



**Proposed Chancliff Telecommunication Mast, Mogale City
Local Municipality, Gauteng Province**

Draft Basic Assessment Report

15 April 2024

CORE Environmental Services
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300067/15
EAPASA: 2020/602



GAUTENG PROVINCE

AGRICULTURE AND RURAL DEVELOPMENT
REPUBLIC OF SOUTH AFRICA

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 1/2022)

Kindly note that:

1. This **Basic Assessment Report** is the standard report required by GDARD in terms of the EIA Regulations, 2014.
2. This template is current as of April 2022. It is the responsibility of the EAP to ascertain whether subsequent versions of the template 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 must be submitted, for purposes of comments within a period of thirty (30) days, to a Competent Authority (uploaded to the EIA online system) empowered in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended to consider and decide on the application. The EIA online system can be accessed at <https://eia.gauteng.gov.za>.**
5. **A copy (PDF) of the final report and attachments must be uploaded to the EIA online system. The EIA online system can be accessed at <https://eia.gauteng.gov.za>.**
6. **Draft and final reports submitted in terms of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) must be emailed to environmentsue@gauteng.gov.za.**
7. 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.
8. Selected boxes must be indicated by a cross and, when the form is completed electronically, must also be highlighted.
9. An incomplete report may lead to an application for environmental authorisation or Waste Management License being refused.
10. 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 authorization or Waste Management License being refused.
11. 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 or Waste Management License being refused.
12. The applicant must fill in all relevant sections of this form. Incomplete applications will not be processed. The applicant will be notified of the missing information in the acknowledgement letter that will be sent within 10 days of receipt of the application.
13. 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.
14. 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 Sustainable Utilisation of the Environment (SUE) Branch
P.O. Box 8769
Johannesburg
2000

Ground floor, Umnotho House, 56 Eloff Street, Johannesburg

Administrative Unit telephone number: (011) 240 3051/3052
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.

N/A

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?

YES

If no, state reasons for not attaching the list.

Have State Departments including the competent authority commented?

NO

If no, why?

DRAFT Report is currently distributed for review and comments will be included within the Final BA Report

SECTION A: ACTIVITY INFORMATION

1. PROPOSAL OR DEVELOPMENT DESCRIPTION

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

1. PROJECT TITLE

Proposed construction of a telecommunication mast of 36m in height on Holding 9 of Chancliff Agricultural Holdings, Krugersdorp, Mogale City Municipality, Gauteng Province

2. PROJECT BACKGROUND AND LOCATION

Fortis Towers (Pty) Ltd is proposing to establish a telecommunication mast of 36m in height with a footprint of 54m² (6m X 9m). Due to the height of the telecommunication mast as well as the location proposed, Environmental Authorisation is required in accordance with the National Environmental Management Act 107 of 1998, GNR 985 of 2014 (as amended in 2017), before the construction and establishment of the proposed mast.

The proposed site is located on Holding 9 of Chancliff Agricultural Holdings, Krugersdorp, within the Mogale City Local Municipality, Gauteng Province.

Coordinates:

26° 4'1.00"S

27° 47'51.00"E

Please refer to Figure 1 for the locality map of the proposed telecommunication mast. For the preferred design, please refer to Figure 2 below which indicates the structure proposed for the 36m telecommunication mast. (Also attached as Appendix A)

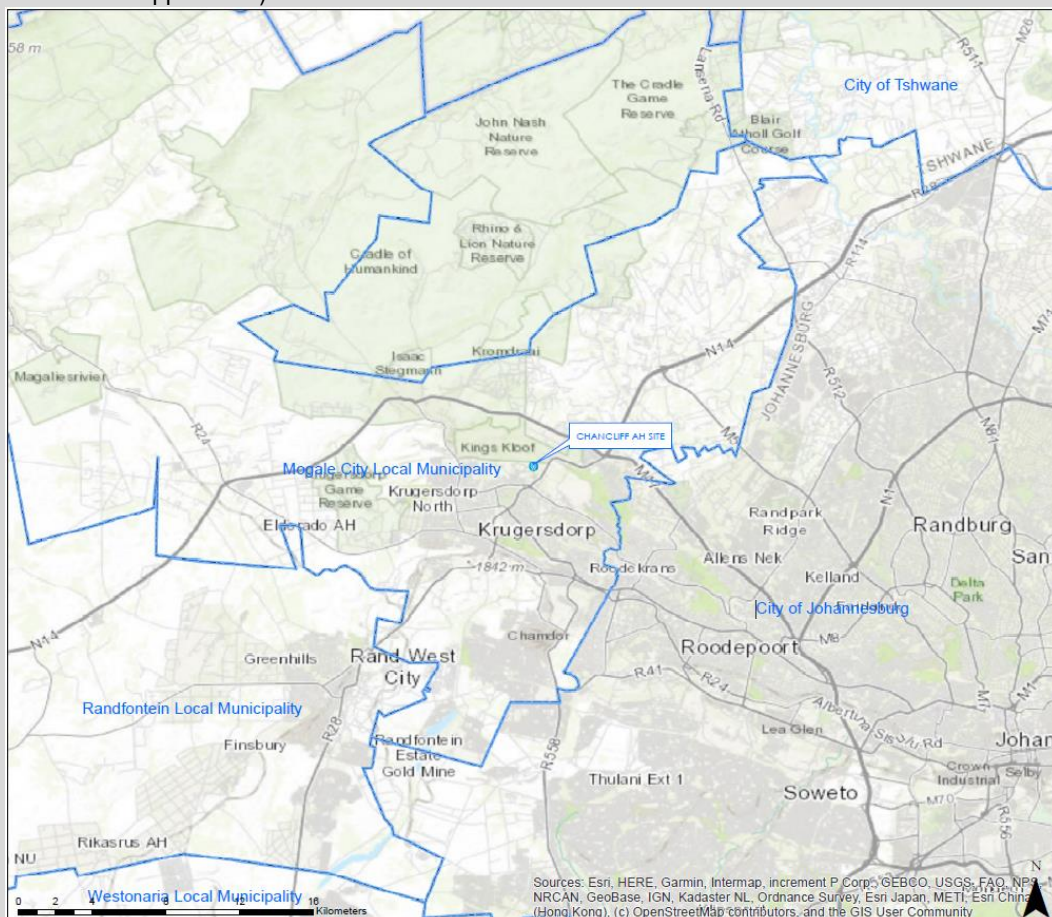


FIGURE 1: LOCALITY MAP OF THE AREA PROPOSED FOR THE CHANCLIFF TELECOMMUNICATION MAST, MOGALE CITY LOCAL MUNICIPALITY, GAUTENG PROVINCE

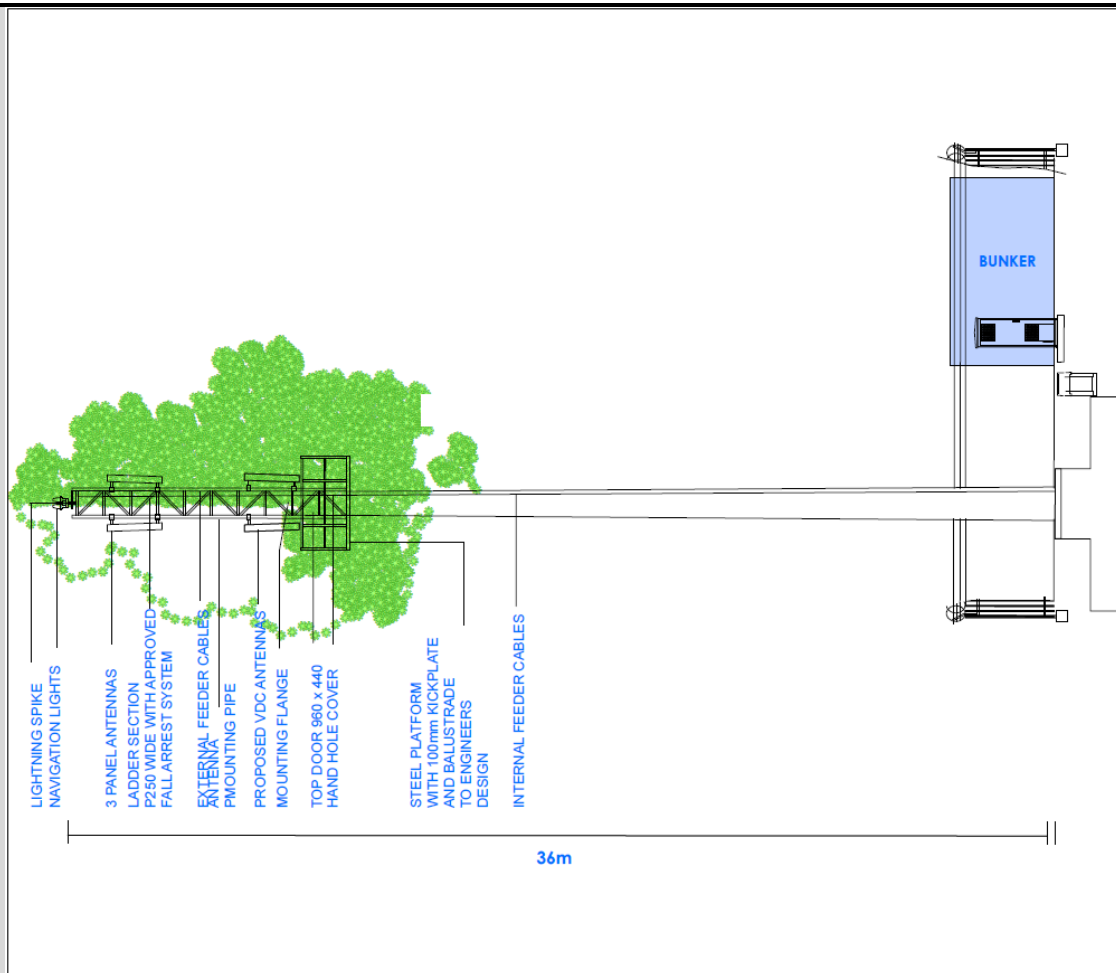


FIGURE 2: PROPOSED DESIGN FOR THE CHANCLIFF TELECOMMUNICATION MAST, KRUGERSDORP, GAUTENG

3. TERMS OF REFERENCE

Core Environmental Services Pty (Ltd) was appointed as an independent Environmental Assessment Practitioner (EAP) by the Applicant to conduct a Basic Assessment Process for the project in accordance with the NEMA Regulations GN R982, 2014 (as amended in 2017). Potential environmental impacts, direct and indirect, positive or negative, associated with the proposed project are to be identified, assessed and reported on. These identified impacts are to be managed and mitigated through the environmental planning and control processes.

In terms of Section 24 (2) of the National Environmental Management Act, 1998 (Act No. 107 of 1998), the proposed development triggers listed activities under the GNR 985, Listing Notice 3 of NEMA Regulations, 2014 (as amended in 2017), and for this reason the required Environmental Authorisation is undertaken in accordance with NEMA 107, of 1998.

4. TRIGGERED ACTIVITIES

As per the National Environmental Management Act 107 of 1998 (NEMA 107, 1998), GNR 985 of 2014 (as amended in 2017), the following listed activity is applicable and requires approval from the Competent Authority, the Gauteng Department of Agriculture and Rural Development (GDARD):

TABLE 1: TRIGGERED ACTIVITIES IN TERMS OF NEMA REGULATIONS, 2014 (AS AMENDED)

Activity	Description
GNR 985 (LN3) Activity 3	<p>The construction of masts or towers of any material or type used for telecommunication, broadcasting or radio transmission purposes where the mast:</p> <p>(a) Is to be placed on a site not previously used for this purpose; and (b) Will exceed 15m in height but excluding attachments to existing buildings and masts on rooftops.</p> <p>c. In Gauteng, within (v) Sites identified within threatened ecosystems listed in term of the National Environmental Management Act (Act No.10 of 2004)</p>

5. REGULATING AUTHORITY

An application is lodged with the Gauteng Department of Agriculture and Rural Development (GDARD).

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?

YES NO

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

N/A

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

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

YES NO
 YES NO

2. APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES

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

Title of legislation, policy or guideline:	Administering authority:	Promulgation Date:
National Environmental Management Act, 1998 (Act No. 107 of 1998 as amended).	National & Provincial	27 November 1998
National Environmental Management Act, 1998 (Act No. 107 of 1998 as amended).	National & Provincial	1998
National Biodiversity Act, 2004 (Act No. 10 of 2004)	National	2004
National Environmental Management: Waste Act, 1998 (Act 59 of 1998)	National	1998
Occupational Health and Safety Act, 1993 (Act No. 85 of 1993)	National	1993
Civil Aviation Act, 2009 (Act 13 of 2009)	National	2009
The Constitution of the Republic of South Africa, 1996 (Act No. 108 of 1996)	National	1996
Mogale City Local Municipality IDP	Provincial	2022/2023
Gauteng Provincial Environmental Management Framework Revised in 2014	Provincial	2014

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

Legislation, policy or guideline	Description of compliance
	Fortis Towers will be required to adhere to the Environmental Management Programme (EMPr) requirements to ensure that social and environmental management considerations are considered and implemented.
The Constitution of South Africa, Act No. 108 of 1996	As per Section 25 the Constitution, a public participation process (PPP) was and will continue to be undertaken, as this is considered to be an essential mechanism for informing

	<p>stakeholders of their rights and obligations in terms of the project.</p>
<p>National Environmental Management Act, 1998 (Act No. 107 of 1998)</p>	<p>The following listed activities are triggered with the proposed establishment of the cellular mast:</p> <p><i>GNR 985, 2014 (as amended), Activity 3:</i> <i>The construction of masts or towers of any material or type used for telecommunication, broadcasting or radio transmission purposes where the mast:</i></p> <p>(c) <i>Is to be placed on a site not previously used for this purpose; and</i></p> <p>(d) <i>Will exceed 15m in height but excluding attachments to existing buildings and masts on rooftops.</i></p> <p><i>c. In Gauteng, within (v) Sites identified within threatened ecosystems listed in term of the National Environmental Management Act (Act No.10 of 2004)</i></p> <p>Environmental Authorisation will subsequently be applied for by means of conducting a Basic Environmental Authorisation process as regulated within GNR982 of 2014 (as amended in 2017).</p>
<p>National Biodiversity Act, 2004 (Act No. 10 of 2004)</p>	<p>The act provides for the management and conservation of South Africa's biodiversity within the framework of the National Environmental Management Act, 1998; the protection of species and ecosystems that warrant national protection; the sustainable use of indigenous biological resources, the fair and equitable sharing of benefits arising from bioprospecting involving indigenous biological resource; the establishment and functions of a South African National Biodiversity Institute; and for matters connected therewith.</p> <p>The site on which the cellular mast is proposed is located within a threatened eco-system (bird species) and for this reason the area is of high sensitivity. Although the project area is located within an area which has already been completely transformed, the National Biodiversity Act, 2004, must be considered to minimise the spread of alien invasive plant species.</p>
<p>National Environmental Management Waste, 1998 (Act 59 of 1998)</p>	<p>The waste act provides reasonable measures for the prevention of pollution and ecological degradation and for securing ecological sustainable development.</p> <p>During construction and decommissioning, waste will be created, and it is essential that all waste is stored and disposed of according to the regulations provided within the National Environmental Management Waste Act 59 of 1998.</p>
<p>Occupational Health and Safety Act, 1998 (Act No. 85 of 1998)</p>	<p>The Act provides for the health and safety of people at work and for the health and safety of people using plant and machinery.</p> <p>During construction and decommissioning, work must be conducted with strict adherence to the Occupational Health and Safety Act 85 of 1998.</p>

Civil Aviation Act, 2009 (Act No. 13 of 2009)	<p>The Act provide for additional measures directed at more effective control of the safety and security of aircraft, airports and the like and to provide for matters connected thereto.</p> <p>Due to the height of the cellular mast (36m), the Civil Aviation Authority (CAA) must ensure that the mast will have no unacceptable impact on civil aviation installations.</p>
Gauteng Provincial Environmental Management Framework (GPEMF),	<p>The GPEMF have zoned specific areas within Gauteng for in terms of sensitivity and noted specific land uses which are compatible for each of the zones.</p> <p>In accordance with the GPEMF, the project area falls within Zone 1 (Urban Development Zone). The intention of Zone 1 is to streamline urban development activities and promote development infill, to establish a more effective and efficient city region that will minimise urban sprawl into rural areas.</p> <p>Telecommunication is identified as a compatible land use within the Urban Development Zone.</p>
Mogale City Local Municipality Integrated Development Plan (IDP) (2022 - 2023)	<p>The IDP of local municipality stated that the following accessibility and connectivity is of importance for the development of the local municipal area.</p> <p>The construction of the telecommunication mast will assist with addressing telecommunication within the area where signal is currently poor.</p> <p>The proposed project is therefore in line with the IDP of the Local Municipality.</p>

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

In order to reach a conclusion as to the best proposed way forward to ensure continuous connectivity for the surrounding area, various alternatives had to be considered.

At this point in time, the only way of providing cellular connectivity for an area, is by establishing a cellular mast that will provide signal to the people within the immediate and surrounding area. For this reason, there is no other technology alternative which can be proposed to improve connectivity within the project area and therefore the only other alternatives to be considered includes the location, design and no-go alternative.

When considering the alternatives for a project, the following factors are taken into consideration:

- Environmental sensitivities of the project area as well as surrounding area;
- Surrounding socio-economic environment;
- Visual receptors of the surrounding area and zoning of the project area;
- Location which would ensure the best possible signal coverage for the surrounding area; and
- Power connectivity.

The alternatives are discussed in more detail below.

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	Location alternatives	<p>The location of the proposed mast is very limited as the following factors must be taken into consideration:</p> <ul style="list-style-type: none"> • Location to ensure best signal coverage for the surrounding area; • Approval of the landowner (agreement); and • Civil Aviation Authority Approval. <p>Due to the above reasons, no other locations for the proposed mast could be considered as the proposed location would provide the best possible coverage for the surrounding area.</p>
2	Design alternatives	<p>There are three important criteria considered when investigating the design of a cellular mast. Most cellular mast designs include either a lattice or monopole structure. The criteria used to consider the preferred design include the following:</p> <ul style="list-style-type: none"> • Aesthetical; • Efficiency, technical value, and the functional requirements; and • Economic aspects <p>As the proposed telecommunication mast is proposed within an area which is inhabited, the visual impact of the cellular mast would have to be mitigated. By establishing a monopole tree structure, the visual impact is significantly reduced for the surrounding visual receptors and when compared with the lattice structure which cannot be disguised as a tree, the preferred design for the project area will most definitely be the monopole structure (disguised as a tree).</p>
2	Alternative 1	N/A
3	Alternative 2	N/A
	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**)

Alternatives:

Alternative 1 (if any)

Alternative 2 (if any)

Size of the activity:

54m²

N/A

N/A

Ha/ m²

or, for linear activities:

Proposed activity

Length of the activity:

	N/A
--	-----

Alternatives:

Alternative 1 (if any)

	N/A
--	-----

Alternative 2 (if any)

	N/A
--	-----

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:

	N/A
--	-----

Alternatives:

Alternative 1 (if any)

	N/A
--	-----

Alternative 2 (if any)

	N/A
--	-----

Ha/m²

5. SITE ACCESS

Proposal

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

YES	NO
m	

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

Describe the type of access road planned:

--

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

Alternative 1

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

YES	NO
m	

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

Describe the type of access road planned:

--

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

Alternative 2

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

YES	NO
m	

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

Describe the type of access road planned:

--

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

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

Section A 6-8 has been duplicated

0

Number of times

(only complete when applicable)

6. LAYOUT OR ROUTE PLAN

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

- the layout plan is printed in colour and is overlaid with a sensitivity map (if applicable);
- layout plan is of acceptable paper size and scale, e.g.
 - A4 size for activities with development footprint of 10sqm to 5 hectares;
 - A3 size for activities with development footprint of > 5 hectares to 20 hectares;
 - A2 size for activities with development footprint of >20 hectares to 50 hectares);
 - A1 size for activities with development footprint of >50 hectares);
- The following should serve as a guide for scale issues on the layout plan:
 - A0 = 1: 500
 - A1 = 1: 1000
 - A2 = 1: 2000
 - A3 = 1: 4000
 - A4 = 1: 8000 (±10 000)
- shapefiles of the activity must be included in the electronic submission on the CD's;
- the property boundaries and Surveyor General numbers of all the properties within 50m of the site;
- the exact position of each element of the activity as well as any other structures on the site;
- the position of services, including electricity supply cables (indicate above or underground), water supply pipelines, boreholes, sewage pipelines, septic tanks, storm water infrastructure;
- servitudes indicating the purpose of the servitude;

- sensitive environmental elements on and within 100m of the site or sites (including the relevant buffers as prescribed by the competent authority) including (but not limited thereto):
 - Rivers and wetlands;
 - the 1:100 and 1:50 year flood line;
 - ridges;
 - cultural and historical features;
 - areas with indigenous vegetation (even if it is degraded or infested with alien species);
- Where a watercourse is located on the site at least one cross section of the water course must be included (to allow the position of the relevant buffer from the bank to be clearly indicated)

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

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

7. SITE PHOTOGRAPHS

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

8. FACILITY ILLUSTRATION

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

SECTION B: DESCRIPTION OF RECEIVING ENVIRONMENT

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

Instructions for completion of Section B for linear activities

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

Section B has been duplicated for sections of the route times

Instructions for completion of Section B for location/route alternatives

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

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

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

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

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

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

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

1. PROPERTY DESCRIPTION

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

Holding 9 of Chancliff Agricultural Holdings, Krugersdorp, Mogale City Local Municipality in the Gauteng Province

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° 4' 1.00"S	27° 47' 51.00"E

In the case of linear activities:

Alternative:

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

The 21 digit Surveyor General code of each cadastral land parcel

PROPOSAL																				
ALT. 1																				
ALT. 2																				
etc.																				

3. GRADIENT OF THE SITE

Indicate the general gradient of the site.

Flat	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5
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4. LOCATION IN LANDSCAPE

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

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

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

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

(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) YES 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) YES 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) YES 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)? YES NO

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

7. GROUNDCOVER

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

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

Natural veld - good	Natural veld with	Natural veld with	Veld dominated by	Landscaped
---------------------	-------------------	-------------------	-------------------	------------

condition % =	scattered aliens % =	heavy alien infestation % =	alien species % =	(vegetation) % =90
Sport field % =	Cultivated land % =	Paved surface (hard landscaping) % =10	Building or other structure % =	Bare soil % =

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

YES	NO
-----	----

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
-----	----

If YES, specify and explain:

N/A

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

YES	NO
-----	----

If YES, specify and explain:

N/A

Was a specialist consulted to assist with completing this section

YES	NO
-----	----

If yes complete specialist details

Name of the specialist:

--

Qualification(s) of the specialist:

--

Postal address:

--

Postal code:

--

Telephone:

--

Cell:

--

E-mail:

--

Fax:

--

Are any further specialist studies recommended by the specialist?

YES	NO
-----	----

If YES, specify:

--

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

YES	NO
-----	----

If YES list the specialist reports attached below

N/A

Signature of specialist: _____

Date: _____

--

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

According to the Gauteng Conservation Plan Version 3.3, the project area is located within a Critically Endangered Eco-System (bird species). Please refer to Figure 3 below.

Although it is noted that the project is located within a Critically Endangered Eco-System, the mast is proposed within an area which has already been completely transformed and therefore no habitat will be disturbed for the construction of the telecommunication mast. The structure proposed for the mast is a monopole tree structure which not only has a more aesthetic appearance, but also more environmentally friendly as it could provide habitat for birds and other animal species. Due to the already transformed nature of the affected site as well as surrounding area, the impact on the ecosystem was found to be very low and therefore no specialist assessment was undertaken to provide input as to the ecological sensitivity of the project site and the impact on the ecological environment.

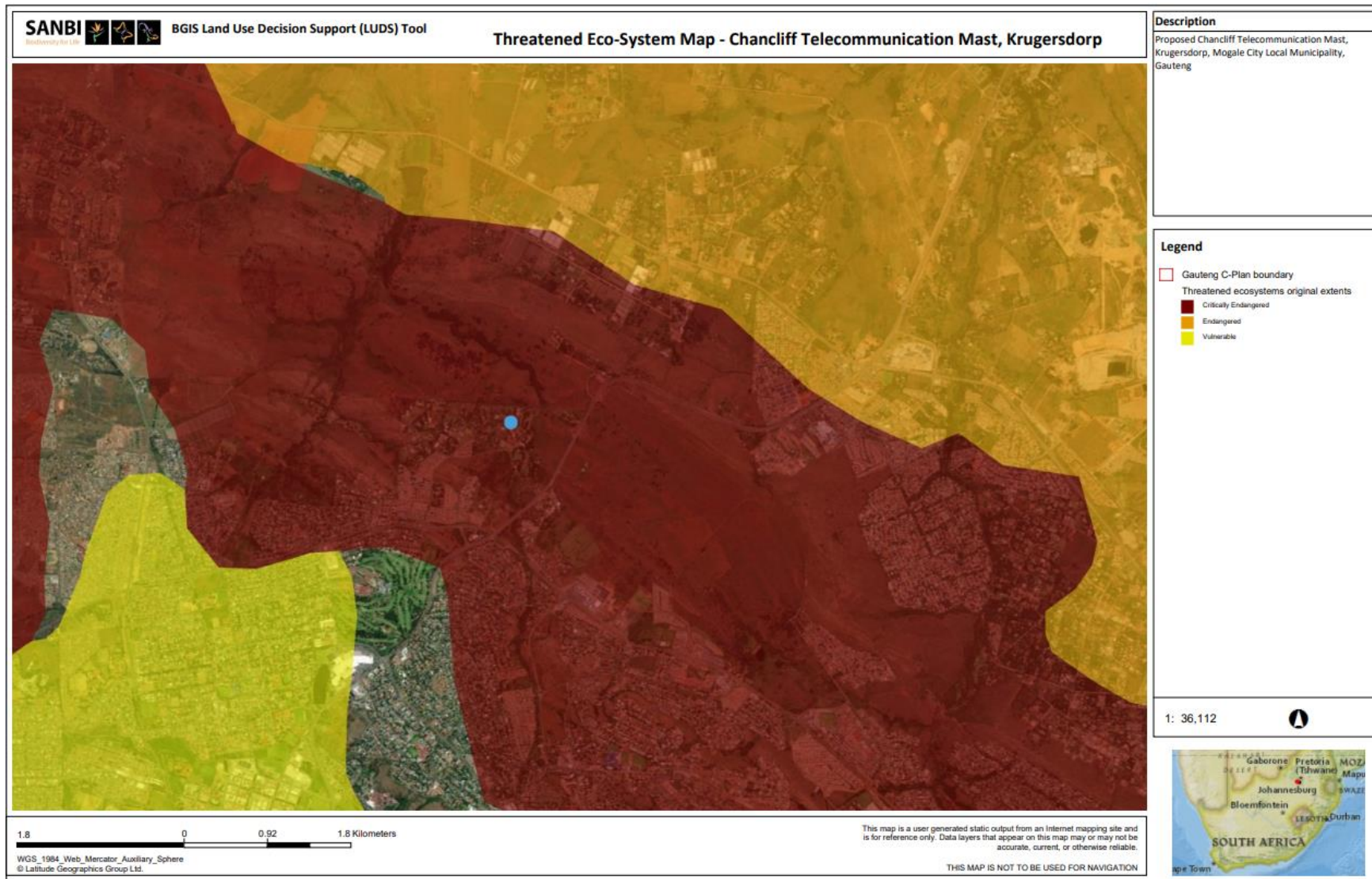


Figure 3: Threatened Eco-System Map of the project area proposed for the Chancliff Telecommunication Mast, Krugersdorp, Gauteng

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						
	34	34	1	1	2	
	34	34	13	34	2	
WEST	34	34	SITE	34	2	EAST
	34	34	34	34	2	
	34	34	34	34	2	
SOUTH						

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

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

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

YES	NO
-----	----

N/A

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.

SOCIO-ECONOMIC ENVIRONMENT

According to Stats SA, population estimates of 2011 census, Mogale City Local Municipality (MCLM) is ranked 17th by population size. According to Figure 4 below, MCLM total population was estimated to be 434 188 in 2022.

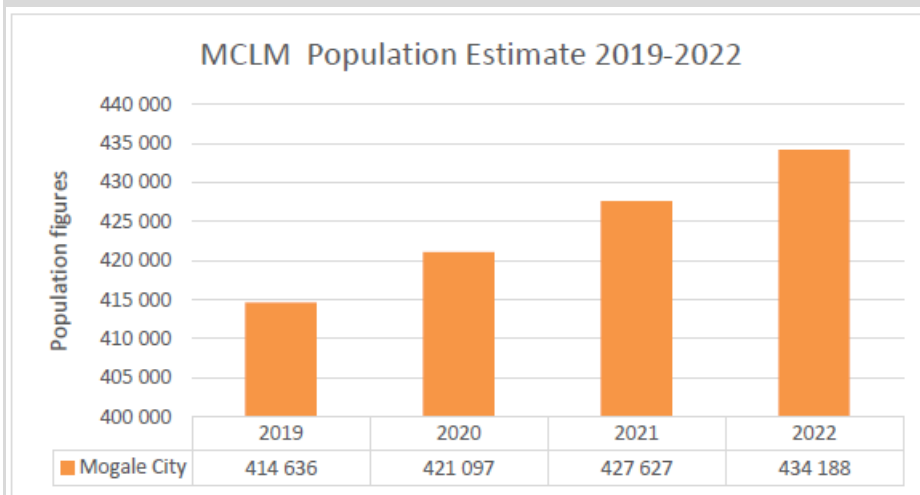


FIGURE 4: MCLM POPULATION STATISTICS (2019 – 2022)

There are three (3 economic sectors which are, primary, secondary and tertiary sectors). The primary sector includes agriculture and mining related industries, secondary sector includes industrial processing and manufacturing. Tertiary sector includes trade services sectors, banking, IT and other community services sector like government. The Integrated Development Plan for MCLM, 2022/23, noted that there has been a steep decline in these economic sectors and further downward trajectory is expected, especially in the mining sector.

According to the IDP, 94% of households within the MCLM have access to piped water, electricity, sanitation and refuse removal and plans are currently being drafted to provide services to the areas which are not serviced.

The MCLM Spatial Development Framework (SDF 2022) highlights a long-term spatial vision of a Mogale City that is inclusive, cohesive, resilient, and transformative which provides high quality of services within a spatially efficient environment, and thus delivering shared prosperity, hospitality, beauty, and security and sense of place. The SDF is 5-year plan from 2022 to 2027. In order to give effect to the above Spatial Development Vision of MCLM, the following spatial development objectives and strategies were formulated to anchor the MCLM Spatial Development Framework 2022:

- Liveability and Sense of Place;
- Nodal Development;
- Economic opportunity;
- Accessibility and connectivity;
- Densification and growth management;
- Environmental protection and resource management.

In summary, it is noted that Krugersdorp is regarded as the primary node for the MCLM and that the municipality is currently facing various challenges of which employment opportunities, economic development and delivering basic services to rural communities are noted.

The construction of the telecommunication mast will however assist the MCLM in attempting to reach their objectives stated above as the new telecommunication mast will improve connectivity within the surrounding area.

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?

YES	NO
-----	----

If YES, explain:

N/A

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:

N/A

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)?

YES	NO
YES	NO

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

SECTION C: PUBLIC PARTICIPATION (SECTION 41)

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

2. LOCAL AUTHORITY PARTICIPATION

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

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

YES NO

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

YES NO

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

No comments have yet been received as the Draft BA Report is currently within the review period. All comments received will be incorporated into the Final BA Report to be submitted to the GDARD for consideration.

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

As above

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?

YES NO

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

N/A

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

No comments have yet been received as the Draft BA Report is currently within the review period. All comments received will be incorporated into the Final BA Report to be submitted to the GDARD for consideration.

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

All Public Participation information and documentation is attached as Appendix C.

SECTION D: RESOURCE USE AND PROCESS DETAILS

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

Instructions for completion of Section D for alternatives

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

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

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

1. WASTE, EFFLUENT, AND EMISSION MANAGEMENT

Solid waste management

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

YES	NO
10m ³	

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

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

Anticipated construction solid waste to be produced includes building rubble, packaging material, overburden material and general litter from construction staff. It is recommended that construction waste/rubble will be collected and stored temporarily in designated containers for the different waste types, and thereafter disposed of at the nearest appropriate licenced waste disposal site.

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

Construction solid waste will be disposed of at an appropriate licenced landfill site.

Will the activity produce solid waste during its operational phase?

YES	NO
m ³	

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

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

N/A

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

YES	NO
-----	----

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

N/A

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?

YES	NO
-----	----

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

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

YES	NO
-----	----

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

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

N/A as the activity will not produce any waste during operation

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?

YES	NO
-----	----

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

N/A m ³	
--------------------	--

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

YES	NO
-----	----

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

Yes	NO
-----	----

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

N/A m ³	
--------------------	--

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?

YES	NO
-----	----

If yes, provide the particulars of the facility:

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

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

N/A

Liquid effluent (domestic sewage)

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

YES	NO
-----	----

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

N/A m ³	
--------------------	--

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

YES	NO
-----	----

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

YES	NO
-----	----

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

N/A

Emissions into the atmosphere

Will the activity release emissions into the atmosphere?

YES	NO
-----	----

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

YES	NO
-----	----

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

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

The only emissions to be emitted could possibly be dust during the construction phase of the project.

2. WATER USE

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

municipal	Directly from water board	groundwater	river, stream, dam or lake	other	the activity will not use water
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Water to be used is limited to construction only. The mast will mostly be assembled and therefore limited water is to be used.

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:

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?

YES	NO
-----	----

If yes, list the permits required

N/A

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

YES	NO
-----	----

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

YES	NO
-----	----

3. POWER SUPPLY

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

Electricity will be sourced from the landowner and a meter will be installed in order for the landowner to be compensated for the electricity consumed.

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:

Electricity requirement for the tower is minimal.

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

None

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.

Notification Phase

No issues were raised by I&APs during the Notification Phase of the project.

Draft BAR Review Phase

The Draft BAR is now being made available to all Stakeholders and I&AP's for review. Once the review period has lapsed, all comments will be included within the Final BAR to be submitted to GDARD for consideration.

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):

No comments have yet been received

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

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

METHODOLOGY FOR ASSESSING IMPACTS

For each impact, the EXTENT (spatial scale), MAGNITUDE and DURATION (time scale) would be described, as shown below. These criteria are then used to determine the SIGNIFICANCE of the impact, firstly in the case of no mitigation and then with the most effective mitigation measure(s) in place. The mitigation described in the Report represents the full range of plausible and pragmatic measures but does not necessarily imply that they would be implemented.

The following tables show the scale used to assess these variables and defines each of the rating categories.

ASSESSMENT CRITERIA FOR THE EVALUATION OF IMPACTS

Criteria	Category	Description
Extent or spatial influence of impact	Regional	Beyond a 30km radius of the candidate site.
	Local	Within a 30km radius of the candidate site.
	Site-specific	On site or within 100 m of the candidate site.
Magnitude of impact (at the indicated spatial scale)	High	Natural and/ or social functions and/ or processes are <i>severely</i> altered
	Medium	Natural and/ or social functions and/ or processes are <i>notably</i> altered
	Low	Natural and/ or social functions and/ or processes are <i>slightly</i> altered
	Very low	Natural and/ or social functions and/ or processes are <i>negligibly</i> altered
	Zero	Natural and/ or social functions and/ or processes remain <i>unaltered</i>
Duration of impact	Long-term	More than 10 years after construction
	Medium-term	Up to 5 years after construction

The SIGNIFICANCE of an impact is derived by taking into account magnitude, duration and extent of each impact. The criteria employed in arriving at the different significance ratings is shown in the table below.

DEFINITION OF SIGNIFICANCE RATINGS

Significance ratings	Level of criteria required
High	<ul style="list-style-type: none"> High magnitude with a regional extent and long-term duration High magnitude with either a regional extent and medium-term duration or a local extent and long-term duration Medium magnitude with a regional extent and long-term duration
Medium	<ul style="list-style-type: none"> High magnitude with a local extent and medium-term duration High magnitude with a regional extent and construction period or a site-specific extent and long-term duration High magnitude with either a local extent and construction period duration or a site-specific extent and medium-term duration Medium magnitude with any combination of extent and duration except site specific and construction period or regional and long term Low magnitude with a regional extent and long-term duration
Low	<ul style="list-style-type: none"> High magnitude with a site-specific extent and construction period duration Medium magnitude with a site-specific extent and construction period duration Low magnitude with any combination of extent and duration except site specific and construction period or regional and long term Very low magnitude with a regional extent and long-term duration
Very low	<ul style="list-style-type: none"> Low magnitude with a site-specific extent and construction period duration Very low magnitude with any combination of extent and duration except regional and long term
Neutral	<ul style="list-style-type: none"> Zero magnitude with any combination of extent and duration

Once the significance of an impact has been determined, the **PROBABILITY** and **CONFIDENCE** of this impact are determined using the rating systems outlined below. The significance of an impact should always be considered in concert with the probability of that impact occurring.

DEFINITION OF PROBABILITY RATINGS

Probability ratings	Criteria
Definite	Estimated greater than 95 % chance of the impact occurring.
Probable	Estimated 5 to 95 % chance of the impact occurring.
Unlikely	Estimated less than 5 % chance of the impact occurring.

DEFINITION OF CONFIDENCE RATINGS

Confidence ratings	Criteria
Certain	Wealth of information on and sound understanding of the environmental factors potentially influencing the impact.
Sure	Reasonable amount of useful information on and relatively sound understanding of the environmental factors potentially influencing the impact.
Unsure	Limited useful information on and understanding of the environmental factors potentially influencing this impact.

Lastly, the **REVERSIBILITY** of the impact is estimated using the rating system indicated below.

DEFINITION OF REVERSIBILITY RATINGS

Reversibility ratings	Criteria
Irreversible	The activity will lead to an impact that is in all practical terms permanent.
Reversible	The impact is reversible within 2 years after the cause of the impact is removed.

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.

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
<p>Flora and Fauna (Biodiversity)</p> <p>The affected footprint of the site will be restricted to 64m² within an area which has already been transformed and landscaped.</p> <p>The loss of fauna and flora is therefore restricted to landscaped garden and due to the small footprint the magnitude of the impact is very low during the construction phase of the development.</p> <p>During development, the impact on the biodiversity is mainly restricted to the spreading of alien invasive plant species.</p> <p>The construction activities are however of short term and the impact is site specific. For this reason, the impact on fauna and flora during the construction phase of the development is rated as insignificant.</p>	<p>Magnitude / Intensity of the impact = Very Low;</p> <p>Extent / Location = Site Specific;</p> <p>Duration = Short-term;</p> <p>Probability = Probable;</p> <p>Significance = Very Low.</p>	<ul style="list-style-type: none"> ▪ The contractor should stick to the recommendations by the consultant detailed in the attached EMPr. ▪ Vegetation removal should be restricted to the recommended development layout footprint. ▪ The management and removal of alien invasive plant species requires continuous attention and the applicant should ensure the implementation of an alien invasive management plan. 	Very Low	<ul style="list-style-type: none"> ▪ Spreading of alien invasive species
<p>Visual Impact</p> <p>During the construction phase of the project, the site might become very untidy.</p> <p>The proposed site will be visible to the adjacent homestead located on the property and therefore an untidy construction site could negatively impact the visual receptors.</p> <p>The impact is of medium magnitude, short term duration and site-specific extent and for this reason the impact is regarded to be of low significance during the construction phase of the development.</p>	<p>Magnitude / Intensity of the impact = Medium;</p> <p>Extent / Location = Site Specific;</p> <p>Duration = Short-term;</p> <p>Probability = Probable;</p> <p>Significance = Low.</p>	<ul style="list-style-type: none"> ▪ The contractor must ensure that the site is tidy during the life of construction and no waste may be visible to residents or motorists passing by. ▪ The project area should be screened by shade cloth if necessary; <p>Ensure that specific areas are dedicated for the storage of material and waste</p>	Very Low	<p>The site will be untidy, causing the area to be visually unattractive.</p>
<p>Noise Pollution</p>	<p>Magnitude / Intensity of the</p>	<ul style="list-style-type: none"> ▪ Construction vehicles and 	Very Low	<ul style="list-style-type: none"> ▪ Nuisance to landowners,

<p>Current noise levels of the area are typical of residential areas and noise sources are mainly traffic and residential activities.</p> <p>It is however noted that an office is being operated at the premises where the mast is proposed and therefore there are sensitive noise receptors within a close proximity to the project site.</p> <p>Noise to be generated during construction would mainly arise from heavy moving vehicles and the construction crew, however, it is not expected that the impact would result to social functions being severely altered and for this reason the impact is of medium magnitude. Due to the short duration of the impact and the impact being site-specific of nature, the impact is regarded to be of low significance prior to the implementation of mitigation measures.</p>	<p>impact = Medium; Extent / Location = Site-Specific; Duration = Short-term; Probability = Probable; Significance = Low.</p>	<p>equipment should be serviced regularly and be kept in good working condition at all times to prevent them from making high pitched roaring sounds.</p> <ul style="list-style-type: none"> ▪ Construction activities must be restricted to specific timeframes of 7:00 till 17:00. ▪ If it is necessary for any construction activities to be conducted after working hours, neighbours should be notified and permission granted. ▪ Adherence to mitigation measures stipulated in the EMPr for noise control during construction and operational phases. 		<p>occupiers and neighboring property owners.</p> <p>Litigations from neighboring property owners due to excessive noise.</p>
<p>Dust Pollution</p> <p>Dust pollution will be at its highest during the construction phase. Excavated soil left bare during site clearance could result to the generation of dust during windy conditions.</p> <p>Due to the proximity of the adjacent receptors, the magnitude of the impact is medium, however, as the site is restricted to 64m², the impact is minimized. The construction phase will be of short duration and therefore the impact is regarded to be of low significance.</p>	<p>Magnitude / Intensity of the impact = Medium; Extent / Location = Site-Specific; Duration = Short-term; Probability = Probable; Significance = Low.</p>	<ul style="list-style-type: none"> ▪ Clearance of vegetation must be restricted to the footprint of the site and should not be left unattended for prolonged periods; 	<p>Very Low</p>	<ul style="list-style-type: none"> ▪ Nuisance to neighboring property owners. <p>Litigations from neighboring property owners due to excessive dust.</p>
<p>Impact on Geology and Soils</p> <p>The proposed project will have a potential to encourage avenues for erosion along the footprint of the site during the construction phase. Disturbance of soil during excavation may cause instability which will result in soil erosion through wind</p>	<p>Magnitude / Intensity of the impact = Low; Extent / Location = Site-specific; Duration = Short-term;</p>	<ul style="list-style-type: none"> ▪ It is imperative that areas prone to erosion must be stabilised by means of temporary erosion protection structures. ▪ All machinery must be kept in a good working order and 	<p>Very Low</p>	<ul style="list-style-type: none"> ▪ Soil erosion. ▪ Contaminated soil.

<p>and surface water run-off. The use of machinery and equipment on site could also result in oil spills and other hazardous spills if machinery is not serviced regularly or in an optimal working condition.</p> <p>As the topography of the site is flat, and the construction project is small, the magnitude of the impact is low. The short-duration and site-specific extent of the impact further reduces the impact to be of very low significance.</p>	<p>Probability = Probable; Significance = Very Low.</p>	<p>serviced regularly to avoid any oil spills.</p> <ul style="list-style-type: none"> ▪ Drip trays must be placed underneath all standing construction equipment to prevent oil from possibly polluting the soil. ▪ Stipulations of the Environmental Management Program (EMPr) should be adhered to during the construction and operation phases respectively. 		
<p>Generation of waste</p> <p>During construction, domestic and construction waste will be generated, temporarily stored and will need to be disposed of in accordance with the National Environmental Management Waste Act 59 of 2008. The improper storage and disposal of construction and other domestic waste will have a significant impact on the surrounding environment.</p> <p>As for sanitation, temporary toilet facilities and potable water will also have to be provided to the construction crew.</p> <p>Although the construction period is short lived, improper sanitation as well as the storage and disposal of waste will alter natural and social conditions and for this reason the impact is of medium magnitude prior to the implementation of mitigation measures.</p> <p>As the waste would have to be transported off site, the impact is of local extent and not restricted to the site. For this reason, the impact is of medium significance prior to the implementation of mitigation measures.</p>	<p>Magnitude / Intensity of the impact = Medium; Extent / Location = Local; Duration = Short-term; Probability = Probable; Significance = Medium.</p>	<ul style="list-style-type: none"> ▪ The site must be kept tidy at all times, sufficient refuse bins must be provided for the construction crew, and they must be emptied regularly. ▪ Refuse or building rubble generated on the premises must not be deposited on adjacent properties, road verges or open spaces. It must be contained on site, then removed and disposed of at an approved dumping site at least every two weeks. ▪ Temporary sanitation facilities at a ratio of 1:10 must be provided for the construction crew. ▪ Construction crew must be provided with potable water for the duration of the construction period. 	<p>Low</p>	<ul style="list-style-type: none"> ▪ Visual eyesore; ▪ Pollution of the surrounding environment; ▪ Indiscriminate excretion and urinating within a public area.

		<ul style="list-style-type: none"> ▪ In order to lessen this impact, all materials must be centralized, and excavations and spoil materials must not be left unattended. ▪ Good housekeeping practices must be implemented, and daily litter patrol undertaken to ensure that there is no littering on the construction site. ▪ Hazardous waste must be stored and disposed of separately and a third-party contractor must be appointed to remove hazardous waste from the construction site; 		
<p>Health and Safety Construction activities could lead to injuries to staff or the public. These activities include the movement of construction vehicles to and from the site, handling of large equipment and material, and movement of private vehicles to and from the site.</p> <p>As the project involves the assembling of large structures up to a height of 36m, the magnitude of the impact is high. Due to the short construction timeframe and site-specific extent, the impact is however minimized to be of medium significance prior to the implementation of mitigation measures.</p>	<p>Magnitude / Intensity of the impact = High; Extent / Location = Site-Specific; Duration = Short-term; Probability = Probable; Significance = Medium.</p>	<ul style="list-style-type: none"> ▪ All necessary signage and traffic measures must be implemented for safe movement of vehicles to and from the proposed development site. ▪ The site crew are to be managed in strict accordance with the Occupational Health and Safety Act, 1993 (Act No.85 of 1993) and the National Building Regulations. ▪ Ensure that the handling of equipment and materials is supervised, and adequately instructed and adequate facilities must be available on 	Low	Injuries.

		site for the emergency treatment of staff and members of the public.		
<p>Socio-Economic</p> <p>During construction of the cellular mast, various job opportunities will be created, and local suppliers would benefit indirectly from the activities.</p> <p>Due to the size of the construction project, the number of employees required for the project is limited and therefore the positive impact is reduced to be of medium magnitude. The project is also short lived during the construction phase and therefore the impact is considered to be of low (positive) significance during construction.</p>	<p>Magnitude / Intensity of the impact = Medium (+);</p> <p>Extent / Location = Local;</p> <p>Duration = Short-term;</p> <p>Probability = Probable;</p> <p>Significance = Low (+).</p>	<ul style="list-style-type: none"> It must be ensured that the contractor adheres to the Basic Conditions of Employment Act 75 of 1997. Local labour must receive preference if additional resource opportunities are required. 	Low (+)	Social unrest
ASSESSMENT OF IMPACTS DURING OPERATION OF THE TELECOMMUNICATION TOWER				
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
<p>Flora and Fauna (Biodiversity)</p> <p>The proposed telecommunication mast is 36m in height and proposed as a monopole tree structure which would blend in with the surrounding environment.</p> <p>In terms of the location proposed for the telecommunication mast, the area is regarded as a threatened ecosystem (bird species). It is however not expected that the proposed monopole tree structure would have any negative impact on bird species as the tree structure have been found to not only minimise the visual impact, but also provide habitat for birds.</p> <p>Taking cognisance of the threatened ecosystem, the magnitude of the impact is rated to be medium, however, the project area as well as surrounding area have already been completely transformed and therefore the probability of the</p>	<p>Magnitude / Intensity of the impact = Medium;</p> <p>Extent / Location = Site Specific;</p> <p>Duration = Long-term;</p> <p>Probability = Unlikely;</p> <p>Significance = Low.</p>	<ul style="list-style-type: none"> Maintenance of the mast must be undertaken on a continuous basis and it must be ensured that there are no open (live) wires which could result to electrification of bird species. 	Low	<ul style="list-style-type: none"> Loss of bird and animal species

<p>structure having an impact on the biodiversity, is unlikely. The impact is however of long-term duration, but site-specific and therefore the impact is rated to be of low significance prior to the implantation of mitigation measures.</p>				
<p>Visual Impact</p> <p>The area proposed for the telecommunication mast is located within a semi-urban area (agricultural holdings) within Krugersdorp.</p> <p>The mast is proposed as a monopole tree structure to minimise the visual impact on the surrounding environment. Due to the character of the surrounding receiving environment, as well as the structure proposed for the telecommunication mast, the magnitude of the impact is already reduced to be of low magnitude. The impact is however of long-term duration and local extent and therefore rated to be of low significance.</p>	<p>Magnitude / Intensity of the impact = Low; Extent / Location = Local; Duration = Long-term; Probability = Definite; Significance = Low.</p>	<p>It must be ensured that the design to be constructed is the monopole tree structure.</p>	<p>Low</p>	<p>Should another design be erected, the visual impact would be of high significance and the mast would be visually intrusive.</p>
<p>Socio-Economic</p> <p>Businesses and surrounding land users and community members depend on a network infrastructure for all aspects of daily operation and on a personal level, better connectivity enabled family and friends from all over the world to connect by means of the latest technology.</p> <p>During the operation of the cellular mast, residents of surrounding area will enjoy better network connectivity which will have a positive impact on their social and economic environment. The impact is therefore of high (+) significance.</p>	<p>Magnitude / Intensity of the impact = High (+); Extent / Location = Local; Duration = Long-term; Probability = Definite; Significance = High (+).</p>	<p>Regular maintenance must be undertaken to ensure uninterrupted connectivity</p>	<p>High (-)</p>	<p>No connectivity to limited connectivity for the surrounding landowners and community members.</p>

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
N/A	N/A	N/A	N/A	N/A
<p>The no-go option would mean that the status quo would remain. Environmental impacts would not be impacted on any further than the current situation. No further development would occur on the site. This would also entail that connectivity within the project area would not improve. The no-go option will therefore not promote a positive impact in terms of socio-economic benefits. The environmental impacts associated with the proposed development can be mitigated and can be effectively managed with the implementation of effective measures as discussed in the EMP.</p>				

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

N/A

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

N/A

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.

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
Considering the nature of the project, it is unlikely that it will be decommissioned in the foreseeable future. The infrastructure may however require maintenance and repairs during the life of its operation, whereby the similar impacts might be experienced as during construction phase of the project. Should the infrastructure need maintenance or repairs, the mitigation and management measures provided for during the construction phase will be implemented. However, should there be plans to decommission the telecommunication mast, a Decommissioning and Closure Plan will be submitted to the Competent Authority for approval, and it will comply with the relevant legislation at the time of closure.				

Alternative 1 (N/A)

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 (N/A)

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.

N/A

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

N/A

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 telecommunication mast is proposed in an urban area of which the proposed site has already been transformed. There are no other known activities proposed within the immediate surroundings of the proposed site and for this reason, it is not believed that the activity proposed would result to any cumulative impacts.

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

IMPACT	MAGNITUDE	EXTENT	DURATION	SIGNIFICANCE BEFORE MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION MEASURES
Construction Impacts					
Biodiversity Impact	Very Low	Site-Specific	Short-term	Very Low	Very Low
Visual Impact	Medium	Site-Specific	Short-term	Low	Very Low
Generation of dust	Medium	Site-Specific	Short-term	Low	Very Low
Geology and Soils	Low	Site-Specific	Short-term	Very Low	Very Low
Noise generation	Medium	Site-Specific	Short-term	Low	Very Low
Waste generation	Medium	Local	Short-term	Medium	Low
Socio-economic	Medium	Local	Short-term	Low (+)	Low (+)
Health and Safety	High	Site-Specific	Short-term	Medium	Low
Operational Phase Impacts					
Visual Impact	Low	Local	Long-term	Low	Low
Socio-economic	High(+)	Local	Long-term	High (+)	High (+)

Alternative 1

N/A

Alternative 2

N/A

No-go (compulsory)

The no-go option would mean that the status quo would remain and that no telecommunication tower will be constructed to improve the connectivity within the project area. The no-go option will not promote a positive impact in terms of socio-economic benefits for the surrounding community, as connectivity would be restricted.

The environmental impacts associated with the proposed development can be mitigated and can effectively be managed with the implementation of effective measures as discussed in the EMPr.

6. IMPACT SUMMARY OF THE PROPOSAL OR PREFERRED ALTERNATIVE

For proposal:

The following is a list of anticipated impacts for the proposal:

- Impact on Flora and Fauna.
- Visual Impact.
- Noise Pollution.
- Dust Pollution Impact.
- Impact on Geology and Soils (Erosion and soil contamination)
- Generation of waste
- Impact on Health and Safety.
- Social and Economic Impact.

For alternative:

N/A

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.

Through the basic assessment investigation, there were no areas of environmental sensitivity identified on or close to the development property. All impacts can effectively be mitigated to be of low or very low significance on condition that the mitigation measures drafted within the Environmental Management Plan are implemented.

7. SPATIAL DEVELOPMENT TOOLS

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

The Gauteng Spatial Development Framework (GSDF) is used as a tool for forward planning to direct decisions within the domain of land development. The approval of the GSDF in terms of the Local Government Municipal Systems Act (Act No. 32 of 2000) implies that the GSDF has statutory status as the lone spatial planning instrument in the province, and as such should be considered the primary frame of reference to which the PGDS, IDPs and SDFs should be aligned with. In broad terms, the GSDF:

- Indicates the spatial implications of the core development objectives outlined in the PGDS;
- Serves as a spatial plan that facilitates local economic development (LED);
- Lays down strategies, proposals and guidelines as these relate to overall sustainable development;
- Facilitates cross-boundary co-operation between municipalities and provinces;
- Serves as a manual for integration and standardisation of the planning frameworks across all spheres of provincial government; and
- Informs the Mogale City Local Municipality's Spatial Development Framework with specific regards to the location and nature of the physical development.

The proposed project falls within an urban area (on the outskirts of Krugersdorp, known as the Chancliff Agricultural Holding). The SDF is 5-year plan from 2022 to 2027. In order to give effect to the Spatial Development Vision of MCLM, the following spatial development objectives and strategies were formulated to anchor the MCLM Spatial Development Framework 2022:

- Liveability and Sense of Place;
- Nodal Development;
- Economic opportunity;
- Accessibility and connectivity;
- Densification and growth management;
- Environmental protection and resource management.

The construction of the telecommunication mast will therefore assist the MCLM in attempting to reach their objectives stated above as the new telecommunication mast will improve connectivity within the surrounding area.

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	NO
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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:

The essence of all environmental assessment processes is aimed at ensuring informed decision-making and environmental accountability. Furthermore, it assists in achieving environmentally sound and sustainable development. The impact assessment for this project has been undertaken in line with the requirements prescribed in the NEMA regulations.

The assessment of the possible impacts associated with the construction, operation and decommissioning activities concluded that the impact on the surrounding environment is of low to very low significance. Recommendations have however been made to address the impacts which could affect the biophysical and socio-economic environment. These recommendations were included within the impact assessment above and also the Draft Environmental Management Plan attached.

The aspects which must be mostly considered during the construction phase includes the following:

- Ensure that specific areas are dedicated for the storage of material and waste;
- Construction vehicles and equipment should be serviced regularly and be kept in good working condition at all times to prevent them from making high pitched roaring sounds;
- Construction activities must be restricted to specific timeframes of 7:00 till 17:00;
- Refuse or building rubble generated on the premises must not be deposited on adjacent properties, road verges or open spaces. It must be contained on site, then removed and disposed of at an approved dumping site at least every two weeks.
- Temporary sanitation facilities at a ratio of 1:10 must be provided for the construction crew;
- The site crew are to be managed in strict accordance with the Occupational Health and Safety Act, 1993 (Act No.85 of 1993) and the National Building Regulations.

It is the opinion of the EAP that the EA for this project should be granted, and the proposed mitigation included as the conditions of the authorisation.

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

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NEED OF THE DEVELOPMENT

Cellular phones have become an important part of the South African way of life and fulfil an important role in our daily lives in terms personal and business activities. Cellular masts are however required and must be placed at optimal locations for cell phones to have signal and be operational. From communications with the farm owner it was noted that cellular signal is very limited and that it is currently a huge safety concern as this aspect isolates farmers from each other when there is an emergency. The benefits that the activity will have for society in general are:

- Better cell phone network or signal coverage
- Socio-economic development; and
- Improved medical response in case of an emergency.

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

The Environmental Authorization is required for the construction of the telecommunication mast and therefore it is requested that the construction of the mast be undertaken within a 5-year period from the date of the EA issued.

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.