

**TOWNSHIP ESTABLISHMENT ON PORTION 159 OF THE
FARM DIEPKLOOF NO 319 IQ.**

DRAFT BASIC ASSESSMENT REPORT

SEPTEMBER 2019

GDARD Ref.:



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Centurion
0157
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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)

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.

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
56 Eloff Street, Umnotho House, Johannesburg, Ground Floor
Administrative Unit telephone number: (011) 240 3377
Department central telephone number: (011) 240 2500

(For official use only)

NEAS Reference Number:

File Reference Number:

Application Number:

Date Received:

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.

N/A

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.

The application is for township establishment on Portion 159 of the farm Diepkloof No 319 IQ to be known as Diepkloof Extension 16, Soweto within City of Johannesburg Metropolitan Municipality (CoJ).

It is not envisaged that the rehabilitation measures will require a closure plan. The accompanying Environmental Management Programme (EMPr) however makes provision for rehabilitation of the construction areas which will be conducted in tandem with the construction phase of the project, where possible. Should the need for closure arise, the applicant will submit the plan to the GDARD in terms of the Legislation that will be prevailing at that time. The EAP expects that the impacts of decommissioning and closure will be the same as those for construction and therefore the mitigation measures shall apply.

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?

N/A

If no, state reasons for not attaching the list.

N/A

Have State Departments including the competent authority commented?

NO

If no, why?

This is the first application to the Competent Authority, and no other State Department administering a law relating to this application are affected.

SECTION A: ACTIVITY INFORMATION

1. PROPOSAL OR DEVELOPMENT DESCRIPTION

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

TOWNSHIP ESTABLISHMENT ON PORTION 159 OF THE FARM DIEPKLOOF NO 319 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?

<input checked="" type="checkbox"/>	NO X
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If yes, describe the legislation and the Competent Authority administering such legislation

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

<input checked="" type="checkbox"/>	NO X
YES	NO

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

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:
National Environmental Management Act, 1998 (ActNo. 107 of 1998 as amended).	Department of Environmental Affairs (DEA) Gauteng Department of Agriculture and Rural Development (GDARD)	27 November 1998
National Water Act, 1998 (Act No. 36 of 1998)	Department of Water and Sanitation (DWS)	20 August 1998
National Heritage Resources Act, 1999 (Act No. 25 of 1999)	South Africa Heritage Resources Agency (SAHRA)	14 April 1999
National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)	Department of Environmental Affairs (DEA) Gauteng Department of Agriculture and Rural Development (GDARD)	7 June 2004
National Spatial Biodiversity Assessment:	Department of Environmental Affairs (DEA) Gauteng Department of Agriculture and Rural Development (GDARD)	2011
National Veld and Forest Fire Act, 1998 (ActNo. 1010 of 1998)	Department of Environmental Affairs (DEA) Gauteng Department of Agriculture and Rural Development (GDARD)	27 November 1998

Title of legislation, policy or guideline:	Administering authority:	Promulgation Date:
Occupational Health and Safety Act, 1993 (Act No. 85 of 1993)	National Department of Labour	23 June 1993
Constitution of the Republic of South Africa, 1996 (Act No. 108 of 1996): Chapter 2 Section 24	National, Provincial, and Local Authorities	8 May 1996
The Gauteng Conservation Plan Version 3.3 (2011)	Gauteng Department of Agriculture and Rural Development (GDARD)	October 2011
Conservation of Agricultural Resources (Act 43 of 1983)	National Department of Agriculture	21 April 1983
The Gauteng Agriculture Potential Atlas Version 4.4 Gauteng Planning and Development Act, 2003 (Act No. 3 of 2003)	Gauteng Department of Agriculture and Rural Development (GDARD)	14 October 2003
Gauteng Environmental Management Framework	Gauteng Province	2015

Legislation, policy of guideline	Description of compliance
National Environmental Management Act, 1998 (Act No. 107 of 1998): Environmental Impact Regulation (2014) (NEMA:EIR)	An application for environmental authorisation for the identified Listed Activities in terms of the Environmental Impact Regulation (2014) has been lodged with the Gauteng Department of Agriculture and Rural Development (GDARD). The application will follow a Basic Assessment approach in terms of Section 19 of Government Notice R982(as amended in March 2017) enema: BAR.
National Heritage Resources Act, 1999 (Act No. 25 of 1999) (NHRA)	The South Africa Heritage Resources Agency will be consulted, and a heritage case will be created in the SAHRIS program for statutory comment in terms of Section 38(8) of the NHRA (1999).
Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) (OHSA)	The proposed rehabilitation activities will be subject to OHSA during construction/operational phase of the project.
National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004) (NEMBA)	Although it is not anticipated, rare or protected species may be affected during construction works. The NEMBA lists flora and fauna species that are threatened and requiring protection to ensure their survival in the wild, while regulating activities which may have a potential negative impact on their long-term survival.
GN. R 327, 7 April 2017, Listing 1 Activity 26: Residential, retail, recreational, tourism, commercial or institutional developments of 1 000 square metres or more, on land previously used for mining or heavy industrial purposes; — excluding —	The proposed development entails high density mixed use development on the property, including but not limited to uses such as a medical precinct (medical purposes, offices), shops, offices, restaurants, dwelling units, hotel, motor showrooms, religious purposes, social halls and places of instruction on Portion 159 of the farm Diepkloof No 319 IQ to be known as Diepkloof Extension 16. The property is approximately 300

<p>(i) where such land has been remediated in terms of part 8 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) in which case the National Environmental Management: Waste Act, 2008 applies; or</p> <p>(ii) where an environmental authorisation has been obtained for the decommissioning of such a mine or industry in terms of this Notice or any previous NEMA notice; or</p> <p>(iii) where a closure certificate has been issued in terms of section 43 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002) for such land.</p>	<p>000m² (30ha), and will form part of Soweto Empowerment Zone (SEZ)</p>
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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

3.1 Site alternatives

No property alternatives were considered for the proposed development. The Soweto Empowerment Zone (SEZ) falls within the Transformation Zone in terms of the Spatial Development Framework 2040 (SDF). These are areas where investment is prioritised for future urban intensification and growth, as they have the capacity to trigger positive effects on a metropolitan scale.

3.2. Activity alternatives

This particular property was earmarked for high-density mixed-use development by the CoJ. The activity is required to meet the need for mixed use development in the area.

3.3. Design or layout alternatives

The preferred layout includes Medical facilities, warehousing, high density residential, public open spaces, hotels, conference centres, convenience stores, community facilities and municipal office (See table below for proposed land uses)

PTN 159 Diepkloof 3191Q - Detailed Proposed Land Uses								
Site	Area (m2)	Area (Ha)	Zoning	Proposed Land Uses	FAR	Bulk (m2)	Density (Du/Ha)	No. of dwelling Units
PTN 1	13749	1,37	General	Business purposes, Shops, Restaurants, Offices, Car sales lot, Motor showrooms, Showrooms, Dwelling units, Residential buildings, Warehouses	1,8	24748	100	137
PTN 2	23111	2,31	Business 1	Business purposes, Shops, Restaurants, Offices, Car sales lot, Motor showrooms, Showrooms, Dwelling units, Residential buildings, Warehouses	1,8	41600	100	231
PTN 3	29302	2,93	Business 2	Offices, Shops, Restaurants, Medical Consulting Rooms, Clinic, Place of instruction, Dwelling units, Residential buildings	1,8	52744	100	293
PTN 4	12247	1,22	Residential 3	Dwelling units, Residential buildings	1,5	18371	150	184
PTN 5	12247	1,22	Residential 3	Dwelling units, Residential buildings	1,5	18371	150	184
PTN 6	7663	0,77	Residential 3	Dwelling units, Residential buildings	1,5	11495	150	115
PTN 7	29546	2,95	Residential 4	Dwelling units, Residential buildings	2	59092	250	739
PTN 8	6944	0,69	Public Open Space	Public Open Space	0,2	1389	0	0
PTN 9	33086	3,31	Residential 4	Dwelling units, Residential buildings	2	66172	250	827
PTN 10	20751	2,08	Residential 4	Dwelling units, Residential buildings	2	41502	250	519
PTN 11	13739	1,37	Residential 4	Dwelling units, Residential buildings, Hotel, Conference Centre, Restaurant	1,2	16487	100	137
PTN 12	36832	3,68	Educational	Place of instruction, Child care centre, Religious purposes, Institutions, Social halls, Sport and recreation clubs	0,4	14733	0	0
PTN 13	5236	0,52	Educational	Place of instruction, Child care centre	0,4	2094	0	0
PTN 14	3194	0,32	Business 1	Shops, Restaurants, Business purposes, Car sales lot, Showrooms, Motor Showrooms	0,6	1916	0	0
Roads	57645	5,76	Public Road	Public Roads	0	0	0	0
	305292	30,53				370712		3366

3.4. Technology alternatives

The propped development will utilise Green Building principles and will utilise processes that are environmentally responsible and resource-efficient throughout a building's life-cycle: from planning to design, construction, operation, maintenance, renovation, and demolition.

3.5. No-go alternative

The no-go Alternative is the option of not undertaking the proposed development. The no-go option would result in failure for the CoJ to meet the growing need for mixed use development in the area. This would have long-term negatively repercussions on the socio-economic structure of the population of CoJ. Currently the land is not being utilised and it serves very little ecological service due to its degraded state. The proposed development will aid the development intent to unlock Soweto as a True City District. Intensification and diversification of land uses through densification and mixed-uses in the proposed development is viewed positively and well received.

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	
2	Alternative 1	

3	Alternative 2	
	Etc.	

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

N/A

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)	Size of the activity: 30ha
Alternatives:	
Alternative 1 (if any)	N/A
Alternative 2 (if any)	
	Ha/ m ²

or, for linear activities:

Proposed activity	Length of the activity:
Alternatives:	
Alternative 1 (if any)	
Alternative 2 (if any)	
	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:
Alternatives:	
Alternative 1 (if any)	
Alternative 2 (if any)	
	Ha/m ²

5. SITE ACCESS

Proposal

Does ready access to the site exist, or is access directly from an existing road?	YES X
If NO, what is the distance over which a new access road will be built	m
Describe the type of access road planned:	
N/A	

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 X
If NO, what is the distance over which a new access road will be built	m
Describe the type of access road planned:	

N/A

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
X

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

m

Describe the type of access road planned:

N/A

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

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

"insert No. of duplicates"

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

DisplayText cannot span

time
s

(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.)

Property description: Portion 159 of the farm Diepkloof
No 319 IQ.
Street Address: Corner of Chris Hani Road and Collinder
Road, Diepkloof.

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.

Alternative:

Latitude (S):

Longitude (E):

-26.264417°

27.950876°

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

Addendum of route alternatives attached

Appendix D

The 21 digit Surveyor General code of each cadastral land parcel

PROPOSAL	T	0	I	Q	0	0	0	0	1	9	0	0	0	0	0	3	1	9	0	0	1
ALT. 1																					
ALT. 2																					

3. GRADIENT OF THE SITE

Indicate the general gradient of the site.

	1:15 – 1:10 X	
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4. LOCATION IN LANDSCAPE

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

Ridgeline X		Side slope of hill/ridge X	Valley X	
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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)

NO
X

Dolomite, sinkhole or doline areas	<input type="checkbox"/> NO <input checked="" type="checkbox"/> X
Seasonally wet soils (often close to water bodies)	<input type="checkbox"/> NO <input checked="" type="checkbox"/> X
Unstable rocky slopes or steep slopes with loose soil	<input type="checkbox"/> NO <input checked="" type="checkbox"/> X
Dispersive soils (soils that dissolve in water)	<input type="checkbox"/> NO <input checked="" type="checkbox"/> X
Soils with high clay content (clay fraction more than 40%)	<input type="checkbox"/> NO <input checked="" type="checkbox"/> X
Any other unstable soil or geological feature	<input type="checkbox"/> NO <input checked="" type="checkbox"/> X
An area sensitive to erosion	<input type="checkbox"/> NO <input checked="" type="checkbox"/> X

(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

According to the GAPA 4, the area has a low agriculture potential, 10 and 12 (Figure 5).

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

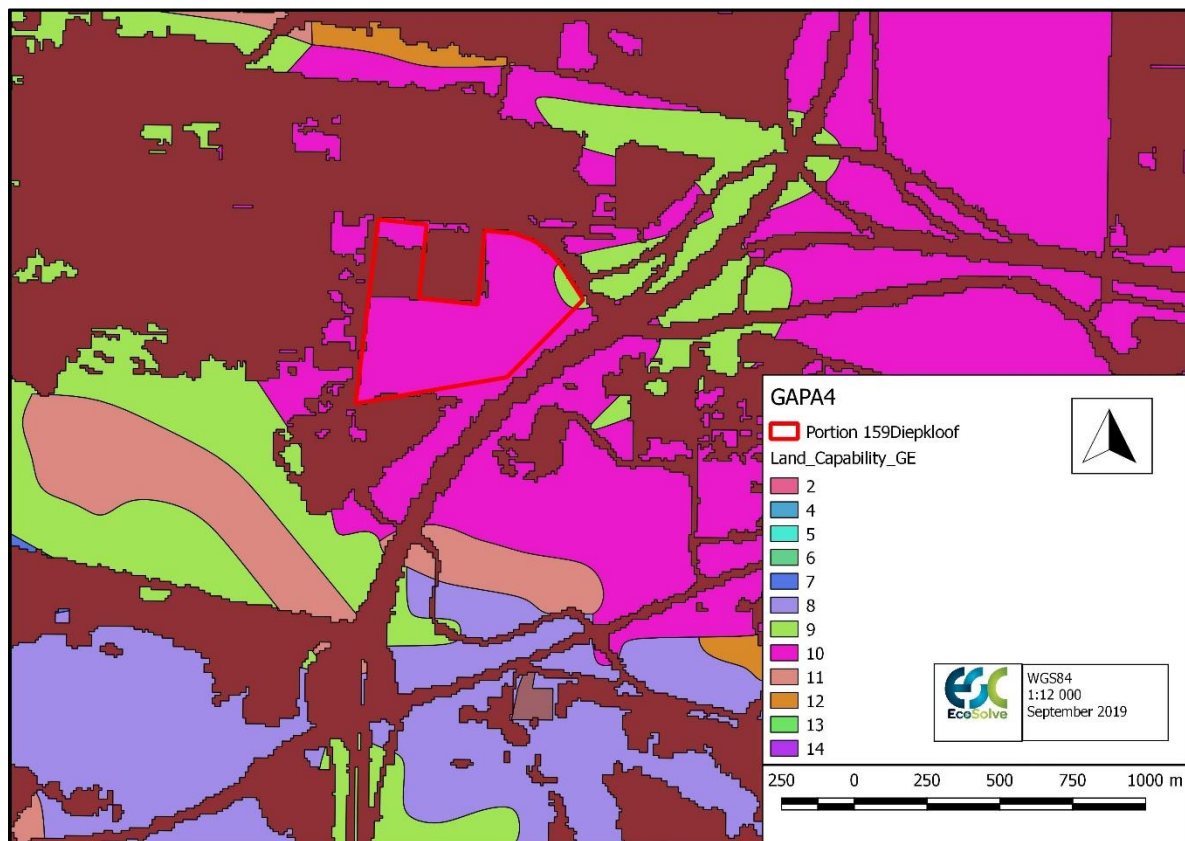


Figure 1: GAPA 4

7. GROUND COVER

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

Natural veld - good condition % = 0	Natural veld with scattered aliens % = 0	Natural veld with heavy alien infestation % = 40	Veld dominated by alien species % = 60	Landscaped (vegetation) % = 0
Sport field % = 0	Cultivated land % = 5	Paved surface (hard landscaping) % = 0	Building or other structure % = 0	Bare soil % = 0

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
X

If YES, specify and explain:

N/A

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.

YES	NO
	X

If YES, specify and explain:

N/A

Are there any special or sensitive habitats or other natural features present on the site?

YES	
X	

If YES, specify and explain:

The Gauteng Conservation Plan 3.3 described the study area as falling within Critical Biodiversity Areas (CBA's) and Ecological support areas (ESA's) (Figure 2). CBAs are areas of the landscape that need to be maintained in a natural or near-natural state in order to ensure the continued existence and functioning of species and ecosystems and the delivery of ecosystem services. In other words, if these areas are not maintained in a natural or near-natural state then biodiversity conservation targets cannot be met. Maintaining an area in a natural state can include a variety of biodiversity-compatible land uses and resource uses. Ecological support areas (ESA's) are areas that are not essential for meeting biodiversity representation targets/thresholds but which nevertheless play an important role in supporting the ecological functioning of critical biodiversity areas and/or in delivering ecosystem services that support socio-economic development, such as water provision, flood mitigation or carbon sequestration. The degree of restriction on land use and resource use in these areas may be lower than that recommended for critical biodiversity areas. According to Gauteng Conservation Plan 3.3, CBAs contain irreplaceable, important and protected areas and ESAs contain buffered wetlands, buffered rivers, ridges within 1500m of CBAs, dolomite, corridors and low cost metropolitan areas.

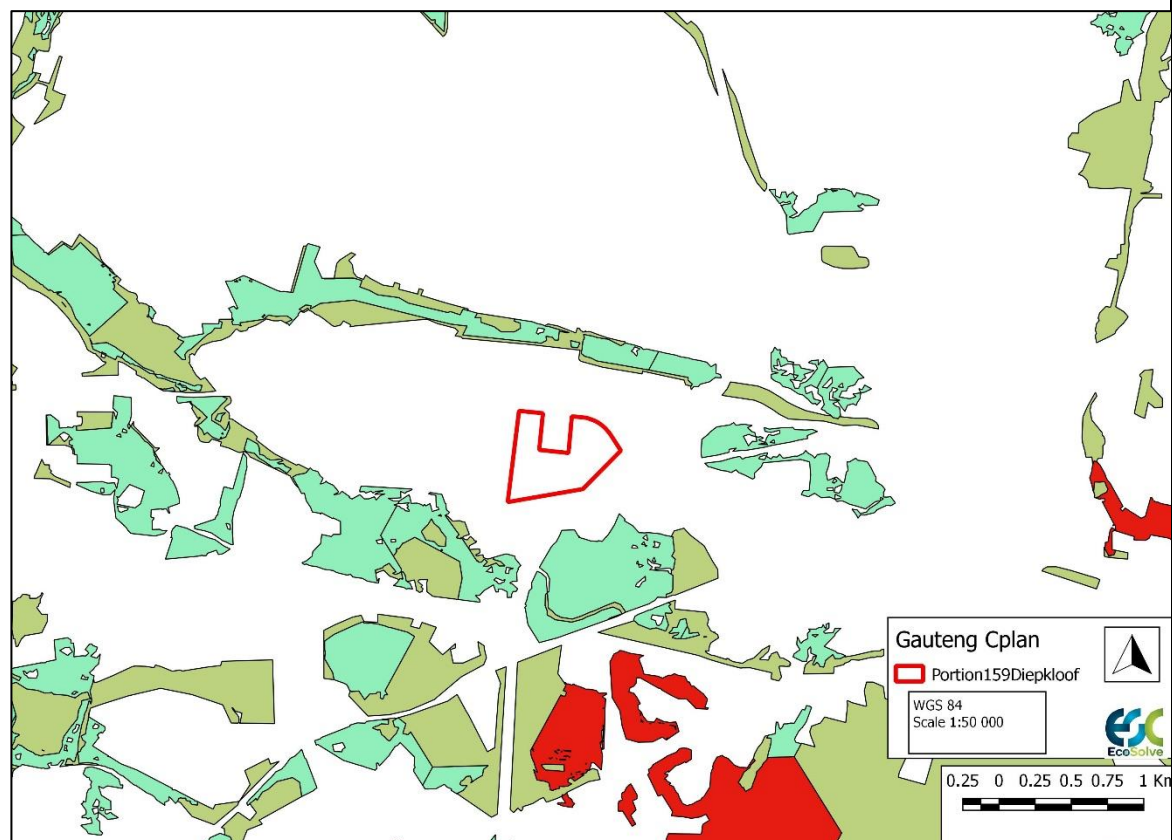


Figure 2: Gauteng Conservation Plan

According to Gauteng Conservation Plan version 3.3 (C Plan 3.3), the proposed area does not fall within any of the areas identified as CBAs or ESAs.



Was a specialist consulted to assist with completing this section YES
X

If yes complete specialist details

Name of the specialist:	Thabo Mohlala (Pr.Sci.Nat)		
Qualification(s) of the specialist:	MSc, Wits University South African Council for Natural Scientific Professions (SACNASP) Reg No.: 114264		
Postal address:	292 Katiso Street Phalaborwa		
Postal code:	1390		
Telephone:		Cell:	076 822 2210
E-mail:	thabo@emnamconsulting.co.za	Fax:	

Are any further specialist studies recommended by the specialist? NO
X

If YES, specify: N/A

If YES, is such a report(s) attached? NO
X

If YES list the specialist reports attached below
N/A

Signature of specialist: _____ Date: 25 September 2019

Was a specialist consulted to assist with completing this section

YES
X

If yes complete specialist details

Name of the specialist:

Molefi Rajele

Qualification(s) of the specialist:

MSc, Integrated Water Resources Management. University of Western Cape.

Postal address:

26 Jellicoe Street
Extension 1
eMalahleni

Postal code:

1034

Telephone:

+27 (0) 13 656 1212

Cell:

E-mail:

mrajele@margen.co.za

Fax:

+27 (0) 13 656 2333

Are any further specialist studies recommended by the specialist?

NO
X

If YES,
specify:

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

NO
X

If YES list the specialist reports attached below

N/A

Signature of
specialist:



Date:

25 September 2019

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 ^{AN}	17. Hospitality facility	18. Church	19. Education facilities	20. Sport facilities
21. Golf course/polo fields	22. Airport ^N	23. Train station or shunting yard ^N	24. Railway line ^N	25. Major road (4 lanes or more) ^N
26. Sewage treatment plant ^A	27. Landfill or waste treatment site ^A	28. Historical building	29. Graveyard	30. Archeological site

31. Open cast mine	32. Underground mine	33. Spoil heap or slimes dam ^A	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

NORTH					
	9/12	9/12	9	9	9
	9/14	9/12	15	9	9
WEST	13	13		25	25
	8	8	1/25	25	9
	1/13	1/13	25	25	25
SOUTH					
					= Site
					EAST

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.

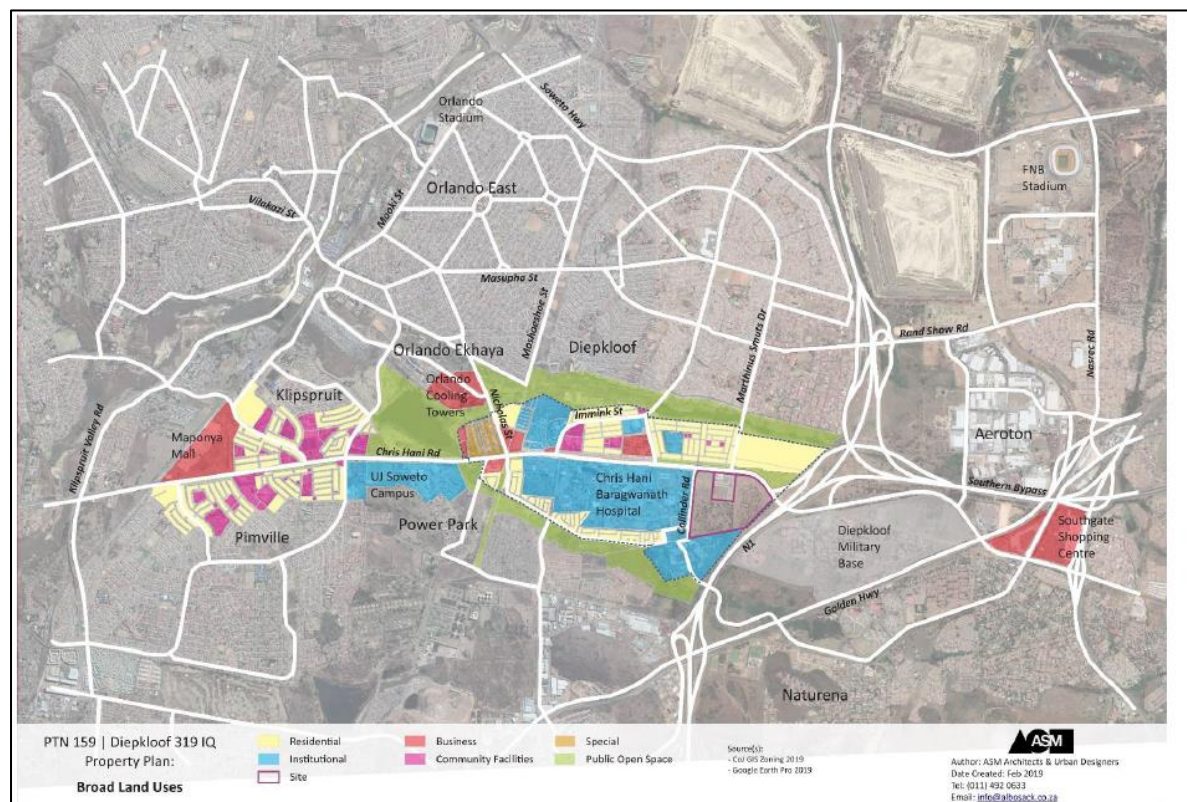


Figure 4: Lanuse Plan for the Project

Have specialist reports been attached
If yes indicate the type of reports below

YES

Traffic Impact study

Land Use Planner

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.

Level of unemployment

The unemployment rate in South Africa increased to 29 percent in the second quarter of 2019 from 27.6 in the previous period. It was the highest jobless rate since the first quarter of 2003, as the number of unemployed rose by 455 thousand to 6.65 million and employment rose by 21 thousand to 16.31 million. A year earlier, the jobless rate was lower at 27.2 percent. Unemployment Rate in South Africa averaged 25.71 percent from 2000 until 2019, reaching an all time high of 31.20 percent in the first quarter of 2003 and a record low of 21.50 percent in the fourth quarter of 2008.

The City of Johannesburg Metropolitan Municipality (CoJMM) are reflective of the challenges that its regions are facing. CoJMM continues to fight unemployment, which is one of the major problems facing South Africa as a whole. Overall, CoJMM unemployment in the second quarter of 2015 was 26.2% based on a narrow definition (StatsSA Quarterly Labour Force Survey July 2015). If the expanded definition is taken into account, unemployment in the region rises to approximately 40%. Youth unemployment is of particular concern and is estimated to be above 35%.

The finance sector is the biggest employer in the region accounting for 26.6% of total employment, followed by the trade sector which employs 21.1% of the formal sector workers. The agricultural sector employs the least share of the formal sector workers with only 0.4% (Global sight, 2015).

Informal economy employs 12.4% of the total employment in Johannesburg. The biggest number of informal economy jobs is generated in trade.

Economic profile of local municipality

Despite being the largest urban residential area in the country, the formal economy of Soweto is very small. It is a region that comprises about 43% of the total population of the City yet contributes about 4% towards the economy of Johannesburg Metro. The Community Services sector (government services like clinics, hospitals, schools etc.) accounts for 20% of the total economy. This is then followed by negligible contributions of about 4% by construction, 3.5% by transport and 3% by the trade sector. Put simply, Soweto does not have a diversified economic base. As such, it is predominantly dependent on the economic activity of the Johannesburg Metropolitan area for its formal employment opportunities.

Sectoral Overview

a) The Tourism Sector

Nationally and internationally, Soweto enjoys an iconic status. Events such as the Soweto Students Uprisings and iconic personalities like Nobel Laureates Nelson Mandela and Desmond Tutu as well as other struggle personalities all point to the fact that Soweto enjoys

a particular place in history. Moreover, it is estimated that the Soweto tourism industry, directly and indirectly, contributed R143 million to the Gauteng gross geographic product in 2003. This accounts for less than 1% of the amount generated by the South African Tourism Economy in 2002. It is estimated that Soweto generated over 1400 jobs and R61 million in salaries in 2003. Soweto's contribution to taxes was calculated as R29 million in tax revenue to provincial and local governments in the same year.

Given the average compound growth of 2.4% forecast over all markets between 2004 and 2013 and assuming that Soweto continues to achieve its current market share, the following results will be achieved: 1 100 000 visitors in 2013; 120 000 visits to tourist attractions in Soweto by 2013. These figures were projected before the 2010 Soccer World Cup hosting was announced. However, it needs to be highlighted that for the region to benefit from the bigger cake of the tourism industry, diversification of the Soweto tourism product portfolio needs to happen, concerns around safety and security need to be addressed, infrastructure investments need to take place, and customer care needs to improve. It is further noted in the tourism plan that integration of Soweto into spatial tourism zones outside the region needs to be undertaken – with particular emphasis placed on Sandton, Fourways and Golf Reef City.

b) The Manufacturing Sector

Whilst there is currently no manufacturing strategy for the region, existing evidence nonetheless seems to suggest that there is no well-developed manufacturing sector in Soweto. Such a phenomenon could be attributed to the residential land use monotony within the region. Nonetheless, a number of underdeveloped and underutilised industrial areas have been established in Soweto. However, the take-up rate is very low, with large areas still undeveloped as the list below indicates:

- i) Emndeni 2,6ha Under utilized
- ii) Midway 3,5ha Largely undeveloped (about 60% vacancy levels)
- iii) Chiawelo Ext 6 5,8ha Vacant iv. Dlamini Ext 3 8,3ha Largely underdeveloped
- iv) Nancefield 7,2ha Under utilized
- v) Dobsonville 2000m² Under utilized

The industrial areas in Soweto find themselves in a precarious position since they have to compete with the other industrial parks available elsewhere in Johannesburg. Although the level of infrastructure is more or less on par with comparable industrial areas, and the price of land is generally cheaper, there is still a perception in the minds of investors and industrialists about levels of crime in Soweto, which adds to the business risks. Furthermore, Soweto is not very accessible and transportation to and from the industrial areas is generally costlier than for comparable areas. These factors militate against the marketability and attractiveness of Soweto as a location for industrial investment. In the absence of significant comparative advantages, it becomes a challenge to successfully market industrial areas in Soweto. The most realistic strategy would be to gradually build a base of sustainable manufacturing enterprises, in order to illustrate that such activities can be located successfully in Soweto. This can be achieved by harnessing local demand within the region.

The Soweto Economic Empowerment Zone is one instrument through which a case is being built for locating industrial enterprises in Soweto. This dedicated SMME and BEE enterprises industrial park is comprised of six clusters, which seek to ensure that the facility is itself

diversified and avoids pitfalls of other similar type industrial estates that government unsuccessfully promoted in the past. These clusters are as follows:

- Property development and management;
- Automotive (motor repair, services and related);
- Paper and printing;
- Furniture;
- Home ware industries, and;
- Clothing and Textile.

This initiative needs to ensure that functional economic linkages between the Sowetan economy and other economic opportunities within and outside the region are strengthened.

The Informal Sector

The informal sector has proliferated in Soweto, and has become a very important source of employment opportunities and income. However, the strong growth in the informal sector is not the result of a sudden surge in the level of entrepreneurship. Rather, it is the result of the high increase in the level of unemployment, which in effect forces people to engage in other economic activities to augment their household survival strategy.

The location of the informal sector is always a very good indication of the degree of demand for the particular goods and services on offer. As such, informal activities are most concentrated at major intersections where there is a high degree of accessibility, and at modal interchanges, where there is a large through flow of pedestrian traffic. Others locate next to larger shopping centres / malls, or at government facilities, where they “feed off” the traffic generated by these concentrations. As such, there is a very strong link between the formal and informal sector. In general, it would appear as if the formal sector do not view the informal sector as a direct threat, as they cater for different market segments. Factors that hamper the informal sector include the unavailability of ablution facilities, proper trading places and a lack of protection against criminal elements. Also, most of the traders do not have access to storage facilities, and most of the entrepreneurs store their goods at home. The large number of people that have entered the industry has resulted in high levels of competition and low profit margins. As a result, most informal activities are survivalist in nature. The most dominant commodities and services offered by the informal sector are fruit & vegetables, street garages, and public telephones. Other typical commodities and services include shoe repairs, hair cutting, traditional doctors, sale of meat, sales of snacks and the sale of second hand clothes. The customer profile depends on the location, and can include taxi / train commuters, pedestrians, public servants, residents and the customers to other facilities in the area such as clinics, or the shopping centre. In broad terms, a distinction can be made between those informal activities that are located at particular places, and those that are performed from home. The former type would locate at highly accessible points such as taxi ranks as they are reliant on a constant flow of vehicular or pedestrian traffic. The typical activity would be trade orientated. The informal activities that are performed from home do not require such a high traffic volume to be profitable, and typical examples include bakeries and traditional doctors.

The informal sector by its nature is robust, dynamic and flexible. The local informal sector has become a major source of employment, and it has a significant role to play in the regional economy.

The Retail Sector

Until recently, the retail sector has been under-provided in Soweto. It is for this reason that in the development of Soweto over time, there were concerns by the residents that the region served to subsidise the traditional white areas in addition to being a residential monotony. It is out of this recognition that the retail strategy for Soweto was developed – from which most of the remarks in this economic development plan are pulled. As regards the assessment of supply and demand, the Retail Strategy arrived at the conclusions that:

- The total demand for retail goods in Soweto is estimated at R4.2 billion per year;
- Of this R4.2 billion spent by Soweto residents, only R1.05 billion is being spent within Soweto;
- The balance is spent in the City of Johannesburg and Southgate predominantly;
- There would be a projected increase of retail spending from R1.05 billion to R2.1 billion over a period of five years;

As such, there would be a need for new shopping space in Soweto. As a result of the assessment, the Retail Strategy was developed and the strategic thrusts could be summarised as follows:

- The City of Johannesburg supported the development of an additional 70 000 square metres of retail space in Soweto over a period of five years – (2004 – 2009);
- Approximately 30 000 square metres were already under construction (Baralink Mall and Protea Gardens) and these were also supported;
- Of the remaining 40 000 square metres believed to be viable, the City intended that about 5 000 square metres be used for street front shopping development aimed at providing convenience shopping in local neighbourhoods and niche shops associated with tourism and entertainment;
- The remaining 35 000 square metres be reserved for new development during the 2004 – 2009-time period;
- Baralink, Kliptown and Jabulani are strongly favoured as locations for new shopping centres – with Ikhwezi being a next nodal priority and Diepkloof being targeted as a smaller neighbourhood centre;
- With regard to new centres, the City would like to see the development of centres which accommodate local retailers, with value centres designed for smaller scale enterprises as an example;
- The City also liked to see energy being placed on the improvement of existing facilities such as Dobsonville, Crossroads and Meadowpoint, and;
- Commitment for supporting informal sector retail development was also demonstrated by the City.

Note was also made of the proposal for the development of the Soweto Crossing – which is nowadays Maponya Mall. Whilst it is not clear-cut, it is obvious that the City did not support the Maponya Mall – given all the technical justifications advanced through the Retail Strategy. Nonetheless, the Maponya Mall has become a contemporary retail landmark of Soweto. Consequently, it has had an added benefit of ensuring that travel time is saved, jobs have been created, benefits are accruing to property developers and owners, the retail sector value chain has been improved through transport, goods supplies, tourism and, functional city efficiency improved.

Of course, there are downsides as well such as the collapse of smaller retail businesses and big business type developments being the norm.

a) 25 Year Gauteng Integrated Master Plan

The Gauteng road network remains one of the most important infrastructure assets of the province that underpins and support local economic growth and the resultant growth in job opportunities within the identified corridors and nodes. It is thus vitally important that the Gauteng Province develop and maintain an integrated road network. The proposed Braamfischerville – Thulani Project seeks to fulfil this mandate. Other planned developments in the area include a railway corridor and Class 1 road (Figure 9).

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?

If YES, explain:

N/A

	NO X
--	---------

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:

The Phase I Archaeological and Cultural Heritage Impact Assessment for the proposed construction of a road has identified no significant impacts to archaeological or grave resources that will need to be mitigated prior construction. None of the heritage resource mentioned under Section 3 of the National Heritage Resources Act where noted in the other proposed alternatives.

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

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

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

	NO X
	NO X

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?

YES X	
----------	--

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

YES X	
----------	--

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

<p>(a) principle by Land Use Management directorate from CoJ subject to various amendments to the proposed land use zonings and densities. It is noted that the current proposal does not include 4 portions. Land Use Management recommends these portions be included into the overall development concept as portion 15, 16, 17 and 18. The Township application must be submitted with following proposed zoning and density amendments:</p> <ul style="list-style-type: none"> • Portion 1: Business to General • Portion 3: Commercial to Business 2 • Portions 4-6: Residential 3 at 150 dwelling units per hectore • Portion 7: Residential 4 at 250 dwelling units per hectore • Portion 9: Residential 4 at 250 dwelling units per hectore • Portion 10: Residential 4 at 250 dwelling units per hectore • Portions 13-14: Community facility to Institutional • Portion 15: Municipal • Portions 16-17: Business 1 • Portion 18: Industrial 1 <p>(b) The proposed development concept of the SEZ aids the development intent to unlock Soweto as a True City District. Intensification and diversification of land uses through densification and mixed-uses in the proposed development is viewed positively and well received, hence City Transformation and Spatial Planning directorate is in support of the proposal.</p> <p>(c) CoJ Housing suggested that residential housing be planned as high rise units with sectional titles. They asked whether the project had considered property title schemes.</p> <p>(d) CoJ suggested that the project investigate other pilot low cost high rise projects that CoJ Housing has undertaken to obtain guidance. They suggested Vleihoff and Jabulani as good examples to investigate.</p> <p>(e) CoJ mentioned that it was important to note that previous feasibility studies were undertaken in response to the overflow of demand from Phase 1 of Elias Motsoaledi Housing Development, and that Reconstruction and Development Programme (RDP) housing was planned, but it ultimately proved to be unfeasible.</p> <p>(f) CoJ added that they was pleased that the SGP would be catering for low cost housing for Elias Motsoaledi, and that CoJ supported the densification concept (i.e. that a high rise, low cost model would work).</p> <p>(g) WM stated that in addition to the Elias Motsoaledi community, there may be people from the Diepkloof community who would want to be part of the new development. They suggested that the project may need to consider incorporating Diepkloof, and possibly Orlando within the low cost and social housing sections of the development. CoJ further added that to pre-empt opposition, they recommended including Diepkloof and Orlando communities, because the project will be disrupted if they are not included. The aim would be to balance inclusion from all three communities.</p>

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

N/A

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?

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

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

If “NO” briefly explain why no comments have been received

The project has only been introduced to the Local Authority (CoJ). Draft Bar will then be published and advertised for a 30-Day period. Public consultations will then be undertaken with the other stakeholders during this period. Comments and Response Report (CRR) will be compiled and included in the final BAR.

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 1 – Proof of site notice

Appendix 2 – Written notices issued as required in terms of the regulations

Appendix 3 – Proof of newspaper advertisements

Appendix 4 – Communications to and from interested and affected parties

Appendix 5 – Minutes of any public and/or stakeholder meetings

Appendix 6 - Comments and Responses Report

Appendix 7 –Comments from I&APs on Basic Assessment (BA) Report

Appendix 8 –Comments from I&APs on amendments to the BA Report

Appendix 9 – Copy of the register of I&APs

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
(complete only when appropriate)

"insert No. of duplicates"

times

Section D
Alternative No.

"insert alternative number"

(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
X

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

(Unknown)
m³

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

Any construction waste produced will be disposed of in dedicated containers on site and removed by approved service providers to permitted landfill sites as specified in the accompanying Environmental Management Programme (EMPr). The landfill site servicing the area is Marie Louise Landfill Site, Cnr. Elias Motsledi Street & Main Road, Dobsonville, Soweto.

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

Construction waste will be disposed of to the nearest permitted landfill site: Goudkoppies Landfill site
11 Pallet Cres
Soweto.

Will the activity produce solid waste during its operational phase?

YES
X

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

Unknown
m³

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

Good waste management practices that are based on reduce, recycling and reuse. Additional waste will be disposed of to the nearest permitted landfill site: Goudkoppies Landfill site
11 Pallet Cres
Soweto.

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?

NO
X

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

Solid waste will be disposed of to the nearest permitted landfill site: Goudkoppies Landfill site. An application will be lodged with the municipality as part of the township establishment approval process.

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? ☐ NO
☒ X

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? ☐ NO
☒ X

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:

Waste Separation and Handling
General domestic wastes at the selected sites will be disposed of through a colour coded bin system for different types of waste material. Solid waste and scrap metals will be collected in refuse bins.

Recycling
Provision for recycling of waste will be considered and all recyclable waste material will be disposed of at municipal facilities that recycle plastics, glasses, papers, scrap metals, cardboard boxes, tins and cans.

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? ☐ NO
☒ X

If yes, what estimated quantity will be produced per month? N/A m³

If yes, has the municipality confirmed that sufficient capacity exist for treating / disposing of the liquid effluent to be generated by this activity(ies)? ☐ NO
☒ X

Will the activity produce any effluent that will be treated and/or disposed of on site? ☐ NO
☒ X

If yes, what estimated quantity will be produced per month? N/A m³

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

N/A

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? ☐ NO
☒ X

If yes, provide the particulars of the facility:

Facility name:	N/A		
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:

Overhead tanks will be utilised. Grey water will be recycled and used for non-potable uses where possible.

Liquid effluent (domestic sewage)

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

YES
X

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

Unkown
m³

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
X

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

NO
X

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

During the construction pahse, waste water will be generated on site. An approved service provider will collect the domestic sewage on a regular basis during construction and dispose of it to an approved WWTW.

During operational phase, the developer will apply to the municipality to connect to the water reticulation system as part of township establishment.

Emissions into the atmosphere

Will the activity release emissions into the atmosphere?

YES
X

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

NO
X

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:

During construction, there will be particulate emissions (dust) related to debris handling; truck transport; materials storage, handling and transfer; open areas (windblown emissions). Gas emissions are also expected to occur due to vehicle and construction equipment activity (exhaust fumes). These impacts can be mitigated and managed to acceptable levels, with a post mitigation impact that is of low significance.

2. WATER USE

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

Municipal X	Directly from water board	groundwater	river, stream, dam or lake	other	the activity will not use water
----------------	---------------------------------	-------------	-------------------------------	-------	------------------------------------

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:

N/A liters

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
X

If yes, list the permits required

N/A

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

	NO X
YES	NO

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

jjud

3. POWER SUPPLY

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

An electrical engineer has been appointed as part of the engineering team. Their report has been appended. Give recommendations from the electrical engineer

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

N/A

4. ENERGY EFFICIENCY

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

Where required, low energy LED lighting will be used in the open spaces and servitudes such as pedestrian pathways.

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

N/A

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.

- (h) The Soweto Empowerment Zone (SEZ) development concept is supported in principle by Land Use Management directorate from CoJ subject to various amendments to the proposed land use zonings and densities. It is noted that the current proposal does not include 4 portions. Land Use Management recommends these portions be included into the overall development concept as portion 15, 16, 17 and 18. The Township application must be submitted with following proposed zoning and density amendments:
- Portion 1: Business to General
 - Portion 3: Commercial to Business 2
 - Portions 4-6: Residential 3 at 150 dwelling units per hectare
 - Portion 7: Residential 4 at 250 dwelling units per hectare
 - Portion 9: Residential 4 at 250 dwelling units per hectare
 - Portion 10: Residential 4 at 250 dwelling units per hectare
 - Portions 13-14: Community facility to Institutional
 - Portion 15: Municipal
 - Portions 16-17: Business 1
 - Portion 18: Industrial 1
- (i) The proposed development concept of the SEZ aids the development intent to unlock Soweto as a True City District. Intensification and diversification of land uses through densification and mixed-uses in the proposed development is viewed positively and well received, hence City Transformation and Spatial Planning directorate is in support of the proposal.
- (j) CoJ Housing suggested that residential housing be planned as high rise units with sectional titles. They asked whether the project had considered property title schemes.
- (k) CoJ suggested that the project investigate other pilot low cost high rise projects that CoJ Housing has undertaken to obtain guidance. They suggested Vleihoff and Jabulani as good examples to investigate.
- (l) CoJ mentioned that it was important to note that previous feasibility studies were undertaken in response to the overflow of demand from Phase 1 of Elias Motsoaledi Housing Development, and that Reconstruction and Development Programme (RDP) housing was planned, but it ultimately proved to be unfeasible.
- (m) CoJ added that they were pleased that the SGP would be catering for low cost housing for Elias Motsoaledi, and that CoJ supported the densification concept (i.e. that a high rise, low cost model would work).
- (n) WM stated that in addition to the Elias Motsoaledi community, there may be people from the Diepkloof community who would want to be part of the new development. They suggested that the project may need to consider incorporating Diepkloof, and possibly Orlando within the low cost and social housing sections of the development. CoJ further added that to pre-empt opposition, they recommended including Diepkloof and Orlando communities, because the project will be disrupted if they are not included. The aim would be to balance inclusion from all three communities.

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):

- (a) EAP responded to say that the project had not yet arrived at the stage where property title schemes were being decided, but were rather at the stage of looking for recommendations regarding the size of housing needed.
- (b) SL said that the SGP project shouldn't compromise the objectives of the Elias Motsoaledi Housing Development, and advised that 'rent-to-buy' concepts do not exist, as developments are governed by the Housing Code which does not include the rent-to-buy concept.
- (c)

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

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

The first stage of any impact assessment is the identification of potential environmental activities¹, aspects² and impacts, which may occur during the commencement and implementation of a project. This is supported by the identification of receptors³ and resources⁴, which allows for an understanding of the impact pathway and an assessment of the sensitivity to change. Environmental impacts⁵ (social and biophysical) are then identified based on the potential interaction between the aspects and the receptors/resources.

The significance of the impact is then assessed by rating each variable numerically according to defined criteria as outlined in Table 1 below. The purpose of the rating is to develop a clear understanding of influences and processes associated with each impact. The severity⁶, spatial scope⁷ and duration⁸ of the impact together comprise the consequence of the impact and when summed can obtain a maximum value of 15. The frequency of the activity⁹ and the frequency of the impact¹⁰ together comprise the likelihood of the impact occurring and can obtain a maximum value of 10. The values for likelihood and consequence of the impact are then read off a significance rating matrix table as shown in Table 2.

This matrix thus provides a rating on a scale of 1 to 150 (low, medium low, medium high or high) based on the consequence and likelihood of an environmental impact occurring.

¹ An **activity** is a distinct process or task undertaken by an organisation for which a responsibility can be assigned. Activities also include facilities or pieces of infrastructure that are possessed by an organisation.

² An **environmental aspect** is an 'element of an organisations activities, products and services which can interact with the environment'. The interaction of an aspect with the environment may result in an impact.

³ **Receptors** comprise, but are not limited to people or man-made structures.

⁴ **Resources** include components of the biophysical environment.

⁵ **Environmental impacts** are the consequences of these aspects on environmental resources or receptors of particular value or sensitivity, for example, disturbance due to noise and health effects due to poorer air quality. Receptors can comprise, but are not limited to, people or human-made systems, such as local residents, communities and social infrastructure, as well as components of the biophysical environment such as aquifers, flora and paleontology. In the case where the impact is on human health or well-being, this should be stated. Similarly, where the receptor is not anthropogenic, then it should, where possible, be stipulated what the receptor is.

⁶ **Severity** refers to the degree of change to the receptor status in terms of the reversibility of the impact; sensitivity of receptor to stressor; duration of impact (increasing or decreasing with time); controversy potential and precedent setting; threat to environmental and health standards.

⁷ **Spatial scope** refers to the geographical scale of the impact.

⁸ **Duration** refers to the length of time over which the stressor will cause a change in the resource or receptor.

⁹ **Frequency of activity** refers to how often the proposed activity will take place.

¹⁰ **Frequency of impact** refers to the frequency with which a stressor (aspect) will impact on the receptor.

Natural and existing mitigation measures, including built-in engineering designs, are included in the pre-mitigation assessment of significance. Measures such as demolishing of infrastructure, and reinstatement and rehabilitation of land, are considered post-mitigation.

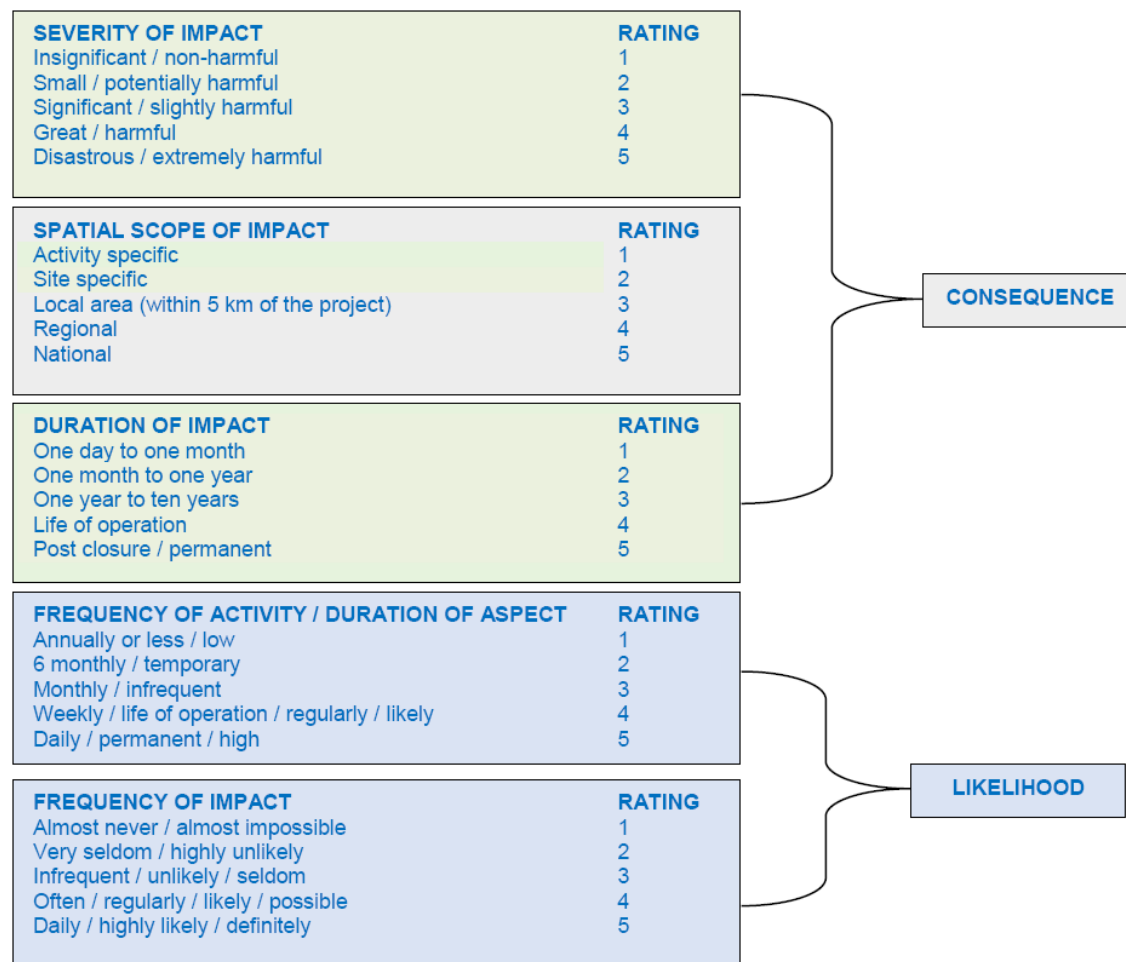


Table 1: Criteria for Assessing Significance of Impacts

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.

Likelihood	Consequence														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30
	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
	4	8	12	16	20	24	28	32	36	40	44	48	52	56	60
	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75
	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90
	7	14	21	28	35	42	49	56	63	70	77	84	91	98	105
	8	16	24	32	40	48	56	64	72	80	88	96	104	112	120
	9	18	27	36	45	54	63	72	81	90	99	108	117	126	135
10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	

Table 2: Impact Assessment Matrix

Potential impacts that can be expected during the construction phase

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
Use of vehicles during field survey	Medium	Make use of existing access roads as far as possible.	Low	Low
Ineffective communication with affected property owners and communities leading to conflict	Low	<ul style="list-style-type: none"> Random and regular alcohol and drug testing shall be conducted on all personnel responsible for operating machinery and driving construction vehicles to ensure the safety of the public. Security and safety should be emphasized. 	Low	Low
Construction activities may result in an increase in petty crimes in the area	Medium	<ul style="list-style-type: none"> Liaise with the SAPD and existing forums to implement effective crime prevention strategies. 	Low	Low
Unauthorised access to private property may result in conflict with the property owners and occupiers	Low	<ul style="list-style-type: none"> No construction workers shall be allowed to access private properties without the owner's knowledge and consent. A register of complaints from the affected residents shall be kept on site and made available for inspection on request. Where possible, a community liaison officer shall be appointed to deal with complaints from the affected residents. 	Low	Low
Creation of employment and business opportunities	Low	Maximise the use of local labour for low – semi skilled jobs far as possible.	Low	Low
Site clearing for construction/placement of roads; <ul style="list-style-type: none"> Foundations; Culverts 	Medium	<ul style="list-style-type: none"> Vegetation clearing to be kept to a minimum. No unnecessary vegetation to be cleared. The final development area should be surveyed by an appropriately qualified ecologist for species suitable for search and rescue, which should be translocated prior to the commencement of construction. No collection of plants or plant parts to be allowed by construction personnel. The ECO should provide environmental induction to all construction staff to ensure that they are aware of this and other environmental sensitivities at the site. No fuelwood collection should be allowed on-site 	Low	Low
Fauna will be impacted by the development as a result of construction activities and human presence at the site.	Medium	<ul style="list-style-type: none"> construction activities should be removed to a safe location by the ECO or other suitably qualified person. The collection, hunting or harvesting of any plants or animals at the site should be strictly forbidden. Personnel should not be allowed to wander off the construction site. If the site must be lit at night for security purposes, this should be done with low-UV type lights (such as most LEDs), which do not attract insects. All hazardous materials should be stored in the appropriate manner to prevent contamination of the site. Any accidental chemical, fuel or oil spills that occur at the site should be cleaned up in the appropriate manner as related to the nature of the spill. 	Low	Low

		<ul style="list-style-type: none"> No unauthorized persons should be allowed onto the site. All construction vehicles should adhere to a low speed limit to avoid collisions with susceptible species 		
Disturbance and the construction activities are likely to result in habitat degradation, impact on biodiversity as well as habitat fragmentation	Low	<ul style="list-style-type: none"> Hardened surfaces should be kept to a minimum Should a service road beneath the power line be required, this should be restricted to a track and a formal cleared road should not be necessary, especially through the rocky hills and drainage lines. Vegetation should be allowed to remain alongside or encroach on the roads as much as possible. Temporary lay-down areas should be in previously transformed areas or areas that will be used by the development. Regular monitoring for erosion during construction to ensure that no erosion problems have developing as result of the construction disturbance. All erosion problems observed to be associated with the project should be rectified as soon as possible, using the appropriate erosion control structures and revegetation techniques 	Low	Low
Destruction of natural bird habitat on and near site	Medium-Low	<ul style="list-style-type: none"> Provide protection for sensitive habitats Conduct avifaunal walk through to identify these areas 	Low	Low
Disturbance of surfaces and/or sub-surfaces may destroy, damage, alter, or remove from its original position archaeological and paleontological material or objects.	Medium-Low	Observed sites are all of low significance and are sufficiently recorded and no further mitigation will be necessary as the impact of the pylon positions are considered to be extremely low and comparative material will remain on the unaffected areas of the site.	Low	Low
Construction on sensitive visual receptors in close proximity to the proposed road.	Low	<ul style="list-style-type: none"> Ensure that vegetation is not unnecessarily removed during the construction period. Reduce the construction period through careful logistical planning and productive implementation of resources. Plan the placement of lay-down areas and temporary construction equipment camps in order to minimise vegetation clearing (i.e. in already disturbed areas) wherever possible. Restrict the activities and movement of construction workers and vehicles to the immediate construction site and existing access roads. 	Low	Low
Visual intrusion because of the movement of machinery and the establishment of the required infrastructure.	Low	<ul style="list-style-type: none"> The number of construction vehicles and machinery to be used shall be kept to a minimum. Movement of vehicles shall be kept to outside busy hours to minimise the visual impacts on the residents. Where possible, rehabilitation of the work areas shall be undertaken in tandem with construction to ensure that areas stripped of vegetation are kept to a minimum. The landscaping and green engineering solutions shall be utilised for rehabilitation and to minimise visual impacts. 	Low	Low

Although the heritage study found no resources of cultural and/or heritage importance that will be affected by the project, a possibility remains that, there may be some resources that may be affected.	Medium-Low	If archaeological sites or graves are exposed during construction work, it should immediately be reported to a heritage practitioner so that an investigation and evaluation of the finds can be made.	Low	Low
Soil erosion on construction sites due to decreased vegetation cover and increased water run-off	Low	<ul style="list-style-type: none"> • If it is not possible to retain a good plant cover during construction, technologies should be employed to keep the soil covered by other means, i.e. straw, mulch, erosion control mats, etc., until a healthy plant cover is again established. • Compile and implement an appropriate stormwater management plan 	Low	Low
Possible increase in dust generation, PM ₁₀ and PM _{2.5} because of bulk earthworks, operation of heavy machinery, and material movement	Medium-Low	<ul style="list-style-type: none"> • Dust suppression measures shall be implemented on dry weather days and periods of high wind velocities. • Appropriate dust suppression measures may include spraying with water. • Where practical possibly rehabilitation should be undertaken progressively. • Dust from the construction activities shall not disturb the landowners in the area. • A speed limit of 20 km/h shall apply to limit vehicle entrained dust from the unpaved roads. • All construction equipment must be scheduled for preventative maintenance to limit air pollution. 	Low	Low
Increase in traffic volumes because of pre-construction activities which may lead to an increase in traffic congestion on roads around the project area.	Medium	<ul style="list-style-type: none"> • Local speed limits and traffic laws shall apply always to minimise the occurrences of accidents on public roads; • Where possible the transportation of construction materials and rubbish shall be undertaken outside traffic peak hours to minimise inconveniencing residents; • Materials transported on public roads must be covered. 	Low	Low
The use of vehicles and machinery during the construction phase may generate noise in the immediate vicinity	Medium	<ul style="list-style-type: none"> • All equipment must be kept in good working order, with immediate attention being paid to defective silencers, slipping fan-belts, worn bearings and other sources of noise. • Equipment must be operated within specifications and capacity (e.g. no overloading of machines). • Regular maintenance of equipment must be undertaken, particularly about lubrication, • Equipment must be operated with appropriate noise abatement accessories such as silencers and sound hoods, which must be correctly maintained. • Equipment must be operated in such a way that the equipment is operated throughout the working periods instead of operating several items simultaneously. • Equipment shall be switched off when not in operation. 	Low	Low

		<ul style="list-style-type: none"> • Appropriate directional and intensity settings must be maintained on all hooters and sirens. • The contractor must ensure that the employees conduct themselves in an appropriate manner while on site. • Adjacent landowners shall be notified in writing if work needs to be carried out after hours or if any blasting will be required. • Noise/vibration producing activities shall be limited to daylight hours (Monday to Friday 07H00 to 16H00 and Saturday 07H00 -14H00). • The contractor (s) shall comply with the traffic regulations 		
Contamination and degradation of the soil due to spillages of oil, petrol, diesel and other contaminants used by vehicles and equipment on the site or stored on the site	Low	<ul style="list-style-type: none"> • Vehicles and equipment must be serviced regularly and maintained in a good operating condition. • Storage of contaminants must be limited to low quantities and done under strict industry standards. • There must be strict control over the safe usage of vehicles and equipment to minimise vehicle accidents and damage to vehicles by rocks and boulders which may cause spillages. 	Low	Low
Exacerbation of erosion as a result of soil stripping and compaction.	Medium	<ul style="list-style-type: none"> • Measures to control erosion include minimal stripping of vegetation • Installation of energy dissipation structures such as catch dams. 	Low	Low
Poor waste management will result in the contamination of surface runoff resulting in the deterioration of water quality of surface water resources.	Medium	<p>Separation of waste</p> <ul style="list-style-type: none"> • Waste shall be stored in demarcated areas according to type of waste. • Hazardous waste shall not be mixed with general waste and in doing so increase the quantities of hazardous waste to be managed. • Runoff from any area demarcated for waste will be contained, treated and reused. • Hazardous waste will be removed and managed by an approved service provider. • A safe disposal certificate must be provided by the approved service provider as proof of responsible disposal of hazardous waste and kept on record. • All waste management facilities will be maintained in good working order. • No littering shall be allowed in and around the site, a sufficient number of bins shall be provided for the disposal of waste. • Flammable substances must be kept away from sources of ignition and from oxidizing agents, • The maximum retention time for temporary storage of waste generated shall not exceed 30 days, provided the waste does not present a health hazard or risk of odour. <p>Disposal of waste.</p> <ul style="list-style-type: none"> • General waste will be collected in adequate number of litter bins located throughout the construction site. • Bins must be provided with lids to keep rain water out. • Bins shall be cleaned regularly to prevent the bins from overflowing. • All work areas shall be kept clean and tidy always. 	Low	Low

		<ul style="list-style-type: none"> • All general waste shall be disposed of to the nearest licensed landfill site, • Where necessary dedicate a storage area on site for collection of construction waste. • No construction rubble shall be disposed of to the riparian area. • If construction rubble is not removed immediately it shall be stockpiled outside the 1:50 year flood line and outside the sensitive riparian areas. • All construction rubble shall be disposed of to an appropriate licensed landfill site. • Concrete shall only be mixed in a dedicated area and surplus concrete shall be disposed of responsibly. • Waste shall not be buried or burned on site. 		
Disposal and storage of hazardous waste including hydrocarbon contaminated soils, rags etc will result in the contamination of surface runoff resulting in the deterioration of water quality of surface water resources.	Low	<p>Storage of hazardous substances</p> <ul style="list-style-type: none"> • All bunding areas of hazardous substances will comply with the SANS standards. • On surface bulk storage of hydrocarbons must be stored in a dedicated area which will include a bund or a drain where necessary to contain any spillages during the use, loading and off-loading of the substances. • Bunded areas shall contain 110% of the stored volume. • Bund areas must be impermeable. • Bund area must have a facility such as a valve/sump to drain or remove clean stormwater, • Contaminated water shall be pumped into a container for removal by an approved service provider. • Regular inspections shall be carried out to ensure the integrity of the bundwalls. • The relevant safety signage must be provided to warn employees of the hazards in the area, • The necessary fire-fighting facilities will be provided. • All hazardous substances shall be stored in a secure, safe and weatherproof facility. The facility shall have an impermeable floor to prevent. • All containers must be labelled according to the substance stored, substances are not allowed to be decanted into another container without the correct labelling displayed on the container, • No combustible materials shall be stored near flammable substances; flammable substances shall be stored in a secured area. • A register of all the hazardous substances shall be kept on site. • The relevant Material Safety Data Sheets (MSDS) for all the hazardous substances shall be made available on request. <p>Handling of hazardous substances</p> <ul style="list-style-type: none"> • All personnel responsible for handling hazardous substances shall be trained on how to store, handling and dispose of the material. • Personnel shall be provided with the necessary personnel protective equipment to handle the hazardous substances. • The MSDS will be made available at the point of use. 	Low	Low

		Disposable of hazardous substances <ul style="list-style-type: none">• All empty hazardous substance containers shall be considered and shall be handled in accordance with the waste EMPr.		
Potential indiscriminate disposal of hazardous and non-hazardous materials wastes within freshwater resources, leading to altered water quality, possible changes to flow patterns because of blockages caused by solid wastes/rubble	Low	<ul style="list-style-type: none">• No wastes are permitted to be disposed of within Kliprivier or surrounding areas, and ensure that all wastes are removed to an appropriate disposal facility;• Kliprivier to be designated a "No Go" area and off-limits to all personnel and vehicles, unless entry is unavoidable due to essential placement of infrastructure; and• Where entry into Kliprivier is essential, such as for the construction of the rock-fill weir, designated entry/exit points to the river must be demarcated to avoid indiscriminate movement through the river.	Low	Low
Inappropriate storage of hazardous materials and/or waste may lead to leaching and ground water pollution	Low	Hazardous material should be properly stored.	Low	Low
Contamination and degradation of the soil due to spillages of oil, petrol, diesel and other contaminants used by vehicles and equipment on the site or stored on the site	Medium	<ul style="list-style-type: none">• Vehicles and equipment must be serviced regularly and maintained in a good operating condition.• Storage of contaminants must be limited to low quantities and done under strict industry standards.• There must be strict control over the safe usage of vehicles and equipment to minimise vehicle accidents and damage to vehicles by rocks and boulders which may cause spillages.	Low	Low
Increase in silt load in runoff due to site clearing, grubbing and the removal of topsoil from the construction footprint area.	Medium	<ul style="list-style-type: none">• Adequate stormwater management must be incorporated into the design of the proposed remedial measures to prevent erosion and the associated sedimentation of the Kliprivier.• Only essential construction personnel shall be permitted within the 1:100-year floodlines.	Low	Low
Debris from poor handling of materials and/or waste blocking watercourses, resulting in flow impediment and pollution.	Medium	<ul style="list-style-type: none">• All vehicles used to import rock must be inspected for leaks prior to entering the construction site. Any vehicles found to be leaking oils/hydrocarbons may not be allowed access;• Entry to Kliprivier must be by designated routes only and no indiscriminate movement within the river and/or banks should be allowed	Low	Low
Contaminated dirty water runoff to surrounding areas resulting in the impact on local surface water quality	Medium	<ul style="list-style-type: none">• All demarcated sensitive zones outside of the construction area shall be kept off limits during the construction phase.	Low	Low
Increase of surface runoff and potentially contaminated water that needs to be maintained in the areas where site clearing occurred.	Medium	<ul style="list-style-type: none">• The footprint area of the construction activities shall be limited to what is essential to minimise environmental damage.• During construction, erosion protection berms shall be installed to prevent gully formation.• Riparian areas shall be rehabilitated upon completion of the construction phase to ensure that the river system functions are re-instated,	Low	Low
Localised changes to the riparian areas because of vegetation clearing.	Medium	<ul style="list-style-type: none">• Disturbed areas must be reseeded with indigenous grasses as specified by a suitably qualified specialist (ecologist).	Low	Low

Temporary water diversion may result in altered flow regime leading to possible loss of recharge downstream, affecting downstream biota.	Medium	<ul style="list-style-type: none"> • Where possible, construction activities shall be restricted to the drier winter months, if possible, to avoid sedimentation of the river system. • Sediment control measures must be put in place prior to commencement of construction activities. • Ensure that the creation of the river diversion does not result in significant water level difference upstream and/or downstream of the installation site. • The duration of impacts on the riparian areas must be minimised as far as possible by ensuring that the duration of time in which flow alteration and sedimentation will take place is minimised (construction period must be kept as short as is possible). • <input type="checkbox"/> All construction activities within Kliprivier should be take place in the low flow period of winter. • Stream diversion must be kept as small as possible and extreme caution must be taken to prevent sedimentation of the downstream resources and where possible construction must be undertaken during the low flow period. • The construction of piles within the coffer dams must be done as quickly as possible to reduce the duration of construction activities within the active channel. • Construction areas must be reseeded with indigenous species as soon as construction has been completed. • Sediment and erosion control measures must be maintained throughout the construction phase to minimise sedimentation downstream of the work areas. 	Low	Low
Impact on the hydrological functioning of the riparian systems	Medium		Low	Low
Loss of habitat and riparian zone ecological structure because of site clearance activities and uncontrolled riparian zone degradation	Medium		Low	Low
Impact on the riparian systems because of changes to the sociocultural service provisions	Medium		Low	Low
Increased runoff due to topsoil removal and vegetation clearance leading to possible erosion and sedimentation of riparian resources	Medium		Low	Low
Soil compaction and levelling because of construction activities and vehicle movement leading to loss of riparian habitat	Medium		Low	Low

No Go

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
Encroachment of Illegal settlements	High	Develop as proposed	Low	High

In terms of the 'no-go option', in this case the proposed development is considered to be vital infrastructure both in the national interest as well as at a local and regional level. Delivering priority infrastructure such as the proposed scheme delivers on CoJ's agreed operational objectives of ensuring quality housing and urban development. It also makes an essential contribution to wider governmental objectives associated with the provision of housing and basic utilities to a wider cross section of society. For this reason, the 'no-go option' is not considered viable in these circumstances.

Potential impacts that can be expected during the operation phase

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
Creation of employment and business opportunities	Low	Maximise the use of local labour for low – semi skilled jobs far as possible.	Low	Low
Waste management	Medium	Waste receptacles should be sited at strategic locations, away from surface water resources.	Low	Low
Fauna will be impacted by the development as a result of operational activities and human presence at the site.	Medium-Low	<ul style="list-style-type: none"> High traffic volumes are expected due to easier mobility; therefore, traffic calming measures should be implemented. 	Low	Low
Disturbance and the operational activities are likely to result in habitat degradation, impact on biodiversity as well as habitat fragmentation	Low	<ul style="list-style-type: none"> Hardened surfaces should be kept to a minimum Vegetation should be allowed to remain alongside or encroach on the roads as much as possible. Regular monitoring for erosion during construction to ensure that no erosion problems have developing as result of the operational disturbance. All erosion problems observed to be associated with the project should be rectified as soon as possible, using the appropriate erosion control structures and revegetation techniques 	Low	Low
Increase in traffic volumes because of operation of the road which may lead to an increase in traffic congestion on roads around the project area.	Low	<ul style="list-style-type: none"> Local speed limits and traffic laws shall apply always to minimise the occurrences of accidents on public roads; Materials transported on public roads must be covered. 	Medium-Low	Low
The use of vehicles during the operational phase may generate noise in the immediate vicinity	Low	<ul style="list-style-type: none"> vehicles must be operated within specifications and capacity (e.g. no overloading of machines). Vehicles must be operated with appropriate noise abatement accessories such as silencers and sound hoods, which must be correctly maintained. Motor vehicle drivers shall comply with the traffic regulations 	Medium-Low	Low

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

- Ecological Assessment
- Floodline studies
- Heritage Resources Assessment; and,
- Traffic Impact Report
- Town Planning Report
- Geotech study

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

Assumptions:

- The scope is limited to assessing the potential impacts associated with the proposed development; therefore the effect on the surrounding environment is based on the current land use.
- All information provided by specialists involved is deemed valid and correct at the time it was provided.
- Since during the public participation process, no indigenous local knowledge came forth, it is assumed that there are no sensitive cultural, e.g. initiation schools sites on the proposed site.
- Based on the layout, the existing downstream aquatic ecosystems will not be affected by construction activities.

Limitations/Gaps in Knowledge:

None

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.

It is not foreseen that the proposed mixed use township development will be removed. It is unlikely that the development will be decommissioned, should this be necessary, the potential impacts will be like that during construction of the measures.

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

Alternative 1

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

Alternative 2

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

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

- Ecological Assessment
- Floodline studies
- Heritage Resources Assessment; and,
- Traffic Impact Report
- Town Planning Report
- Geotech study

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

None

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:

The cumulative impact of the construction of the proposed mixed use development is considered to be moderate to high at ward level and low at farm level, as the broader study area already comprises of a number of existing similar infrastructure including Baragwanath Hospital, Diepkloof Township, warehousing and retail.

Cumulative impacts of the proposed project need to be seen both from a site perspective (e.g. at individual farm level) and from a municipal, district or area perspective.

At local farm scale, the cumulative impacts of the proposed project will be high as there is existing similar infrastructure.

At ward level, the cumulative impacts will also be high as there is similar existing infrastructure. This also applies for regional level (municipal and district) as there is existing similar infrastructure.

The project is reviewed in conjunction with the Integrated Development Plans (IDPs) and Spatial Development Frameworks (SDFs) for the area. These are seen to provide limited detail for planned development and land use management.

Vegetation: The project is located within the Soweto Highland Grassland which occurs on gently to moderately undulating landscape on the Highveld plateau, supporting short to medium-high, dense, tufted grassland dominated almost entirely by *Themeda triandra*. More than 60% of area is infested by alien invasive plants. It is expected that the vegetation in this area is not likely to add to the conservation target of this vegetation type in the region in its present state and its loss from the study area is therefore not considered to contribute to any cumulative impacts. The development footprint of the project is also considered small in relation to the surrounding areas. The cumulative impact associated with the construction of the protection measures is therefore considered to be low (-).

Groundwater and Surface: Currently the Kliprivier is affected by water quality problems as result of contamination from sewer systems, industry, mining, residential areas and sedimentation. It is expected that during construction the project may result in erosion of the banks and bed, as well as contamination of the water if run-off is not managed. This will lead to an increased contamination and impact on the aquatic ecology. The potential groundwater and surface water quality impact associated with the project also relates to the potential contamination as a result of mismanagement of materials stored and leakages from vehicles and machinery. Mismanagement of materials stored on site and leakage of hydrocarbons may lead to an increase in the cumulative effect of potential contamination of groundwater and surface water quality downstream of the development area. It must however be noted that the impacts will be of short duration (during the construction phase). Mitigation measures have been proposed for the impacts on ground water and surface water contamination. It is expected that with the implementation of the mitigation measures this impact will be reduced to an acceptable level.

Air Quality: The potential air quality impacts associated with the project relate to the potential generation of PM_{2.5}, PM₁₀ and fugitive dust emissions as a result of site clearance, vehicular movements as well as carbon emissions and ambient air pollutants (NO₂ and SO₂) as a result of movement of vehicles and operation of machinery/equipment. The majority of the surrounding land is mostly business/commercial and residential in nature, associated with a lot of vehicular movement in the vicinity of the river contributing air quality impacts. The movement of construction vehicles will lead to additional air quality impacts. The impacts are expected to be of low significance and can be mitigated to be of very low significance.

Noise: The potential noise nuisance associated with the project relates to the movement of vehicles and operation of machinery on site. Mitigation measures have been proposed to avoid and /or reduce the nuisance noise impacts. It is expected that with the implementation of the mitigation measures this impact will be reduced to an acceptable level.

The majority of the land use in the vicinity of the project area is mostly business/commercial and residential in nature. There will be a lot of vehicle movement associated with the project, contributing to nuisance noise levels. Mismanagement of sources of noise may lead to an increase in the cumulative effect of nuisance noise in the vicinity of the project.

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:

It should be recognized that no development could be completed without impacting in some way on the environment; therefore, it is imperative that negative impacts are minimized to a greater extent.

During the screening phase of the project, the environmental issues that were identified were for both the construction and operation phase.

The identified impacts are summarized below:

- 1 Loss of topsoil;
2. Potential habitat of the infrastructure on the socio-economic structure of the area.
3. Job creation looking at employment of local community;
4. Excessive noise generation during construction;
5. Potential damage or destruction to undiscovered heritage sites of the area;
6. Traffic congestion during construction;
7. Potential impact of sensitive habitat destruction; and
8. Potential impact of destruction on red data plants.

From the evaluation identified impacts using the assessment methodology, the significance ratings of negative impacts were reduced to low with outlined mitigation measures and the positive impacts were accentuated. The extent with mitigation ranged between site specific and local. Adherence to the draft EMPr will also ensure that impacts occurring due to the development will be reduced to a greater extent. Specialists' studies that were undertaken as part of the BAR process included a Traffic Impact Assessment, Flood lines Assessment, Heritage Impact Assessment, **Ecological Assessment** to determine possible impacts of the development on the receiving environment. According to these studies, the site has no major major environmental impacts.

During the public participation, no objections were received. A no-go option for this project is not feasible because the site has been earmarked for mixed use development and connections to basic amenities like water and sewerage are economically feasible.

Alternative 1:

Alternative 2: Route 3

No-go (compulsory)

In terms of the 'no-go option', in this case the proposed development is considered to be vital infrastructure both in the national interest as well as at a local and regional level. Delivering priority infrastructure such as the proposed scheme delivers on CoJ's agreed operational objectives of ensuring reliability of services. It also makes an essential contribution to wider governmental objectives associated with the provision of housing and basic utilities to a wider cross section of society.

For this reason, the 'no-go option' is not considered viable in these circumstances.

6. IMPACT SUMMARY OF THE PROPOSAL OR PREFERRED ALTERNATIVE

For proposal:

The proposed development will result in a number of impacts, both positive and negative, during the Planning and Design, Construction and Operation Phases (see Impact Table above). The phase with the highest number of impacts is the construction phase. The following table provides a summary of the pre-mitigation and post-mitigation impacts for the preferred alternative. .

Table 1: Environmental Significance

Environmental Feature	Likely Impact – Pre-mitigation	Likely Impact – Post-mitigation
Rivers and Wetlands	Low	Low
Red Data Flora	Low	Low
Red Data Fauna	Low	Low
Heritage	Low	Low
Gauteng Cplan	Low	Low
Social	Medium	Low

For alternative:

For alternative:

Having assessed the significance of impacts of the proposal and alternative(s), please provide an overall summary and reasons for selecting the proposal or preferred alternative.

In addition to an extensive public consultation exercise, specialist studies were undertaken in order to identify potential environmental impacts arising from the implementation of the proposed infrastructure. Based on the information gathered by specialists and received from Interested and Affected Parties (I&AP's) that responded during the public consultation process, a sensitivity analysis was undertaken to indicate the main social and environmental features present within the study area and the likely impact of the proposed infrastructure.

The proposed site is suitable for a mixed use development because it is compatible with the surrounding area, easily accessible and availability of connection points to services, e.g. water, electricity. The development will enable the municipality to decrease their housing development backlog and minimize the formation of illegal settlements on areas not considered for residential planning and to provide basic amenities, e.g. church, sport ground, and parks. The future residents will have proper shelter and access to basic services and in turn their livelihood and well being will be improved. The development will also contribute towards urban development.

CoJ must ensure compliance with the National Environment Management: Biodiversity Act, 2004 (Act 10 of 2004, section 56 (d) and section 57 (1) with, regards the protected and indigenous species. Any solid waste shall be disposed of at a waste disposal facility permitted in terms of Section 20(b) of the National Environmental Management Waste Act, 2008 (Act No. 59. of 2008).

According to Gauteng Environmental Management Framework (EMF), the proposed alternatives all fall within Urban Development Zone (UDZ).

7. SPATIAL DEVELOPMENT TOOLS

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

The Spatial Development Framework (SDF) is the legislated component of the municipality's Integrated Development Plan (IDP) that prescribes development strategies and policy guidelines to restructure and reengineer the urban and rural form. The SDF is the municipality's long-term vision of what it wishes to achieve spatially, and within the IDP programmes and projects. The SDF should not be interpreted as a blueprint or master plan aimed at controlling physical development, but rather the framework giving structure to an area while allowing it to grow and adapt to changing circumstances. The proposed project has considered and is guided by the Regions SDF and IDP priorities of the area. It aims to empower the local economy, which is individuals and local business in terms of job creation and skills development.

According to the CoJ SDF, The land use proposals of the Johannesburg Spatial Development Framework require the implementation of a range of policies and strategies in order to re-create a smart, creative and developmental city.

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	
X	

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

N/A

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:

Recommendations to be considered in the planning and design phase

It is recommended that all mitigation measures provided should be a condition of any approval from GDARD. In addition, a Construction and Operational Environmental Management Programme needs to be compiled.

Recommendations to be considered in the planning and design phase

POLICY COMPLIANCE

- Once the EA has been received, the conditions must be incorporated into all project phases, including planning and design, construction and operation.
- Other legal conditions of relevant policy and legislation (e.g. National Forestry Act, National Water Act) must be compiled and adhered to.

TECHNOLOGY EMPLOYED

Water:

- Rainwater tanks should be considered in the design and planning phase. Tanks will reduce the runoff created by the housing footprint and reduce municipal water usage.
- Water piping material and infrastructure must comply with SABA to insure as far as possible pipeline failures and future indirect impacts resulting from burst pipes do not result in water loss.

Energy:

- Insulation of houses and use of solar water heaters should be considered.
- Use of alternative renewable energy sources such as wind or solar power (PV) should be considered in the design and layout. However, if renewable energy technology is not implemented initially, provisions should be made in design to allow for easier post-construction retrofitting.

STORMWATER MANAGEMENT

- A flood attenuation and stormwater management plan must be drawn up by a qualified engineer and submitted to DWS and DAFF for comment and approval
- The stormwater management plan must include stormwater attenuation berms that are situated 32 m away from the watercourse. These berms should be able to hold a 1:100 year flood to be released as a 1:5 year flood.
- Impermeable surfaces should be minimised as much as possible through permeable surface technology, such as grassed gardens and verges, permeable paving and internal roads, etc.

SOCIO-ECONOMIC

- The architectural design should be as unobtrusive as possible in terms of colour and building material used.
- An architectural code could include use of natural/earth tone colours for the walls and a suitable blending colour (such as grey) is used for the roof.
- Vegetation could be planted to mitigate visual impacts

TRAFFIC AND TRANSPORT

- The recommendation of the Traffic Impact Assessment should be adhered to.

WASTE MANAGEMENT

- Provisions must be made for temporary storage of domestic waste, prior to municipal pick-up and disposal.
- A waste management plan incorporating recycling and waste minimisation must be developed and implemented for the construction and operational phases.
- The waste facility must be enclosed to avoid the spread of foul odours and to ensure that the spread of pests (flies) and vermin (rats and monkeys) are deterred.

Recommendations to be considered in the construction phase

BIOLOGICAL IMPACTS

- Prior to construction all sensitive areas (Rocky outcrops) must be demarcated and signs erected to ensure these areas are maintained. This must be done with the assistance of the ECO.
- The construction footprint must be surveyed and demarcated prior to construction. The surveyed construction footprint must be approved by an ECO to ensure that vegetation is not unnecessarily damaged.
- Alien plants must be removed from the site through appropriate methods e.g. hand pulling, chemical, cutting, etc., and under the supervision of the ECO.
- After construction, exposed areas must be rehabilitated with indigenous vegetation.
- Post-construction monitoring of rehabilitation must be implemented.
- All staff employed during construction must undergo environmental induction training.
- No construction workers should reside onsite.
- Construction personnel must be educated in appropriate waste management practices.
- Collected waste must be categorised as —hazardousll, —general wastell and —construction rubblell. Separate, distinguishable containers should be provided for different waste categories.
- Litter and construction waste must be removed on a regular basis and disposed of in an approved registered landfill.
- Potentially hazardous materials must be handled and stored onsite in secure containers and disposed of at an appropriately permitted hazardous waste disposal site through appointment of a reputable hazardous waste disposal company.
- The Contractor should maintain a register of the hazardous materials and should document the use, storage, final destination and method of disposal.

POLICY COMPLIANCE

- The developer must employ an independent Environmental Control Officer (ECO) for the construction phase to ensure that construction is implemented according to specifications in the EA and EMPr.

EROSION

- Wind screening and stormwater control should be undertaken to prevent soil erosion.

- All erosion control mechanisms must be regularly maintained.
- Vegetation must be retained where possible to avoid soil erosion.
- Construction must be phased in order to minimise the area of exposed soil at any one time.
- Re-vegetation of disturbed surfaces should occur immediately after the construction activities are completed with indigenous vegetation.

SANITATION

- Adequate sanitary and ablutions facilities must be provided for construction workers
- The facilities must be regularly serviced to reduce the risk of surface or groundwater pollution.
- Portable toilets must not be located within 50 metres of any watercourse.

STORAGE OF EQUIPMENT AND HAZARDOUS SUBSTANCES

- The storage of potentially hazardous material must be controlled to reduce the risk of environmental contamination.
- Drip trays must be placed under all machinery to avoid soil contamination.
- All vehicles and machinery must be regularly maintained and in good working order to reduce the risk of contamination of soil and ground water.
- All areas that have been contaminated during the construction phase must be rehabilitated.

CONCRETE BATCHING

- Cement and concrete must not be mixed directly on the ground, or during rainfall events when the potential for transport of pollutants to watercourses is the greatest. Cement and concrete must only be mixed in the area demarcated for this purpose and on an impermeable substratum.
- All construction water and contaminated runoff must be directed away from the drainage line.

DISPOSAL OF CONSTRUCTION MATERIAL

- Construction material must be removed to an approved, licenced off-site disposal site by the appointment of a reputable waste services provider.

NOISE POLLUTION

- Construction activities, which include the movement of construction vehicles and the operation of machinery, must be restricted to normal working hours (07:00am – 17:00pm).

FIRES ONSITE

- Fires must be prohibited onsite.
- Any source of fire hazards must be removed.
- The construction personnel must be educated regarding fire and fire management.
- Fire extinguishers must be available onsite.
- In order to reduce the risk of fires:
 - All flammable substances must be stored in dry areas which do not pose an ignition risk to the said substances.
 - Smoking must not be permitted near flammable substances.
 - All cooking must be done in demarcated areas that are safe in terms of runaway or uncontrolled fires.

- The contractor must have operational fire-fighting equipment available on site at all times.

DUST CONTROL

- Vegetation should only be stripped as construction progresses. The time that stripped areas are exposed should be minimised wherever possible.
- The sites must be re-vegetated as soon as possible during the construction phase, and indigenous trees, shrubbery and grass species must be retained wherever possible, for this purpose.
- Exposed soils must be dampened whenever possible and especially in dry and windy conditions to avoid excessive dust generation.
- Any soil excavated and not utilised for rehabilitation must be removed from site or incorporated into landscaping.

SOCIO-ECONOMIC

- Access control to the site must ensure no unauthorised person shall enter.
- The site must be secured in order to reduce the opportunity for the criminal activity in the locality of the construction site.

Recommendations to be considered for the operational phase

SOCIO-ECONOMIC

- Vegetation could be planted to mitigate visual impacts and residents should be encouraged to plant indigenous trees.
- The effectiveness of traffic control measures must be monitored on an on-going basis and appropriate remediation steps implemented if necessary.

TECHNOLOGY EMPLOYED

- Measures must be taken to reduce the consumption of natural resources.
- These measures should include, but not be limited to, the installation of rainwater tanks to reduce stormwater runoff and the pressure on the municipal water supply, as well as alternative renewable energy sources such as wind or solar (PV) power.

BIOLOGICAL IMPACTS

- An independent ECO must inspect the site during the first 6 months of the operational phase to assess the level of rehabilitation and address accordingly.
- There should be on-going alien plant removal from the site.

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

	Questions (Notice 792, NEMA, 2012)	Response
PART I: NEED		
1.	Is the land use associated with the activity being applied for considered within the timeframe intended by the	The proposed project has considered and is guided by the Regions SDF and IDP priorities of the area. It aims to empower the local economy, which

	existing approved SDF agreed to be the relevant environmental authority?	<p>is individuals and local business in terms of job creation and skills development.</p> <p>According to the CoJ SDF, The land use proposals of the Johannesburg Spatial Development Framework require the implementation of a range of policies and strategies in order to re-create a smart, creative and developmental city.</p>
2	Should the development, or if applicable, expansion of the town/area concerned in terms of this land use occurs here at this point in time?	Yes. The development will enable the municipality to decrease their housing development backlog and minimize the formation of illegal settlements on areas not considered for residential planning and to provide basic amenities, e.g. church, sport ground, and parks. The future residents will have proper shelter and access to basic services and in turn their livelihood and well being will be improved. The development will also contribute towards urban development.
3	Does the community/area need the activity and the associated land use concerned? This refers to the strategic as well as local level.	<p>Yes. The project is highly favoured as it forms part of the main objectives of the Provincial Municipality as well as will provide various benefits to the communities involved. The project will contribute to community empowerment through the creation of temporary jobs to unemployed members of the community.</p> <p>The development will also enable the municipality to decrease their housing development backlog and minimize the formation of illegal settlements on areas not considered for residential planning</p>
4	Are the necessary services with adequate capacity currently available (at the time of application) or must additional capacity be created to cater for the development?	Additional electricity supply will be required.
5	Is this development provided for in the infrastructure planning of the municipality, and if not what will the implication be on the infrastructure planning of the municipality (priority and placement of the services and opportunity cost)?	

6	Is the project part of a national programme to address an issue of national concern or importance?	This project satisfies requirements of Strategic Infrastructure Project (SIP 7) which involves planning and implementation of public transport, human settlement, economic and social infrastructure and location decisions into sustainable urban settlements connected by densified transport corridors. This will focus on the 12 largest urban centres of the country, including all the metros in South Africa.
PART II: DESIRABILITY		
1	Is the development the best practicable environmental option for this land/site?	Yes. An assessment of the available feasible options showed that the proposed option is the best option, taking into account both socio-economic and environmental considerations.
2	Would the approval of this application compromise the integrity of the existing approved and credible IDP and SDF as agreed to by the relevant authorities?	No. The project has no bearing on the IDP or SDF of the CoJ.
3	Would the approval of this application compromise the integrity of the existing environmental management priorities for the area (e.g. as defined in EMFs), and if so, can it be justified in terms of sustainability considerations?	No. The Gauteng EMF shows that the project is located in Zone 1 (Urban Development Zone). The project will however not have any implications on the integrity of the EMFs.
4	Do location factors favour this land use at this place? (this relates to the contextualization of the proposed land use on this site within its broader context).	Yes.
5	How will the activity of the land use associated with the activity being applied for, impact on sensitive natural and cultural areas (built and rural/natural environment)?	The project area has significantly been modified, it is deemed unlikely that further negative impacts would have a significant impact on the ecology of the area, although cognisance must be taken of rocky outcrops which are considered areas of high biodiversity and cultural significance.
6	How will the development impact on people's health and well-being? (E.g. In terms of noise, odours, visual character and sense of place, etc.)?	The project will result in an improved mobility and safety and well-being. This will provide a safer environment to the public. During construction, there will be particulate emissions (dust) related to debris handling; truck transport; materials storage, handling and transfer; open areas (windblown

		<p>emissions). Gas emissions are also expected to occur due to vehicle and construction equipment activity (exhaust fumes). These impacts, however, can be mitigated and managed to acceptable levels, with a post mitigation impact that is not significant.</p> <p>Movement of construction vehicles and machinery result in the production of construction related noise from construction vehicles and machineries which may cause a nuisance to people living near the project area. However, the implementation of appropriate mitigation measures would reduce the noise levels to remain within applicable and acceptable SANS levels (SANS 10103:2008). Occupational health and safety standards will apply.</p> <p>It is expected that the project will not have an impact on the visual character and sense of place, especially since landscaping techniques will be used.</p>
7	Will the proposed activity or the land use associated with the activity being applied for, result in unacceptable opportunity costs?	No. The project will not result in any opportunity costs.
8	Will the proposed land use result in unacceptable cumulative impacts?	No. It is expected that the project may result in cumulative impacts. The impacts will be short lived, during the construction phase. It is however expected that implementation of the mitigation measures included in the EMPr will reduce the significance of the impact to low.

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

The Environmental Authorisation is required for a minimum of 50 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

Yes

SECTION F: APPENDIXES

The following appendixes must be attached as appropriate (this list is inclusive, but not exhaustive):

It is required that if more than one item is enclosed that a table of contents is included in the appendix

Appendix A: Site plan(s) – *(must include a scaled layout plan of the proposed activities overlain on the site sensitivities indicating areas to be avoided including buffers)*

Appendix B: Photographs

Appendix C: Facility illustration(s)

Appendix D: Route position information

Appendix E: Public participation information

Appendix F: Water use license(s) authorisation, SAHRA information, service letters from municipalities, water supply information

Appendix G: Specialist reports

Appendix H: EMPr

Appendix I: Other information

CHECKLIST

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

- Where requested, supporting documentation has been attached;
- All relevant sections of the form have been completed.

Appendix A: Site plan(s) – *(must include a scaled layout plan of the proposed activities overlain on the site sensitivities indicating areas to be avoided including buffers)*

Appendix B: Photographs

Appendix C: Facility illustration(s)

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