

Document Classification: Controlled Disclosure

**ENVIRONMENTAL IMPACT ASSESSMENT FOR
DISTRIBUTION ACTIVITIES**

Unique Identifier: 240-72597722

Revision: 1

Page: 18 of 70

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

Reticulation Powerlines and Ancillary Services

Ratified and accepted by

Environmental Practitioner *N. K. [Signature]*

Environmental Specialist

Head of Engineering Survey

(one signature please)

Accepted by Land Owner/s/Users *F. LEEUW* *L*

I have seen the completed document and accept the
recommendations made *F. LEEUW* *X*

Form completed by *M. M. [Signature]* Assessor/s
Signature: *[Signature]*

in consultation with: *F. LEEUW* Signature: *[Signature]* *K*

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

DATE COMPLETED: *14 - FEB - 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

Project number

Rural scheme/

Feeder

Supply from

(scheme name, pole numbers for tee-off)

Supply to

(Farm name, etc.)

Area

File number

Voltage

2 Properties traversed

Farm name

Registration number and Division

Compilation number

Farm name

Registration number and Division

Compilation number

Line length (m)

Sub-division

Sub-division

Line length/Site area (m²)

3 Brief description of the surrounding area

The area is dry and hard area.
New area with water services available.

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: None

Potential impact (e.g. threat of pollution):
.....
.....
.....

4.2 Soil: sandy rocky clayey OTHER HARD

Present condition:

Potential impact (e.g. of erosion)

4.3 Topography mountains ridges hills valleys ravines dongas OTHER

Present condition: None

Potential impact (e.g. of erosion)

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)

..... NONE

Potential impact (e.g. permit applications)

.....

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)

.....

.....

Potential impact (e.g. threat of electrocution, collision, etc).....

.....

.....

Comments/mitigating 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

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Potential impact e.g. threat of encroachment, etc.

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

Brief description

Potential impact

6.3 Natural heritage: cultural archaeological monuments palaeontological
significance objects 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

Comments/mitigating measures

SAHRA to be notified - HU 1336m

7 Economic environment

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

Brief description Residential

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Annex B
(continued)

Potential impact

7.1.1 Commercial: factories shops OTHER

Brief description

Potential impact

.....

.....

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

Brief description: WATER - Pipes!

.....

.....

.....

Potential impact

.....

Comments/mitigating measures:

.....

.....

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.....

.....

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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 studyIs 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.).

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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 routes.
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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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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Project name Project No.	Survey Finding	Enviro Finding	Comment	Applicable Act
Line/Cable Length (m)	1335M	The total line length is more than 300m	The proposed line is outside the residential area, therefore SAHRA notification required	SAHRA
Affected Environment (residential/commercial/public open space)	Commercial	N/A	Proposed line is outside the residential area and the area is dry and municipal services	N/A
Water Resource	Yes X No	Is actively 32m from Water Resource? Yes X No	No water sources within the area, only the pipelines	National water act
Flora	Yes X No	Will vegetation be required to be cut down along the route? Yes X No	None, only grass patches	N/A
	Yes X No	Will any rare, threatened, protected & endangered plant species be affected by construction/operation of project? Yes X No	None	N
	Yes X No	Is a tree cutting permit required from DAFF? Yes X No X	None, only grass patches	N
	Yes X No X	List wildlife species that utilise the site		N/A
Fauna	Domestic animals	domestic animals	None	N/A
	Will there be any interaction with large mammals? Yes X No X	Yes X No X	None	N/A
	Are there any rare, threatened, protected & endangered animal species on site? Yes X No X	Yes X No X	N/A	N/A
	Will the proposed project pose a risk of electrocution/collision on big birds/structures? Yes X No X	Yes X No X	Normal birds	Biodiversity Act
	Will any special clearance required? Yes X No X	Yes X No X	N/A	N/A
	Are bird flight diverters recommended? Yes X No	Yes X No	Bird friendly Structures are recommended	Biodiversity Act
	Are bird guards recommended? Yes X No X	Yes X No X	N/A	N/A
Protected Areas	Are there any protected areas adjacent to site? Yes X No X	Yes X No X	N/A	N/A
Visual Impacts	Will the project impact on aesthetic quality of the area? Yes X No X	Yes X No X	The area is easily seen	N/A
	Are there any Heritage/Cultural resources on the proposed site? Yes X No X	Yes X No X	N/A	N/A
Overall Impact Assessment	Physical Natural social	Rating (0-4) 2 0 0	0 Low 0 2-Medium X 0 4-High	N/A

N. Khanye
Signature: Environmental Officer
Date: March 2019

B. Maupa
Signature: Surveyor
Date: March 2019



AREA: <u>Groblershoop</u>	PROJECT NO. <u>OPWAG Elec</u>
FEEDER: <u>KGH</u>	
SUPPLY TO: <u>OPWAG</u>	
ESKOM REPRESENTATIVE:	TEL: <u>081 4456105</u>
*DISTRIBUTION	FAX:

WAY LEAVE AGREEMENT OVERHEAD POWER LINE/UNDERGROUND CABLE(S)

x I/We, the undersigned (full names) JOSEPH TEBOGO FLOYD LEEUW

(* If Company/CC/Trust, complete capacity of authorised persons)

x (Identity number: 6608075757082 married in/out of community of property with/without
accrual/marital power)

Address: Postal Code

x Tel No.: 079 877 5137
being the REGISTERED OWNER/S
and

(Identity number: married in/out of community of property with/without
accrual/marital power)

Address: Postal Code

Tel No.:
being the *PURCHASER/LESSEE/USUFRUCTUARY/HEIR/OCCUPANT

(hereinafter referred to jointly or individually as the "Owner) of the following property/properties:

.....
.....
.....

situate in the Administrative District of ZF MGRAWU

x held by virtue of Title Deed/s
number/s extent

mn

(* Delete if not applicable)

(hereinafter referred to as the "Property") hereby grant/s to Eskom Holdings Limited, Registration Number 2002/015527/06, its successors in title, assignees, licensees, (hereinafter referred to as "Eskom") an irrevocable right of way leave in perpetuity free of charge to transmit electricity over the property.

1. The right of WAY LEAVE shall be binding on the Owner, its heirs, assignees and successors in title and shall include the following rights in favour of Eskom:
 - 1.1 the right to erect an overhead power line/underground cable(s) together with such structures, works, appliances, apparatus, conductors and overhead cables ("works") on the property or to erect or lead such conductors or appliances or other equipment on, under or over the property substantially on the route as indicated by the letters ABC on the sketch attached hereto, as may at any time be necessary or convenient in exercising the right of way leave for overhead power line(s) / underground cable(s) (hereinafter together with the restriction area referred to in 3.1, referred to as the "Servitude Area").
 - 1.2 the right to enter and be upon the property at any time in order to construct, erect, operate, use, maintain, repair, re-erect, remove, alter or inspect the structures, works, appliances, apparatus, conductors or cables ("works") on the property, or in order to gain access to any adjacent properties in the exercise of similar rights.
 - 1.3 the right to have access to and egress from the power lines and the right to use existing roads giving access to and egress from the property or roads running across the property and gates on the property and to erect in any fence such gates as may be necessary or convenient to gain access to and egress from any power line/underground cable or accessory equipment.
 - 1.4 the right to remove any trees, bush, grass, material or structures within the restricted area defined in clause 3 hereof and the right to cut or trim any trees in order to comply with the restrictions referred to in clause 3 hereof, after consultation with the land owner/s.
2. Eskom shall exercise its rights subject to the following terms and conditions -
 - 2.1 Eskom shall ensure that any gates used by its personnel shall be kept closed.
 - 2.2 Eskom shall pay compensation:
 - 2.2.1 where damage or injury is caused by any negligent act or omission on the part of Eskom, its employees or contractors;
3. The following special restrictions are placed on the use of the property namely -
 - 3.1 No building or structure may be erected or installed above or below the surface of the ground, neither may any material which might endanger the safety of this power line/underground cable be placed within 5m metres of the centre line of this power line/underground cable without the prior written permission of Eskom.
 - 3.2 No tree shall be planted within the servitude area.
 - 3.3. No tree which will grow to a height in excess of the horizontal distance of that tree from the nearest conductor of any power line shall be planted within the vicinity of the power line
 - 3.4. No material which may in the opinion of Eskom endanger the safety of any transmission line shall be placed within the servitude area.

mn 

- 3.5. No mining activities or blasting operations shall be permitted within 500 metres of any power line/underground cable without the prior written permission of Eskom.
4. The right of way leave hereby granted to Eskom -
- 4.1 shall be binding on the heirs, assignees and successors in title of the owner.
- 4.2 shall be brought in writing to the attention of any purchaser or transferee of the property (or of any portion of the property) by the owner or the seller (at that time) of the property before the property (or any portion thereof) is sold and/or transferred to such purchaser or transferee.
- 4.3 shall, if Eskom so requests, be incorporated into a notarial deed of servitude and be registered against the title deed under which the property is held; on Eskom's costs the owner and/or its heirs, assignees and successors in title shall perform all necessary actions and sign all necessary documents to achieve the notarial execution and registration (in the office of the Registrar of Deeds) of a deed of servitude, as envisaged above.
5. Remarks / Special Conditions:

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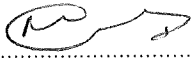
of

- 4 -

Signed at Croftersheep on this 14 day of FEB 2019 *

AS WITNESSES:

1.



.....
 REGISTERED OWNER(S)/PURCHASER/
 LESSEE/USUFRUCTUARY/HEIR/
 OCCUPANT*/SPOUSE IF MARRIED IN
 COMMUNITY OF PROPERTY

2.

Signed at on this Day of 20.....

AS WITNESSES:

1.

.....
 REGISTERED OWNER(S)/PURCHASER/
 LESSEE/USUFRUCTUARY/HEIR/
 OCCUPANT*/SPOUSE IF MARRIED IN
 COMMUNITY OF PROPERTY

2.

Signed at Kimberley on this 11 day of March 2019

AS WITNESSES:

1.

M. Archina
 for and on behalf of
 ESKOM HOLDINGS LIMITED

2.

(* Delete whichever is not applicable)