#### 10. LAND USE

#### 10.1. Background

The study area is situated in the area of the jurisdiction of Lephalale Local Municipality, which municipality forms part of the Waterberg District Municipality.

The Waterberg District Municipality consists of six local municipalities namely:

- Mookgopong Local Municipality (Naboomspruit Area)
- Bela-Bela Local Municipality (Warm Baths Area)
- Thabazimbi Local Municipality (Thabazimbi Area)
- Modimolle Local Municipality (Nylstroom Area)
- Mogalakwena Local Municipality (Potgietersrus Area)
- Lephalale Local Municipality (Lephalale Area)

The Lephalale Local Municipality is the only municipality that may directly experience potential land use impacts as a result of the proposed power station development.

The Lephalale Local Municipality was established during 2001 and is an authorised local authority in terms of the provisions of the Town Planning and Townships Ordinance, 1986 (Ordinance 15 of 1986) and is, therefore, in a position to take decisions in respect of applications for amendment or new land use rights within its area of jurisdiction.

Applications for changes in land use rights in urban areas (proclaimed townships) are dealt with in terms of the Ellisras/Marapong Town Planning Scheme, 1996. All the properties identified for this project fall outside the area that is governed by the Ellisras/Marapong Town Planning Scheme, 1996. The Marapong Township is, however, included in this town planning scheme.

The existing Matimba Power Station provides employment opportunities for approximately 750 employees and, therefore, contributes to the economic growth of Lephalale and the Limpopo Province.

The development of the proposed Matimba B Power Station will create additional employment and, therefore, contribute positively to economic growth of the area, as well as the economic empowerment and social upliftment of local residents.

# 10.2. Approach

The investigation into the land use consequences of the project included the following:

- The identification of land parcels affected by the proposed power station development and the compilation of an appropriate electronic database for this purpose.
- Determining the status of these land parcels.
- A technical appraisal of the potential impacts from a land use perspective.

Based on the alternative sites for the proposed power station and ancillary infrastructure the following investigations were undertaken:

- A search on the most recent compilations on record with the Surveyor General (effective date: end June 2005).
- A comparison with the records of the Registrar of Deeds to determine:
  - Registered owners of affected land portions.
  - \* Correct property descriptions and title deed information.
  - \* Identification of existing legal encumbrances (servitudes, long lease diagrams and accurate cadastral size of land portions involved).
- Determination of existing land use rights attaching to each land portion (zoning rights, consent rights and related statutory development controls).
- Determination of the status of Land Development Objectives (LDO's) and Integrated Development Plans (IDP's) affecting the relevant land portions and categorisation of spatial framework implications.
- Assessment of any applications for change in land use and/or subdivision under consideration by the responsible authorities in the area of the Matimba Power Station.

Input into the environmental impact assessment from a land use perspective includes the following:

- Investigating and reporting on potential impacts on land use configurations and local planning in the affected areas.
- An exposition of conditions prevailing in the affected area and a technical description and assessment of the perceived impact from a land use perspective.
- Suggested mitigating measures to alleviate or reduce the effects of negative impacts or, alternatively, to enhance positive impacts. This includes references to the required changes in statutory planning policies (such as approved integrated development plans and land development objectives), which affect the relevant land parcels.

# 10.3. Development Concept

The development concept is based on the development of the proposed Power Station terrace area on one of four selected properties in close proximity to the existing Matimba Power Station, as well as the development/provisioning of ancillary infrastructure on a property adjacent to the preferred site (eight potential properties/sites have been identified for this purpose).

From a land use perspective the proposed power station and ancillary infrastructure should be developed in a position, and manner, to have the least possible impact on surrounding land uses, the land use regime, and future planning in the area.

The proposed Matimba B Power Station would not be regarded as an extension of the existing Matimba Power Station, and would be able to function independently and all the relevant infrastructure and supporting functions would, therefore, be provided on site.

# 10.4. Defining The Subject Areas

Information was provided for four alternative sites for the proposed power station terrace area and four additional sites for the ancillary infrastructure for the purposes of the site selection process from a land use perspective.

For the purposes of this study the subject areas/sites are defined in the following manner:

- Possible Sites for the proposed power station:
  - \* Appelvlakte 448 LQ
  - \* Nelsonskop 464 LQ
  - \* Naauwontkomen 509 LQ
  - \* Eenzaamheid 687 LQ
- Possible Sites for the proposed ancillary infrastructure:
  - \* Appelvlakte 448 LQ
  - \* Nelsonskop 464 LQ
  - \* Naauwontkomen 509 LQ
  - \* Eenzaamheid 687 LQ
  - \* Droogeheuvel 447 LQ
  - \* Zongezien 467 LQ
  - \* Kuipersbult 511 LQ
  - \* Kromdraai 690 LQ

# 10.5. Property Particulars

The property particulars of the proposed sites, according to information gathered from the Surveyor General and the Registrar of Deeds, are summarised in Table 10.1.

**Table 10.1:** Property particulars of the proposed sites

Property	Property	Registered Owner	Surveyor-General
Description	Size		Diagram No
Remainder of	881.8068 ha	Kumba Coal (Pty) Ltd (Reg	
Farm		no: 200001107807)	
Appelvlakte 448			
LQ			
Portion 1 of the	256.9596 ha	Kumba Coal (Pty) Ltd	A/5528/59
Farm		(Reg no: 200001107807)	
Appelvlakte 448			
LQ			
Farm	1278.8166 ha	Professional Imaging CC	
Droogeheuvel		(Reg no: 199804836623)	
447 LQ			
Remainder of	848.1985 ha	Kumba Coal (Pty) Ltd	
Farm		(Reg no: 200001107807)	
Nelsonskop 464			
LQ			
Portion 1 of the	256.9596 ha	Kumba Coal (Pty) Ltd	
Farm		(Reg no: 200001107807)	
Nelsonskop 464			
LQ			
Remainder of	964.2712 ha	Eskom Holdings (Ltd)	A3392/63
the Farm		(Reg no: 200201552706)	
Zongezien 467			
LQ			
Portion 1 of the	217.2796 ha	Martheunis Frederik Loots	A3393/63
Farm Zongezien			
467 LQ			
Portion 2 of the	13.3425 ha	Plaaslike Owerheid van	A10459/1993
Farm Zongezien		Marapong	
467 LQ			
Portion 3 of the	13.4414 ha	Plaaslike Owerheid van	A10460/1993
Farm Zongezien		Marapong	
467 LQ			

Property	Property	Registered Owner	Surveyor-General
Description	Size		Diagram No
Naauwontkomen	883.4785 ha	Kumba Coal (Pty) Ltd	A3811/09
509 LQ		(Reg no: 200001107807)	
Remainder of	523.5634 ha	Kapersbult CC	
the Farm		(Reg no: 19883415423)	
Kuipersbult 511			
LQ			
Portion 1 of the	557.3318 ha	Kapersbult CC	A3277/52
Farm		(Reg no: 19883415423)	
Kuipersbult 511			
LQ			
Eenzaamheid	936,5780 ha	Jacobus Johannes Thuynsma	8477/2001
687 LQ			
Kromdraai 690	1136,0508ha	Noord Grond Eiendomme	5704/2002
LQ		(Pty) Ltd	

# 10.6. Planning Policy and Guideline Documents

# 10.6.1. Integrated Development Plans (IDP's) at District Level

Integrated Development Planning is a process through which municipalities prepare strategic development plans for a 5-year period. The Integrated Development Plan (IDP) is a strategic planning instrument that aims to guide and inform all planning, budgeting, management and decision making in a municipality. Integrated Development Plans are prepared in terms of the Municipal Structures Act, 1998.

The Integrated Development Planning process for the Waterberg District Municipality Area had not been finalised when this report was completed. A Spatial Development Framework for the Northern Province was made available by the Provincial Department of Housing and Local Government. Although the Spatial Framework had not been approved at the date of this report, the information was used for the purpose of this report, as this framework represents the latest updated information of the district and local municipal area affected by this project.

# 10.6.2. Integrated Development Planning at Local Level

The Lephalale Local Municipality had finalised the Local Municipality Integrated Development Planning process as at the date of this report. This IDP (Lephalale Local Municipality Integrated Development Plan) was largely used for the purposes of this report.

#### 10.6.3. Northern Province Spatial Development Framework, 2002

#### Spatial Framework

Applications for changes in land use rights in rural areas for the local municipal area involved in this project are evaluated on provincial level. The above-mentioned Provincial Spatial Development Framework is used as an instrument to guide and inform all planning, management and decision-making at provincial level in the area under consideration. This Spatial Development Framework contains the latest updated information regarding each local municipality within the Northern Province.

The Spatial Development Framework identified various land use categories including:

- \*\_\_agricultural areas.
- <u>\*</u> conservation areas.
- so-called exemption farms.
- \*\_\_biospheres.
- development clusters.

#### Guiding Principles

The Limpopo Provincial Spatial Development Framework provides the spatial background to guide development and development initiatives in the Limpopo Province. It is strategic in nature and serves to guide and direct the decision-making process rather than to govern and regulate land use development. However, where Integrated Development Plans (IDP's) and Land Development Objectives (LDO's) have been officially approved by the appropriate authorities, the relevant legislation provides that no land use related decisions of any authority may be implemented where such decisions are deemed to be inconsistent with the provisions of the IDP or LDO's. It is, therefore, important to assess the proposed development of the proposed new power station against the background of what is proposed by the IDP and the Provincial Spatial Development Framework.

The Spatial Development Framework divides the district into seven functional precincts/categories - each based on a very distinct function which the area

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fulfils in the context of the each authority area. The areas can be summarised as follows:

- \* Mineral potential areas
- \* Coal fields
- \* Potential agriculture areas
- \* Nature Conservation areas
- Hunting lodges (exemption farms)
- Biospheres
- Development Clusters

Development clusters are further categorised as follows:

- \* Provincial growth point
- \* District growth point
- \* Municipal growth point
- Population concentration points
- Local services point

The above-mentioned functional areas are illustrated on the extract from the Provincial Spatial Development Framework on Map 1 (refer to Appendix M: Map 1).

Although the subject areas are not specifically earmarked for the purpose of a power station and associated infrastructure, it is confirmed that the existing Matimba Power Station and the subject areas are situated in a provincial growth point. In addition, it is confirmed that infrastructure is usually not indicated on plans of such a strategic nature. The scale and nature of a Spatial Development Framework (at provincial level) precludes the possibility of indicating detailed infrastructure as part of the broader land use categorisation.

It may, therefore, be concluded that the proposed Matimba B Power Station and associated infrastructure can, in terms of the LDO / IDP development framework proposals at provincial level be deemed to be generally consistent with the provisions governing land use.

# 10.6.4. Lephalale Local Municipality Integrated Development Plan, 2002

The Lephalale Local Municipality IDP focuses in more detail on the area within the jurisdiction of the Lephalale Local Municipality.

The above-mentioned IDP identified two Growth Points within the Lephalale area namely:

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- the Mokerong area.
- the Lephalale/Onverwacht area.

The IDP and the Spatial Development Framework focuses largely on these two areas, since they are regarded as the major growth points in the Lephalale jurisdiction.

Map 2 illustrates the Spatial Development Framework for the Lephalale/Onverwacht area and indicates Development Nodes and Mineral Areas for the Lephalale/Onverwacht area, as identified in the Lephalale IDP (Map 2 is included in Appendix M).

The existing Matimba Power Station, situated on Remainder of the Farm Grootestryd 465 LQ, is situated in an industrial node in terms of the Ellisras/Marapong Spatial Development Framework.

Although the subject areas are not earmarked for any specific purpose in terms of the Ellisras/Marapong Spatial Development Framework, it can be said that it is generally accepted that industrial type uses (such as power stations) should be concentrated in industrial nodes. It would, therefore, make sense to expand the industrial node to, eventually include the preferred site.

Nelsonskop 464 LQ is the best positioned in this regard (adjacent to the existing Matimba Power Station) and the inclusion of this property into the industrial node will, therefore, not lead to leap-frog development taking place.

With reference to Map 2 (refer to Appendix M) it is confirmed that, according to the proposal of the framework, Marapong will grow/extend in an eastern and south-eastern direction (away from the Matimba Power Station and towards Lephalale/Onverwacht) which implies that the development of any of the subject areas would not interfere with the future planning of the Marapong Township (as indicated on the Ellisras/Marapong Spatial Development Framework). The mentioned framework does not make provision for Marapong to extend in a northern or north-western direction.

#### 10.7. Land Use Rights and Zoning Implications

The subject areas are zoned "Undetermined" in terms of the Peri-Urban Areas Town Planning Scheme, 1975. In terms of the mentioned Town Planning Scheme, properties zoned "Undetermined" may be used for the erection of single dwelling houses and limited agricultural buildings.

The Marapong Township (situated directly east of the existing Matimba Power Station) is a proclaimed township and is, therefore, governed in terms of the

Ellisras/Marapong Town Planning Scheme. None of the properties in this township will, however, be affected by the proposed development.

#### 10.8. Implication of Zoning Restrictions

The existing zoning restrictions of the subject areas do not provide for the development of the proposed power station and ancillary infrastructure without a change in land use zoning. The proposed power station facility can be regarded as being a "single use" development and the amendment of the relevant town planning scheme can, therefore, be dealt with by means of a rezoning process instead of an township establishment process, which is generally applicable when a farm portion is developed.

The following two application procedures are available for the purposes of the procurement of the necessary land use rights:

- An application for rezoning in terms of Section 56 of the Town Planning and Townships Ordinance, 1986 (Ordinance 15 of 1986).
  - In terms of this process a rezoning application (Ordinance application) is submitted to the local authority and circulated to internal service providers for comment. The local authority approves, or rejects the application.
- An application for the Establishment of a Development Area in terms of the Development Facilitation Act, 1995.

In terms of this process a DFA application is submitted to the Limpopo Development Tribunal and circulated to relevant service providers, stakeholders and the local authority for comment. A hearing takes place, whereafter the Development Tribunal takes a decision on the matter.

# 10.9. Land Use Regime and Implications

# 10.9.1. Towns and settlements

Proclaimed towns and settlements that may be influenced (directly or indirectly) by the proposed development of the power station are as follows:

- Marapong
- Onverwacht
- Lephalale

Lephalale is situated approximately 15 km east of the existing Matimba Power Station, and approximately 10 - 12 km east of the farm Zongezien 467 LQ which

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property is situated closer to Lephalale than any of the alternatives sites. It is therefore unlikely that the proposed development of a power station on any of the subject areas would have negative impacts on Lephalale from a land use perspective, particularly against the background of the existing Matimba Power Station having been there for a period of 14 years.

The township Onverwacht (including various extensions of Lephalale) is situated approximately 4 km south-east of the existing Matimba Power Station and approximately 8 km south-east of the closest alternative site, namely Zongezien 467 LQ.

From the above it is clear that the existing Matimba Power Station is situated closer to Onverwacht than the subject areas. It is, therefore, not anticipated that the development of the proposed power station will have any negative impacts on the township of Onverwacht from a land use perspective.

Marapong is situated directly north of, and adjacent to, the existing Matimba Power Station on Portions of the Farms Grootestryd 465 LQ, Peerboom 466 LQ and Nelsonskop 464 LQ.

The Marapong Township is most likely to be impacted on should either Nelsonskop 464 LQ or Appelvlakte 448 LQ be selected as the preferred alternative. The development of the proposed power station on Nelsonskop 464 LQ will result in Marapong being bordered by power station developments on 3 sides (to the south, to the west and to the north).

# 10.9.2. Agricultural

Several properties in the vicinity of the subject areas are being used for commercial farming purposes in the form of maize and crop growing and cattle farming. It is evident that the farming activities continue without experiencing a significant impact from the existing Matimba Power Station.

It is, therefore, anticipated that the proposed power station will not have a significant impact on the agricultural activities in the area. It must, however, be said that the infrastructure related to the proposed power station development (such as powerline infrastructure, roads, pipelines and other associated infrastructure) might cause possible negative impacts on agricultural activities on surrounding farm portions. Attention should therefore be given to the alignment of services in such a manner as to cause the least possible impact on agricultural activities. Services should be aligned in such a manner to hug cadastral boundaries (when possible) or to traverse over areas (of farms) which are not suitable for agricultural purposes.

# 10.9.3. Exemption farms (Hunting Lodges)

It is important to take into consideration that numerous farms in the vicinity of the subject areas are being used for tourist-related facilities (game farms). These farms (exemption farms) are clearly illustrated on Map 1(refer to Appendix M) and illustrate the demand for, and popularity of, this area for such purposes. The development of the proposed power station may have a detrimental impact on these farms in terms of visual quality, which may result in loss of income by registered owners.

The nature of the proposed power station (large structures, towers, etc) is such that it may impact on the visual aesthetics and quality of the farms involved which may lead to the relocation of these enterprises and resulting change in the land use of properties. It is anticipated that the visual impact will be minimised if the proposed new power station is developed adjacent to the existing power station.

### 10.9.4. Mineral potential areas

With reference to Map 1 (refer to Appendix M) it is confirmed that the areas to the north and north-east of Lephalale (around Matimba Power Station) are well known for the Waterberg Coalfield (Coal deposits). Parties such as Kumba Resources, Anglo Coal and Sasol have interests in the Waterberg coalfields.

Current mining activities within the study area include the Grootegeluk Colliery which is situated on the farms Enkelbult, Daarby and Goedehoop. The existing Matimba Power Station currently obtains its coal from his mine, which has sufficient coal reserves to guarantee Matimba a minimum life span of 35 years at 4 800 tons of coal per hour.

Coal deposits occur on: -

- Eenzaamheid (north of the Eenzaamheid fault)
- Naauwontkomen (north of the Eenzaamheid fault)
- Appelvlakte (at depth)
- Nelsonskop (at depth)
- Droogeheuvel (at depth)
- Zongezien (at depth)

It is anticipated that the current mining activities will extend to the west and possible to the south of the current mine which could include the following farms:

- Grootegeluk
- Leeuwdrift

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- Hieromtrent
- Turfvlakte

Future mining activities are restricted by the Daarby fault (in the north) and the Eenzaamheid fault (in the south). Information from Kumba Resources indicates that potential coal reserves can also be found on the farm Zongesien and to a lesser extent Nelsonskop. However, the potential for exploration is not known.

Anglo Coal have a prospecting permit for gas on numerous farms in the area, including the farms Droogeheuvel 447 LQ, Zongezien 467 LQ, Apelvlakte 448 LQ and Nelsonskop 464 LQ. These farms are part of Anglo Coals pending application for conversion to an exploration right in terms of the Minerals and Petroleum Resources Development Act.

The construction of a power station and infrastructure on these coal deposits may have economic implications, as these coal deposits will become sterilised.

# 10.9.5. Development Clusters

The Spatial Development Framework (Appendix M: Map 1) that was used for the purposes of this report identified the following categories of development clusters on a provincial level:

- Provincial growth point
- Restrict growth point
- Municipal growth point
- Population concentration point
- Local services point

The area surrounding Lephalale, close to the Matimba Power Station, is identified in the Spatial Development Framework as a Provincial Growth Point. The proposed developments of the proposed Matimba B Power Station will result in an economic injection into the area and, therefore, support the development principles of the Spatial Development Framework with specific reference to supporting the Provincial Growth Point.

The proposed development will not influence any development clusters as identified in the Provincial Spatial Development Framework.

# 10.10. The Expected Impact of the Development on Surrounding Land Uses

#### 10.10.1. Towns and settlements

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#### • Functional Division

Although it is not anticipated that the development of the proposed power station will result in the functional division of any township, it may happen that the ancillary infrastructure, with specific reference to transmission lines, result in the functional division of the Marapong Township. Special attention should, therefore, be given to the route alignment of transmission lines to and from the preferred site.

Specific reference is made to the Marapong Township where the existing power line servitudes divide Marapong into two areas. The addition of new power line servitudes may cause further division. Table 10.2 evaluates the impact of the proposed power station and ancillary infrastructure on land use in terms of the functional division of towns and settlements.

**Table 10.2:** The evaluation of the impact of the proposed power station and ancillary infrastructure on land use in terms of the functional division of towns and settlements

Site	e Nature of	Temporal	Spat	ial	Severity	Signific	cance		Likel	ihood	Degree of
	Impact	Scale	Scale	е							Certainty
	Functional Division					WOM	WM	W	ОМ	WM	
	(Towns)										
1	NA	NA	NA		NA	NA	NA	N/	4	NA	NA
2	Marapong	Permanent	Hous	ehold	Severe	High	NS	W	DO	VUTO	Definite
3	NA	NA	NA		NA	NA	NA	N/	4	NA	NA
4	NA	NA	NA		NA	NA	NA	NA		NA	NA
5	Marapong	Permanent	Hous	ehold	Severe	High	NS	W	DO	VUTO	Definite
6	Marapong	Permanent	Hous	ehold	Severe	High	NS	W	DO	VUTO	Definite
7	NA	NA	NA		NA	NA	NA	NA N		NA	NA
8	NA	NA	NA		NA	NA	NA	N	4	NA	NA
1	Appelvlakte 448	3 LQ	2	Nelso	nskop 464 LO	5	3	Naauwontkomen 5			09 LQ
4	Eenzaamheid 68	87 LQ	5	Droog	geheuvel 447	LQ	6	Zor	igeziei	1 467 LQ	
7	Kuipersbult 511	LQ	8	Krom	draai 690 LQ						
WON	Without miti	gation	NS	No	significance		VUT	0	Very	unlikely t	o occur
WM	With mitigat	ion	WDC	) W	ill definitely o	ccur	NA		Not a	pplicable	

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#### Possible restriction of access

The proposed power station may restrict the accessibility between certain settlements and extensions and cause detours, with specific reference to pedestrian routes. Again, this impact would rather be associated with the supporting infrastructure such as transmission lines (placement of towers) and associated servitudes that may cause problems in terms of accessibility. Table 10.3 evaluates the impact of the proposed power station and ancillary infrastructure on land use in terms of possible restriction of access.

**Table 10.3:** The evaluation of the impact of the proposed power station and ancillary infrastructure on land use in terms of possible restriction of access.

Site	Nature of Impact	Temporal Scale	Spa Scal		Severity	Significan	ce		Like	lihood	Degree of
											Certainty
	Possible					WOM	WN	1	wo	WM	
	Restriction								М		
	of Access										
1	NA	NA	NA		NA	NA	NA		NA	NA	NA
2	Marapong	Permanent	Hous	se-	MS	Moderate	NS		MO	VUTO	Possible
			hold								
3	NA	NA	NA		NA	NA	NA		NA	NA	NA
4	NA	NA	NA		NA	NA	NA		NA	NA	NA
5	NA	NA	NA		NA	NA	NA		NA	NA	NA
6	NA	NA	NA		NA	NA	NA		NA	NA	NA
7	NA	NA	NA		NA	NA	NA		NA	NA	NA
8	NA	NA	NA		NA	NA	NA		NA	NA	NA
1	Appelvlakte 448	LQ	2	Nels	sonskop 464	LQ	3	Naa	uwontk	omen 509	9 LQ
4	Eenzaamheid 68	7 LQ	5	Dro	ogeheuvel 4	47 LQ	6	Zor	igezien	467 LQ	
7	Kuipersbult 511	LQ	8	Kro	mdraai 690 l	_Q					
WOM	Without mitiga	ation	NS	N	o significance	е	VU	то	Very u	ınlikely to	occur
WM	With mitigatio	n	МО	М	ay occur		NA		Not ap	plicable	
MS	Moderate seve	ere									

# • Possible restriction of development

The proposed power station may restrict the future extension of settlements located in close proximity to the subject areas, with specific reference to the Marapong Township. With reference to Map 2 (included in Appendix M) it is confirmed that future planning of Marapong indicates that this township would, most probably, extend in an eastern and south-eastern direction and no provision is made for extension of the township towards the subject areas situated directly north of the township. Table 10.4 evaluates the impact of

the proposed power station and ancillary infrastructure on land use in terms of possible restriction of development.

**Table 10.4:** The evaluation of the impact of the proposed power station and ancillary infrastructure on land use in terms of possible restriction of development

Site	Possible Restrictio n of Develop- ment	Temporal Scale	Spat Scale		Severity	Signific	WM		WO M	WM	Degree of Certain ty
1	NA	NA	NA		NA	NA	NA		NA	NA	NA
2	Marapong	Permanent	House	ehold	MS	М	М		WDO	WDO	Possible
3	NA NA	NA	NA		NA	NA	NA		NA	NA	NA
4	NA	NA	NA		NA	NA	NA		NA	NA	NA
5	NA	NA	NA		NA	NA	NA		NA	NA	NA
6	Marapong	Permanent	Hous	ehold	MS	М	М		WDO	WDO	POSSIB LE
7	NA	NA	NA		NA	NA	NA		NA	NA	NA
8	NA	NA	NA		NA	NA	NA		NA	NA	NA
1	Appelvlakte 44	8 LQ	2	Nelso	nskop 464 L	Q	3	Na	aauwont	tkomen 5	09 LQ
4	Eenzaamheid 6	587 LQ	5	Droog	eheuvel 447	' LQ	6	Zo	ongezier	1 467 LQ	
7	Kuipersbult 51	1 LQ	8	Kromo	draai 690 LQ	1					
WOM	Without miti	gation	М	Mod	derate		WD	0	Will de	efinitely o	ccur
WM	With mitigat	ion	МО	May	occur /		NA		Not ap	plicable	
MS	Moderate se	vere									

# • Visual Impact

The proposed power station may, upon completion of construction, have a negative impact on the visual character of existing settlements, as a power station consists of large structures and stacks that are very prominent. Aesthetic appreciation of the landscape and townscape may be detrimentally affected. Table 10.5 evaluates the impact of the proposed power station and ancillary infrastructure on land use in terms of visual impact.

**Table 10.5:** The evaluation of the impact of the proposed power station and ancillary infrastructure on land use in terms of visual impact

Site	Nature of	Temporal	Spatia	ı	Severity	Signifi	cance	Likel	ihood	Degree of
	Impact	Scale	Scale	1						Certainty
						WOM	WM	WOM	WM	
1	VI	Permanent	Localise	ed	Severe	High	High	WDO	WDO	Definite
2	VI	Permanent	Localise	ed	MS	М	М	WDO	WDO	Definite
3	VI	Permanent	Localise	ed	Severe	М	М	WDO	WDO	Definite
4	VI	Permanent	Localise	ed	Severe	High	High	WDO	WDO	Definite
5	VI	Permanent	Localise	ed	Severe	High	High	WDO	WDO	Definite
6	VI	Permanent	Localise	ed	Severe	High	High	WDO	WDO	Definite
7	VI	Permanent	Localise	ed	Severe	High	High	WDO	WDO	Definite
8	VI	Permanent	Localise	ed	Severe	High	High	WDO	WDO	Definite
1	Appelvlakte 4	148 LQ	2	Ne	Isonskop 46	4 LQ	3	Naauwontkome		n 509 LQ
4	Eenzaamheid	l 687 LQ	5	Dr	oogeheuvel	447 LQ	6	Zongez	ien 467 l	_Q
7	Kuipersbult 5	511 LQ	8	Kr	Kromdraai 690 LQ					
WOM	Without r	nitigation	VI		Visual Im	pact	WDO	Will definit		ely occur
WM	With mi	tigation	М		Modera	te	NA		Not appl	icable
MS	Moderat	e severe								

# • Possible resettlement of households

It may be necessary to relocate some households if existing dwellings are found to be located on the preferred site (illegal squatting) at the date of commencement of construction. At the date of this report the subject areas were vacant and no illegal squatting occurred. Table 10.6 evaluates the impact of the proposed power station and ancillary infrastructure on land use in terms of resettlement.

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**Table 10.6:** The evaluation of the impact of the proposed power station and ancillary infrastructure on land use in terms of resettlement.

Site	•	Nature of	Temporal	Spat	ial	Severity	Significan	се		Like	lihood	Degree of
		Impact	Scale	Scale	е							Certainty
							WOM	WI	1	wo	WM	
										М		
1		PROH	Permanent	Hous	ehold	Severe	Moderate	NS		МО	VUTO	Unsure
2		PROH	Permanent	Hous	ehold	Severe	Moderate	NS		МО	VUTO	Unsure
3		PROH	Permanent	Hous	ehold	Severe	Moderate	NS		МО	VUTO	Unsure
4		PROH	Permanent	Hous	ehold	Severe	Moderate	NS		МО	VUTO	Unsure
5		PROH	Permanent	Hous	ehold	Severe	Moderate	NS		МО	VUTO	Unsure
6		PROH	Permanent	Hous	ehold	Severe	Moderate	NS		МО	VUTO	Unsure
7		PROH	Permanent	Hous	ehold	Severe	Moderate	NS		МО	VUTO	Unsure
8		PROH	Permanent	Hous	ehold	Severe	Moderate	NS		МО	VUTO	Unsure
1	Αŗ	pelvlakte 448	LQ	2	Nelso	onskop 464 L	Q	3	Na	auw O	ntkomen	509 LQ
4	Ee	enzaamheid 68	37 LQ	5	Droo	geheuvel 44	7 LQ	6	Zoı	ngezie	n 467 LQ	
7	Κι	ipersbult 511	LQ	8	Krom	ndraai 690 L0	Q.					
WON	1	Without mitig	gation	NS		No significan	ce	VU	то	Very	unlikely	to occur
WM		With mitigati	on	МО		May occur						
PRO	Н	Possible rese	ttlement of ho	useho	lds							

Possible impact on planning policies and future development

The proposed power station is deemed to be generally consistent with the existing LDO/IDP directives for the area under consideration, but it would, however, be necessary to undertake the necessary application process in order to procure the required land use rights.

The proposed power station development is also regarded as being consistent with the Provincial Spatial Development Framework as illustrated on Map 1 (refer to Appendix M). Table 10.7 evaluates the impact of the proposed power station and ancillary infrastructure on land use in terms of planning policies and future development.

**Table 10.7:** The evaluation of the impact of the proposed power station and ancillary infrastructure on land use in terms of planning policies and future development.

Sit	е	Nature of	Temporal	Spat	ial	Severity	Significan	ce	Lik	elihood	Degree of
		Impact	Scale	Scal	е						Certainty
							WOM	WM	I WOM	I WM	
1			Permanent	Loca	ised	MS	Moderate	Low	MO	МО	Probable
2		PIPPAFD	Permanent	Local	ised	MS	Moderate	Low	MO	МО	Probable
3		PIPPAFD	Permanent	Loca	ised	MS	Moderate	Low	MO	МО	Probable
4			Permanent	Local	ised	MS	Moderate	Low	MO	МО	Probable
5	5 PIPPAFD Permanent		Permanent	Loca	ised	MS	Moderate	Low	MO	МО	Probable
6		PIPPAFD	Permanent	Local	ised	MS	Moderate	Low	MO	МО	Probable
7		PIPPAFD	Permanent	Loca	ised	MS	Moderate	Low	MO	МО	Probable
8		PIPPAFD	Permanent	Loca	ised	MS	Moderate	Low	MO	МО	Probable
1	Al	ppelvlakte 448	I LQ	2	Nelso	nskop 464 L	-Q	3	Naauw	Ontkomen	509 LQ
4	Ee	enzaamheid 68	87 LQ	5	Droo	geheuvel 44	7 LQ	6	Zongezi	en 467 LC	Σ
7	Κι	uipersbult 511	LQ	8	Krom	ndraai 690 L0	Q.				
WOI	М	Without mitig	gation	MS		Moderately	severe	МО	May	occur	
WM		With mitigati	ion	PIPE	PAFD	Possible im	pact on plani	ning p	oolicies a	nd future	development

# Possible safety risk

A power station adjacent to a residential area may create a safety and/or health risk. Special attention should be given to fencing and security measures in order to prevent unauthorised access, which may have fatal consequences. Table 10.8 evaluates the impact of the proposed power station and ancillary infrastructure on land use in terms of safety risk.

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**Table 10.8:** The evaluation of the impact of the proposed power station and ancillary infrastructure on land use in terms of safety risk.

Sit	е	Nature of	Temporal	Spat	ial	Severity	Significa	nce		Like	lihood	Degree of
		Impact	Scale	Scal	е							Certainty
							WOM	WM		WOM	WM	
1	1 PSR Permanent		Permanent	Hous	ehold	VS	High	Low		МО	VUTO	Probable
2		PSR	Permanent	Hous	ehold	VS	High	Low		МО	VUTO	Probable
3			Permanent	Hous	ehold	VS	High	Low		МО	VUTO	Probable
4	4 PSR Permanent		Permanent	Hous	ehold	VS	High	Low		МО	VUTO	Probable
5	5 PSR Perman		Permanent	Hous	ehold	VS	High	Low		МО	VUTO	Probable
6		PSR	Permanent	Hous	ehold	VS	High	Low		МО	VUTO	Probable
7		PSR	Permanent	Hous	ehold	VS	High	Low		МО	VUTO	Probable
8		PSR	Permanent	Hous	ehold	VS	High	Low		МО	VUTO	Probable
1	ΑĮ	ppelvlakte 448	LQ	2	Nelso	nskop 464 L	.Q <b>3</b> 1		N	aauw Oi	ntkomen	509 LQ
4	Εe	enzaamheid 68	37 LQ	5	Droog	geheuvel 44	7 LQ	6	Z	ongeziei	n 467 LQ	
7	Κι	uipersbult 511	LQ	8	Krom	draai 690 L0	5					
WOI	М	Without mitig	gation	PSR		Possible Sa	afety Risk	VUT	)	Very u	ınlikely to	occur
WM		With mitigati	on	VS		Very sever	е	МО		May o	ccur	

# 10.10.2. Agriculture (communal and commercial farming)

# Functional division

It is not anticipated that the proposed power station would have the effect of functionally dividing farm portions, but the power line infrastructure associated with the power station may have the effect of functional division of certain farm portions, where the presence of the power line "divides" a farm portion into two or more portions. Table 10.9 evaluates the impact of the proposed power station and ancillary infrastructure on land use in terms of the functional division of agricultural land.

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**Table 10.9:** The evaluation of the impact of the proposed power station and ancillary infrastructure on land use in terms of the functional division of agricultural land

Sit	е	Nature of	Temporal	Spat		Severity	Significa	nce	Likel	lihood	Degree of
		Impact	Scale	Scal	е						Certainty
							WOM	WM	WOM	WM	
1			Long term	Hous	ehold	MS	High	Low	MO	VUTO	Probable
2		FD	Long term	Hous	ehold	MS	High	Low	MO	VUTO	Probable
3	- 3		Long term	Hous	ehold	MS	High	Low	МО	VUTO	Probable
4	FD Long term		Long term	Hous	ehold	MS	High	Low	МО	VUTO	Probable
5	FD Long term		Long term	Hous	ehold	MS	High	Low	MO	VUTO	Probable
6		FD	Long term	Hous	ehold	MS	High	Low	MO	VUTO	Probable
7		FD	Long term	Household		MS	High	Low	MO	VUTO	Probable
8		FD	Long term	Hous	ehold	MS	High	Low	MO	VUTO	Probable
1	Αŗ	ppelvlakte 448	LQ	2	Nelso	nskop 464 L	.Q	3	Naauw O	ntkomen	509 LQ
4	Εe	enzaamheid 68	37 LQ	5	Droog	geheuvel 44	7 LQ	6	Zongezie	n 467 LQ	
7	Κι	uipersbult 511	LQ	8	Krom	draai 690 L0	S				
WOI	М	Without mitig	gation	FD		Functional	Division	VUTO	Very (	unlikely to	occur
WM		With mitigati	on	MS		Moderately	severe	МО	May o	ccur	

# • Sterilisation of Agricultural Land

The development of a power station on a farm portion that was never before impacted on by such a development implies that the agriculture potential of that property would be lost. None of the subject areas (sites) are, however, currently being used for the purposes of intensive agriculture. Table 10.10 evaluates the impact of the proposed power station and ancillary infrastructure on land use in terms of the sterilisation of agricultural land.

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**Table 10.10:** The evaluation of the impact of the proposed power station and ancillary infrastructure on land use in terms of the sterilisation of agricultural land

Sit	e	Nature of	Temporal	Spat	ial	Severity	Significa	ance		Likel	ihood	Degree of
		Impact	Scale	Scal	е							Certainty
							WOM	WM		WOM	WM	
1		SOAL	Long term	Hous	ehold	Slight	Low	Low		WDO	WDO	Possible
2		SOAL	Long term	Hous	ehold	Slight	Low	Low		WDO	WDO	Possible
3	,	SOAL	Long term	Hous	ehold	Slight	Low	Low		WDO	WDO	Possible
4		SOAL	Long term	Hous	ehold	Slight	Low	Low		WDO	WDO	Possible
5	SOAL Long term		Long term	Household		Slight	Low	Low		WDO	WDO	Possible
6			Long term	Hous	ehold	Slight	Low	Low		WDO	WDO	Possible
7	,	SOAL	Long term	Hous	ehold	Slight	Low	Low		WDO	WDO	Possible
8	}	SOAL	Long term	Hous	ehold	Slight	Low	Low		WDO	WDO	Possible
1	A	ppelvlakte 448	3 LQ	2	Nelso	nskop 464 l	_Q <b>3</b>		Naauw On		tkomen	509 LQ
4	E	enzaamheid 6	87 LQ	5	Droog	geheuvel 44	7 LQ	6	Zc	ngezien	467 LQ	
7	Kı	uipersbult 511	. LQ	8	Krom	draai 690 L0	5					
wo	М	Without miti	gation	WDC	)	Will definit	ely occur	SOA	L	Sterilis	ation of	agricultural
										land		
WM		With mitigat	ion	MS		Moderately	/ severe					

# 10.10.3. Exemption farms

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• Decrease in property value

The development of a power station in an area where exemption farms and game lodges occur may result in the change of character and the "sense of place" which may lead to decrease in property value of such developments and potential loss in income.

The Matimba Power Station has been in existence for 14 years in the Lephalale area and it is anticipated that the development of a second power station on a property in close proximity the existing power station would not have an adverse impact on the character of the area and the "sense of place".

Table 10.11 evaluates the impact of the proposed power station and ancillary infrastructure on land use in terms of property value.

**Table 10.11:** The evaluation of the impact of the proposed power station and ancillary infrastructure on land use in terms of property value

Site	е	Nature of	Temporal	Spat	ial	Severity	Significa	nce		Likel	ihood	Degree of
		Impact	Scale	Scale	е							Certainty
							WOM	WM		WOM	WM	
1		DIPV	MT	Local	ised	MS	М	М		WDO	WDO	Possible
2			MT	Local	ised	MS	М	М		WDO	WDO	Possible
3		DIPV MT		Localised		MS	М	М		WDO	WDO	Possible
4	DIPV MT		MT	Localised		MS	М	М		WDO	WDO	Possible
5		DIPV MT		Localised		MS	М	Low		MO	UTO	Possible
6		DIPV	MT	Local	ised	MS	М	М		WDO	WDO	Possible
7		DIPV	MT	Local	ised	MS	М	М		WDO	WDO	Possible
8		DIPV	MT	Local	ised	MS	М	М		WDO	WDO	Possible
1	Αŗ	pelvlakte 448	LQ	2	Nelso	nskop 464 L	.Q	3	Naauw O		tkomen	509 LQ
4	Εe	enzaamheid 68	37 LQ	5	Droo	geheuvel 44	7 LQ	6	Kı	uipersbu	lt 511 LQ	)
7	Zd	ongezien 467 l	n 467 LQ <b>8</b> Krd		Krom	ndraai 690 LO	S					
WOI	М	Without mitig	gation	MT		Medium ter	m	DIPV	′	Decrea	se in Pro	perty value
WM		With mitigati	on	MS		Moderately	severe	МО		May oc	cur	
WDO	)	Will definitely	occur /	UTO		Unlikely to	occur	М		Modera	ite	

# · Visual Impact

The proposed power station may have a negative impact on exemption farms and game lodges in the area that offer tourist related services. With reference to Map 1 (included in Appendix M) it is confirmed that numerous properties in the vicinity of the subject areas are being used for such purposes. Serious consideration will have to be given to the placement of the proposed power station, so as to prevent unnecessary visual intrusion in the area. Table 10.12 evaluates the impact of the proposed power station and ancillary infrastructure on land use in terms of visual impact on exemption farms and game lodges.

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**Table 10.12:** The evaluation of the impact of the proposed power station and ancillary infrastructure on land use in terms of visual impact on exemption farms and game lodges

Site	Site Nature of Temporal		Spatial Severi		Severity	Significance		Likelihood		Degree of		
Impact		Impact	Scale	Scale								Certainty
							WOM	WM		WOM	WM	
<b>1</b> VI		VI	MT	Localised		Severe	High	High		WDO	WDO	Probable
2	2 VI MT		Localised		MS	High	High		WDO	WDO	Probable	
3	3 VI MT		MT	Localised		MS	High	High		WDO	WDO	Probable
4	4 VI MT		Localised		MS	High	High		WDO	WDO	Probable	
5	<b>5</b> VI MT		MT	Localised		MS	М	Low		MO	ULO	Probable
6	6 VI MT		Localised		MS	High	High		WDO	WDO	Probable	
7		VI	MT	Localised		MS	High	High		WDO	WDO	Probable
8		VI	MT	Localised		MS	High	High		WDO	WDO	Probable
1	Appelvlakte 448 LQ			2	Nelso	Nelsonskop 464 LQ <b>3</b> Naauw Ontkomen					509 LQ	
4	Eenzaamheid 687 LQ			5	Droogeheuvel 447 LQ <b>6</b> Zongezien 467				467 LQ			
7	7 Kuipersbult 511 LQ		8	Kromdraai 690 LQ								
WOI	ч	Without mitigation		VI		Visual Impact		WDO	WDO		Will definitely occur	
WM		With mitigation		М		Moderate		ULO	ULO		Unlikely to occur	
MS		Moderate severe		MT		Medium ter	m <b>MO</b>			May oc	cur	

# 10.10.4. Mineral potential areas

The possible impact of the proposed power station on mineral potential areas and potential mining activities would appear to be minimal if any.

#### Possible Restrictions of Future Mining Operations

The development of the proposed power station on a preferred site may sterilise that area for the purposes of future mining operations. The future planning of the Grootegeluk Colliery (adjacent to the existing Matimba Power Station) confirms that none of the subject areas would be needed for mining purposes. Hoever, it is unconfirmed if the proposed development would have an impact on Anglo Coal's pending application to convert their prospecting permit for gas to a exploration right. Anglo Coal's prospecting permit includes the farms Droogeheuvel 447 LQ, Zongezien 467 LQ, Appelvlakte 448 LQ and Nelsonskop 464 LQ. Table 10.13 evaluates the impact of the proposed power station and ancillary infrastructure on land use in terms of future mining operations.

**Table 10.13:** The evaluation of the impact of the proposed power station and ancillary infrastructure on land use in terms of future mining operations

Sit	Site Nature of Tempora		Temporal	Spat	ial	Severity	nce Likelihood			Degree of		
		Impact	Scale	Scale	е							Certainty
							WOM	WM		WOM	WM	
1		PSFMO	Long term	Household		Slight	Low	Low		ULO	ULO	Unsure
3	PSFMO Long term		Household		Slight	Low	Low		ULO	ULO	Unsure	
5		PSFMO	Long term	Household		Slight	Low	Low		ULO	ULO	Unsure
7	PSFMO Long term		Household		Slight	Low	Low		ULO	ULO	Unsure	
2		PSFMO	Long term	Household		Slight	Low	Low		ULO	ULO	Unsure
4		PSFMO	Long term	Household		Slight	Low	Low		ULO	ULO	Unsure
6		PSFMO	Long term	Household		Slight	Low	Low		ULO	ULO	Unsure
8		PSFMO	Long term	Household		Slight	Low	Low		ULO	ULO	Unsure
1	ΑĮ	Appelvlakte 448 LQ			Nelso	Nelsonskop 464 LQ			Naaı	ıw Ontl	komen !	509 LQ
4	Eenzaamheid 687 LQ			5	Droog	geheuvel 44	6	Zongezien 467 LQ				
<b>7</b> Kuipersbult 511			LQ	8	Kromdraai 690 LQ							
WO	М	Without mitigation		ULO	JLO Unlikely to		occur					
WM		With mitigation		PSE	PSEFMO Possible restriction of			future mining operations				

#### 10.10.5. Development Clusters

It is not anticipated that the proposed power station will have any impact on any development clusters identified in the Provincial Spatial Development Framework. The power station will rather contribute positively to the Provincial Growth Point of Lephalale.

# 10.11. Conclusions

The investigation into the possible impact of the proposed power station in the Lephalale area has revealed no fatal flaws from a land use perspective. Although certain areas of concern have been highlighted, it appears that most are of such a nature that appropriate mitigation may reduce the impact to an acceptable level.

With reference to the alternative sites the conclusions on each identified alternative are summarised below:

# Appelvlakte 448 LQ

With proper mitigation, it is confirmed that the proposed power station and/or ancillary infrastructure can be accommodated on this site. The anticipated visual impact associated with the development of the power station on this site (approximately 4 km apart from the existing power station) may, however, have certain consequences on existing land uses in

the area, with specific reference to exemption farms. This property is one of several of interest to Anglo Coal in terms of prospecting for gas.

#### Nelsonskop 464 LQ

Nelsonskop 464 LQ is situated directly north of, and adjacent to, the existing Matimba Power Station. With proper mitigation it is confirmed that the proposed power station and/or ancillary infrastructure can be accommodated on this site. It is anticipated that the development of the proposed power station on this site would have the least possible impact from a land use perspective and that it would be sensible to concentrate industrial type uses in one area. This property is one of several of interest to Anglo Coal in terms of prospecting for gas.

#### • Naauwontkomen 509 LQ

This site is situated approximately 2 km south-west of the existing Matimba Power Station and it is divided into at least eight portions by existing infrastructure such as roads and a railway line, which might prove to be problematic if this site is selected. The relocation of roads would be inevitable.

#### • Eenzaamheid 687 LQ

This site is situated approximately 6,5 km south-west of the existing Matimba Power station and the development of the power station on this site would cause an impact on properties that were never impacted on by such infrastructure. The related infrastructure, such as power-lines, to be constructed as part of the proposed development, would have the affect of functionally dividing farm portions located between this site and the existing Matimba Power Station. The anticipated impacts in this regard could potentially be properly mitigated.

# Droogeheuvel 447 LQ

The site is situated adjacent to Appelvlakte 448 LQ and Nelsonskop 464 LQ. This property is one of several of interest to Anglo Coal in terms of prospecting for gas.

#### Zongezien 467 LQ

This site is bordered by the township, Marapong, to the south-west. It is anticipated that the provisions of ancillary infrastructure on this site could have negative impacts on the Marapong Township and, although these impacts can be mitigated to an acceptable level, the development of this property would not be regarded as desirable in the context of more appropriate sites being available. This property is one of several of interest to Anglo Coal in terms of prospecting for gas.

#### • Kuipersbult 511 LQ

The ancillary infrastructure could be accommodated on this site without adverse impacts from a land use perspective.

# Kromdraai 690 LQ

The ancillary infrastructure could be accommodated on this site without having adverse impacts from a land use perspective.

#### 10.11.1. Site preference Rating

The site preference rating for the sites in terms of tourism impact is outlined in Table 10.15 and Table 10.16.

**Table 10.15:** The Site Preference Rating of the alternative Sites for the power station with regards to land use

Farm name	Site Preference Rating
Farm Appelvlakte 448 LQ	3 (acceptable)
Farm Nelsonskop 464 LQ	4 (preferred)
Farm Naauwontkomen 509 LQ	3 (acceptable)
Farm Eenzaamheid 687 LQ	3 (acceptable)

The preferred site for the construction of the proposed power station wih regards to land use is farm Nelsonskop 464 LQ.

**Table 10.16:** The Site Preference Rating of the alternative sites for the ancillary infrastructure with regards to land use

Farm name	Site Preference Rating				
Farm Appelvlakte 448 LQ	3 (acceptable)				
Farm Nelsonskop 464 LQ	4 (preferred)				
Farm Naauwontkomen 509 LQ	3 (acceptable)				
Farm Eenzaamheid 687 LQ	3 (acceptable)				
Farm Droogeheuwel 447 LQ	3 (acceptable)				
Farm Zongezien 467 LQ	2 (not preferred)				
Farm Kuipersbult 511 LQ	3 (acceptable)				
Farm Kromdraai 690 LQ	3 (acceptable)				

In final conclusion and from a land use perspective, it is suggested that Nelsonskop 464 LQ be adopted for the construction of the power station and any of the adjacent farms (i.e. Appelvlakte 448 LQ or Droogeheuwel 447 LQ) for the provision of ancillary infrastructure.

#### 10.12. Recommendations

The mitigation measures recommended in this section should be read in the context of the identified impacts generally described in Section 10.10. Many of the identified impacts are not of a significant nature (in the context of the land use regime in the area) and will not necessarily require for substantial mitigation.

#### 10.12.1 Towns and settlements

# • Functional Division

#### Marapong

To minimise the possibility of functional division of Marapong (by the infrastructure associated with the power station), the alignment of the associated powerline and other infrastructure should be planned in such away not to cause the functional division of Marapong, as far as the farms Nelsonskop 464 LQ and Zongezien 467 LQ are concerned.

Nelsonskop 464 LQ and Zongezien 467 LQ are the only sites that may have the impact of functionally dividing the Marapong Township, if selected as the preferred alternatives.

#### Possible restriction of access

Special attention should be given to the alignment of associated infrastructure, with specific reference to the placement of possible towers, so as to prevent the restriction of access between townships and existing functional areas.

# Possible restriction of future development

The selection of Nelsonskop 464 LQ and/or Zongezien 467 LQ will result in the development of the proposed power station and ancillary infrastructure directly north of, and adjacent to, the existing Marapong Township, thereby restricting development of the township in a northern direction.

The current policy documents applicable to the area, with specific reference to the Ellisras/Marapong Spatial Development Framework, do not make provision for the extension of Marapong in a northern or western direction. The areas directly east, and south-east, of Marapong are earmarked for the purposes of future extensions.

#### Visual Impact

The prominent nature of the proposed power station and related infrastructure effectively precludes the possibility of camouflaging or hiding the structures.

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#### • Possible resettlement of households

Resettlement of households will only occur if illegal squatting takes place on the subject areas between the date of this report and the date of commencement of construction. It is proposed to relocate such households (if any) to areas dedicated for residential purposes (for example Marapong) in order to prevent any fatal consequences. Formal households (if any) on the nominated site would be compensated appropriately.

#### • Possible impact on Planning Policies and future development

The proposed power station can be accommodated in terms of the existing LDO/IDP's applicable to the area under consideration and changes to these policy documents will, therefore, not be necessary. It will, however, be necessary to undertake an application process in order to procure the necessary land use rights for the purposes of the proposed development, and thereby, effectively amending the Ellisras/Marapong Town Planning Scheme.

#### Possible safety risks

Where infrastructure such as power stations and/or powerlines are being constructed in close proximity to existing residential areas, access to such facilities should be restricted by means of appropriate fencing to prevent unauthorised access which may have fatal consequences.

# 10.12.2 Agriculture

#### Functional division

Functional division of farm portions (by related infrastructure) can be minimised by proper planning of the final routing (of related infrastructure) to ensure that, where farm portions are divided, it be done in such away that the smallest possible portion is separated from the effect farm portion. Route alignments should, where possible, hug cadastral boundaries or traverse areas of the farms least likely to be used for active agriculture.

#### • Sterilisation of agricultural land

None of the identified site areas are currently being used for intensive agricultural purposes, nor are any of the portions classified as properties with high agricultural potential. The area where the subject areas are located in is indicated as a mineral potential area in the Provincial Spatial Development Framework. The Ellisras/Marapong Spatial Development Framework (local framework) earmarks the area for the purposes of an industrial node, and no mitigation is therefore required in this regard.

#### 10.12.3 Exemption farms

#### • Decrease in property value

The possible decrease in property value of properties in the area can be minimised by concentrating the industrial uses in one place. It is, therefore, proposed to develop the proposed new power station on Nelsonskop 464 LQ (adjacent to and directly north of the existing power station). By concentrating the industrial developments in one place the visual impact and associated decrease in property value would be minimised.

#### Visual Impact

The existing Matimba Power Station forms part of the current landscape of the area as the power station has been in existence for 14 years. The possible visual impact associated with the introduction of a second power station in the area would be minimised if the proposed power station is constructed adjacent to the existing power station, instead of constructing it on a property several kilometres apart from the existing power station.

#### 10.12.4 Mineral Potential Areas

Possible restriction of future mining operations
 To minimise the possible restriction of future mining operations it is proposed to involve representatives from the Grootegeluk Colliery, as well as other mining organisations in the area, through the site selection, impact assessment and design phases of the project.

# 10.12.5. Development Clusters

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The development of the proposed power station would have a positive impact (if any) on the Provincial Growth Point (as indicated on the Provincial Spatial Development Framework) and no mitigation is, therefore, required in this regard.