetation (even if it is degraded or infested with alien species);
- locality map must show exact position of development site or sites;
- locality map showing and identifying (if possible) public and access roads; and
- the current land use as well as the land use zoning of each of the properties adjoining the site or sites.

**7. SITE PHOTOGRAPHS**

Colour photographs from the center of the site must be taken in at least the eight major compass directions with a description of each photograph. Photographs must be attached under the appropriate Appendix. It should be supplemented with additional photographs of relevant features on the site, where applicable.

**8. FACILITY ILLUSTRATION**

A detailed illustration of the activity must be provided at a scale of 1:200 for activities that include structures. The illustrations must be to scale and must represent a realistic image of the planned activity. The illustration must give a representative view of the activity to be attached in the appropriate Appendix.

# SECTION B: DESCRIPTION OF RECEIVING ENVIRONMENT

**Note:** Complete Section B for the proposal and alternative(s) (if necessary)

**Instructions for completion of Section B for linear activities**

- 1) For linear activities (pipelines etc) it may be necessary to complete Section B for each section of the site that has a significantly different environment.
- 2) Indicate on a plan(s) the different environments identified
- 3) Complete Section B for each of the above areas identified
- 4) Attach to this form in a chronological order
- 5) Each copy of Section B must clearly indicate the corresponding sections of the route at the top of the next page.

Section B has been duplicated for sections of the route  times

**Instructions for completion of Section B for location/route alternatives**

- 1) For each location/route alternative identified the entire Section B needs to be completed
- 2) Each alternative location/route needs to be clearly indicated at the top of the next page
- 3) Attach the above documents in a chronological order

Section B has been duplicated for location/route alternatives  times  
(complete only when appropriate)

**Instructions for completion of Section B when both location/route alternatives and linear activities are applicable for the application**

Section B is to be completed and attachments order in the following way

- All significantly different environments identified for Alternative 1 is to be completed and attached in a chronological order; then
- All significantly different environments identified for Alternative 2 is to be completed and attached chronological order, etc.

Section B - Section of Route  (complete only when appropriate for above)

Section B – Location/route Alternative No.  (complete only when appropriate for above)

## 1. PROPERTY DESCRIPTION

**Property description:**  
(Including Physical Address  
and Farm name, portion etc.)

**Portion 179 and part of portion 139 of the farm Rietfontein 301 IQ at Volta Street Lenasia, City of Johannesburg.**

## 2. ACTIVITY POSITION

Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in decimal degrees. The degrees should have at least six decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

**Proposed:**

Latitude (S):	Longitude (E):
<b>26°20'25.044"S</b>	<b>27°51'16.05"E</b>

**In the case of linear activities:**

**Alternative:**

- Starting point of the activity
- Middle point of the activity
- End point of the activity

Latitude (S):	Longitude (E):
°	°
°	°
°	°

For route alternatives that are longer than 500m, please provide co-ordinates taken every 250 meters along the route and attached in the appropriate Appendix

The 21 digit Surveyor General code of each cadastral land parcel

<b>PROPOSAL</b>	<b>T</b>	<b>0</b>	<b>I</b>	<b>Q</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>I</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>I</b>	<b>7</b>	<b>9</b>	<b>0</b>	<b>0</b>
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## 3. GRADIENT OF THE SITE

Indicate the general gradient of the site.

Flat <b>X</b>	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5
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## 4. LOCATION IN LANDSCAPE

Indicate the landform(s) that best describes the site.

Ridgeline	Plateau	Side slope of hill/ridge	Valley	Plain <b>X</b>	Undulating plain/low hills	River front
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## 5. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

a) Is the site located on any of the following?

Shallow water table (less than 1.5m deep)		<b>NO</b>
Dolomite, sinkhole or doline areas		<b>NO</b>
Seasonally wet soils (often close to water bodies)		<b>NO</b>
Unstable rocky slopes or steep slopes with loose soil		<b>NO</b>
Dispersive soils (soils that dissolve in water)		<b>NO</b>
Soils with high clay content (clay fraction more than 40%)		<b>NO</b>
Any other unstable soil or geological feature		<b>NO</b>
An area sensitive to erosion		<b>NO</b>

(Information in respect of the above will often be available at the planning sections of local authorities. Where it exists, the 1:50 000 scale Regional Geotechnical Maps prepared by Geological Survey may also be used).



b) are any caves located on the site(s)  **NO**

If yes to above provide location details in terms of latitude and longitude and indicate location on site or route map(s)

Latitude (S): \_\_\_\_\_ Longitude (E): \_\_\_\_\_

c) are any caves located within a 300m radius of the site(s)  **NO**

If yes to above provide location details in terms of latitude and longitude and indicate location on site or route map(s)

Latitude (S): \_\_\_\_\_ Longitude (E): \_\_\_\_\_

d) are any sinkholes located within a 300m radius of the site(s)  **NO**

If yes to above provide location details in terms of latitude and longitude and indicate location on site or route map(s)

Latitude (S): \_\_\_\_\_ Longitude (E): \_\_\_\_\_

If any of the answers to the above are "YES" or "unsure", specialist input may be requested by the Department

### 6. AGRICULTURE

Does the site have high potential agriculture as contemplated in the Gauteng Agricultural Potential Atlas (GAPA 4)?  **NO**

Please note: The Department may request specialist input/studies in respect of the above.

### 7. GROUNDCOVER

To be noted that the location of all identified rare or endangered species or other elements should be accurately indicated on the site plan(s).

Indicate the types of groundcover present on the site and include the estimated percentage found on site

<b>Natural veld - good condition</b> % = 10	<b>Natural veld with scattered aliens</b> % = 20	<b>Natural veld with heavy alien infestation</b> % = 20	<b>Veld dominated by alien species</b> % = 25	<b>Bare soil</b> % = 25
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Please note: The Department may request specialist input/studies depending on the nature of the groundcover and potential impact(s) of the proposed activity/ies.

Are there any rare or endangered flora or fauna species (including red list species) present on the site  **NO**

**The proposed development is likely to cause minimal disturbances. Overall, Ecological Assessment revealed that the proposed development will be located on habitats that have already undergone severe transformation. As a result, the proposed development does not pose any high risk to the vegetation nor ecological integrity on site. The management of the impacts as well as recommendations were developed for the potential impacts identified.**

If YES, specify and explain:

Are there any rare or endangered flora or fauna species (including red list species) present within a 200m (if within urban area as defined in the Regulations) or within 600m (if outside the urban area as defined in the Regulations) radius of the site.  **NO**

If YES, specify and explain:

\_\_\_\_\_

Are there any special or sensitive habitats or other natural features present on the site?  **NO**

If YES, specify and explain:

\_\_\_\_\_

Was a specialist consulted to assist with completing this section

**NO**

If yes complete specialist details

Name of the specialist:

Qualification(s) of the specialist:

Postal address:

Postal code:

Telephone:

Cell:

E-mail:

Fax:

Are any further specialist studies recommended by the specialist?

**NO**

If YES, specify:

If YES, is such a report(s) attached?

YES NO

If YES list the specialist reports attached below

Signature of specialist: \_\_\_\_\_ Date: \_\_\_\_\_

**Please note;** If more than one specialist was consulted to assist with the filling in of this section then this table must be appropriately duplicated

### 8. LAND USE CHARACTER OF SURROUNDING AREA

Using the associated number of the relevant current land use or prominent feature from the table below, fill in the position of these land-uses in the vacant blocks below which represent a 500m radius around the site

1. Vacant land	2. River, stream, wetland	3. Nature conservation area	4. Public open space	5. Koppie or ridge
6. Dam or reservoir	7. Agriculture	8. Low density residential	9. Medium to high density residential	10. Informal residential
11. Old age home	12. Retail	13. Offices	14. Commercial & warehousing	15. Light industrial
16. Heavy industrial <sup>AN</sup>	17. Hospitality facility	18. Church	19. Education facilities	20. Sport facilities
21. Golf course/polo fields	22. Airport <sup>N</sup>	23. Train station or shunting yard <sup>N</sup>	24. Railway line <sup>N</sup>	25. Major road (4 lanes or more) <sup>N</sup>
26. Sewage treatment plant <sup>A</sup>	27. Landfill or waste treatment site <sup>A</sup>	28. Historical building	29. Graveyard	30. Archeological site
31. Open cast mine	32. Underground mine	33. Spoil heap or slimes dam <sup>A</sup>	34. Small Holdings	
Other land uses (describe):				

**NOTE: Each block represents an area of 250m X 250m, if your proposed development is larger than this please use the appropriate number and orientation of hashed blocks**

10	1,10,13,14, 15	10,15
10	<b>SITE</b>	12,14, 15
1,10	1,14	14

**Note:** More than one (1) Land-use may be indicated in a block

**Please note:** The Department may request specialist input/studies depending on the nature of the land use character of the area and potential impact(s) of the proposed activity/ies. Specialist reports that look at health & air quality and noise impacts may be required for any feature above and in particular those features marked with an "A" and with an "N" respectively.

Have specialist reports been attached

**NO**

If yes indicate the type of reports below

**Not applicable**

## 9. SOCIO-ECONOMIC CONTEXT

Describe the existing social and economic characteristics of the area and the community condition as baseline information to assess the potential social, economic and community impacts.

**Over the past eighteen years Johannesburg's economy has grown faster than that of South Africa as a country. The result of this performance is a City output which in 2013 was some 92 percent larger than in 1996 compared with the 70 percent for South Africa as a whole. This in relative terms, favourable economic performance, is also reflected in employment statistics, where despite inwards migration, the City had in 2013, a higher proportion of working age people in employment than any other South African City.**

**The proposed development site forms part of ward 8 of Region G (Lenasia) which encompasses the whole of Ennerdale and Orange Farm. Region G borders Soweto in the northwest; its north-eastern suburb, Lenasia, borders Johannesburg South. Region G lacks formal housing and social services infrastructure, it has the highest rate of unemployment in the city, and most of its residents live below the breadline.**

**It is eastern, western, and southern borders form greater Johannesburg's extreme southern boundary. About 40 kilometres south of the inner city, it is the most isolated, least integrated region of Johannesburg. Although fairly remote, it is diagonally traversed by the N1 and the Golden Highway (both running from north-east to south-west), with the N12 (R29) running along its northern border.**

**Residents of Lenasia have been able to overcome the disadvantage of their isolation from mainstream Johannesburg to some degree. Many had developed strong economic involvement with the city before being relocated here.**

**As a result, there are small pockets of prosperity in these areas with some larger middle-income neighbourhoods and long-established social networks. Similar neighbourhoods are found in Zakariyya Park and Ennerdale.**

**In general, though, much improvement is still needed. The bulk of the housing in these formal settlements still falls in the lower income bracket. And the large informal settlements, especially in the south, suffer from extreme poverty and unemployment, and their geographic isolation makes it costly to provide much-needed infrastructure.**

**The southern area of the region still contains agricultural land which opens possibilities for future development. At present, however, open spaces are often used for illegal dumping as the current waste removal system is inadequate. In addition, land and water pollution must be dealt with to ensure a clean, healthy living environment in the future.**

**There are also sites of historic and archaeological significance, such as Gatsrand and Klipriver, that need to be conserved together with the already established Olifantsfontein Nature Reserve.**

**A significant amount of underdeveloped and vacant agricultural land is publicly owned, providing an opportunity for more intensive agricultural development. The promotion of the agricultural sector and the management of development to ensure environmental sustainability are among the City council's stated goals.**

The others are to support local economic development opportunities; to manage informal settlements; to protect existing residential investments; to promote and manage mixed-use developments, and to promote regional connectivity.

**Demographic information:**

The total population of Region G is estimated at 270 000, with 170 000 of these people living in the Greater Orange Farm and Weilers Farm area.

The population is extremely young, with 40 per cent under 18. Income levels are very low: 50 per cent of the population has no income and about 62 per cent of the remainder earn less than R1 500 a month, indicating that the majority live below the breadline.

Unemployment is estimated at 70 per cent, far higher than the national average, with most people in the region being employed in elementary occupations or as craft and related trade workers.

**Key issues:**

For Greater Ennerdale and Lenasia, the issues are informal settlements; the absence of higher-income residential areas; and the lack of control of local economic activities.

For Greater Orange Farm and Weilers Farm (Kanana Park) the issues are extreme levels of poverty and unemployment; the geographic isolation and marginalisation from the economic and social opportunities afforded by greater Johannesburg; low quality basic services - both infrastructural and social; invasion of planned residential areas, public and private land; and civil disobedience - this fragmented community has strong political and local groupings.

**10. CULTURAL/HISTORICAL FEATURES**

Please be advised that if section 38 of the National Heritage Resources Act 25 of 1999 is applicable to your proposal or alternatives, then you are requested to furnish this Department with written comment from the South African Heritage Resource Agency (SAHRA) – Attach comment in appropriate annexure

38. (1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorised as-

- (a) the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;
- (b) the construction of a bridge or similar structure exceeding 50m in length;
- (c) any development or other activity which will change the character of a site-
  - (i) exceeding 5 000 m2 in extent; or
  - (ii) involving three or more existing erven or subdivisions thereof; or
  - (iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or
  - (iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;
- (d) the re-zoning of a site exceeding 10 000 m2 in extent; or
- (e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority, must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.

Are there any signs of culturally (aesthetic, social, spiritual, environmental) or historically significant elements, as defined in section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999), including archaeological or palaeontological sites, on or close (within 20m) to the site?

**NO**

**There were no historic or any heritage artefacts identified during the EAPs' site investigations and a Phase 1 Heritage Impact Assessment Study was conducted, and no evidence of archaeological or heritage value were discovered.**

If YES, explain:

**Not applicable**

If uncertain, the Department may request that specialist input be provided to establish whether there is such a feature(s) present on or close to the site.

Briefly explain the findings of the specialist if one was already appointed:

**A Phase 1 Heritage Impact Assessment Study was conducted, and no evidence of archaeological or heritage value were discovered.**

Will any building or structure older than 60 years be affected in any way?

**NO**

Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?

**NO**

If yes, please attached the comments from SAHRA in the appropriate Appendix

## SECTION C: PUBLIC PARTICIPATION (SECTION 41)

1. The Environmental Assessment Practitioner must conduct public participation process in accordance with the requirement of the EIA Regulations, 2014.

### 2. LOCAL AUTHORITY PARTICIPATION

Local authorities are key interested and affected parties in each application and no decision on any application will be made before the relevant local authority is provided with the opportunity to give input. The planning and the environmental sections of the local authority must be informed of the application at least thirty (30) calendar days before the submission of the application to the competent authority.

Was the draft report submitted to the local authority for comment?

**NO**

If yes, has any comments been received from the local authority?

**NO**

If "YES", briefly describe the comment below (also attach any correspondence to and from the local authority to this application):

**Not applicable**

If "NO" briefly explain why no comments have been received or why the report was not submitted if that is the case.

**The Basic Assessment Report will be distributed to all the identified stakeholders and comments are anticipated before/after the 30 days commenting period lapses.**

### 3. CONSULTATION WITH OTHER STAKEHOLDERS

Any stakeholder that has a direct interest in the activity, site or property, such as servitude holders and service providers, should be informed of the application at least **thirty (30) calendar days** before the submission of the application and be provided with the opportunity to comment.

Has any comment been received from stakeholders?

**NO**

If "YES", briefly describe the feedback below (also attach copies of any correspondence to and from the stakeholders to this application):

**Not applicable**

If "NO" briefly explain why no comments have been received

**The Basic Assessment Report will be distributed to all the identified stakeholders and comments are anticipated before/after the 30 days commenting period lapses.**

#### The following has been undertaken to date

• <b>Placing of site notice</b>	<b>04 June 2021</b>
• <b>Handing out of Background Information Documents (BIDs)</b>	<b>04 June 2021</b>
• <b>Publishing of Newspaper advert (The Citizen)</b>	<b>04 June 2021</b>

#### 4. GENERAL PUBLIC PARTICIPATION REQUIREMENTS

The Environmental Assessment Practitioner must ensure that the public participation process is adequate and must determine whether a public meeting or any other additional measure is appropriate or not based on the particular nature of each case. Special attention should be given to the involvement of local community structures such as Ward Committees and ratepayers associations. Please note that public concerns that emerge at a later stage that should have been addressed may cause the competent authority to withdraw any authorisation it may have issued if it becomes apparent that the public participation process was flawed.

The EAP must record all comments and respond to each comment of the public / interested and affected party before the application report is submitted. The comments and responses must be captured in a Comments and Responses Report as prescribed in the regulations and be attached to this application.

#### 5. APPENDICES FOR PUBLIC PARTICIPATION

All public participation information is to be attached in the appropriate Appendix. The information in this Appendix is to be ordered as detailed below

**Appendix D1 – Proof of site notice**

**Appendix D2 – Proof of newspaper advertisement in terms of the regulations**

**Appendix D3 – Written notifications to adjacent properties (BIDs)**

**Appendix D4– Proof of BIDs receipt**

## SECTION D: RESOURCE USE AND PROCESS DETAILS

**Note:** Section D is to be completed for the proposal and alternative(s) (if necessary)

### Instructions for completion of Section D for alternatives

- 1) For each alternative under investigation, where such alternatives will have different resource and process details (e.g. technology alternative), the entire Section D needs to be completed
- 4) Each alternative needs to be clearly indicated in the box below
- 5) Attach the above documents in a chronological order

Section D has been duplicated for alternatives  times  
(complete only when appropriate)

Section D Alternative No.  (complete only when appropriate for above)

### 1. WASTE, EFFLUENT, AND EMISSION MANAGEMENT

#### Solid waste management

Will the activity produce solid construction waste during the construction/initiation phase?

YES	
	±1.5 m <sup>3</sup>

If yes, what estimated quantity will be produced per month?

How will the construction solid waste be disposed of (describe)?

**Most waste is expected to be packaging materials (shrink wrap, cardboard), construction rubble and litter generated by the construction staff. Waste will be recycled as far as possible. Non-recyclable waste will be sorted into different types and disposed of at a suitably licensed waste disposal facility. Disposal of solid waste will be inline with that of the landfill personnel; however onsite there will be a skip in which waste will be stored before transportation to the landfill for disposal. A licensed waste management company will be contracted to manage the waste during the construction period.**

Where will the construction solid waste be disposed of (describe)?

**Disposal of construction waste will only be at a registered waste disposal site; this will be included in the EMP on the waste management section to ensure that it is implemented. It will be the duty of the client and principal contractor to ensure that best environmental management practices are implemented.**

Will the activity produce solid waste during its operational phase?  
 If yes, what estimated quantity will be produced per month?

YES	<input type="checkbox"/>
	<input checked="" type="checkbox"/>
<b>±0.5 m<sup>3</sup></b>	

How will the solid waste be disposed of (describe)?

**Solid waste will be collected by a registered waste management contractor to a registered municipal waste disposal site (municipal waste collection system may be investigated). The client will be responsible to ensure that measures are implemented, and municipal agreements are in place.**

Has the municipality or relevant service provider confirmed that sufficient air space exists for treating/disposing of the solid waste to be generated by this activity?

YES	<input checked="" type="checkbox"/>
-----	-------------------------------------

Where will the solid waste be disposed if it does not feed into a municipal waste stream (describe)?

**Confirmation will be obtained from the municipality that sufficient space exists for the waste prior to construction.**

**Note:** If the solid waste (construction or operational phases) will not be disposed of in a registered landfill site or be taken up in a municipal waste stream, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

Can any part of the solid waste be classified as hazardous in terms of the relevant legislation?

<input checked="" type="checkbox"/>	NO
-------------------------------------	----

If yes, inform the competent authority and request a change to an application for scoping and EIA.

Is the activity that is being applied for a solid waste handling or treatment facility?

<input checked="" type="checkbox"/>	NO
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If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

Describe the measures, if any, that will be taken to ensure the optimal reuse or recycling of materials:

**General Waste Management**

- Litter and rubble on the construction site and at the site camp will be monitored strictly by a dedicated housekeeping team.**
- All waste generated on site will be separated into metal, paper, plastic, glass & contaminated paper, glass, plastic, and polystyrene and will be recycled.**

**Construction rubble**

- No material shall be left on site that may harm man or animals. Broken, damaged and unused nuts, bolts and washers shall be picked up and removed from site.**
- Surplus concrete will not be dumped indiscriminately.**
- Concrete water will be re-used in the batching process.**

**Liquid effluent (other than domestic sewage)**

Will the activity produce effluent, other than normal sewage, that will be disposed of in a municipal sewage system?

<input checked="" type="checkbox"/>	NO
	m <sup>3</sup>
YES	NO

If yes, what estimated quantity will be produced per month?

If yes, has the municipality confirmed that sufficient capacity exist for treating / disposing of the liquid effluent to be generated by this activity(ies)?

Will the activity produce any effluent that will be treated and/or disposed of on site?

<input checked="" type="checkbox"/>	NO
	m <sup>3</sup>

If yes, what estimated quantity will be produced per month?

If yes describe the nature of the effluent and how it will be disposed.

Note that if effluent is to be treated or disposed on site the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA

Will the activity produce effluent that will be treated and/or disposed of at another facility?

<input checked="" type="checkbox"/>	NO
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If yes, provide the particulars of the facility:

Facility name:			
Contact person:			
Postal address:			
Postal code:			
Telephone:		Cell:	
E-mail:		Fax:	

Describe the measures that will be taken to ensure the optimal reuse or recycling of waste water, if any:

**Liquid effluent (domestic sewage)**

Will the activity produce domestic effluent that will be disposed of in a municipal sewage system?

**YES**

If yes, what estimated quantity will be produced per month?

**± 1 m<sup>3</sup>**

If yes, has the municipality confirmed that sufficient capacity exist for treating / disposing of the domestic effluent to be generated by this activity(ies)?

**NO**

Will the activity produce any effluent that will be treated and/or disposed of on site?

**NO**

If yes describe how it will be treated and disposed off.

**Emissions into the atmosphere**

Will the activity release emissions into the atmosphere?

**NO**

If yes, is it controlled by any legislation of any sphere of government?

**NO**

If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

If no, describe the emissions in terms of type and concentration:

**Emissions may be produced by construction vehicles during the construction phase of the project. Dust may also be created during the construction phase. The EMP will however address mitigation measures. No emissions will be produced during operation of the facility.**

**2. WATER USE**

Indicate the source(s) of water that will be used for the activity

Municipal <b>X</b>	Directly from water board	groundwater	river, stream, dam or lake	other	the activity will not use water
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If water is to be extracted from groundwater, river, stream, dam, lake or any other natural feature, please indicate the volume that will be extracted per month:

**Not applicable**

If Yes, please attach proof of assurance of water supply, e.g. yield of borehole, in the appropriate Appendix

Does the activity require a water use permit from the Department of Water Affairs?

**NO**

If yes, list the permits required

**Not applicable**

If yes, have you applied for the water use permit(s)?

**NO**

If yes, have you received approval(s)? (attached in appropriate appendix)

**NO**

**3. POWER SUPPLY**

Please indicate the source of power supply eg. Municipality / Eskom / Renewable energy source

**Municipal**

If power supply is not available, where will power be sourced from?

**4. ENERGY EFFICIENCY**

Describe the design measures, if any, that have been taken to ensure that the activity is energy efficient:

- **Solar powered lighting is recommended for street lighting and within the shops.**
- **Outdoor lighting should be downward facing and low wattage.**
- **Lights used for non-security purposes will be energy efficient for example compact fluorescent lights (CFL) or LED lights.**

Describe how alternative energy sources have been taken into account or been built into the design of the activity, if any:

**Renewable energy sources such as the use of solar power will be investigated as an alternative energy source.**



# SECTION E: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2014, and should take applicable official guidelines into account. The issues raised by interested and affected parties should also be addressed in the assessment of impacts as well as the impacts of not implementing the activity (Section 24(4)(b)(i)).

## 1. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

Summarise the issues raised by interested and affected parties.

**None at this stage.**

Summary of response from the practitioner to the issues raised by the interested and affected parties (including the manner in which the public comments are incorporated or why they were not included)

(A full response must be provided in the Comments and Response Report that must be attached to this report):

**The EAP recommends that contractors hire local community members to perform duties that do not require specialized skills, although the Contractor may source qualified personnel outside the boundaries of the project area.**

## 2. IMPACTS THAT MAY RESULT FROM THE CONSTRUCTION AND OPERATIONAL PHASE

Briefly describe the methodology utilised in the rating of significance of impacts

**The objective of the impact assessment is to thoroughly identify potential impacts associated with the proposed development both positive and negative. The identified impacts are therefore evaluated in terms of their significance. This assessment is of a systematic analysis framework to evaluate the nature, extent, duration, intensity; probability and significance of the various impacts are considered either with or without mitigation and management measures.**

**There are several biophysical and social issues that can be expected as a result of the proposed development. Some of the issues are localised in their effects, whilst others could influence a more widespread area. The aim of this basic assessment report is to ensure that issues are identified, assessed and mitigation measures be proposed.**

**The identification and brief descriptions of the relevant physical, biological, socio-economic and heritage issues include:**

- **Environmental aspects:** defined as those actions on site that may potentially have an environmental impact.
- **Environmental component to be impacted upon.**
- **Locality / applicable zone of the impact.**
- **Nature and description of the impact or issue.**

**An impact significance rating and evaluation, for the listed aspects, will form part of the BAR process/report to follow the environmental process. The methodology of impact assessment and its significance rating will be indicated below.**

**Most of the identified and anticipated negative impacts listed below will only take effect once the construction phase of the development commences; the main period of positive impacts occurrence is during the long term “operational” phase of the development.**

**An impact significance rating and evaluation, for the listed aspects, will form part of the BAR process/report to follow the environmental process. The methodology of impact assessment and its significance rating will be indicated below.**

**Significance is determined through a synthesis of the various impact characteristics and represents the combined effect of the extent, duration, intensity and probability of the impacts.**

- **No significance, the impact is not substantial and does not require any mitigatory action.**
- **Low, the impact is of little importance, but may require limited mitigation.**
- **Medium, the impact is of importance and therefore considered to have a negative impact. Mitigation is required to reduce the negative impacts to acceptable levels.**
- **High, the impact is of great importance. Failure to mitigate, with the objective of reducing the impact to**
- **Acceptable levels could render the entire development option or entire project proposal unacceptable. Mitigation and management is essential.**

Briefly describe and compare the potential impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the construction phase for the various alternatives of the proposed development. This must include an assessment of the significance of all impacts.

**Proposal**

<b>Potential impacts:</b>	<b>Significance rating of impacts(positive or negative):</b>	<b>Proposed mitigation:</b>	<b>Significance rating of impacts after mitigation:</b>	<b>Risk of the impact and mitigation not being implemented</b>
<b>Soil Erosion</b>	<b>Negative</b>	<ul style="list-style-type: none"> <li>• <b>Movement of machinery along and within the proposed site should be restricted to only that which is necessary for construction.</b></li> <li>• <b>Erosion control must be implemented along access roads.</b></li> <li>• <b>Construction is only allowed within the proposed site.</b></li> </ul>	<b>Low</b>	<b>Physical disruption of the natural terrain.</b>
<b>Soil contamination</b>	<b>Negative</b>	<ul style="list-style-type: none"> <li>• <b>All heavy machinery must be serviced and fixed on solid concrete surfaces or away from the construction site.</b></li> <li>• <b>The machines have to be provided with drip trays for overnight oil leaks monitoring.</b></li> <li>• <b>No dumping or burying of waste is permitted.</b></li> <li>• <b>On site toilets is not allowed to use deep pit systems.</b></li> <li>• <b>Portable toilets have to be emptied by removal and not dumping of waste.</b></li> </ul>	<b>Low</b>	<b>Impacts on soil, land use and land capability</b>

		<ul style="list-style-type: none"> <li>• Cement batching must take place on an impermeable surface.</li> <li>• Drip trays and spillkit set must be utilized for vehicle or machinery maintenance where the risk of oil spillages is highly likely.</li> </ul>		
Increase establishment of alien and invasive plant species	Negative	<ul style="list-style-type: none"> <li>• The appropriate agency should implement an ongoing monitoring and eradication programme for all invasive and weedy plant species growing.</li> </ul>	Low	Impact on patches of indigenous vegetation.
Visual / Aesthetic impact	Negative	<ul style="list-style-type: none"> <li>• All construction waste must be removed from site and taken to a registered disposal site.</li> <li>• Construction traffic must only be within the designated routes.</li> </ul>	Low	Visual impact on surrounding environment.
Cultural or Historical impacts	Negative	<ul style="list-style-type: none"> <li>• There are no historical artefacts that were identified on site.</li> </ul>	Low	Impact on cultural features
Social and Economic impacts	Positive	<ul style="list-style-type: none"> <li>• Temporary job opportunities will result from proposed development. These opportunities are usually limited to the contractor workforce and usually do not involve the greater community except if the contractor sources his workforce from another community.</li> <li>• This employment will only provide work on a short-term basis until the construction is completed and permanent employment opportunities during the operation phase.</li> </ul>	High	Community upliftment.
Safety and security	Negative	<ul style="list-style-type: none"> <li>• It is noted that the construction phase may result in potential increase in crime. It is therefore recommended that a community liaison officer is appointed to liaise between the contractor and community during the Construction phase.</li> </ul>	Low	Community unrest

Potential impacts:	Significance rating of impacts(positive or negative):	Proposed mitigation:	Significance rating of impacts after mitigation:	Risk of the impact and not being implemented
Noise Pollution	Negative	<ul style="list-style-type: none"> <li>All vehicles must abide by a speed limit set by the management party of the contractor around and near the proposed site.</li> <li>Work hours should be limited to daily hours e.g. from 7:00am to 17:00 pm.</li> <li>Vehicles must be maintained to prevent unattended vehicles from making excessive noise due to mechanical faults. General rules such as no unnecessary use of the truck horns should be implemented.</li> <li>The above must be implemented as the development is within residential area.</li> </ul>	Low	Noise and disturbance of peace to residents.
Air pollution	Negative	<ul style="list-style-type: none"> <li>Dust should be controlled by the regular wetting of soil surfaces used by vehicles (construction vehicles) such as access roads. This measure will be included in the EMPr to ensure implementation.</li> </ul>	Low	Air pollution and visual pollution.
Storm water management	Negative	<ul style="list-style-type: none"> <li>A stormwater management plan must be compiled and adhered with by the appointed contractor during the construction phase.</li> <li>Proper stormwater designs must be implemented to ensure effective stormwater management during the operational phase.</li> </ul>	Low	Flooding within the proposed site and soil erosion
Traffic congestion	Negative	<ul style="list-style-type: none"> <li>General traffic of the area will increase during the construction phase, when vehicles transport construction material and during the operation phase when motorists are driving in and out of the shopping complex.</li> </ul>	Low	Increase in traffic volumes

Impact on ecology	Negative	<ul style="list-style-type: none"> <li>• No permanent infrastructure should be placed on Highly Sensitive Areas.</li> <li>• No activity should take place within the watercourse buffers as indicated in the wetland report.</li> <li>• No construction material should be dumped on site or near the watercourses.</li> <li>• Watercourses and riparian vegetation should be demarcated as no go areas during construction phase.</li> <li>• No collection of firewood or medicinal floral species must be allowed by construction personnel.</li> <li>• No painting or marking of vegetation to identify locality or other information shall be allowed, as it will disfigure the natural setting. Marking shall be done by steel stakes with tags, if required.</li> <li>• Avoid translocating topsoil stockpiles from one place to another or importing topsoil from other sources that may contain alien plant propagules.</li> </ul>	Low	Impact on ecological integrity
		<ul style="list-style-type: none"> <li>• Only necessary damage must be caused: for example, unnecessary driving around in the veld should not take place.</li> <li>• Disturbance of the vegetation will not result in a net loss of species within this area.</li> <li>• It is imperative that the mitigation measures outlined in this report are implemented during operational phases.</li> </ul>		

**Alternative I (No alternatives considered at this stage)**

Proposal

Potential impacts:	Significance rating of impacts(positive or negative):	Proposed mitigation:	Significance rating of impacts after mitigation:	Risk of the impact and mitigation not being implemented
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List any specialist reports that were used to fill in the above tables. Such reports are to be attached in the appropriate Appendix.

**None at this stage**

Describe any gaps in knowledge or assumptions made in the assessment of the environment and the impacts associated with the proposed development.

**Environmental Assessment studies are limited in scope, time and budget. The discussions and assessments are made to some extent that there are assumptions to a certain degree. Future environmental impacts are not known. Impacts from the proposed development are also narrowed down to the receiving environment. Therefore, recommendations provided in this report are based on the author's best professional knowledge as well as available information regarding the perceived impacts on environment.**

### 3. IMPACTS THAT MAY RESULT FROM THE DECOMMISSIONING AND CLOSURE PHASE

Briefly describe and compare the potential impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the decommissioning and closure phase for the various alternatives of the proposed development. This must include an assessment of the significance of all impacts.

#### 3.1 Evaluation of impacts in terms of significance

The evaluation of anticipated impacts has been done through a significance rating method that makes use of quantitative measures. Some impacts will bear relevance to the construction phase or to the operational phase while others will be applicable to both phases. The methodology used is as follows:

##### 3.1.1 Significance assessment methodology:

Tables below provide a key to the qualification criteria used for impact assessment in terms of probability, intensity, geographic extent and duration.

##### 3.1.2 Probability: Probability of impact occurrence

Rating	Explanation of probability
1 (Very low)	<10% chance of impact occurrence
2 (Very low)	10 to 20% chance of impact occurrence
3 (Low)	20 to 39% chance of impact occurrence
4 (Low)	30 to 49% chance of impact occurrence
5 (Moderate)	41 to 50% chance of impact occurrence
6 (Moderate)	51 to 60% chance of impact occurrence
7 (High)	61 to 70% chance of impact occurrence
8 (High)	71 to 80% chance of impact occurrence
9 (Very high)	81 to 90% chance of impact occurrence
10 (Very high)	91 to 100% chance of impact occurrence

##### 3.1.3 Intensity/severity: Intensity/severity of impact consequence

Rating	Explanation of intensity
1 (Very low)	Consequence if impact will be of no to very low level of harm/damage to the affected environmental component.
2 (Very low)	Same as above but of a little higher intensity.
3 (Low)	Consequence if impact will be of a low level of harm/damage to the affected environmental component.
4 (Low)	Same as above but of a little higher intensity.

5 (Moderate)	Consequence if impact will be of a moderate harm/damage to the affected environmental component.
6 (Moderate)	Same as above but of a little higher intensity.
7 (High)	Consequence if impact will be of high harm/damage to the affected environmental component.
8 (High)	Same as above but of a little higher intensity.
9 (Very high)	Consequence if impact will be of a very high or unacceptable harm/damage to the affected environmental component.
10 (Very high)	The affected environmental component will be destroyed due to the consequence if the impact.

### 3.1.4 Extend: Explanation of geographic extend of impact

Rating	Explanation of extend
1 (Site specific, no affect on any neighbours)	Direct and/or indirect impacts limited to site of development only.
2 (Site specific, affecting direct neighbour(s))	Direct and/or indirect impacts limited to site of development and one or more direct neighbouring sites.
3 (Neighbourhood)	Direct and/or indirect impacts affecting environmental elements on a neighbourhood level.
4 (Local)	Direct and/or indirect impacts affecting environmental elements within the local community, e.g. on municipality level.
5 (Regional / district)	Direct and/or indirect impacts affecting environmental elements within the region e.g. a significant part of a province, a development corridor, the lowveld region, etc.
6 (Provincial)	Direct and/or indirect impacts affecting environmental elements on a provincial scale.
7 (> 2 provinces)	Direct and/or indirect impacts affecting environmental elements on more than a provincial scale, but not yet on a national scale. As a general guide: affecting more than 2 provinces.
8 (National)	Direct and/or indirect impacts affecting environmental elements on a national level, and/or affecting one or two neighbouring countries.
9 (Sub-continental / continental)	Direct and/or indirect impacts affecting environmental elements on a sub-continental or continental level.
10 (Global)	Direct and/or indirect impacts affecting environmental elements on more than a provincial scale, but not yet on a national scale. As a general guide: affecting more than 2 provinces.

### 3.1.5 Duration: Explanation of duration of impact

Rating	Explanation of duration
1 (Very short term)	Less than 4 months
2 (Very short term)	4 months to <1 year

3 (Short term)	1 year to <3 years
(Short term)	3 years to <9 years
5 (Medium term)	9 years to <27 years
6 (Medium term)	27 years to <81 years
7 (Long term)	81 years to <243 years
8 (Long term)	243 years to < 729 years
9 (Very long term)	729 years to < 2000 years
10 (Very long term)	2000 years or longer

### 3.2 Final impact significance rating

= probability rating + intensity rating + extend rating + duration rating / 4 Round off to the nearest whole number.

#### Explanation of impact significance

Final impact significance rating	Impact significance	Explanation of impact significance
1-2	Very low	Impact would be negligible. In the case of negative impacts, almost no mitigation and/or remedial activity would be needed, and any minor steps which might be needed would be easy, cheap and simple.
3-4	Low	Impact would be of a low order and with little real effect. In the case of negative impacts, mitigation and/or remedial activity would be either easily achieved or little would be required, or both.
5-6	Moderate significance	Impact would be real but not substantial within the bounds of those which could occur. In the case of negative impacts, mitigation and/or remedial activity would be both feasible and easily possible.
7-8	High significance	Impacts of a substantial order. In the case of negative impacts, mitigation and/or remedial activity would be feasible but difficult, expensive, time-consuming or some combination of these.
9-10	Very high significance	Of the highest order possible within the bounds of impacts which could occur. In the case of negative impacts, there would be no possible mitigation and/or remedial activity to offset the impact at the spatial or time scale for which it was predicted.

Impact significance ratings between parenthesis are given presuming that **no** mitigation measures are to be implemented during the construction or operational phase of the project (this would imply a worst case scenario).

Impact significance rating not between parentheses is given presuming that mitigation measures as described in this document are implemented.



### 3.2.1 Assessment of the proposed development's main issues or impacts on the environment and the developments biophysical surroundings:

Project phase applicable	Probability	Intensity / Severity	Extent	Duration	SIGNIFICANCE RATING	Description of impact
<b>Impact: Potential of soil pollution</b>						
Construction & Operation	(5)	(5)	(3)	(3)	(4)	Improper disposal of paint, cement powder, tar and rubble during the construction phase, and domestic waste during the operational phase may cause land/soil pollution. During the collection, transportation, and storage of wastes at all phases spillages may occur, which may lead to soil pollution. Oil and fuel spillages from vehicles (construction and operational phases) could lead to soil contamination.
<b>Impact: Soil compaction</b>						
Construction	(4)	(3)	(1)	(3)	(3)	Soil compaction will occur in areas subjected to trampling by humans and vehicles (in the areas where humans and vehicles frequently move travel). During the construction phase soils at and around construction sites (roads, storm water retention berms, cable, and pipe network), construction camp establishment, storage areas and transportation routes will become compacted.
<b>Impact: Soil erosion</b>						
Construction	(4)	(5)	(2)	(3)	(4)	Soil erosion could occur in areas where bare soil surfaces are exposed to the force of wind and water.  During the construction phase, this includes clearing of the land in preparation for construction. Manner stored piles of cement or soil. Wind erosion leads to dust pollution. Poorly designed storm water outlets will result in increased surface runoff (volume and speed). This can create erosion gullies.  To summarise, the main activities which may lead to erosion are excavation works and civil works i.e. site clearing and associated activities.
<b>Impact: Consumption of scarce water resource</b>						
Construction & Operation	(2)	(2)	(3)	(3)	(3)	Water consumption during the construction & Operation phase will be minimal as only municipal connection will be utilized and external suppliers will be sourced when required.

Project phase applicable	Probability	Intensity / Severity	Extent	Duration	SIGNIFICANCE RATING	Description of impact
<b>Impact: Loss of soil structure</b>						
Construction	(4)	(3)	(1)	(3)	(3)	Soil handling may result in loss of soil structure, especially if topsoil is not handled and stockpiled appropriately.
<b>Impact: Water pollution due to on site sanitation</b>						
Construction	(3)	(3)	(3)	(3)	(3)	Improper sanitation for construction workers may lead to storm water and groundwater pollution during the construction phase.
<b>Impact: Water pollution with waste and spillages</b>						
Construction	(2)	(3)	(3)	(3)	(3)	<p>Improper disposal of paint, cement powder and other construction waste during the construction phase may result in surface (and especially groundwater) pollution.</p> <p>The collection, transportation, and storage of wastes during the construction phase may result in spillages which may lead to soil and water pollution.</p> <p>Oil and fuel spillages from vehicles (construction) could lead to soil pollution.</p> <p>Improper disposal of used oil or other hydrologic fluids will cause pollution. However, no vehicle maintenance is anticipated to take place on site.</p>
<b>Impact: Increased crime rates within the area</b>						
Construction & Operation	(2)	(3)	(3)	(3)	(3)	<p>Crime in the local community may increase due to the presence of workers and building materials during the construction phase.</p> <p>General crime threat due to shops containing valuable stocks and materials during operational phase.</p>

Project phase applicable	Probability	Intensity / Severity	Extent	Duration	SIGNIFICANCE RATING	Description of impact
<b>Impact: Consumption of natural resources: Construction material</b>						
Construction	(9)	(4)	(7)	(3)	(6)	Vehicle movement in the general area is anticipated to increase due to the proposed development. During the construction phase, it will mainly be from vehicles transporting construction material to and from the site.
<b>Impact: Waste generation</b>						
Construction & Operation	(7)	(5)	(3)	(3)	(5)	<p>Waste will be generated during the construction phase (construction waste e.g. cement bags, empty paint cans, etc.) and operational phase (litter from shopping patrons) and general packaging materials from shops.</p> <p>Waste generated from the site preparations (e.g. overburdened material)</p> <p>Waste accumulation, collection, storage and disposal may cause littering, visual pollution, blockages of storm water, groundwater pollution, filling of scarce waste sites if not properly classified and release of unpleasant odors. Construction waste e.g. building rubble and cement powder may cause soil compaction.</p>
<b>Impact: Littering</b>						
Construction	(2)	(3)	(3)	(3)	(3)	Littering may be caused by construction workers (construction phase) and from shopping patrons (operational phase).
<b>Impact: Traffic congestion</b>						
Construction & Operation	(7)	(5)	(3)	(3)	(5)	<ul style="list-style-type: none"> <li>The general traffic of the area will increase the developer must ensure that road traffic safety requirements are met.</li> <li>Location of access points to and from the development to ensure that road traffic safety requirements are met.</li> <li>Implementation of appropriate traffic control measures, both in the design and layout of access points and during construction and operation thereof.</li> </ul>

Project phase applicable	Probability	Intensity / Severity	Extent	Duration	SIGNIFICANCE RATING	Description of impact
<b>Impact: Improper stormwater management</b>						
Construction & Operation	(2)	(3)	(2)	(1)	(2)	Improper of stormwater management during the construction phase, and poor stormwater designs during the operational phase could lead to stormwater impacts such as flooding, soil erosion, runoff etc.

Proposal

**Portion 179 and part of portion 139 of the farm Rietfontein 301 IQ**

List any specialist reports that were used to fill in the above tables. Such reports are to be attached in the appropriate Appendix.

**Biodiversity assessment report, Appendix E1**  
**Heritage impact assessment report, Appendix E2**

Where applicable indicate the detailed financial provisions for rehabilitation, closure and ongoing post decommissioning management for the negative environmental impacts.

**Not applicable at this stage**

#### 4. CUMULATIVE IMPACTS

Describe potential impacts that, on their own may not be significant, but is significant when added to the impact of other activities or existing impacts in the environment. Substantiate response:

- **Employment creation could improve a few household incomes in the long term.**
- **Increased vehicle activity within the township due to an increasing number of motorists going in and out of the shopping complex, thus would result in the concentration air pollutants (vehicle emissions) to be higher.**
- **Storm Water Management: A storm water management plan must be compiled and complied with during and after the construction phase. Storm water impacts such as flooding, soil erosion and runoff should be kept in mind when compiling the storm water management plan, and continuous maintenance is required on drainage systems.**

## 5. ENVIRONMENTAL IMPACT STATEMENT

Taking the assessment of potential impacts into account, please provide an environmental impact statement that sums up the impact that the proposal and its alternatives may have on the environment after the management and mitigation of impacts have been taken into account with specific reference to types of impact, duration of impacts, likelihood of potential impacts actually occurring and the significance of impacts.

### Proposal

**If all phases of the project will adhere to the mitigation measures in the EMPr, the impacts associated with the proposed construction and operation mainly noise, traffic, dust, and social impacts which have minimum significance.**

**Positive impacts associated with the proposed development include:**

- **Temporary employment opportunities and skills development,**
- **Permanent employment during the operation phase.**

**With our experience in dealing with similar activities in such environments we do not foresee any major negative environmental impacts, however it should be noted that the identified impacts have the potential to environmentally degrade the site if not properly managed and therefore we recommend the EMPr should be implemented and be treated as a binding document on site. The site is suitable for the proposed development and the construction activities would pose less harm to the well-being of the surrounding environment.**

**Further, should any privately owned infrastructure (e.g. fencing) be damaged during construction, it should be replaced in the same condition, if not better, by the contractor. After the construction phase the contractors must ensure that all hazardous materials if (any was produced) are removed from the site and that affected areas are rehabilitated to acceptable levels.**

### No-go (compulsory)

**This will involve no development of any infrastructure and will present both direct and indirect negative environmental and socio-economic impacts such as:**

- **Capital investment in the area.**
- **No employment opportunities will be created.**
- **Unemployment will result in high levels of crime in the area.**

## 6. IMPACT SUMMARY OF THE PROPOSAL OR PREFERRED ALTERNATIVE

### For proposal:

**The proposed development may not result in any adverse impacts on the natural and social environment. The nature and type of negative impacts do not outweigh the potential benefits of this project; it is highly recommended that the short-term localized impacts of the construction phase are adequately mitigated.**

### For alternative:

**Alternative technologies are to be implemented that will ensure resultant impacts during the operational phase are minimized (i.e. solar panels)**

**The proposed development should not result in impacts on the natural or social environment that are highly detrimental, nor result in undue risks to the natural environment. The nature and types of negative impacts do not outweigh the potential benefits of this project, provided that the short-term localised impacts of the construction phase are adequately mitigated. In this regard, an EMPr has been compiled and is attached to this report.**

**The preferred proposal will:**

- **Provide job opportunities close in and around the area.**
- **Development will improve household income in the local community.**
- **The site has suitable geological structure and terrain that will be suitable for the establishment of a shopping complex with minimal environmental impacts.**

**It is recommended that an external monthly EMPr monitoring takes place by an independent Environmental Control Officer (ECO) to ensure that the requirements of the EMPr are being correctly implemented, thus ensuring the protection of the surrounding environment during construction.**

## **7. SPATIAL DEVELOPMENT TOOLS**

Indicate the application of any spatial development tool protocols on the proposed development and the outcome thereof.

**Spatial Development Tool include policies and plans that provide and overall strategic land development in a wide strategic direction in terms of effecting desired development patterns, promotion of economic development near residential developments and conservation of valued environmental assets.**

**According to the Gauteng Environmental Management Framework (GEMF), the proposed development site is situated within Zone I: Urban development zone. The intention with Zone I is to streamline urban development activities in it and to promote development infill, densification, and concentration of development within the urban development zones, to establish a more efficient city region that will minimize urban sprawl.**

**Therefore, a function will be provided to the public to provide facilities needed within a short distance from residential and industrial/commercial area in the near vicinity. The application is therefore in the public interest. The eventual development will cause temporary jobs for the building team whilst long term employment will be provided for workers in the area seeking work opportunities.**

## 8. RECOMMENDATION OF THE PRACTITIONER

Is the information contained in this report and the documentation attached hereto sufficient to make a decision in respect of the activity applied for (in the view of the Environmental Assessment Practitioner as bound by professional ethical standards and the code of conduct of EAPASA).

**YES**

If "NO", indicate the aspects that require further assessment before a decision can be made (list the aspects that require further assessment):

If "YES", please list any recommended conditions, including mitigation measures that should be considered for inclusion in any authorisation that may be granted by the competent authority in respect of the application:

**It is the recommendation of the EAP that the following management and mitigation measures be incorporated should an authorisation be issued or granted:**

- **All mitigation measures listed in the EMPr must be adhered to by the Applicant and subcontractors appointed by the Applicant.**
- **A waste skip and categorized waste bins should be made available on site for integrated waste management.**
- **A grievance procedure will be established whereby any complaints can be received, recorded and responded to appropriately.**
- **Any significant spills or leak incidents must be reported in terms of the National Environmental Management Act and the Water Act.**
- **Chemical toilets must be provided for the use of the construction workers and must be regularly serviced.**
- **An Environmental Control Officer must conduct monitoring at the site once a month during construction and rehabilitation phase of the project.**
- **An Emergency Response Plan must be in place for the site, which must clearly describe emergency procedures and include emergency contact numbers.**

## 9. THE NEEDS AND DESIREBILITY OF THE PROPOSED DEVELOPMENT (as per notice 792 of 2012, or the updated version of this guideline)

**Need and desirability is based on the principle of sustainability, set out in the Constitution and in NEMA, and provided for in various policies and plans, including the National Development Plan 2030 (NDP). Addressing the need and desirability of a development is a way of ensuring sustainable development, thus, a development that is ecologically sustainable, socially, and economically justifiable while ensuring the simultaneous achievement of the triple bottom line.**

**The National Development Plan aims to eliminate poverty and reduce inequality by 2030. South Africa can realise these goals by drawing on the energies of its people, growing an inclusive economy, building capabilities, enhancing the capacity of the state, and promoting leadership and partnerships throughout society. This plan envisions a South Africa where everyone feels free yet bounded to others; where everyone embraces their full potential, a country where opportunity is determined not by birth, but by ability, education and hard work. Realising such a society will require transformation of the economy and focused efforts to build the country's capabilities.**

**A sustainable increase in employment will require a faster-growing economy and the removal of structural impediments, such as poor-quality education or spatial settlement patterns that exclude the majority. These are essential to achieving higher rates of investment and competitiveness and expanding production and exports. Business, labour, communities, and government will need to work together to achieve faster economic growth.**

**To reduce the acute effects of poverty on millions of South Africans over the short term, the National Development Plan 2030 amongst other priorities proposes to:**

- Promote mixed housing strategies and more compact urban development to help people access public spaces and facilities, state agencies, and work and business opportunities;**
- Reducing the cost of living for low-income and working-class households;**
- Inequality and poverty can be addressed by raising incomes through productivity growth and reducing the cost of living;**
- A commitment to a minimum living standard will ensure that all households can meaningfully participate in the economy. The costs of food, commuter transport and housing must be reduced, while raising the quality of free or low-cost education and health care; For infrastructure that supports human settlements (housing, water, sanitation, roads, parks and so on) the picture is unnecessarily complicated;**
- The planning function is located at local level, the housing function is at provincial level, and the responsibility for water and electricity provision is split between those responsible for bulk services and reticulation. In practice, these arrangements do not work;**
- In general, human settlements are badly planned, with little coordination between those installing water reticulation infrastructure and those responsible for providing bulk infrastructure. Responsibility for housing should shift to the level at which planning is executed at municipal level. The NDP sets out recommendations for effective urban development.**

**In terms of collectively considering ecological, social and economic impacts it is important to remember that while there might be some trade-offs between the considerations, in South Africa all development must in terms of Section 24 of the Constitution be ecologically sustainable, while economic and social development must be justifiable. The environmental impact assessment EIAs are about the search for the best practicable option that will best ensure the maintenance of ecological integrity while promoting justifiable social and economic development.**



Alternatives are also considered to avoid negative impacts altogether, but if avoidance is not possible to be considered, alternatives that will better mitigate and manage negative impacts, while search for alternatives to better enhance the positive impacts is explored to ensure that a best practicable environmental option is selected. According to NEMA the "best practicable environmental option" means the option that provides the most benefit and causes the least damage to the environment as a whole, at a cost acceptable to society, in the long term as well as in the short term.

The area is considered to being inside urban edge and there is currently no existing Environmental Management Framework adopted by the municipality; however, specialist studies (Fauna, Flora, Heritage Impact Assessments and other related) have been conducted to ensure that the that the project design, construction and operation of any aspects of the project (if the BAR is approved), are appropriate to ensuring that ecological integrity is maintained at an acceptable level. Mitigation measures to manage impacts have been included in the report to ensure that impacts on the environment are kept to acceptable levels. An EMPr has been compiled which incorporates the mitigation measures put forward in the BAR. The implementation of the EMPr will ensure that environmental management continues throughout the life cycle of the project. The appropriateness of the development in the broader context has received attention. All of the above aspects contribute to the sustainability of the development.

**10. THE PERIOD FOR WHICH THE ENVIRONMENTAL AUTHORISATION IS REQUIRED**  
(CONSIDER WHEN THE ACITIVITY IS EXPECTED TO BE CONCLUDED)

**10 years**

**11. ENVIRONMENTAL MANAGEMENT PROGRAMME (EMPr)** (must include post construction monitoring requirements and when these will be concluded.)

If the EAP answers "Yes" to Point 7 above then an EMP is to be attached to this report as an Appendix

EMPr attached

**Attached**

## SECTION F: APPENDIXES

### CHECKLIST

To ensure that all information that the Department needs to be able to process this application, please check that:

**Appendix A: Locality Plan**

**Appendix B: Layout Plan**

**Appendix C: Site Photographs**

**Appendix D: Public Participation Information**

**Appendix E: Specialist Studies**

**Appendix F: Environmental Management Programme**

**Appendix G: CV of the EAP**

# Appendix A: Locality Map

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## Appendix B: Layout plan

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## Appendix C: Site photographs

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## Appendix D: Public participation information

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- **Proof of site notice**
- **Newspaper advert**
- **Background Information Document (BID)**
- **Proof of BID receipt**

# Appendix E: Specialist Reports

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# Appendix G: Curriculum Vitae of the EAP

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