

11. VISUAL IMPACT ASSESSMENT

The proposed power station would be similar to the existing Matimba Power Station in terms of operations, design and dimensions. The existing structure's dimensions are: two smoke stacks (each 250 m high) and a core power station building that is 130 m high and approximately 500 m wide. Other related infrastructure would include a coal stockpile, conveyor belts, an ash dump, transmission lines, etc and would also contribute to the overall visual intrusion created by the power station.

11.1. Description of the Affected Environment

Cattle and game farming practises dominate the general land-use character of the immediate area surrounding the proposed power station. The existing Matimba Power Station and the Grootegeluk Coal Mine are within a 10 km radius of the eight identified farms, and have to a large degree set the trend for industrial and mining related practises. A formal industrial area has been earmarked for the remainder of the Grootestryd farm south of the Stockpoort road. Large areas surrounding the Grootegeluk Coal Mine, land owned by Kumba Resources, are being utilised as a game reserve and commercial hunting area. Figure 11.1 provides a broad description of the land use in the area.

The dominant topographical unit or terrain type of the study area is plains, with low mountains and foothills of the Waterberg plateau to the extreme south-east of the study area. Figure 11.2 indicates the relatively flat topography of the area and the extent of the existing mining and power station operations (mine dumps, the open cast pit, slimes dams and the Matimba ash dump).

The natural vegetation type is woodland to the south and thicket and bushland to the north (generally referred to as bushveld). The natural vegetation cover (for the greater portion of the study area) is relatively undisturbed due to the low success rate with dry-land agriculture in this region.

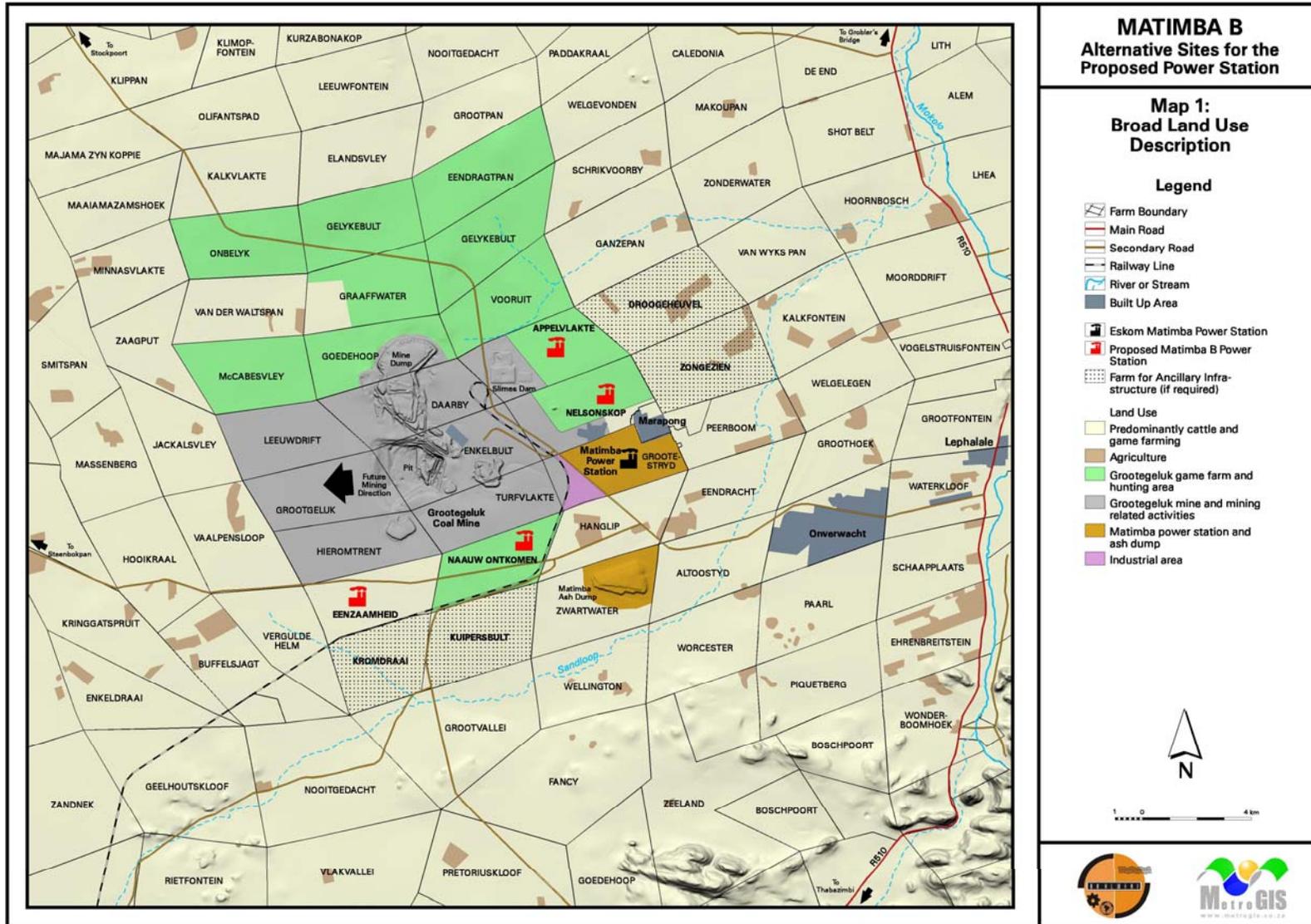


Figure 11.1: Broad Description of the Land Use in the Area

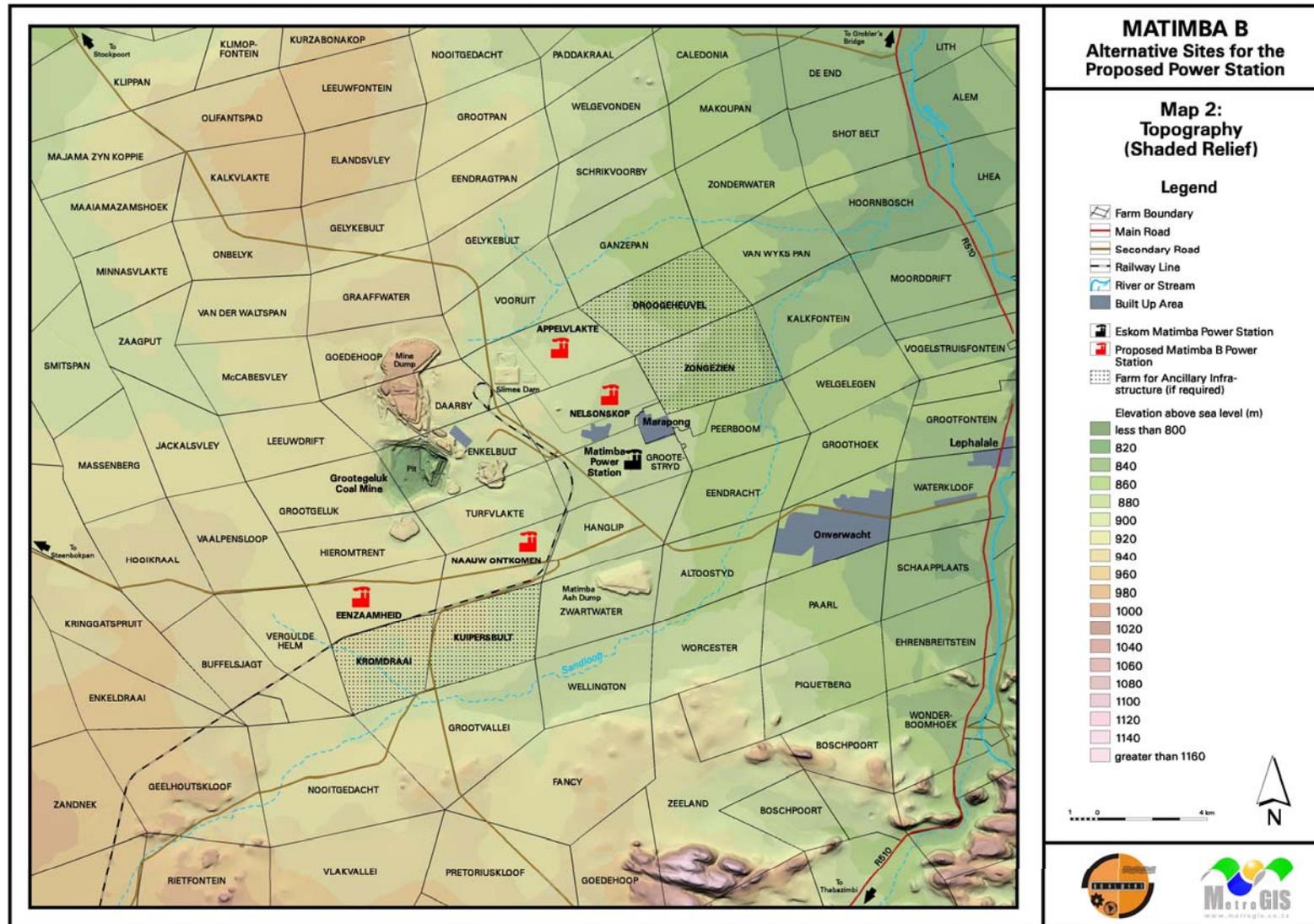


Figure 11.2: Map indicating the relatively flat topography of the area and the extent of the existing mining and power station operations

11.2. Issues Related to the Visual Impact Assessment

There are several critical issues that need to be identified and assessed in order to determine the envisaged visual impact of the proposed power station and its ancillary infrastructure. These potential impacts need to be identified for each of the four proposed farms earmarked for the placement of the core power station and for each of the eight farms proposed for the placement of the ancillary infrastructure (if required).

The issues identified for the placement of the proposed Matimba B Power Station are:

- **A:** The potential visual exposure of the proposed power station within the region.
- **B:** The visual exposure and proximity of the proposed power station to major roads and tourist routes (i.e. the R510 and the R33).
- **C:** The visual exposure and proximity of the proposed power station to secondary roads (i.e. the Steenbokpan and Stockpoort roads).
- **D:** The visual exposure and proximity of the facility from areas with high viewer incidence (i.e. residential areas: Lephale, Onverwacht and Marapong).
- **E:** The visual exposure and proximity of the proposed facility to game farms and lodges in the vicinity, especially farms from which complaints have been received about the existing power station and mining activities.
- **F:** The compound visual impact of the proposed facility, the existing power station and the mining activities on the bushveld character and sense of place of the region. This issue relates to the proximity of the proposed facility to the existing power station and the Grootegeluk Mine. In other words: would the selection of a specific farm facilitate the containment of the visual impact or would it spread the visual impact.
- **G:** The effect of lighting of the facility in terms of light glare, light trespass and sky glow.
- **H:** The strategic placement of the proposed facility in close proximity to the existing Matimba Power Station ash dump. This issue relates to the short-term possibility of utilising the existing ash dump. The rationale being that the greater the distance between the proposed power station and the ash dump, the greater the visual impacts associated with the construction and operation of a lengthy conveyor belt.
- **I:** The visual impact of clearing natural vegetation cover for the construction of the power station, as opposed to the placement of the facility in an already degraded (less attractive) area.

The issues identified for the placement of the power station's ancillary infrastructure are:

- **A:** The visual exposure and proximity of the ancillary infrastructure to secondary roads.
- **B:** The visual exposure and proximity of the ancillary infrastructure to residential areas (areas with high viewer incidence).
- **C:** The visual exposure of the ancillary infrastructure from game farms and lodges in the vicinity, especially farms from which complaints have been received about the existing power station and mining activities.
- **D:** The effect of lighting in terms of light glare, light trespass and sky glow.
- **E:** The strategic placement of ancillary infrastructure in terms of future mine expansion. This issue relates to the containment of the ancillary infrastructure to areas where there are already similar activities, as opposed to spreading it to relatively remote areas with potentially conflicting land-uses.
- **F:** The visual impact of clearing natural vegetation cover (as opposed to degraded land cover) for ash dumping and/or coal stock piling.

These visual impact issues will also form the basis for the preference rating of each of the identified farms in terms of its suitability for the construction and operation of the power station. This preference rating will also be applied to the identified farms suggested for the ancillary infrastructure.

11.3. Criteria for the Evaluation and Determination of the Significance of the Visual Impact

This chapter sets out to determine the significance of each of the envisaged impacts and evaluate these impacts in terms any other mitigating and/or aggravating circumstances that might be relevant to either a specific site or to all the sites in general.

11.3.1. Potential Visual Exposure

The visibility or visual exposure of any structure or activity is the point of departure for the visual impact assessment. It stands to reason that if the proposed power station and associated infrastructure was not visible, no impact would occur.

An initial viewshed analysis of the proposed potential sites, based on a combined 20 m and 5 m contour interval digital terrain model of the study area, indicates the potential visibility of the each of the proposed power station locations. Figures 11.3 to 11.6 illustrate the visual exposure of the power station of the four alternative

sites. *(Note: This viewshed analysis is based on the power station alone and does not include the proposed ancillary infrastructure. A combined viewshed analysis and visual impact assessment will be done once the preferred site has been selected).*

It becomes apparent that the proposed facility would be relatively exposed due to the predominantly flat topography of the region. This is true for the placement of the power station on any of the proposed farms. The potential visibility does not take into consideration the visual absorption capacity of the natural vegetation. This is done in order to create a worst-case scenario in the event of natural vegetation being cleared for agricultural or other purposes. The visibility analysis does, however, take into account the effect of existing mining activity and the existing Matimba Power Station and is modelled on the dimensions of the existing power station (as previously mentioned).

The visibility analyses highlight the fact that it would be near impossible to effectively "hide" a structure of these dimensions in this topographical region, no matter which farm is selected to host the power station. There is little difference in the visual exposure pattern of each of the individual potential sites. The fact that these areas are exposed does not, however, imply that it necessarily constitutes a significant visual impact, at least not for all of the exposed areas. Further criteria that influence the envisaged visual impact within these potentially exposed areas are discussed further in Sections 11.3.2 to 11.3.4.

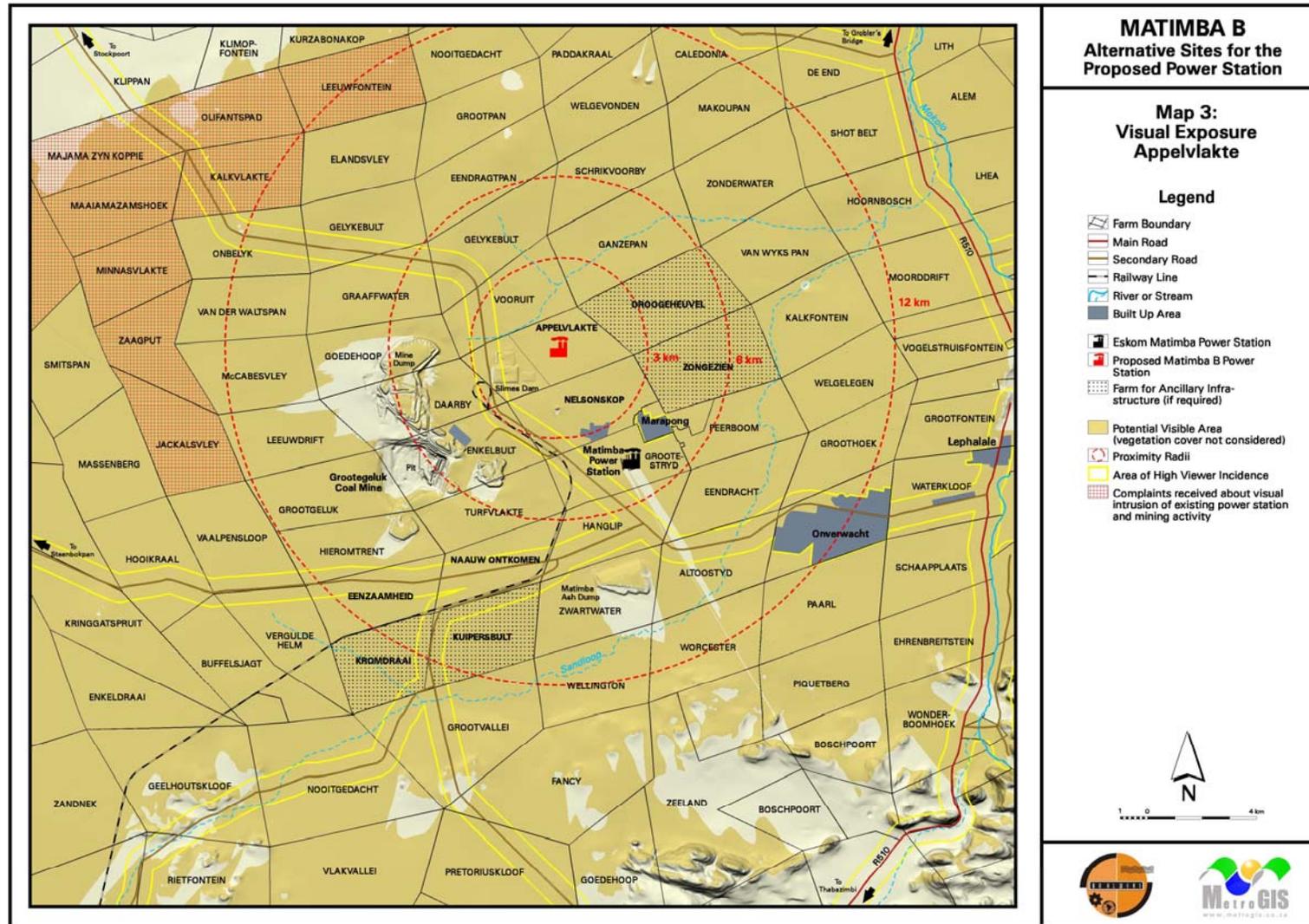


Figure 11.3: Visual exposure - Appelviakte

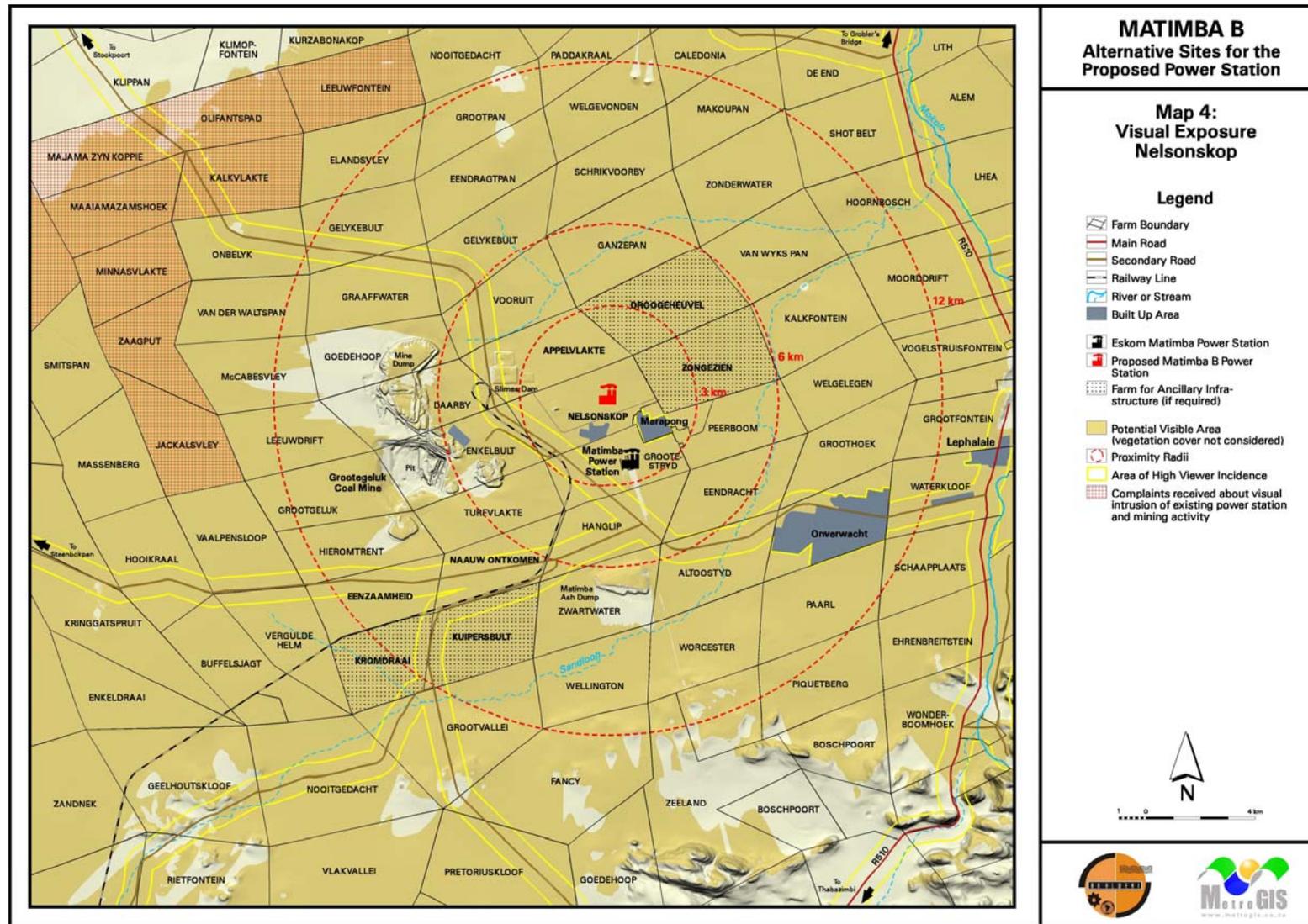


Figure 11.4: Visual Exposure - Nelsonskop

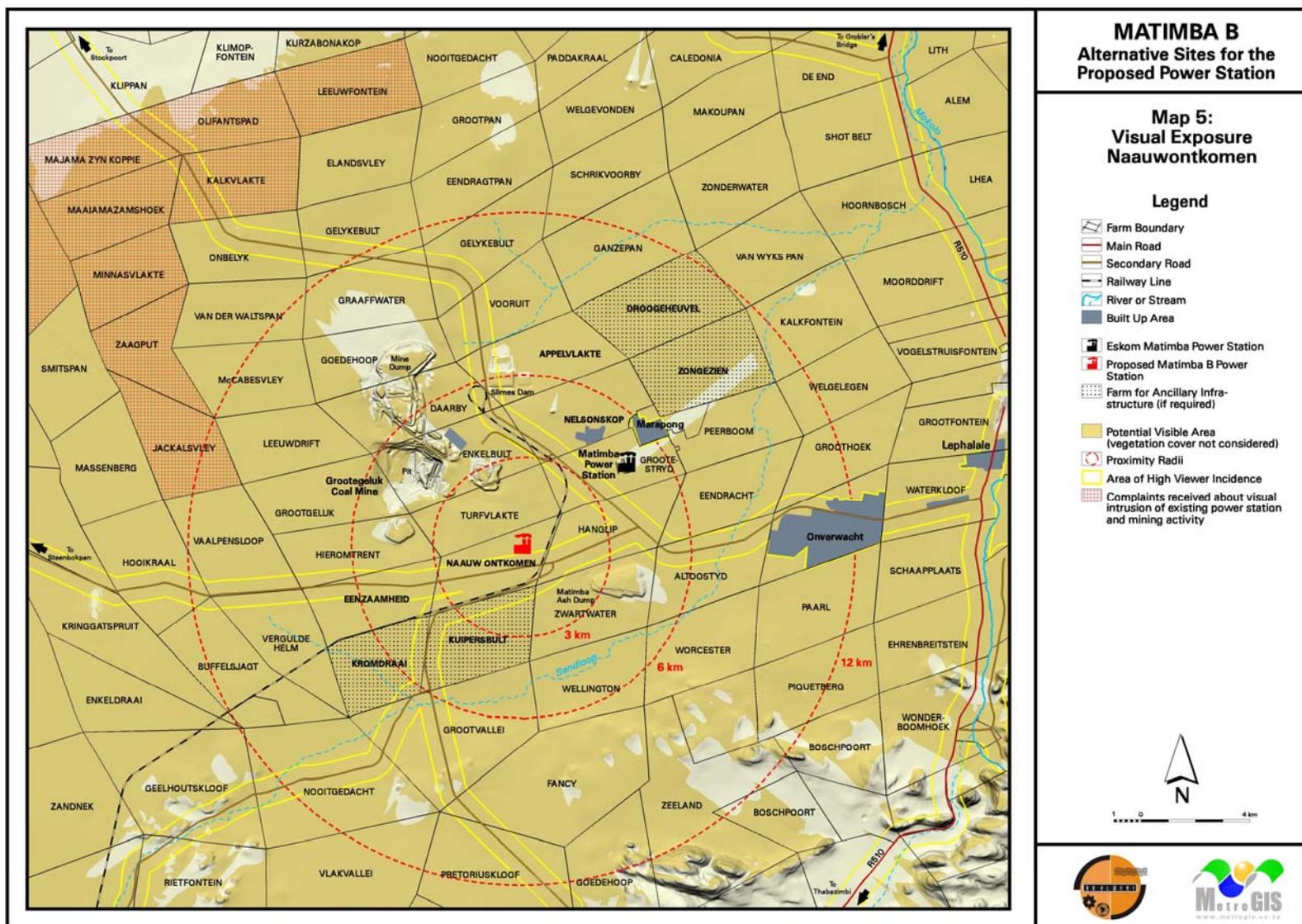


Figure 11.5: Visual exposure - Naauwontkomen

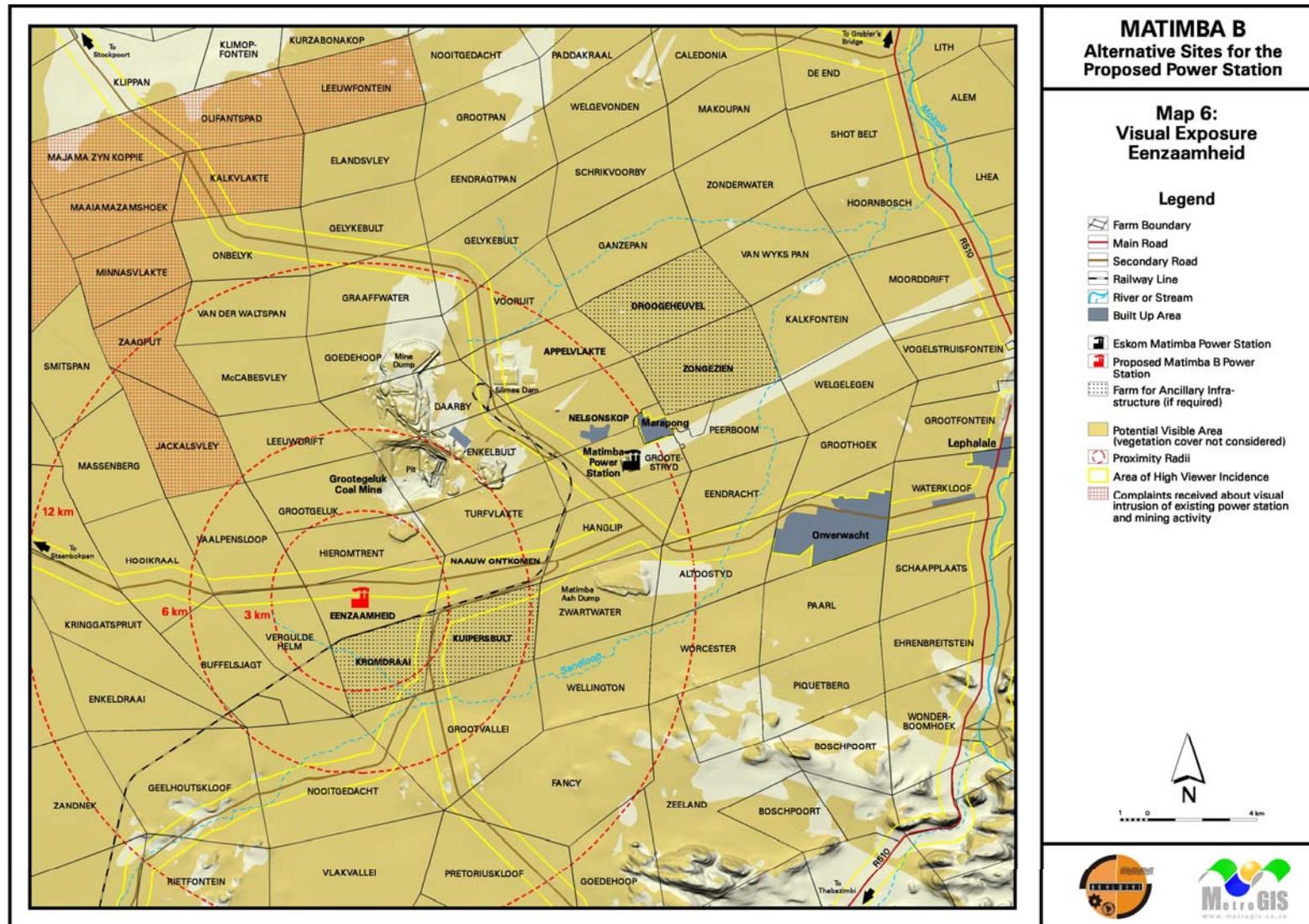


Figure 11.6: Visual Exposure - Eenzaamheid

11.3.2. Visual Distance/Observer Proximity to the Facility

The principle of reduced impact over distance is applied in order to determine the core area of visual influence for this type of structure. It is envisaged that the nature of the structure and the relatively natural state of the environment would create a significant contrast that would make the facility visible and recognisable from a great distance. This would be especially true where the observer has an elevated vantage point.

The proximity radii for the proposed power station are indicated on Figures 11.3 to 11.6 in order to indicate the scale and viewing distance of the facility and to determine the prominence of the structure in relation to its environment.

The proximity radii chosen for this type of structure, based on the dimensions of the existing facility, are:

- 0 - 3 km. Short distance view where the facility and its ancillary infrastructure would dominate the frame of vision and constitute a very high visual prominence.
- 3 - 6 km. Medium distance view where the facility and its ancillary infrastructure would be easily and comfortably visible and constitute a high visual prominence.
- 6 - 12 km. Medium to longer distance view where the facility and ancillary infrastructure would become part of the visual environment, but would still be visible and recognisable. This zone constitutes a high to medium visual prominence.
- Greater than 12 km. Long distance view of the facility where the power station would still be visible, though not as easily recognisable, and the ancillary infrastructure would not likely be visible. This zone constitutes a medium visual prominence for the power station and a medium to low visual prominence for the ancillary infrastructure.

The visual distance theory and the observer's proximity to the facility are closely related, and especially relevant, when considered from areas with a high viewer incidence and a predominantly negative visual perception of the proposed facility.



Figure 11.7: Long distance view (approx. 15 - 20 km) of the Matimba power station from the R33 near the R33/R510 junction.

11.3.3. Viewer Incidence/Viewer Perception

The number of observers and their perception of a structure determine the concept of visual impact. If there are no observers or if the visual perception of the structure is favourable to all the observers, there would be no visual impact.

It is necessary to identify areas of high viewer incidence and to classify certain areas according to the observer's visual sensitivity towards the proposed power station. It would be impossible not to generalise the viewer incidence and sensitivity to some degree, as there are many variables when attempting to determine the perception of the observer, including regularity of sighting, cultural background, state of mind, purpose of sighting, etc. which would create a myriad of options.

For the purpose of this study, four areas were classified as having differing observer incidences and/or perceptions.

The first is a 500 m buffer zone from the R510 main road that extends along the eastern boundary of the study area. This road has a high incidence of potential observers, especially since it functions as a main tourist route between Gauteng and Grobler's Bridge (the South Africa/Botswana border post). The envisaged perception of these observers would be predominantly negative, as the purpose of their journey is generally nature and wildlife orientated.

The second zone of observer incidence and perception is a 500 m buffer zone along the secondary roads in the area, more specifically Nelson Mandela Drive (connecting Lephhalale, Onverwacht, the Matimba Power Station and the Grootegeluk mine), the Stockpoort road and the Steenbokpan road. The secondary roads in the study area are predominantly frequented by employees of the mine and the power station and by landowners whose farms are situated west and north-west of the mine. These roads are also utilised, to a lesser degree (in terms of traffic volume), by hunters and tourists visiting these farms. It is envisaged that the perception of the observers in this zone will mostly be neutral and in some cases even positive.

A third zone of high viewer incidence and predominantly negative viewer perception is the residential areas of Onverwacht, Marapong and, to a lesser degree (due to its relatively long distance from the proposed facility), Lephhalale town. The observers in these areas would generally not welcome the sight of either the construction or the operation of a coal fired power station near their places of residence.

The fourth zone comprises the remainder of the study area. This zone is characterised by relatively large and sparsely populated farms that predominantly function as cattle and game farming areas. This zone has, due to the relative absence of random observers, a neutral envisaged viewer perception of the proposed power station. Possible exceptions could occur on certain farms (as indicated on Figures 11.3 to 11.6), where there have been specific complaints about the visual intrusion, at night, of the lighting at the Grootegeluk mine and the existing Matimba Power Station.

11.3.4. Visual Absorption Capacity of the Natural Vegetation

The viewshed analyses created for the four alternative power station site locations do not consider the effect of natural vegetation as a possible mitigation factor in the construction of the proposed power station. It has become apparent from site inspections that the visual absorption capacity of the natural veld (thicket and bushland and woodland) is considerable in mitigating the impact of the existing power station. This is true for large tracts of land where the natural vegetation is still intact (refer to Figure 11.8). The observer is effectively shielded from the facility

by dense vegetation adjacent to the road. The opposite (i.e. the power station becomes highly visible) is also very noticeable where the natural vegetation had been cleared for agricultural fields or for transmission line servitudes, or where the observer is elevated above the vegetation. These cleared areas are, due to the low success rate with dry-land agriculture in this region (as indicated by Garry Patterson - Agricultural Potential Specialist), restricted to scattered patches across the study area (refer to Figure 11.9).

The digital terrain model for the selected power station locality (to be undertaken in the EIA phase) will attempt to quantify (in general terms) the effect of natural vegetation in the mitigation of the visual impact of the facility.



Figure 11.8: The presence of natural vegetation (along the same road) almost entirely shields the observer from the existing Matimba power station.



Figure 11.9: View of the power station from Nelson Mandela road (at the Steenbokpan road intersection) where the natural vegetation has been removed

11.4. Visual Impact Evaluation: Power Station

Having listed all the identified envisaged visual impacts and the evaluation criteria for each impact, this chapter outlines the significance of these impacts per site. Each of the potential impacts are evaluated for each of the four proposed farms identified as potential locations for the power station.

Some of the impacts are general impacts that are applicable to all four of the proposed farms. These impacts are discussed in Section 11.4.1.

11.4.1. General Impacts

- *Impact A: Potential Visual Exposure*

The potential visual exposure of each of the proposed power stations is indicated on Figures 11.3 to 11.6 and has been discussed under Section 11.3.1. It is necessary to reiterate that the proposed power station has the potential to be

highly visible from a great distance, due to its large dimensions and the relatively flat topography of the area.

- *Impact G: The Effect of Lighting*

The effects of lighting are especially problematic within this region, due to the fact that the bushveld is generally considered to be an ideal place for stargazing, far removed from the bright lights of the city. The expansion of industrial, mining and residential developments into this area has led to sky glow. This is the condition where the night sky is illuminated when light reflects off particles in the atmosphere such as moisture, dust or smog. The sky glow intensifies with the increase in the amount of light sources. Each new light source, especially upwardly directed lighting, contribute to the increase in sky glow. The construction and operation of another power station on any of the four proposed farms would therefore further increase the amount of sky glow.

Other issues related to the impact of lighting are light trespass and glare. Light trespass, or spill light, is the unintentional illumination of surfaces beyond the property boundary. Glare is the effect of looking directly into the light fixture or light source. The construction and 24-hour operation of the proposed power station has the potential to significantly impact on adjacent landowners if the design and placement of lighting is not executed with utmost care and sensitivity. This has become apparent through the complaints already received from landowners west and north-west of the Grootegeluk coal mine (see Figures 11.3 to 11.6). The complaints are primarily directed at the mining activities but are applicable to the existing Matimba Power Station too.

It should further be stressed that the impacts related to lighting cannot be addressed in isolation, and that a concerted joint effort (between the mine, the Matimba Power Station and the proposed power station) could potentially be the only way to successfully mitigate this visual impact.

11.4.2. Site Specific Impacts

- *Impact B: Proximity and Exposure to the R510 and R33*

The four identified farms are all relatively far removed from both the R510 and the R33. It has, however, become apparent that the existing Matimba Power Station is visible from elevated vantage points along the R33, specifically where the road descends the Waterberg foothills (near the south-eastern corner of the study area) towards the R510. This observation highlighted the fact that the farms Nelsonskop and Appelvlakte, situated behind the existing power station,

would be better suited to lessen the visual impact from these vantage points. The existing power station would shield the proposed facilities from the observer.

A new power station on the farms Naawontkomen and Eenzaamheid would appear adjacent to the existing power station, and therefore, effectively double the visual impact associated with the existing Matimba Power Station from certain vantage points.

- *Impact C: Proximity and Exposure to Secondary Roads*

Nelsonskop and Appelvlakte are further removed from the Stockpoort secondary road than Eenzaamheid and Naauwontkomen. In fact, the Steenbokpan road crosses over both of these properties and would to some extent, in the event of either of these farms being selected, be required to be re-aligned. The visual sensitivity and observer incidence along these roads would be less than the main roads, but the proximity of potential observers still dictates that the significance of the visual impact on the latter farms would be greater than the formerly mentioned farms.

- *Impact D: Proximity and Exposure to Residential Areas*

The construction and operation of a power station on the farm Nelsonskop would have a significant visual impact on the residents of Marapong. This proposed location is less than 3 km away from the residential area. Combined with the already high visual prominence of the existing power station the compound visual impact would be even greater. The same applies, to a lesser degree, to Appelvlakte which is approximately 4 km from Marapong.

Naauwontkomen and Eenzaamheid are located 6 km and 12 km respectively from the Marapong residential area. The proposed new power station would also be situated behind the existing power station and would therefore not have a visual influence on Marapong.

None of the proposed site locations would have a significant impact on Onverwacht or the town of Lephale.

- *Impact E: Proximity and Exposure to Game Farms and Lodges*

The exact locations of all the private and commercial game farms and lodges in the study area are not known. There were, however, specific complaints from landowners (the farms of which are indicated on the visual exposure maps) about the existing power station and the Grootegeluk mine. These complaints were specifically aimed at the visual intrusion of the lighting of these facilities at night. It therefore stands to reason that the closer the proposed facility is to these

farms, the greater the visual impact would be. The farm Eenzaamheid is the closest farm to the property owners who are currently experiencing difficulties with night lighting, and could, therefore potentially have the highest potential visual impact. However, the significance of the impact is directly related to the proximity and exposure to existing game farms/lodges.

- *Impact F: Compound Visual Impact*

The compound visual impact refers to the envisaged impact the proposed power station would have, together with the mining activities and the existing power station. The reasoning is that if these activities are contained, or restricted, to a relatively small geographical area, as opposed to being scattered over a large area, the visual impact would be lessened.

This rationale indicated that the closer the proposed power station is to the existing mining and power station activities (including the ash dump), the more contained the compound visual impact would be. Nelsonskop and Naauwontkomeen are situated closer to these activities and are therefore identified as having a more contained area of visual influence. Eenzaamheid and Appelvlakte, situated on the south-western and north-eastern extremities of the existing active area respectively would contribute to increasing the area of influence of the compound visual impact. However, all 4 properties are within close proximity to the existing power station and mining activities (refer to Figure 11.1).

- *Impact H: Strategic Placement of the Proposed Power Station near the Existing Ash Dump*

The strategic placement of the proposed power station refers to the potential mitigation of the visual impacts associated with the ancillary infrastructure through the utilisation of the existing ash dump (even as a short-term solution), or the introduction of a second ash dump in close proximity to the existing ash dump (on the farm Zwartwater). If the placement of the proposed power station is in close proximity of the ash dump, this option can be exercised without the construction of a lengthy conveyor belt.

The farm Naauwontkomeen is strategically the best of the four proposed farms as it borders the farm Zwartwater, currently occupied by the Matimba power station ash dump. The other three farms are all relatively far removed from the ash dump, and would increase the visually affected area.

- *Impact I: Destruction of Natural Vegetation*

The destruction of pristine natural bushveld, considered a scenic natural feature, would constitute a significant visual impact. The farms Nelsonskop and Appelvlakte have, through their incorporation into the Ferroland Private Game Reserve, been preserved in a natural state with high scenic quality and diversity. The farms Naauwontkomen and Eenzaamheid have been extensively utilised for cattle and game farming. This has led to the general degradation of the vegetation through overgrazing and bush clearing. The impact on the general visual quality of the vegetation of these two farms would be considerably less than on Nelsonskop and Appelvlakte.

11.4.3. Issues Related to the Visual Impact: Rating for the Power Station

The results of the identification and evaluation of the issues related to the visual impact of the construction and operation of the proposed Matimba B Power Station are presented in Table 11.1 per farm. This rating determines the suitability of each of the farms as a location for the proposed power station.

Table 11.1: Issues related to the visual impact: rating for power station

| Impact* | Eenzaamheid | Naauw Ontkomen | Appelvlakte | Nelsonskop |
|--------------|-------------|----------------|-------------|------------|
| A | 2 | 2 | 2 | 2 |
| B | 2 | 2 | 4 | 4 |
| C | 2 | 2 | 3 | 3 |
| D | 4 | 4 | 2 | 2 |
| E | 2 | 3 | 3 | 4 |
| F | 2 | 3 | 2 | 3 |
| G | 2 | 2 | 2 | 2 |
| H | 2 | 4 | 2 | 2 |
| I | 4 | 4 | 2 | 2 |
| Total | 22 | 26 | 22 | 24 |

*as per Section 11.2

11.5. Visual Impact Assessment: Ancillary Infrastructure

In order to determine the significance of the potential visual impacts of the proposed ancillary infrastructure per site, each of the identified potential impacts are evaluated for each of the eight proposed farms identified as potential locations for the ancillary infrastructure.

11.5.1. General Impacts

- *Impact D: The Effect of Lighting*

The effect of lighting and the potential visual impacts associated with sky glow, light trespass and light glare have been discussed under Section 11.4.1.

The impact of the lighting of the ancillary infrastructure would be considerably less than the impact of the terrace area/power station. The envisaged amount of light fixtures would be restricted to the flingers used to deposit the ash on the ash dump. The same principles of careful design and sensitivity to adjacent landowners would be required to be applied.

11.5.2. Site Specific Impacts

- *Impact A: Visual Exposure and Proximity to Secondary Roads*

The placement of ancillary infrastructure (i.e. the ash dump, coal stockpile, etc.) on the four southern farms (Eenzaamheid, Naauwontkomen, Kromdraai and Kuipersbult) has the potential to impact on observers travelling along the Steenbokpan secondary road. The four northern farms (Appelvlakte, Nelsonskop,

Droogeheuvel and Zongezien) are better suited due to their relative remote location from the Stockpoort secondary road. This is especially true for the farms Droogeheuvel and Zongezien, that are approximately 5 km away from this road.

- *Impact B: Visual Exposure and Proximity to Residential Areas*

The residential area most influenced by the proposed construction and operation of the power station and its associated infrastructure, is the Marapong residential area. The visual impact pattern mentioned above is effectively reversed for this impact. The four southern farms are all far removed from Marapong and would not have an impact on the residents, whilst the northern farms would constitute a significant impact. This is especially true for Nelsonskop and Zongezien that borders on the residential area.

- *Impact C: Visual Exposure and Proximity to Game Farms and Lodges*

The same general principle of reduced visual impact over distance applies to the proximity of the ancillary infrastructure to existing game farms from which complaints have been received. Table 11.2 indicates how each farm scored in terms of this potential visual impact.

- *Impact E: Strategic Placement of Infrastructure*

The principle of containing the potential compound visual impact has already been mentioned in this report (refer to Section 11.4.2). The placement of the ancillary infrastructure in close proximity to similar activities, such as the existing ash dump and mining activities, would prevent the spread of the area of visual influence. This strategic placement should also be cognisant of the future expansion of the Grootegeluk mine. The farms Eenzaamheid and Naauwontkomen both conform to this principle in terms of their locality in relation to the existing and future mining areas.

- *Impact F: Destruction of Natural Vegetation*

The physical footprint of the existing Matimba ash dump is already 220 ha in size (excluding newly cleared areas – refer to Figure 11.10). This translates to the loss of a considerable amount of natural scenic vegetation cover. The visual impacts associated with the clearing of large tracts of land can be reduced through the placement of the ancillary infrastructure being restricted to already degraded areas. Nelsonskop and Appelvlakte, the farms with the highest quality vegetation, would be negatively influenced by the placement of an ash dump and stockpile.



Figure 11.10: Cleared area for the expansion of the existing Matimba ash dump.

11.5.3. *Issues Related to the Visual Impact: Rating for the Ancillary Infrastructure*

The results of the identification and evaluation of the issues related to the visual impact of the ancillary infrastructure of the proposed Matimba B Power Station are presented in Table 11.2 per farm. This rating determines the suitability of each of the farms as a location for the ancillary infrastructure.

Table 11.2: Issues related to the visual impact: rating for ancillary infrastructure.

| Impact | Eenzaamheid | Naauw Ontkomen | Appelvlakte | Nelsonskop | Kromdraai | Kuipersbult | Drooggeheuvel | Zon-gezien |
|--------------|-------------|----------------|-------------|------------|-----------|-------------|---------------|------------|
| A | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 |
| B | 4 | 4 | 3 | 2 | 4 | 4 | 3 | 2 |
| C | 2 | 3 | 2 | 4 | 2 | 3 | 3 | 4 |
| D | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| E | 4 | 4 | 2 | 2 | 2 | 2 | 2 | 2 |
| F | 4 | 4 | 2 | 2 | 3 | 3 | 3 | 3 |
| Total | 18 | 19 | 14 | 15 | 16 | 17 | 17 | 17 |

11.6. Conclusion

Each of the identified farms has certain opportunities and constraints for the construction and operation of the proposed power station. This became clear from the above evaluation of the issues related to the visual impact and the subsequent rating of the impacts and the preferred alternatives. It would have been ideal, in terms of selecting the preferred alternative, if all the opportunities lay with one farm and all the constraint were applicable to the rest. Unfortunately even the preferred alternative would have negative visual impacts and certain constraints regarding the mitigation and reduction of these impacts.

Based on the issues related to the visual impact, an overall site preference rating was undertaken for both the placement of the power station and for the placement of the ancillary infrastructure. The site preference rating for the power station and ancillary infrastructure in terms of their visual impact are outlined in Tables 11.3 and 11.4 respectively.

Table 11.3: The Site Preference Rating of the alternative Sites for the power station with regards to visual impact

| Farm name | Site Preference Rating |
|---------------------------|------------------------|
| Farm Appelvlakte 448 LQ | 2 (not preferred) |
| Farm Nelsonskop 464 LQ | 3 (acceptable) |
| Farm Naauwontkomen 509 LQ | 4 (preferred) |
| Farm Eenzaamheid 687 LQ | 2 (not preferred) |

In terms of visual impact, the Farm Naauwontkomen 509 LQ is the preferred site for the construction of the proposed power station.

Table 11.4: The Site Preference Rating of the alternative sites for the ancillary infrastructure with regards to visual impact

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

In terms of visual impact, the farms Naauwontkome 509 LQ and Eenzaamheid 687 LQ are the preferred site for the establishment of ancillary infrastructure.

11.7. Recommendations

In-depth investigation and assessment of the identified impacts would be required to be undertaken during the EIA phase. A detailed design of the proposed power station and ancillary infrastructure should further assist in the specific placement of the facilities within the nominated preferred farm. Once these details are available, the potential visual impact and potential mitigating factors, such as the absorption capacity of the natural vegetation cover, would be re-assessed.