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## 10 CONCLUSION AND RECOMMENDATIONS

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### 10.1 Impact Assessment Summary

The environmental impacts for each of the components for the proposed railway, power lines, substation and associated infrastructure have been summarised in Section 9. The following broad conclusions can be drawn from the impact assessment.

- Sections of the current baseline environment in the study area are already highly impacted by the Kusile Power Station construction;
- The proposed corridors are located within an environment that is fairly tolerant to change with the exception of the wetlands and surface water environments;
- The receiving environment is not of a sensitive nature with the exception of the wetlands and seepage zones;
- There are sensitive avi-fauna and wetlands on site;
- The most significantly impacted baseline elements in the area are avi-fauna, flora and wetlands;
- During the Construction Phase the impacts will range from LOW to HIGH without mitigation measures being implemented. The most significant impacts will be to geology, soil, surface water and wetlands, avi-fauna and aquatic ecology. Mitigation measures employed will adequately reduce the significance of impacts that may be sustained by the construction activities.
- Additional impacts sustained during the construction phase will not result in a more significant cumulative impact to the environment.
- During the operational phase negative impacts sustained will be in the LOW to HIGH range without mitigation measures implemented. The most significant impact will be to avi-fauna.
- Cumulative negative impacts to the physical environment are nominal, and with proper mitigation it is possible to minimise impacts.

#### 10.1.1 Preferred Alternative

On the basis of the findings in this report, it is suggested that ***railway corridor alternative 3 (three)*** be utilised as the preferred alternative for the proposed railway, access roads and substations (as well as associated infrastructure) and ***power line corridor A-(b)*** be utilised as the preferred alternative for the one 88/132kV power line, as these have the least sensitive features associated with the alignments. For the second power line both alternative B-(a) and B-(b) were ranked equally and have few environmental sensitivities therefore either is preferred (Figure 10-1).

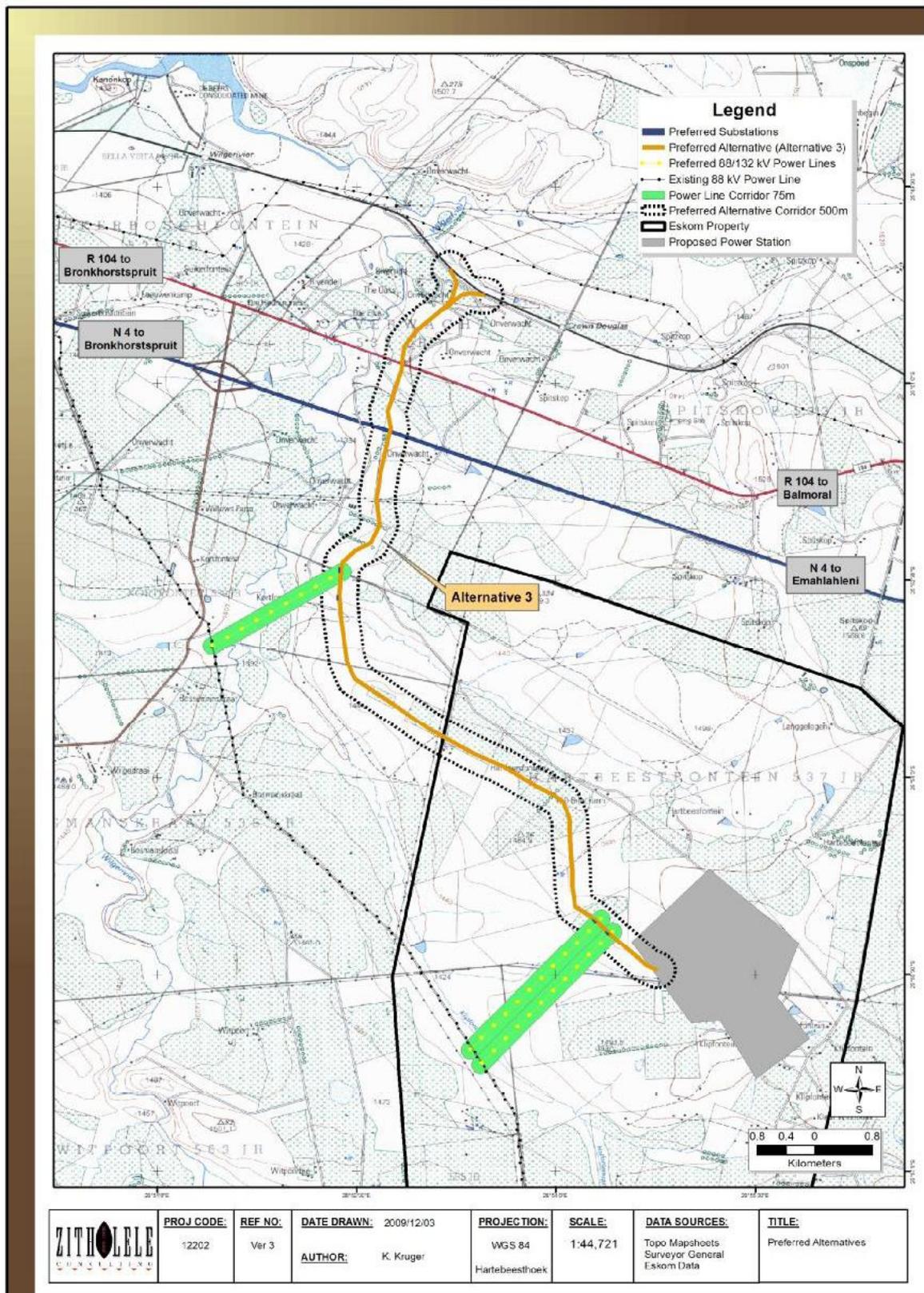


FIGURE 10-1: PREFERRED ALTERNATIVES.

The corridors that were assessed for the railway alternatives were 500 metres in width along the length of the proposed routes. Consequently Alternative 1 and Alternative 3 corridors are immediately adjacent to each other along the property boundaries. This being said it is preferable to construct the railway line along this boundary to minimise the impact on the landowners as little to no land will be lost. Therefore the preferred alternative is alternative three.

## **10.2 Way Forward**

The way forward recommended by this study is as follows:

- This Draft EIR was on public review from 11 November to 10 December 2009. I&APs were encouraged to forward any comments and issues on to the Zitholele public participation team.
- Once comments had been received they were captured in Version 3 of the Issues and Response Report and incorporated into this Final EIR;
- The Final EIR and EMP is being submitted to the Department of Environmental Affairs (DEA) for approval;
- Once the DEA has reached a decision a Environmental Authorisation will be issued;
- Upon receipt of the Environmental Authorisation Zitholele will notify all I&APs on the stakeholder database of the DEA's decision by means of advertisements and letters;
- The Eskom negotiation process with affected stakeholders will then commence.