



AREA: <u>BUSHBUCKRIDGE</u>	PROJECT NUMBER:
FEEDER:	ITEM OF:
SUPPLY TO: <u>SIBAMBAYANE & DEMULANI ELECTRIFICATION</u>	
ESKOM REPRESENTATIVE: <u>S. NTOZINI</u>	TEL: <u>084 424 1766</u>
*DISTRIBUTION/*TRANSMISSION	FAX:

**WAYLEAVE CONTRACT
POWERLINE AND/OR CABLE AND ASSOCIATED INFRASTRUCTURE**

1. GENERAL

1.1 Identification of parties:

1.1.1 Contractor means any entity appointed as an independent contractor to execute works on the Property in the exercise of the Rights.

1.1.2 Eskom means Eskom Holdings SOC Ltd, a public company with registration number 2002/015527/30 with its head office at Megawatt Park, 2 Maxwell Drive, Sunninghill, Sandton.

1.1.3 Lessee means the holder of a lease registered against the title deed of the Property and is
 , a company / close corporation / trust / partnership / natural person / Government department / tribal authority of
 , herein represented by who through signature here below, warrants his or her authority to sign on behalf of the Lessee.

1.1.4 Owner means AMASHANGANA a company / close corporation / trust / partnership / natural person / Government department / tribal authority of
 , herein represented by M.E. NKUMALO who through signature here below, warrants his or her authority to sign on behalf of the Owner.

1.1.5 Property means:
REM. NEWFOREST 234 - KU, REM. ORINOCO 233 - KU
AND REM. CHAMPAGNE 23 - KU
 T121790/2001 2993.5804 H
 held by virtue of Title Deed/s number/s T888/1965 extent 1943.4970 H
T 27243/1950 3341.2257 H

M.E

1.1.6 Usufructuary means ,
 a company / close corporation / trust / partnership / natural person /
 Government department / tribal authority of

 , herein represented by
 , who through signature here below, warrants his or her authority to sign on
 behalf of the Usufructuary.

2. THE RIGHTS

M.E

2.1 The Owner grants, generally, an irrevocable right (herein the "Rights"), in perpetuity and free of charge, to Eskom and over the Property, for the distribution and transmission of electricity and related purposes, substantially along the route indicated by letters ~~SEE SKETCH~~ on the attached sketch plan, comprising an area meters on either side of the centre line of the Goods, once they are built (the "Wayleave Area"), and the Rights include those set out in paragraph 2 hereof.

2.2 To the extent necessary to give effect hereto, the Owner's spouse, Lessee and/or Usufructuary agrees to the granting of the Rights by signing below.

2.3 The Rights, specifically, include the rights to:

2.3.1 convey electricity and telecommunication across the Property;

2.3.2 erect structures, conductors, cables, appliances and, without limitation, everything else as may be necessary or convenient in exercising the Rights (herein referred to as the "Goods") and the Owner agrees that structure-supporting mechanisms may reasonably extend beyond the Wayleave Area where it is necessary to safely secure the Goods;

2.3.3 enter and be upon the Property at any time in order to construct, erect, operate, use, maintain, repair, re-erect, alter or inspect the Goods or in order to gain access to any adjacent property in the exercise of rights similar to the Rights;

2.3.4 have these Goods remain on the Property for so long as either Eskom or the Owner requires them to;

2.3.5 extend the Goods to other customers, suppliers or contracting parties of Eskom, over the Property;

2.3.6 use existing roads and gates giving access to and running across the Property and to erect in any fence such gates as may be necessary or convenient to gain access to or exit from the Property and the Goods or in order to gain access to any adjacent property in the exercise of rights similar to the Rights;

2.3.7 remove any material or structures, and cut or trim any tree, bush or grass within the Wayleave Area or to the extent necessary where the Goods extends beyond the Wayleave Area, in order to comply with the restrictions referred to in paragraph 3.2 hereof;

2.3.8 every ancillary right necessary or convenient for the proper exercise of the Rights granted to Eskom; and

M.E

- 2.3.9 At Eskom's election, have this wayleave registered as a servitude against the title deed of the Property.
- 2.4 The Rights will apply to all electricity infrastructure on the Property and the area which such infrastructure covers will be deemed to be included in the Wayleave Area and/or Restricted Area. It is agreed that the Owner herewith grants permission for all electricity infrastructure on the Property to remain on the Property.
- 2.5 Any expenses to be incurred, which are necessitated by a change to or removal of the Goods in the Wayleave Area required by the Owner, are for the Owner's account and must be paid for by the Owner in advance. Eskom will effect such changes or removals after receipt of such payment, if such changes or removal are technically possible.
- 2.6 The Contractor may exercise any of the Rights.
- 2.7 Eskom may:
- 2.7.1 let any portion of the Goods to any third party on such conditions as Eskom may deem fit;
- 2.7.2 cede all or any of the Rights granted in terms of this Wayleave to any third party.

3. THE OBLIGATIONS

- 3.1 Eskom must:
- 3.1.1 ensure that any of Eskom's gates that it had used is closed after use;
- 3.1.2 pay reasonable compensation for intentional damage or damage caused through a negligent act or omission, caused by Eskom, its employees or agents in pursuit of the Rights, save where Eskom is acting in accordance with sub-clause 2.3.7 of this document; and
- 3.1.3 where a Contractor exercises the Rights, ensure that the Contractor complies with the obligations contained in this sub-clause 3.1.1.
- 3.2 The Owner must ensure that no:
- 3.2.1 building or structure is erected or installed above or below the surface of the ground within the Wayleave Area and no tree or bush is planted within the Wayleave Area or within ^{9M}..... metres from any structure-supporting mechanism (the "Restricted Area");
- 3.2.2 tree, which could grow to a height in excess of the horizontal distance of that tree from the nearest conductor of any power line is planted or allowed to continue growing, regardless if it is outside of the Wayleave or Restricted Area;
- 3.2.3 material which may in the opinion of Eskom endanger any electricity infrastructure is placed within the Wayleave or Restricted Area.

M.E

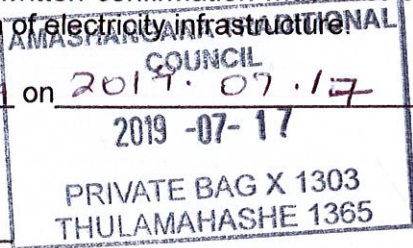
M.E

3.3 The Owner must bring the existence of this wayleave contract to the attention of any purchaser or other transferee of the Property (or of any portion of the Property) before the Property (or any portion thereof) is sold and/or transferred to such purchaser or transferee, or if the Owner grants any further rights in or to the Property to any other third party, to such third Party.

3.4 The Owner must inform Eskom in writing if it is going to sell the Property.

3.5 The Owner's attention is drawn to the provisions of section 10.17.1 of the regulations promulgated in terms of the Explosives Act 26 of 1956, which prescribes that when blasting is to be done within 500 (five hundred) metres of any electricity infrastructure, written confirmation must first be obtained from Eskom concerning the protection of electricity infrastructure.

Signed at AMASHANGANA on 2019-07-17



X M.E Nxumalo
The Owner

Witnesses:

1. _____

2. _____

Signed at _____ on _____

Spouse of the Owner if married in community of property

Witnesses:

1. _____

2. _____

Signed at _____ on _____.

The Usufructuary

Witnesses:

1. _____

2. _____

Signed at _____ on _____.

The Lessee

Witnesses:

1. _____

2. _____

Signed at _____ on _____.

Eskom Holdings SOC Limited

Witnesses:

1. _____

2. _____

RED LINE INDICATES PROPOSED POWERLINE ROUTE

REMAINDER CHAMPAGNE 23 KU

REMAINDER ORINOCO 233 KU

Orinoco

2012



Wayleave
Mpumalanga Operating Unit

Property description:

Disclaimer
Geographic information (satellite) are not responsible for any errors in external datasets displayed on this map.

Registered Owner: **THULAMAHASHE TRADITIONAL COUNCIL**

Eskom: _____
Witness: 1. _____
Witness: 2. _____

Witness: 1. _____
Witness: 2. **2019 -07- 17**

Project No: _____
Date: _____
Portion of map no: _____
Scale: **1:2 500**



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**PRIVATE BAG X 1303
THULAMAHASHE 1365**


RED LINE INDICATES PROPOSED POWERLINE ROUTE

REMAINDER OF NEWFOREST 234 KU

REMAINDER OF NEWFOREST 234 KU

Image © 2019 DigitalGlobe

AMAZONAS TRADITIONAL



Registered Owner: 87M.7

Witness: 1. BAG X 1303

Witness: 2. THULAMASHHE 1365

Wayleave
Mpumalanga Operating Unit

Eskom: _____

Witness: 1. _____

Witness: 2. _____

Property description: _____

Project No: _____

Date: _____

Portion of map no: _____

Scale: 1:2 500

Disclaimer
Geographic Information eMaplets
are not responsible for any errors
in external datasets displayed
on this map.



RED LINE INDICATES PROPOSED POWERLINE ROUTE

REMAINDER OF ORINOCO 233 KU

REMAINDER OF ORINOCO 233 KU

Image © 2019 DigitalGlobe

ESKOM
Distribution
Registered Owner: ORINOCO
Witness: 1. PRIVATE BAG X 1303
Witness: 2. WILHELMINA MAHASHE 1365

Wayleave
Mpumalanga Operating Unit

Property description: _____

Disclaimer
Geographic Information eMalahleni
are not responsible for any error
in external datasets displayed
on this map.

Eskom: _____
Witness: 1. _____
Witness: 2. _____

Project No: _____
Date: _____
Portion of map no: _____
Scale: 1:2 500



RED LINE INDICATES PROPOSED POWERLINE ROUTE

REMAINDER OF ORINOCO 233 KU

Orinoco

REMAINDER OF ORINOCO 233 KU

Image © 2019 DigitalGlobe



Wayleave

Property description:

Mpumalanga Operating Unit

AMASHANGANA TRADITIONAL COUNCIL

Registered Owner:

X M. COUNCIL

Eskom:

Project No: _____

Date: _____

Witness: 1.

2019-07-17

Witness: 1. _____

Portion of map no: _____

Witness: 2.

Witness: 2. _____

Scale: NOT TO SCALE

PRIVATE BAG X 1303

THULAMASHE 1365

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Geographic Information eMalaheni
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on this map.



Woods

Annex B - Distribution Environmental Screening Document (DESD)
(Informative)

Reticulation Powerlines and Ancillary Services

Ratified and accepted by
Environmental Practitioner
Environmental Specialist
Head of Engineering Survey

(one signature please)

Accepted by Land Owner/s/Users

Nxumalo m. E.

I have seen the completed document and accept the
recommendations made

Form completed by *H.K. MOGAGE* Assessor/s Signature: *[Signature]*

in consultation with: *Nxumalo m. E.* Signature: *Nxumalo m. E.*

CAPACITY (e.g. land owner, specialist): *CHIEF*

DATE COMPLETED: *19 June 2019*



Instructions

1. Fill the report in as neatly and completely as possible.
2. Where the question / statement is not applicable mark N/A.
3. Indicate sensitive areas on a map and/or spanning plans.
4. When in doubt, consult the Environmental Practitioner in your region.

The purpose of this *DESD* is to:

- Determine whether or not the project should be subject to R543-7, published in terms of the National Environmental management Act 107 of 1998.
- Identify and mitigate the negative impact of Eskom's activities to a minimum in line with both Legislation and Eskom's Environmental Policies.
- This report is a guide to Route Selection, Construction and Field Services.

NOTE Complete the report before the survey!!!

This is not an office exercise.

Extra sheets of paper may be added and referenced if insufficient space has been provided.

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Annex B
(continued)

1 Project description

Project name/Survey
 Request SIBAMBAYANE ELECTRIFICATION Area BUSHBUCKRIDGE
 Project number File number
 Rural scheme/
 Feeder NOR & ARC Voltage 22kV
 Supply from
 (scheme name, pole numbers for tee-off)
 Supply to SIBAMBAYANE COMMUNITY
 (Farm name, etc.)

2 Properties traversed

Farm name BRINOCO
 Registration number and Division 233 KV Sub-division REMAINDER
 Compilation number Line length (m)
 Farm name CHAMPAGNE
 Registration number and Division 230 KV Sub-division REMAINDER
 Compilation number Line length/Site area (m²)

3 Brief description of the surrounding area

Residential area, some are new
stands with long grass.

Could the proposed project have an impact on or be constrained by any of the following environmental aspects?

Encircle the appropriate aspect, giving a description of the present state as well as an indication of the possible negative impact. **Note that mitigating measures for these impacts are to be included in the Environmental Management Programme.**

Annex B
(continued)

4 Physical environment

4.1 Water: streams rivers dams wetlands springs floodplains OTHER

Present condition: Good

Potential impact (e.g. threat of pollution): none

4.2 Soil: sandy rocky clayey OTHER

Present condition: Some areas are sandy with loamy sands

Potential impact (e.g. of erosion) Yes in some area

4.3 Topography mountains ridges hills valleys ravines dongas OTHER

Present condition: Good

Potential impact (e.g. of erosion) none, but some area have excavation where people are taking out sand

Comments/mitigating measures: avoid driving when is wet in areas with loose sand

Annex B
(continued)

5 Natural environment

5.1 Flora: indigenous protected exotic OTHER

Brief description and conservation status (e.g. rare, etc., mention trees/bush/grass)

marula tree
Potential impact (e.g. permit applications) yes, marula to be cut off

5.2 Fauna: mammals (birds) OTHER

Brief description and conservation status:
(e.g. rare, protected, etc., mention giraffe, elephants, eagles, vultures, etc., mention migratory paths)

Different kinds of small birds
domestic animals
Potential impact (e.g. threat of electrocution, collision, etc) none

Comments/mitigating none measures:

6 Social environment

6.1 Restricted areas: nature/game reserves hiking trails tourism routes parks recreational areas
Residential-areas green belts sacred/holy grounds OTHER

Brief description village developed

Annex B

(continued)

Potential impact e.g. threat of encroachment, etc. None

6.2 Visual aesthetics: easily seen hidden partially.....

Brief description The proposed power line runs along the street with the new medstock

Potential impact None

6.3 Natural heritage: cultural significance archaeological objects monuments palaeontological objects graves meteorites ruins OTHER.....

Note: Should any natural heritage resource as listed above, or as defined in the National Heritage Resource Act, No 25 of 1999 be identified, the requirements of Act 25 of 1999 shall be followed by notifying the SAHRA. **If line or access road length exceeds 300m SAHRA shall be notified.**

Potential impact None

Comments/mitigating measures None

7 Economic environment

7.1 Land use: crops orchards grazing crop spraying game farming forestry areas mining OTHER.....

Brief description CATTLE grazing, maize

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Annex B
(continued)

Potential impact none

7.1.1 Commercial: factories shops OTHER

Brief description SPAZA SHOP, SCHOOL & church

Potential impact

7.1.2 Infrastructure: roads railways communications power lines air fields
pipelines sewage OTHER

Brief description: underground water pipe, please
be careful when digging holes because
some areas pipes are not easy to see

Potential impact yes

Comments/mitigating measures: please dig with hands
where there are pipes cable by

Annex B

(continued)

What impact will this project have on elements 4 to 7?

1. Physical

No impact (0)

Medium impact (2)

High impact (4)

2. Natural

No impact (0)

Medium impact (2)

High impact (4)

3. Social

No impact (0)

Medium impact (2)

High impact (4)

Overall impact:

This section addresses the overall environmental impact of the project. The impacts as assessed in the above three spheres (physical, natural and social) need to be considered to determine the overall impact

0	2	4
No impact	Medium impact	High impact

If the overall impact is between 2 and 4, contact the Environmental Management Officer or the Environmental Senior Superintendent.

Alternatives

Have alternative routes been discussed with the relevant land owner/s or users?

Yes

No

Detailed study

Is an *environmental assessment* required in terms of Regulation R543?

Yes

No

Should a permit application be made to DWA?

Yes

No

Should the SAHRA be notified?

Yes

No

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Annex C - Environmental Management Plan

(Normative)

1 General conditions

- 1.1** The Eskom project manager or co-ordinator shall be responsible for ensuring that the land owners have been informed before any work is carried out on site. Contractors shall find out if the landowners have been informed before moving onto site.
- 1.2** No fences, gates or locks shall be damaged to obtain access onto a line route. Arrangements shall be made in advance to obtain permission for access.
- 1.3** Use of private roads shall be arranged in advance. Any damage to private roads shall be repaired at the contractor's expense and to the satisfaction of the landowner. This shall be the responsibility of the project manager or co-ordinator.
- 1.4** Gates shall be left as they are found, i.e. closed gates shall be kept closed and open gates shall be left open. Gates to adjacent properties or onto public roads shall be closed at all times. Any Eskom gates installed on the line route shall be kept closed and locked except while stringing is taking place. Open gates shall be guarded to prevent animals straying and unauthorised persons and vehicles entering into adjacent camps or properties.
- 1.5** Permission shall be obtained from landowners before any water is used.
- 1.6** No fires shall be lit on private property. If fires are lit on Eskom's property or in the construction camp, provision shall be made that no accidental fires are started. No firewood shall be collected in the veld.
- 1.7** If activities that can cause a fire are carried out, fire extinguishers shall be available on site and in the construction camp.
- 1.8** No property may be accessed after normal working hours except with the permission of the landowner. Privacy shall be respected at all times.
- 1.9** Eskom, Eskom's contractors and their employees shall at all times be courteous towards landowners, tenants and the local community.
- 1.10** Eskom, Eskom's contractors and their employees shall not cause damage to property, crops or animals. Activities that may cause conflict with landowners, tenants, the local work force or the local community shall be avoided. Should conflict arise it shall be immediately reported to the Eskom project manager or co-ordinator.
- 1.11** Vehicles shall be driven at a moderate speed on private roads and stay within the statutory speed limit on public roads.
- 1.12** All movement of vehicles shall take place on the established Eskom servitude road or on private roads as agreed in advance. Keep to existing tracks. No movement shall take place through the veld. Special care shall be taken to prevent excess damage during wet weather.

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Annex C

(continued)

- 1.13** If any vehicle should get stuck, the damage shall be repaired immediately so that no deep ruts remain.
- 1.14** Any damage to private property shall immediately be reported to Eskom and the owner. The damage shall be rectified immediately if possible and/or appropriate compensation shall be paid to the owner at the discretion of the project manager/co-ordinator in consultation with the property owner. A record of damages and rectifying action shall be kept. The landowner's satisfaction with the outcome of rectifying action shall be obtained in writing.
- 1.15** A proper system of waste management shall be instituted in the construction camp. This entails that sufficient waste bins are available on site and in the construction camp. The waste shall be dumped at an approved waste disposal site. No containers, scrap metal, conductor etc. shall be left on site.
- All scrap shall be removed and taken to an appropriate disposal site. No oil, diesel or other chemicals shall be spilled or discarded anywhere. If an accidental spill occurs, it shall be reported immediately and cleaned to the satisfaction of Eskom and the landowner. No waste shall be left in the veld or on the line route.
- 1.16** Washing and toilet facilities shall be provided on site and in the construction camp. The facilities shall comply with Eskom standards and shall have the approval of the landowner.
- 1.17** No human excrement shall be left in the veld. If no toilet facilities are available such waste shall be buried *immediately*.
- 1.18** Herbicides shall only be applied with Eskom's permission and in accordance with the Eskom Policy on Herbicides ESKPBAAD4.
- 1.19** Camp and office sites shall be dismantled and removed after completion of the construction phase of the project. The site shall be rehabilitated to as close as possible to its original condition to the satisfaction of the landowner, which shall be in writing.
- 1.20** All excavations shall be enclosed to prevent animals or people from accidentally falling into excavations.
- 1.21** No trees shall be cut or removed without prior permission from the landowner. Permits shall be obtained for the cutting and removal protected trees (protected trees shall be dealt with in 2, **Special conditions**).
- 1.22** Should any natural heritage object be found, or exposed during excavations, all work shall be terminated immediately and the finding reported to the Project Manager who shall inform the Eskom Environmental Practitioner and the SAHRA.

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Annex C
(continued)

2 Special conditions

(Specific issues identified during the scoping as needing attention i.e. erosion berms, bird flappers, protected trees. etc.) *None*

.....

TYPICAL MITIGATION MEASURES

ENVIRONMENTAL CONCERNS	MITIGATION MEASURES
AGRICULTURE	
Loss of standing crop due to access road and tower work site.	<ul style="list-style-type: none"> - limit width of access and size of tower site. - avoidance of crop areas. - monetary compensation for crop loss. - time construction to avoid growing season.
Soil Compaction	<ul style="list-style-type: none"> - scheduling activities to times of the year when soils are least susceptible to compaction. - stop activities when ground conditions are poor. - use of equipment with low bearing capacity. - chisel ploughing.
Construction of new lines	<ul style="list-style-type: none"> - locate access roads along existing traffic routs.
Topsoil – subsoil mixing/soil rutting	<ul style="list-style-type: none"> - scheduling activities. - stop activity when ground conditions are poor. - use of equipment with low bearing capacity. - use of gravel roads. - addition of manures to offset fertility loss. - compensation for reduced soil pEAactivity. - removal of spoil and/or bentonite from foundation operations. - Segregation of topsoil and subsoil.
Disturbance to farm operations	<ul style="list-style-type: none"> - maintain contact with landowner/tenant regarding preferences.
Loss of livestock	<ul style="list-style-type: none"> - employ noise control measures near sensitive livestock. - Construction of farm gates. - Securing farm gates. - Clean-up construction materials which could be ingested. - Compensation for lost, injured livestock.
SOCIAL IMPACTS	
Mud and Dust	<ul style="list-style-type: none"> - wetting down dry soils. - chemical control of dust. - cleaning roads to remove mud. - temporary planting of grasses.

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**ENVIRONMENTAL IMPACT ASSESSMENT FOR
DISTRIBUTION ACTIVITIES**Unique Identifier: **240-72597722**Revision: **1**Page: **28 of 70****Annex C**

(continued)

Aesthetics	<ul style="list-style-type: none"> - screen with natural or planted vegetation restoration. - avoid linear access down the right-of-way. - addition of topsoil to gravel access roads. - hoarding construction sites. - installation of landscaping in advance of site completion.
Inconvenience	<ul style="list-style-type: none"> - select route and method of installation to suit landowners' conditions. - select timing of activity.
Heritage resources	<ul style="list-style-type: none"> - avoidance/isolation. - design measures to make facility less obtrusive. - screening. - alternate methods of equipment. - protection by use of enclosures, barrier fencing, covering. - salvage in conjunction with SAHRA. - relocation in conjunction with SAHRA.
Tourism and recreation resources	<ul style="list-style-type: none"> - design measures to make facility less obtrusive of disruptive. - screening and restoration. - minimise noise and dust. - safety precautions to protect the public. - scheduling to avoid peak use periods.
WATER QUALITY	
Sedimentation of streams due to erosion from the right-of way.	<ul style="list-style-type: none"> - minimise use of slopes adjacent to streams during soils testing, construction and maintenance. - maintain a cover crop. - retain buffers.
Stream bank erosion.	<ul style="list-style-type: none"> - mechanical erosion control. - retain shrubby stream bank vegetation and selectively cut or prune trees during line clearing/maintenance. - selective spraying of herbicides. - Mechanical erosion control.
Impedance of natural flow streams/others surface waters.	<ul style="list-style-type: none"> - use and maintenance of appropriate stream crossing device.
Ponding or channelization of surface waters due to rutting.	<ul style="list-style-type: none"> - timing activities to stable ground conditions. - use of gravel roads.
Contamination of surface or ground waters through spills or leaks of toxic substances.	<ul style="list-style-type: none"> - spill control material and procedures readily available. - site selection where possible.
Soil compaction/topsoil-subsoil mixing.	<ul style="list-style-type: none"> - avoidance of rutting by vehicles where possible. - construction timing. - use of gravel roads. - use of vehicles with low bearing pressures. - stop activities when ground conditions are poor.
Wind/water erosion.	<ul style="list-style-type: none"> - avoidance of areas with high erosion potential. - timing activities to the most stable ground conditions. - slope stabilisation. - mechanical erosion control. - vegetation erosion control. - recompaction of trenches. - avoid trenching parallel to the fall of a slope.

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Annex C
(continued)

Contamination by petrochemicals.	<ul style="list-style-type: none"> - spill control material and procedures made readily available. - restoration methods investigated.
FAUNA & FLORA	
Loss of habitat, breeding and/or food source for terrestrial wildlife.	<ul style="list-style-type: none"> - environmental mapping to identify sensitive areas. - avoidance of areas containing rare/endangered species. - construction and maintenance activities to be timed where possible to avoid peak breeding periods. - the creation of "edge" (may be considered a positive impact.) - promotion of wildlife habitat through vegetation control. - avoid the filling of small wetlands. - use design with low risk to wildlife electrocution or collision - fit bird flight divertors to powerlines in bird migration areas.
Changes in composition of vegetation as a result of disturbance.	<ul style="list-style-type: none"> - construction timing to minimise soil disturbance. - restoration of soils to a stable condition.
Removal or burial of stream bottom habitat and increased turbidity due to sedimentation.	<ul style="list-style-type: none"> - minimise erosion from the right-of-way by maintaining a cover crop. - mechanical erosion control. - minimise stream bank erosion by retaining shrubby bank vegetation and selective cutting, pruning of trees near watercourses. - installation of sediment traps when necessary.
Possible loss of wildlife/fish migration/travel routes.	<ul style="list-style-type: none"> - avoid filling small wetlands servings as staging areas for waterfowl migration. - Installation and maintenance of a proper stream crossing device. - time construction activities to avoid disturbance to migrating fish and wildlife or during breeding. - Follow Eskom standards for the application of herbicides near watercourses. - Preserve and/or augment existing natural corridor crossings; investigate tower placement to optimise clearances to preserve existing vegetation.
IntEduction of exotic plant species resulting from vegetative erosion control.	<ul style="list-style-type: none"> - use of native species for erosion control.
Vegetation stress due to nutrient loss as a result of soil deterioration.	<ul style="list-style-type: none"> - erosion control measures.
Changes in vegetation due to soil disturbance (topsoil-subsoil mixing).	<ul style="list-style-type: none"> - time construction/clearing to take advantage of stable soil conditions.

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Annex B - Distribution Environmental Screening Document (DESD)
(Informative)

Reticulation Powerlines and Ancillary Services

Ratified and accepted by

Environmental Practitioner

Environmental Specialist

Head of Engineering Survey

(one signature please)

Accepted by Land Owner/s/Users X M. E. Nxumalo

I have seen the completed document and accept the
recommendations made

Assessor/s

Form completed by V. DINGISWAYO Signature: [Signature]

in consultation with X M. E. Nxumalo Signature: X M. E. Nxumalo

CAPACITY (e.g. land owner, specialist): X AMASHANGANA TRIBAL AUTHORITY

DATE COMPLETED: X 2019. 07. 17

Instructions

1. Fill the report in as neatly and completely as possible.
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NOTE Complete the report before the survey!!!

This is not an office exercise.

Extra sheets of paper may be added and referenced if insufficient space has been provided.



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Annex B
(continued)

1 Project description

Project name/Survey
Request DEMULANI ELECTRIFICATION Area BUSHBUCKRIDGE
Project number File number
Rural scheme/
Feeder NOR and TDW Voltage 22KV
Supply from
(scheme name, pole numbers for tee-off)
Supply to DEMULANI COMMUNITY
(Farm name, etc.)

2 Properties traversed

Farm name NEW FOREST
Registration number and Division 234 KU Sub-division REMAINDER
Compilation number Line length (m)
Farm name ORINSCO
Registration number and Division 233 KU Sub-division REMAINDER
Compilation number Line length/Site area (m²)

3 Brief description of the surrounding area

THIS IS A RESIDENTIAL AREA WITH HILLS
AND VALLEYS. IT IS COVERED WITH GRASS,
SRI SHRUBS AND SOME TREES. SOIL IS MOSTLY
SANDY.

Could the proposed project have an impact on or be constrained by any of the following environmental aspects?

Encircle the appropriate aspect, giving a description of the present state as well as an indication of the possible negative impact. **Note that mitigating measures for these impacts are to be included in the Environmental Management Programme.**

Annex B
(continued)

4 Physical environment

4.1 Water: streams rivers dams wetlands springs floodplains OTHER

Present condition: Good for planting Poles

Potential impact (e.g. threat of pollution): NONE

4.2 Soil: sandy rocky clayey OTHER

Present condition: SANDY AND ROCKY

Potential impact (e.g. of erosion) NONE

4.3 Topography mountains ridges hills valleys ravines dongas OTHER

Present condition: GENTLY SLOPES

Potential impact (e.g. of erosion) NONE

Comments/mitigating measures:
.....
.....
.....
.....
.....
.....
.....

Annex B
(continued)

5 Natural environment

5.1 Flora: indigenous protected exotic OTHER

Brief description and conservation status (e.g. rare, etc., mention trees/bush/grass)

MARULA TREES

Potential impact (e.g. permit applications) NO PERMIT NEEDED

5.2 Fauna: mammals birds OTHER

Brief description and conservation status:

(e.g. rare, protected, etc., mention giraffe, elephants, eagles, vultures, etc., mention migratory paths)

DIFFERENT TYPES OF SMALL BIRDS AND

DOMESTIC ANIMALS

Potential impact (e.g. threat of electrocution, collision, etc) NONE

Comments/mitigating measures:

6 Social environment

6.1 Restricted areas:	nature/game reserves	hiking trails	tourism routes	parks	recreational areas
<u>Residential-areas</u>	green belts	sacred/holy grounds	OTHER		

Brief description VILLAGE

Annex B

(continued)

Potential impact e.g. threat of encroachment, etc. NONE

6.2 Visual aesthetics: easily seen hidden partially.....

Brief description ALONG STREETS AND IN BETWEEN
HOUSES

Potential impact NONE

6.3 Natural heritage:	cultural significance	archaeological objects	monuments	palaeontological objects
	graves	meteorites	ruins	OTHER.....

Note: Should any natural heritage resource as listed above, or as defined in the National Heritage Resource Act, No 25 of 1999 be identified, the requirements of Act 25 of 1999 shall be followed by notifying the SAHRA. **If line or access road length exceeds 300m SAHRA shall be notified.**

Potential impact NONE

Comments/mitigating measures
NOTIFY SAHRA - LINE EXCEEDS 300 M

7 Economic environment

7.1 Land use: crops orchards grazing crop spraying
game farming forestry areas mining OTHER.....

Brief description SUBSISTANCE FARMING

Annex B
(continued)

Potential impact **NONE**

7.1.1 Commercial: factories shops OTHER

Brief description **SPATA SHOPS**

Potential impact **NONE**

7.1.2 Infrastructure: roads railways communications power lines air fields
pipelines sewage OTHER

Brief description: **DIRT ROADS, EXISTING POWERLINES AND
UNDERGROUND WATER PIPELINES**

Potential impact **NONE**

Comments/mitigating measures:

..... **WATCH OUT FOR WATER PIPE LINE**

Annex B
(continued)

What impact will this project have on elements 4 to 7?

1. Physical

<u>No impact (0)</u>	Medium impact (2)	High impact (4)
----------------------	-------------------	-----------------

2. Natural

<u>No impact (0)</u>	Medium impact (2)	High impact (4)
----------------------	-------------------	-----------------

3. Social

<u>No impact (0)</u>	Medium impact (2)	High impact (4)
----------------------	-------------------	-----------------

Overall impact:

This section addresses the overall environmental impact of the project. The impacts as assessed in the above three spheres (physical, natural and social) need to be considered to determine the overall impact

<u>0</u>	2	4
<u>No impact</u>	Medium impact	High impact

If the overall impact is between 2 and 4, contact the Environmental Management Officer or the Environmental Senior Superintendent.

Alternatives

Have alternative routes been discussed with the relevant land owner/s or users?

Yes _____
No _____

Detailed study

Is an *environmental assessment* required in terms of Regulation R543?

Yes _____
No _____

Should a permit application be made to DWA?

Yes _____
No _____

Should the SAHRA be notified?

Yes _____
No _____

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Annex C - Environmental Management Plan

(Normative)

1 General conditions

- 1.1** The Eskom project manager or co-ordinator shall be responsible for ensuring that the land owners have been informed before any work is carried out on site. Contractors shall find out if the landowners have been informed before moving onto site.
- 1.2** No fences, gates or locks shall be damaged to obtain access onto a line route. Arrangements shall be made in advance to obtain permission for access.
- 1.3** Use of private roads shall be arranged in advance. Any damage to private roads shall be repaired at the contractor's expense and to the satisfaction of the landowner. This shall be the responsibility of the project manager or co-ordinator.
- 1.4** Gates shall be left as they are found, i.e. closed gates shall be kept closed and open gates shall be left open. Gates to adjacent properties or onto public roads shall be closed at all times. Any Eskom gates installed on the line route shall be kept closed and locked except while stringing is taking place. Open gates shall be guarded to prevent animals straying and unauthorised persons and vehicles entering into adjacent camps or properties.
- 1.5** Permission shall be obtained from landowners before any water is used.
- 1.6** No fires shall be lit on private property. If fires are lit on Eskom's property or in the construction camp, provision shall be made that no accidental fires are started. No firewood shall be collected in the veld.
- 1.7** If activities that can cause a fire are carried out, fire extinguishers shall be available on site and in the construction camp.
- 1.8** No property may be accessed after normal working hours except with the permission of the landowner. Privacy shall be respected at all times.
- 1.9** Eskom, Eskom's contractors and their employees shall at all times be courteous towards landowners, tenants and the local community.
- 1.10** Eskom, Eskom's contractors and their employees shall not cause damage to property, crops or animals. Activities that may cause conflict with landowners, tenants, the local work force or the local community shall be avoided. Should conflict arise it shall be immediately reported to the Eskom project manager or co-ordinator.
- 1.11** Vehicles shall be driven at a moderate speed on private roads and stay within the statutory speed limit on public roads.
- 1.12** All movement of vehicles shall take place on the established Eskom servitude road or on private roads as agreed in advance. Keep to existing tracks. No movement shall take place through the veld. Special care shall be taken to prevent excess damage during wet weather.

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Annex C

(continued)

- 1.13** If any vehicle should get stuck, the damage shall be repaired immediately so that no deep ruts remain.
- 1.14** Any damage to private property shall immediately be reported to Eskom and the owner. The damage shall be rectified immediately if possible and/or appropriate compensation shall be paid to the owner at the discretion of the project manager/co-ordinator in consultation with the property owner. A record of damages and rectifying action shall be kept. The landowner's satisfaction with the outcome of rectifying action shall be obtained in writing.
- 1.15** A proper system of waste management shall be instituted in the construction camp. This entails that sufficient waste bins are available on site and in the construction camp. The waste shall be dumped at an approved waste disposal site. No containers, scrap metal, conductor etc. shall be left on site.
- All scrap shall be removed and taken to an appropriate disposal site. No oil, diesel or other chemicals shall be spilled or discarded anywhere. If an accidental spill occurs, it shall be reported immediately and cleaned to the satisfaction of Eskom and the landowner. No waste shall be left in the veld or on the line route.
- 1.16** Washing and toilet facilities shall be provided on site and in the construction camp. The facilities shall comply with Eskom standards and shall have the approval of the landowner.
- 1.17** No human excrement shall be left in the veld. If no toilet facilities are available such waste shall be buried *immediately*.
- 1.18** Herbicides shall only be applied with Eskom's permission and in accordance with the Eskom Policy on Herbicides ESKPBAAD4.
- 1.19** Camp and office sites shall be dismantled and removed after completion of the construction phase of the project. The site shall be rehabilitated to as close as possible to its original condition to the satisfaction of the landowner, which shall be in writing.
- 1.20** All excavations shall be enclosed to prevent animals or people from accidentally falling into excavations.
- 1.21** No trees shall be cut or removed without prior permission from the landowner. Permits shall be obtained for the cutting and removal protected trees (protected trees shall be dealt with in 2, **Special conditions**).
- 1.22** Should any natural heritage object be found, or exposed during excavations, all work shall be terminated immediately and the finding reported to the Project Manager who shall inform the Eskom Environmental Practitioner and the SAHRA.

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Annex C
(continued)

2 Special conditions

(Specific issues identified during the scoping as needing attention i.e. erosion berms, bird flappers, protected trees. etc.).

..... *NONE*

.....

.....

.....

TYPICAL MITIGATION MEASURES

ENVIRONMENTAL CONCERNS	MITIGATION MEASURES
AGRICULTURE	
Loss of standing crop due to access road and tower work site.	<ul style="list-style-type: none"> - limit width of access and size of tower site. - avoidance of crop areas. - monetary compensation for crop loss. - time construction to avoid growing season.
Soil Compaction	<ul style="list-style-type: none"> - scheduling activities to times of the year when soils are least susceptible to compaction. - stop activities when ground conditions are poor. - use of equipment with low bearing capacity. - chisel ploughing.
Construction of new lines	<ul style="list-style-type: none"> - locate access roads along existing traffic routs.
Topsoil – subsoil mixing/soil rutting	<ul style="list-style-type: none"> - scheduling activities. - stop activity when ground conditions are poor. - use of equipment with low bearing capacity. - use of gravel roads. - addition of manures to offset fertility loss. - compensation for reduced soil pEAactivity. - removal of spoil and/or bentonite from foundation operations. - Segregation of topsoil and subsoil.
Disturbance to farm operations	<ul style="list-style-type: none"> - maintain contact with landowner/tenant regarding preferences.
Loss of livestock	<ul style="list-style-type: none"> - employ noise control measures near sensitive livestock. - Construction of farm gates. - Securing farm gates. - Clean-up construction materials which could be ingested. - Compensation for lost, injured livestock.
SOCIAL IMPACTS	
Mud and Dust	<ul style="list-style-type: none"> - wetting down dry soils. - chemical control of dust. - cleaning roads to remove mud. - temporary planting of grasses.

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Annex C

(continued)

Aesthetics	<ul style="list-style-type: none"> - screen with natural or planted vegetation restoration. - avoid linear access down the right-of-way. - addition of topsoil to gravel access roads. - hoarding construction sites. - installation of landscaping in advance of site completion.
Inconvenience	<ul style="list-style-type: none"> - select route and method of installation to suit landowners' conditions. - select timing of activity.
Heritage resources	<ul style="list-style-type: none"> - avoidance/isolation. - design measures to make facility less obtrusive. - screening. - alternate methods of equipment. - protection by use of enclosures, barrier fencing, covering. - salvage in conjunction with SAHRA. - relocation in conjunction with SAHRA.
Tourism and recreation resources	<ul style="list-style-type: none"> - design measures to make facility less obtrusive or disruptive. - screening and restoration. - minimise noise and dust. - safety precautions to protect the public. - scheduling to avoid peak use periods.
WATER QUALITY	
Sedimentation of streams due to erosion from the right-of way.	<ul style="list-style-type: none"> - minimise use of slopes adjacent to streams during soils testing, construction and maintenance. - maintain a cover crop. - retain buffers.
Stream bank erosion.	<ul style="list-style-type: none"> - mechanical erosion control. - retain shrubby stream bank vegetation and selectively cut or prune trees during line clearing/maintenance. - selective spraying of herbicides. - Mechanical erosion control.
Impedance of natural flow streams/others surface waters.	<ul style="list-style-type: none"> - use and maintenance of appropriate stream crossing device.
Ponding or channelization of surface waters due to rutting.	<ul style="list-style-type: none"> - timing activities to stable ground conditions. - use of gravel roads.
Contamination of surface or ground waters through spills or leaks of toxic substances.	<ul style="list-style-type: none"> - spill control material and procedures readily available. - site selection where possible.
Soil compaction/topsoil-subsoil mixing.	<ul style="list-style-type: none"> - avoidance of rutting by vehicles where possible. - construction timing. - use of gravel roads. - use of vehicles with low bearing pressures. - stop activities when ground conditions are poor.
Wind/water erosion.	<ul style="list-style-type: none"> - avoidance of areas with high erosion potential. - timing activities to the most stable ground conditions. - slope stabilisation. - mechanical erosion control. - vegetation erosion control. - recompaction of trenches. - avoid trenching parallel to the fall of a slope.

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