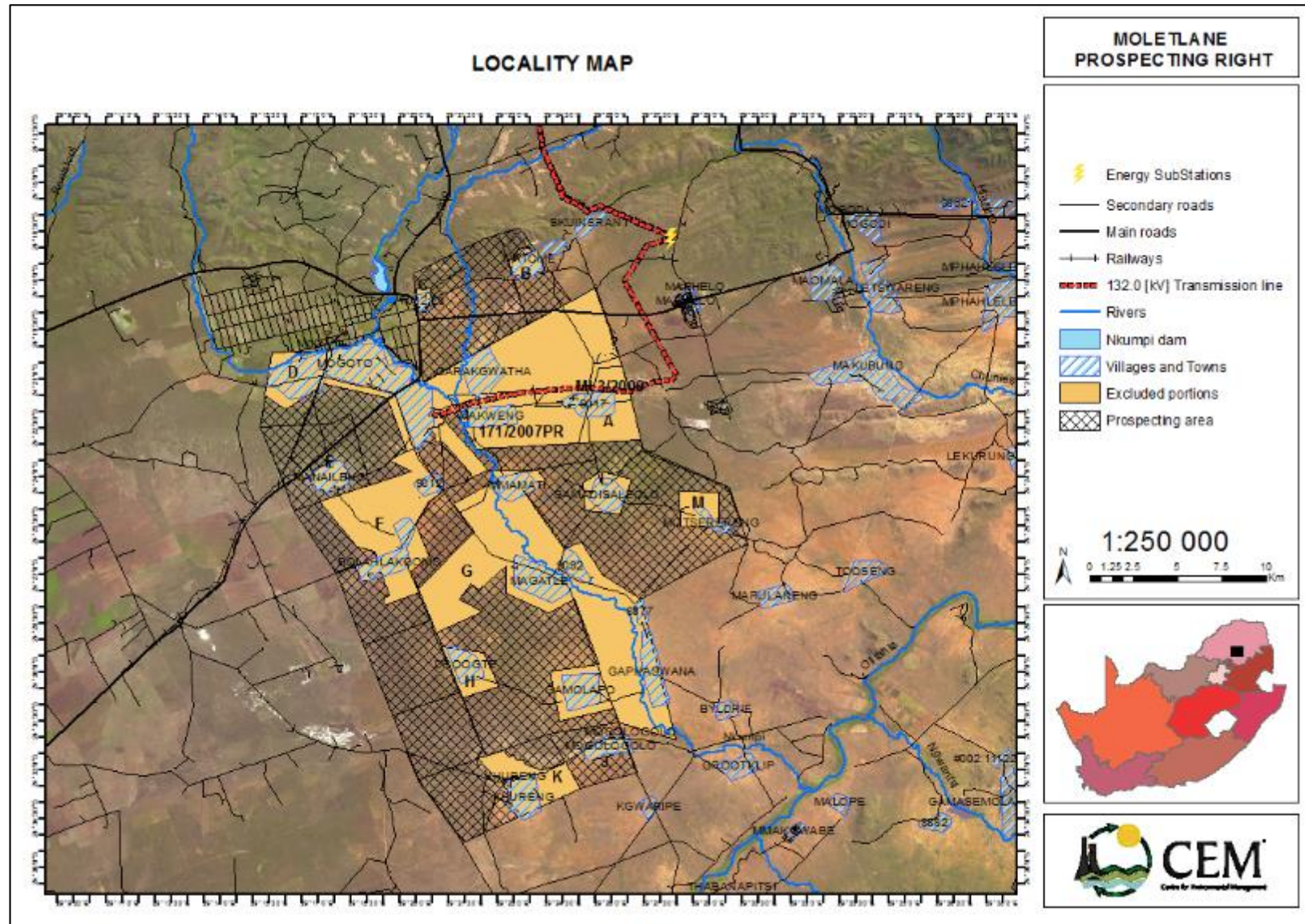
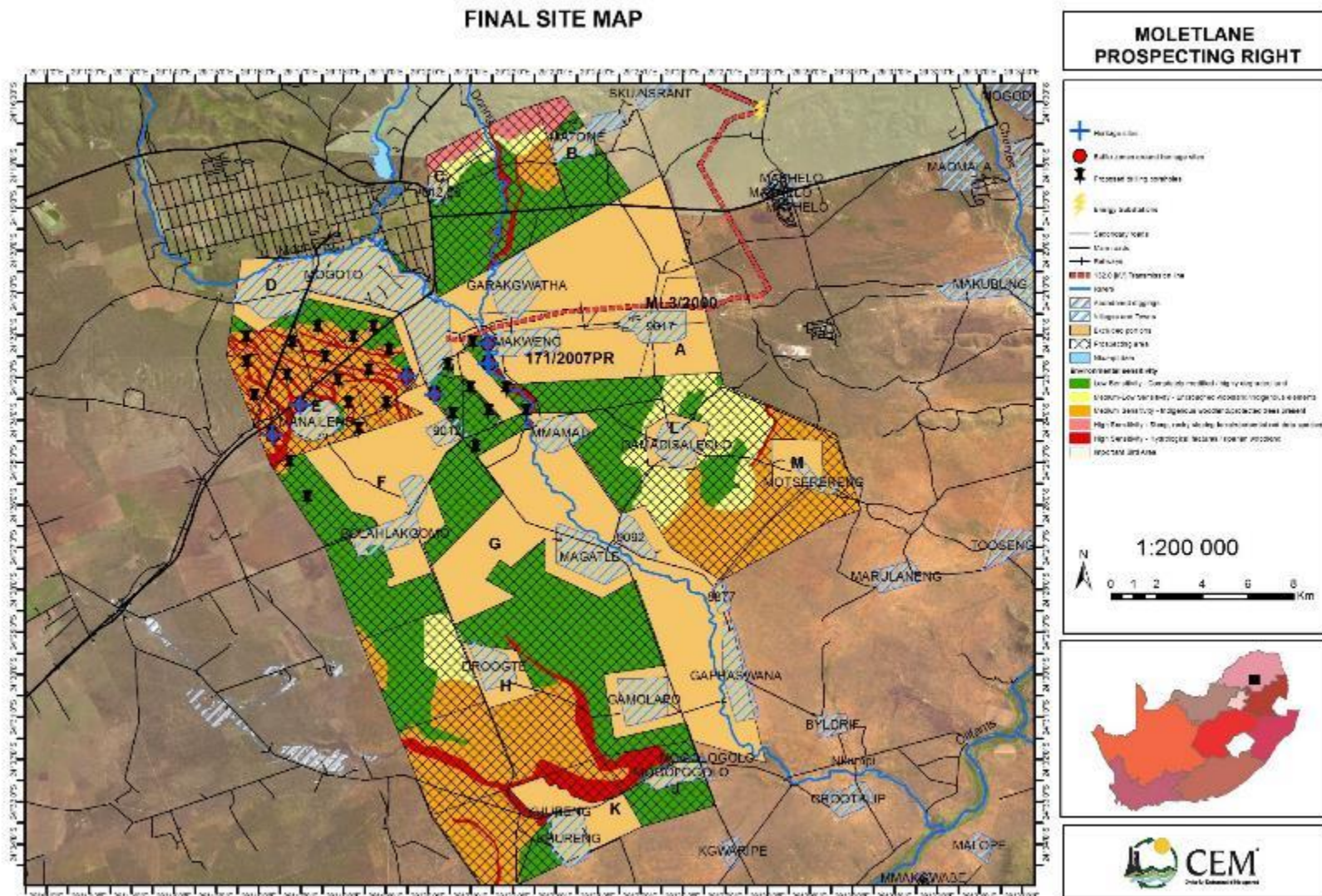


Appendices

Appendix 1: Locality map indicating the nearest towns/villages to the proposed prospecting area.



Appendix 3: Final site plan, indicating the positions of the proposed prospecting boreholes in relation to the environmental sensitivities and socio-economic infrastructure, as well as areas that should be avoided (buffer zones)



Appendix 4: Motivation for the limited reasonable or feasible alternatives

With prospecting activities, no site alternatives are considered, because the site locality has been carefully chosen, based on the site geology, which is fixed in the landscape. The only alternative that has been considered is site lay-out alternatives, where positioning of prospecting boreholes and lay-out of prospecting sites will be done in such a way that environmental harm is prevented as far as possible and care is taken to ensure that no new or unnecessary destruction of areas or habitats, other than the demarcated prospecting site will take place. No technology alternatives has been investigated, based on the available affordable prospecting technologies, with no reasonable or feasible alternatives to percussion and diamond drilling.

Appendix 5: The supporting impact assessment for the proposed prospecting

Impact	Nature of impact	Activity	Phases	Pre mitigation impact assessment							Post mitigation significance	
				Extent	Duration	Magnitude	Probability	Reversibility	Extent of avoidance, management, mitigation	Extent of irreplaceable loss of resources		Significance
Soil compaction	• Soil compaction due to prospecting activities, primarily due to movement of vehicles and equipment, as well as establishment of the drilling site and core storage and processing facility	Establishment of temporary access roads	Phases 1, 2 & 3 drilling, Decommissioning & closure	Site	Medium	Moderate	High	Moderate	Moderate	Low	Low	Low
		Travelling to and from site										
		Camp & drilling site establishment										
		Erection and or hire of core storage and processing facility										
		Drilling										
		Lining and capping of boreholes										
		Decommissioning & rehabilitation of the camp/drill site										
Soil pollution	• Soil contamination and degradation due to spillages of hydrocarbons, waste, sewerage and other contaminants used and stored on the site	Establishment of temporary access roads	Phases 1, 2 & 3 drilling, Decommissioning & closure	Local	Medium	Moderate	Moderate	High	Moderate	Low	Low	Low
		Travelling to and from site										
		Camp & drilling site establishment										
		Erection and or hire of core storage and processing facility										
		Drilling										
		Lining and capping of boreholes										
		Decommissioning & rehabilitation of the camp/drill site										
Change in land use/land potential	• Interference of prospecting activities with the day-to-day management of agricultural/domestic land use • Reduced land potential due to loss of vegetation, compaction and disturbance of soil and loss of carrying capacity as a result of prospecting activities	Establishment of temporary access roads	Phases 1, 2 & 3 drilling, Decommissioning & closure	Local	Short	Moderate	Moderate	Moderate	Moderate	Low	Moderate	Low
		Camp & drilling site establishment										
		Erection and or hire of core storage and processing facility										
		Drilling										
		Decommissioning & rehabilitation of the camp/drill site										
Increased surface water run-off	• An increase in the surface water run-off as a result of the increase in bare areas and impervious surfaces • Soil erosion on and off site due to decreased vegetation cover and increased water run-off as a result of prospecting activities	Establishment of temporary access roads	Phases 1, 2 & 3 drilling, Decommissioning & closure	Local	Short	Moderate	Moderate	Moderate	Moderate	Low	Low	Low
		Travelling to and from site										
		Camp & drilling site establishment										
		Erection and or hire of core storage and processing facility										
		Decommissioning & rehabilitation of the camp/drill site										

Impact	Nature of impact	Activity	Phases	Pre mitigation impact assessment							Post mitigation significance	
				Extent	Duration	Magnitude	Probability	Reversibility	Extent of avoidance, management, mitigation	Extent of irreplaceable loss of resources		Significance
Surface water pollution	<ul style="list-style-type: none"> Increased pollutant concentrations in surface water run-off, including silt, hydrocarbons and other contaminants used and stored on the site Increased silt loading as a result of prospecting activities causing soil disturbance, decreased vegetation cover and increased water run-off 	Establishment of temporary access roads	Phases 1, 2 & 3 drilling, Decommissioning & closure	Local	Short	Moderate	High	Moderate	Moderate	Low	Low	Low
		Travelling to and from site										
		Camp & drilling site establishment										
		Erection and or hire of core storage and processing facility										
		Drilling										
		Lining and capping of boreholes										
Decommissioning & rehabilitation of the camp/drill site												
Generation of dust and fumes	<ul style="list-style-type: none"> Dust/fumes generated/released during the prospecting activities Smoke/gaseous emissions due to machinery/processes/equipment/ vehicles employed during prospecting activities 	Establishment of temporary access roads	Phases 1, 2 & 3 drilling, Decommissioning & closure	Local	Very short	Moderate	Very High	High	High	Low	Low	Low
		Travelling to and from site										
		Camp & drilling site establishment										
		Erection and or hire of core storage and processing facility										
		Drilling										
		Decommissioning & rehabilitation of the camp/drill site										
Noise and vibration	<ul style="list-style-type: none"> Noise and vibration due to machinery/processes/equipment/ vehicles employed during prospecting activities 	Establishment of temporary access roads	Phases 1, 2 & 3 drilling, Decommissioning & closure	Local	Very short	Moderate	Definite	High	Low	Low	Low	Low
		Travelling to and from site										
		Camp & drilling site establishment										
		Erection and or hire of core storage and processing facility										
		Drilling										
		Lining and capping of boreholes										
Decommissioning & rehabilitation of the camp/drill site												
Vegetation impacts due to site clearance and invader plants	<ul style="list-style-type: none"> Loss of vegetation due to the clearance of vegetation and soil contamination during the prospecting activities Loss of indigenous plant species as a result of the spreading of alien and invasive plants 	Establishment of temporary access roads	Phases 1, 2 & 3 drilling, Decommissioning & closure	Local	Medium	Moderate	Definite	Moderate	Moderate	Moderate	Low	Low
		Camp & drilling site establishment										
		Erection and or hire of core storage and processing facility										
		Decommissioning & rehabilitation of the camp/drill site										

Impact	Nature of impact	Activity	Phases	Pre mitigation impact assessment							Post mitigation significance	
				Extent	Duration	Magnitude	Probability	Reversibility	Extent of avoidance, management, mitigation	Extent of irreplaceable loss of resources		Significance
Wildlife killing/injury and disturbance	<ul style="list-style-type: none"> Displacement of species due to habitat transformation and destruction Restriction of wildlife movement Potential snaring, hunting and killing of wildlife 	Establishment of temporary access roads	Phases 1, 2 & 3 drilling, Decommissioning & closure	Local	Very short	Moderate	Low	High	Moderate	Low	Low	Low
		Camp & drilling site establishment										
		Erection and or hire of core storage and processing facility										
		Decommissioning & rehabilitation of the camp/drill site										
Ecosystem services	<ul style="list-style-type: none"> Disruption or destruction of ecosystem services due to prospecting activities 	Establishment of temporary access roads	Phases 1, 2 & 3 drilling, Decommissioning & closure	Local	Short	Moderate	Low	Moderate	Moderate	Low	Low	Low
		Camp & drilling site establishment										
		Erection and or hire of core storage and processing facility										
		Decommissioning & rehabilitation of the camp/drill site										
Visual impact	Visual impact caused by the clearance of vegetation, as well as construction of ancillary buildings and structures	Establishment of temporary access roads	Phases 1, 2 & 3 drilling, Decommissioning & closure	Local	Short	Low	Moderate	High	Low	Low	Low	Low
		Camp & drilling site establishment										
		Erection and or hire of core storage and processing facility										
		Decommissioning & rehabilitation of the camp/drill site										
Destruction/disturbance of archaeological & culturally important sites	<ul style="list-style-type: none"> Destruction of informal African cemetery, historical plunge dips and associated infrastructure, as well as site with very high density of mid stone age lithics during prospecting 	Establishment of temporary access roads	Phases 1, 2 & 3 drilling, Decommissioning & closure	Site	Permanent	Severe	Definite	Low	Low	High	Very high	Moderate
		Camp & drilling site establishment										
		Erection and or hire of core storage and processing facility										

Impact	Nature of impact	Activity	Phases	Pre mitigation impact assessment							Post mitigation significance	
				Extent	Duration	Magnitude	Probability	Reversibility	Extent of avoidance, management, mitigation	Extent of irreplaceable loss of resources		Significance
Negative impact on social fabric	<ul style="list-style-type: none"> Negative impact on the land-use of the area due to prospecting activities Adverse social impacts due to the presence of migrant construction workers 	Establishment of temporary access roads	Phases 1, 2 & 3 drilling, Decommissioning & closure	Local	Short	Moderate	High	Moderate	Moderate	Moderate	Moderate	Low
		Camp & drilling site establishment										
		Erection and or hire of core storage and processing facility										
		Drilling										
		Decommissioning & rehabilitation of the camp/drill site										
Positive social impacts due to job creation etc.	<ul style="list-style-type: none"> Direct economic benefit through the creation of temporary and permanent employment opportunities Indirect economic benefit through the benefits associated with the provision of accommodation, catering and local spending by contractors 	Establishment of temporary access roads	Phases 1, 2 & 3 drilling, Decommissioning & closure	Local	Very short	Moderate	High	High	High	Moderate	Moderate	Low
		Camp & drilling site establishment										
		Erection and or hire of core storage and processing facility										
		Drilling										
		Decommissioning & rehabilitation of camp/drill site										