

	<p><b><u>ENKANYINI PROJECTS</u></b></p> <table><tr><td><b>Pretoria</b> P. O. Box 4983, The Reeds 0158 Tel: +27 12 657 1505 Fax: +27 12 657 0220</td><td><b>Nelspruit</b> P.O Box 5194 Nelspruit, 1200 Tel: +27 13 752 3702 Fax: +27 13 752 6202</td></tr></table> <p>Email: <a href="mailto:info@enkanyiniprojects.co.za">info@enkanyiniprojects.co.za</a> Web: <a href="http://www.enkanyiniprojects.co.za">www.enkanyiniprojects.co.za</a></p>	<b>Pretoria</b> P. O. Box 4983, The Reeds 0158 Tel: +27 12 657 1505 Fax: +27 12 657 0220	<b>Nelspruit</b> P.O Box 5194 Nelspruit, 1200 Tel: +27 13 752 3702 Fax: +27 13 752 6202
<b>Pretoria</b> P. O. Box 4983, The Reeds 0158 Tel: +27 12 657 1505 Fax: +27 12 657 0220	<b>Nelspruit</b> P.O Box 5194 Nelspruit, 1200 Tel: +27 13 752 3702 Fax: +27 13 752 6202		

---

---

**TYPE OF DOCUMENT: SOCIAL STUDY REPORT FOR THE PROPOSED  
FIRGROVE MTS SUBSTATION UPGRADE AND PALMIET/ STIKLAND LOOP IN  
LOOP OUT LINES**

**PREPARED BY:  
ENKANYINI PROJECTS  
CONTACT PERSON: CALVIN MAWELELA  
CONTACT NUMBERS: (012) 657 1505**

**PREPARED FOR:  
ESKOM HOLDINGS LIMITED  
CONTACT PERSON: MR K. MAKHANYA  
CONTACT NUMBERS: (011) 800 2706**

**Copyright Warning**

The content including format ,ideas and budget, is to subject to copyright in terms of the Copyright Act ,Act 98 of 1978 and may not be produced in part or whole ,or disclosed to a third, party, without the prior written permission of Enkanyini Projects .With very few exceptions, the copyright in all text and other matter (including the manner of presentation) is the exclusive property of Enkanyini Projects .It is a criminal offence to reproduce and/or use any matter ,technical procedure and /or technique contained in this document.

## **Table of Contents**

DEFINITIONS.....	4
1. Introduction.....	5
2. Description of the project.....	5
3. Purpose of the research study.....	6
4. Methodology.....	6
5. Research findings.....	7
5.1. Summary of the findings.....	7
5.1.1. Ploughing fields.....	9
5.1.2. Residential houses.....	10
5.1.3. Railway line.....	11
5.1.4. Road passing next to the substation.....	12
5.1.5. Heritage sites.....	13
5.2. Findings per suburb.....	13
5.2.1. Firgrove.....	13
5.2.2. Macassar.....	14
5.2.3. Craydon.....	15
5.2.4. Deepfreeze.....	15
6. Comments from the City of Cape Town.....	16
7. Conclusion and recommendations.....	16

## **APPENDIX SECTION**

**Appendix A: Questionnaire**

**Appendix B: List of suburbs**

**Appendix C: Locality map**

## **DEFINITIONS**

### **Ancestral sites:**

These are areas of birth or where people's forefathers resided or areas where the gods are worshipped.

### **Archaeological sites:**

Archaeological sites are places that are deemed to have historical importance and value and which sites impact on learning of past life forms, both human and animals (these may included places where fossils are found)

### **Religious sites:**

Religious sites refer to areas where religious activities take place, such as baptism, worshipping.

## **1. INTRODUCTION**

Enkanyini Projects was appointed by Eskom Holdings Limited to conduct a social impact assessment (SIA) for the proposed Firgrove MTS and Palmiet / Stirkland loop in loop out lines up in Firgrove, Macassar, Craydon and Deepfreeze suburbs at Western Cape Province. The objective of this part of the report is to provide a detailed account of the social study and to identify social impacts (both negative and positive) that may result during the pre-construction, construction and operation of the substation.

## **2. DESCRIPTION OF THE PROJECT**

The proposed upgrading of Firgrove MTS will cover the area of about 300m X 400m. The following activities will be undertaken during the upgrading of Firgrove substation and Palmiet/Stikland loop-in loop-out lines:

- a. Create a substation with footprint to accommodate 4x500MVA 400/132kV transformers at Firgrove (Firgrove MTS)
  - Find the site for the MTS next to the existing 132kV Firgrove Distribution substation
  - Establish the Firgrove MTS as Follows
    - Install 400kV double busbar 9x400kV bays
    - Install 2x500MVA 400/132kV Transformers (as phase 1)
    - Extend the existing 132kV busbar to accommodate the new 2 transformers and allow connection to the existing distribution busbar
  
- b. Loop-in loop-out of the existing Palmiet-Stikland 400kV line:
  - Establish a servitude for approximately 200m of 400kV double circuit line
  - Cut the existing Palmiet-Stikland line at approximately 20km
  - Build approximately 200m of 1x400kV line on a double circuit tower to establish:
    - 1x400kV Firgrove – Stikland line (approximately 31km)
    - 1x400kV Figrove – Palmiet line (approximately 21 km)

### **3. PURPOSE OF THE RESEARCH STUDY**

The purpose of the research study was:

- ❖ To analyse the social impacts that the upgrading of Firgrove substation will likely to have on the interested and affected parties during pre-construction, construction and operation.
- ❖ How the existing environment might change if a given alternative or change is implemented.
- ❖ To clearly give affected parties an understanding of the projects based on their environment and how they can anticipate the social impacts from the project.
- ❖ To clearly find the response per alternative site.

### **4. METHODOLOGY**

The methodologies used in this assignment were interviews, field observation and secondary data.

#### **Interviews**

People who are living nearby the substation were interviewed through door to door and some were consulted along the streets. The public consultation campaign was done in the following suburbs: Firgrove, Macassar, Craydon and Deepfreeze. Among the interviewees were young and adult male and female including the farmers as well. A tabulated questionnaire forms were used to gather information, and a spreadsheet was developed to capture the results emanating, then analysis was made based on the findings (**a copy of the questionnaire is included in Appendix 1**).

There were challenges in some cases in getting the full co-operation of the people to participate in the survey. The following were the main reasons given for the unwillingness to participate:

- ❖ Fear that they may loose their properties when they participate
- ❖ Fear that we may take decisions on their behalf
- ❖ Fear to express feelings in the absence of the landowners
- ❖ Lack of understanding of the whole study objective

## **Field Observation**

Field observation was carried out in Firgrove area to assess the natural and social landscape occurring there and how they will be affected by the proposed development.

## **5. RESEARCH FINDINGS**

### **5.1 Summary of research findings**

This section of the report details an overall picture of the findings.



**Figure 1: Firgrove MTS substation**





**Figure 2: Firgrove MTS substation entrance**

Figure 1 and 2 depict the existing substation which is about 150-200m away from Railway line and 2 kilometres away from Firgrove residential area. The social impacts that may arise during the pre-construction, construction and operational phase were fully explained to the residents and the social assessment study was successfully conducted.



### 5.1.1 Ploughing fields



**Fig 3a: Ploughing fields**



**Fig 3b: Ploughing fields**

Firgrove is dominated by passionate farmers from subsistence to commercial farming. The farms in the area around the Firgrove substation are used annually for vegetation and fruits.



### 5.1.2 Residential houses



**Figure 4: Houses next to the substation**

There are about 20 people who reside just about 40metres away from the substation and most of them are unemployed hence the residence is dominated by school children. During the assessment it was found that the residents were uncertain with the relocation issue and they highlighted that they should be informed in time should there be a need for the relocation. They also highlighted that they are looking forward to the development because job opportunities will be created.



### 5.1.3 Railway line



Figure 5a: Goods train passing next to the substation



Figure 5b: Railway line

The pictures depicted above show a railway line which is located between 100-150m south of Firgrove substation and it is regularly used by Metrorail and Transnet. The railway line is expected to be affected during the transportation of materials to and from the proposed development site.

#### **5.1.4 Road passing next to the substation**



**Figure 6: Road R102**

The picture shown above shows road R102 that passes next to the substation as it can be seen in the picture. The road is expected to be affected during the development more especially during the transportation of construction material to the proposed development site.



### 5.1.5 Heritage sites

During the site investigation there was no area identified as a heritage site in and around the proposed development site.

## 5.2. FINDINGS PER SUBURB

### 5.2.1 Firgrove

Based on our site investigation in Firgrove around the substation it was found that the local people who are residing next to the substation do not have problem with the proposed development but they are concerned with the relocation issue and they highlighted that they should be informed in time if they are going to be relocated. However they are looking forward to the development hence there are going to be job opportunities for the residents as most of the residents are unemployed in the area.

The questionnaires were distributed to the local residents and some of them responded on the questionnaires that were provided to them and from the responses that were received it was evident that the residents are happy with the proposed development.

<b>FIRGROVE</b>		
<b>Determinants</b>	<b>11 respondents</b>	<b>Percentage</b>
<b>SOCIO/CULTURAL IMPORTANCE</b>		
1. People directly dependent on the land(ploughing fields)	0	0
2. People dependent on riparian plants for building, thatching and medicinal plants	0	0
3. People depending on the land for grazing field	0	0
4. People using the land for recreational purposes that requires ecologically healthy land	0	0
<b>CULTURAL/HISTORICAL VALUES</b>		
1. Sacred places on the land, and religious cultural events associated with the land	0	0
2. Historical/archaeological sites on the land	0	
3. Special features and beauty spots	0	0
4. General aesthetic value on the land	0	0
<b>CONSERVATION ASPECTS IN A SOCIAL CONTEXT</b>		
1. Potential for eco-tourism	0	0

2. Present recreation, and potential for recreation	0	0
3. People feeling that the proposed upgrading of the Firgrove substation will benefit them	11	100%

### 5.2.2 Macassar

Based on our field investigation in Macassar it was found out the residents are also looking forward for the development hence they are anticipated job opportunities to be created during the undertaking of the proposed development. Most of the people in Macassar are unemployed and are expecting that job opportunities will be created for them.

<b>MACASSAR</b>		
<b>Determinants</b>	<b>28 respondents</b>	<b>Percent age</b>
<b>SOCIO/CULTURAL IMPORTANCE</b>		
1. People directly dependent on the land(ploughing fields)	0	0
2. People dependent on riparian plants for building, thatching and medicinal plants	0	0
3. People depending on the land for grazing field	0	0
4. People using the land for recreational purposes that requires ecologically healthy land	0	0
<b>CULTURAL/HISTORICAL VALUES</b>		
1. Sacred places on the land, and religious cultural events associated with the land	0	0
2. Historical/archaeological sites on the land	0	0
3. Special features and beauty spots	0	0
4. General aesthetic value on the land	0	0
<b>CONSERVATION ASPECTS IN A SOCIAL CONTEXT</b>		
1. Potential for eco-tourism	0	0
2. Present recreation, and potential for recreation	0	0
3. People feeling that the proposed upgrading of the Firgrove substation will benefit them	28	100%

### 5.2.3 Craydon

The questionnaires were distributed in the area but no feedback was received from the local residents hence the questionnaires were distributed in the street.

<b>CRAYDON</b>		
<b>Determinants</b>	<b>0 respondents</b>	<b>Percentage</b>
<b>SOCIO/CULTURAL IMPORTANCE</b>		
1. People directly dependent on the land(ploughing fields)	0	0
2. People dependent on riparian plants for building, thatching and medicinal plants	0	0
3. People depending on the land for grazing field	0	0
4. People using the land for recreational purposes that requires ecologically healthy land	0	0
<b>CULTURAL/HISTORICAL VALUES</b>		
1. Sacred places on the land, and religious cultural events associated with the land	0	0
2. Historical/archaeological sites on the land	0	0
3. Special features and beauty spots	0	0
4. General aesthetic value on the land	0	0
<b>CONSERVATION ASPECTS IN A SOCIAL CONTEXT</b>		
1. Potential for eco-tourism	0	0
2. Present recreation, and potential for recreation	0	0
3. People feeling that the proposed upgrading of the Firgrove substation will benefit them	0	0

### 5.2.4 Deepfreeze

The questionnaires were distributed in the area and the there was no feedback received hence the questionnaires were distributed to the people.

<b>DEEPFREEZE</b>		
<b>Determinants</b>	<b>2respondents</b>	<b>Percentage</b>
<b>SOCIO/CULTURAL IMPORTANCE</b>		
1. People directly dependent on the land(ploughing fields)	0	0
2. People dependent on riparian plants for building, thatching and medicinal plants	0	0
3. People depending on the land for grazing field	0	0
4. People using the land for recreational purposes that requires ecologically healthy land	0	0
<b>CULTURAL/HISTORICAL VALUES</b>		



1. Sacred places on the land, and religious cultural events associated with the land	0	0
2. Historical/archaeological sites on the land	0	0
3. Special features and beauty spots	0	0
4. General aesthetic value on the land	0	0
<b>CONSERVATION ASPECTS IN A SOCIAL CONTEXT</b>		
1. Potential for eco-tourism	0	0
2. Present recreation, and potential for recreation	0	0
3. People feeling that the proposed upgrading of the Firgrove substation will benefit them	2	100%

## 6. COMMENTS FROM THE CITY OF CAPE TOWN

Various departments from the City of Cape Town Municipality commented on the proposed development. The comments received are from respective departments within the municipality. Based on the comments received from the municipality it is clear that the city of Cape Town acknowledges the importance of the proposed upgrading of Firgrove substation in Firgrove. However the municipality highlighted that the environment should be conserved responsibly so as to ensure that the surrounding environment next to the substation is not degraded and also to ensure that the lives of the residents are taken into consideration during and after the undertaking of the proposed development.

## 7. CONCLUSIONS AND RECOMMENDATIONS

In terms of our field investigation for the proposed development it was found that the residents around the area of the proposed development are looking forward to the proposed development.

The following information is based on the field investigation conducted in each suburb. The study was however limited and this prevented proper consultation with all relevant affected parties (for example, formal structures like associations and local community organization, business structures) which means that more information may have not been sourced. The poor response from the public with regard to the questionnaires distributed also lengthened the process of capturing data with regard to the social status of the affected communities. The reasons why there was poor response from the communities included the following:

1. Members of the community feared that if they sign the questionnaire this would mean that they will lose their land.
2. Some members were participating with the fear that they may take decision for others which could later put them in trouble.

The implication of these challenges is that the degree to which the results reflect the reality is not as high as it should be.

Notwithstanding the challenges during the execution of the project and the limited extent of participation by all relevant stakeholders the survey results can be relied upon.

<b>QUESTIONNAIRE</b>			
1. SETTLEMENT/AREA NAME:			
POPULATION ESTIMATE:			
NAME & ID:			
ADDRESS & CONTACTS:			
AGE:			
GENDER:	Female		Male
EDUCATIONAL LEVEL:			
STATUS OF EMPLOYMENT:	Yes		No
2. WHICH PART OF VILLAGE/PORION ARE YOU USING?			
3. WHAT ARE YOU DIRECTLY USING THE LAND FOR?	Cultivating/farming		
	Hunting		
	Conservation		
	Recreational/Sport		
	Traditional Customs or religion		
	Plants/Mineral		
	Stock		
4. HOW OFTEN DO YOU USE THE LAND?	Yearly		
	Monthly		
	Weekly		
	Daily		
5. DO YOU HAVE ANY HISTORICAL OR ARCHAEOLOGICAL SITE ON THE LAND?	Yes (if yes, please state where)		
6. IN YOUR OPINION, WILL POWER LINE BENEFIT YOU?	Yes (if yes, please state how)		
	No		
7. DO YOU HAVE AREAS ON THE PROPOSED CORRIDOR THAT IS POTENTIAL FOR ECOTOURISM?	Yes (if yes, please state where)		
	No		
8. DO YOU HAVE ANY BEAUTY SPOTS OR AESTHETIC VALUE ON THE LAND?	Yes (if yes, please specify)		
	No		
9. WHAT IS YOUR FEELING ABOUT THE PROPOSED PROJECT?			
10. HOW WILL THE PROJECT AFFECT THE USE OF THE LAND?			

Signature:.....

Date:.....

**APPENDIX B**

List of suburbs:

1. Firgrove
2. Macassar
3. Craydon
4. Deepfreeze

