

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)

SEBENZUJE MITHUNGO *[Signature]*

02/03/2020

Accepted by Land Owner/s/Users

R.M

I have seen the completed document and accept the
recommendations made

CHILONGE

Assessor/s

Form completed by

Signature

in consultation with

R.M. CHILONGE

Signature

CHILONGE R.M

CAPACITY (e.g. land owner, specialist)

CHIEF

DATE COMPLETED

25/02/2020

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.

R.M. SETLHARE
Private Bag X423
ACORNHOEK 1360

25 -02- 2020

SETLHARE TRADITIONAL COUNCIL
TRADITIONAL COUNCIL

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1 Project description

Project name/Survey
 Request Area MOU
 Project number MBG332260643 File number
 Rural scheme/
 Feeder ARTHURSCAT - SEHLOLE Voltage 22kV
 Supply from EP ASC 93 9 94.
 (scheme name, pole numbers for tee-off)
 Supply to PRECIOUS MALATJI
 (Farm name, etc)

2 Properties traversed

Farm name ARTHURSCAT
 Registration number and Division 214-KV Sub-division R/6
 Compilation number Line length (m) 447m
 Farm name
 Registration number and Division Sub-division
 Compilation number Line length/Site area (m²)

3 Brief description of the surrounding area

THE LINE WILL SUPPLY THE NEW CHICKEN FARM IN VOILETBANK.

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

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4 Physical environment

4.1 Water streams rivers dams wetlands springs floodplains OTHER *N/A*

Present condition

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

.....

4.2 Soil: sandy rocky clayey OTHER

Present condition *GOOD SOIL CONDITION*

Potential impact (e.g. of erosion) *PLAUSIBLE SMALL IMPACT*

4.3 Topography mountains ridges hills valleys ravines dongas OTHER

Present condition *RELATIVELY FLAT AREA*

Potential impact (e.g. of erosion) *PLAUSIBLE SMALL IMPACT*

Comments/mitigating measures

NO MITIGATING MEASURES TO BE TAKEN TO PROTECT THE PHYSICAL ENVIRONMENT

ENVIRONMENTAL IMPACT ASSESSMENT FOR DISTRIBUTION ACTIVITIES

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5 Natural environment

5.1 Flora: indigenous protected exotic OTHER

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

Potential impact (e.g permit applications) ONLY FRUIT TREES WILL BE CUT.

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).. NO IMPACT

Comments/mitigating measures to protect the natural environment NO MITIGATING MEASURES TO BE IMPLEMENTED

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 DEVELOPING RESIDENTIAL AREA

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Potential impact e.g. threat of encroachment, etc

6.2 Visual aesthetics: easily seen hidden partially

Brief description THE LINE WILL RUN ON STREET FRONT.

Potential impact NO IMPACT

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 THE LINE IS 402m LONG.

Comments/mitigating measures SAHRA NEEDS TO BE NOTIFIED.

7 Economic environment

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

Brief description THE LINE WILL SUPPLY A CHICAGO FARM.

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Potential impact *Positively*

7.1.1 Commercial: factories shops OTHER ..

Brief description *THE LINE WILL SUPPLY A PROCESSING PLANT.*
Potential impact *POSITIVELY -*

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

Brief description *EXISTING POWER LINE THE AREA HAS WATER PIPES SUPPLYING THE COMMUNITY.*

Potential impact *DAMAGE.*

Comments/mitigating measures: *MAKE SURE IF THE WATERPIPES ARE AFFECTED THE HOLES SHOULD BE DUG BY HANDS*

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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 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 _____

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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- 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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2 Special conditions

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

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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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 serving 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
Introduction 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