



SCAN / SELECTED INFORMATION FOR ASSEN AND TAMBOTIE

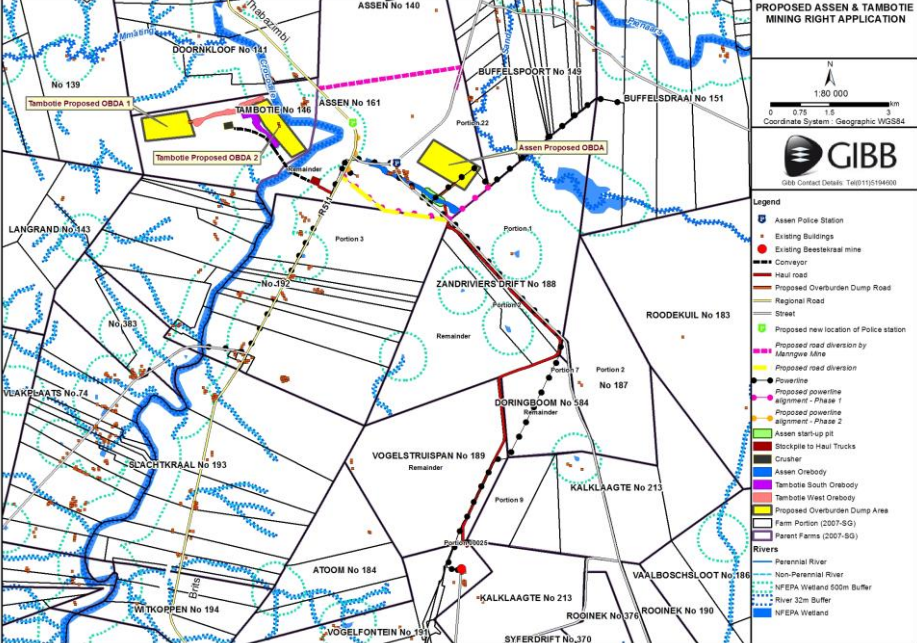
This scan was completed by GIBB's GIS unit on **2016/11/21**

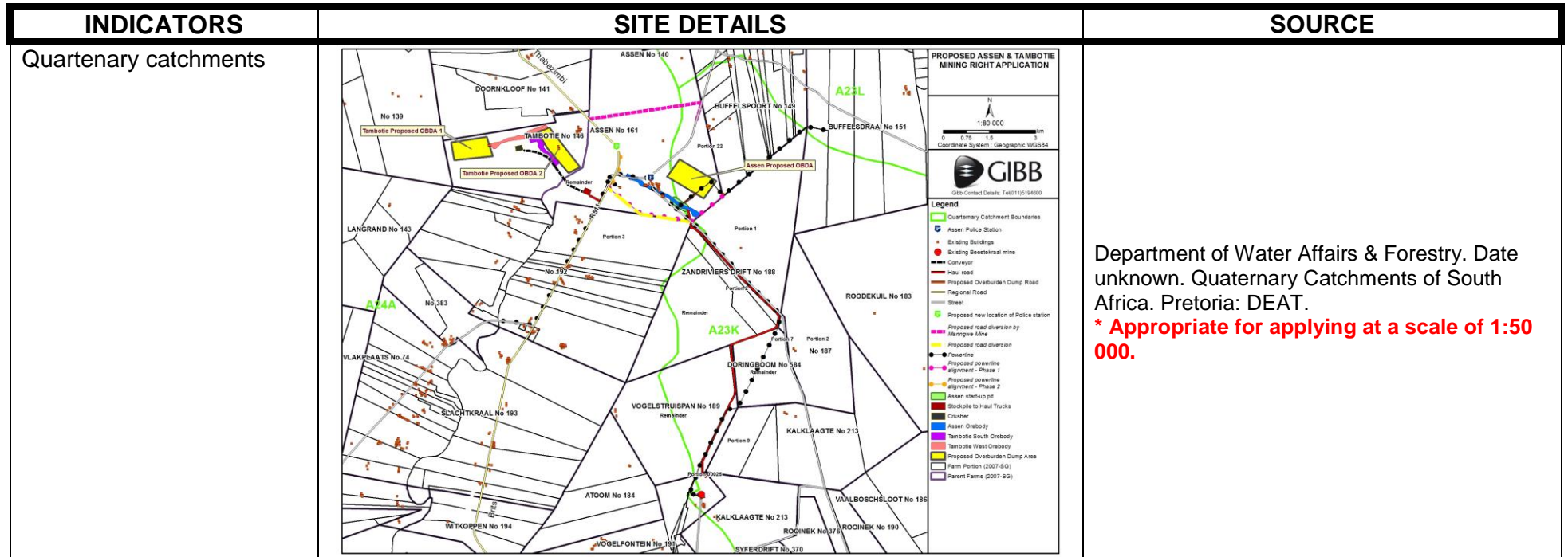
Please note that this information is to be used to flag issues that may arise during further investigation.

INDICATORS	SITE DETAILS	SOURCE
Topomap number	2527BA	Department of Rural Development & Land Reform. Chief Directorate: Surveys & Mapping 2009: Topomap. Cape Town: CDSM. Scale : 1: 50 000

INDICATORS	SITE DETAILS	SOURCE
Property information		<p>* Appropriate for applying at a scale of 1:10 000.</p>
SG code	<p>TOJQ000000009610000 TOJQ000000001460001 TOJQ000000009730000 TOJQ000000003760000 TOJQ000000002130004 TOJQ0000000019100047 TOJQ000000002130001 TOJQ0000000019100045 TOJQ0000000019100049 TOJQ0000000019100044 TOJQ0000000019100065 TOJQ00000000058400000 TOJQ0000000018700009 TOJQ0000000019100046</p>	<p>Department of Rural Development Land Affairs. 2014. Pretoria: Surveyor-General Office.</p>

INDICATORS	SITE DETAILS	SOURCE
	T0JQ0000000009480000 T0JQ0000000002130003 T0JQ0000000001910025 T0JQ0000000001890000 T0JQ0000000001920038 T0JQ0000000001880000 T0JQ0000000001880004 T0JQ0000000009740000 T0JQ0000000001610000	
Latitude/longitude (Degrees Minutes Seconds – DMS)	27°36'39.664"E 25°10'43.772"S	Derived from screen
Nearest town / nearest place	ASSEN	Municipal Demarcation Board. 2016
Province	27°34'38.587"E 25°9'48.454"S	Municipal Demarcation Board. 2016
District municipality	Bojanala District municipality	Municipal Demarcation Board. 2016
Municipality	Bojanala Local Municipality	Municipal Demarcation Board. 2016
Ward number		Municipal Demarcation Board. 2016

INDICATORS	SITE DETAILS	SOURCE
<p>Wetlands and rivers</p>	 <p>PROPOSED ASSEN & TAMBOTIE MINING RIGHT APPLICATION</p> <p>Scale: 1:50 000 Coordinate System: Geographic WGS84</p> <p>GIBB GIBB Contact Details: T661155194600</p> <p>Legend</p> <ul style="list-style-type: none"> Assen Police Station Existing Buildings Existing Beestekraal mine Conveyor Haul road Proposed Overburden Dump Road Regional Road Street Proposed new location of Police station Proposed road diversion by Manganese Mine Proposed road diversion Powerline Proposed powerline alignment - Phase 1 Proposed powerline alignment - Phase 2 Assen start-up pit Stockpile to Haul Trucks Crestline Assen Orebody Tambotie South Orebody Tambotie West Orebody Proposed Overburden Dump Area Farm Portion (2007-SG) Parent Farms (2007-SG) Rivers Perennial River Non-Perennial River NFEPA Wetland 500m Buffer River 30m Buffer NFEPA Wetland 	<p>Department of Rural Development & Land Reform. Chief Directorate: Surveys & Mapping 2009: Hydrology. Cape Town: CDSM.</p> <p>* Appropriate for applying at a scale of 1:50 000.</p> <p>South African National Botanical Institute 2010. NFEPA. Cape Town: SANBI.</p> <p>* Appropriate for applying at a scale of 1:50 000.</p>



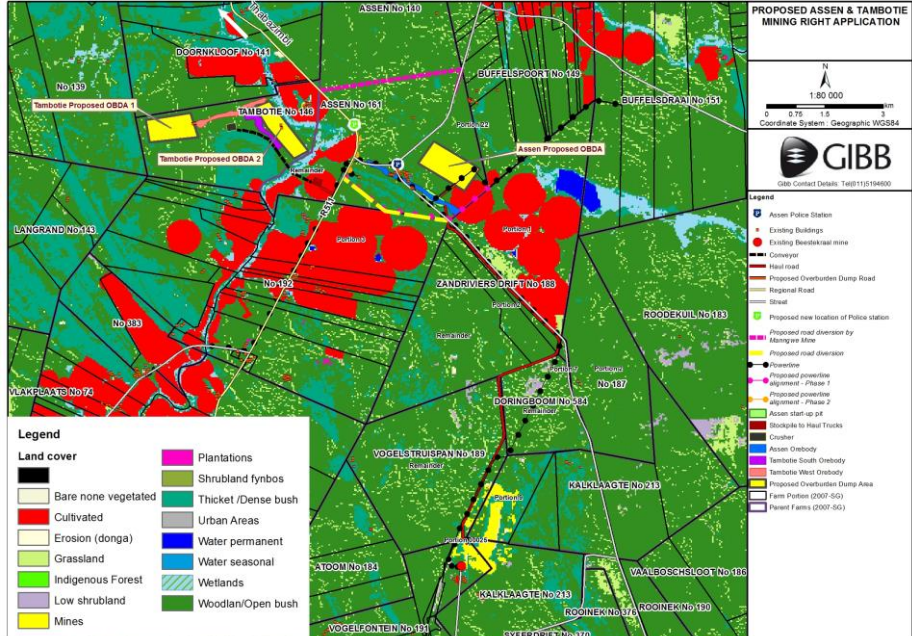
INDICATORS	SITE DETAILS	SOURCE
Land types	<p>PROPOSED ASSEN & TAMBOTIE MINING RIGHT APPLICATION</p> <p>Scale: 1:80 000 Coordinates System: Geographic WGS84</p> <p>GIBB GIBB Contact Details: Telf: 011 51516400</p> <p>Legend</p> <ul style="list-style-type: none"> Assen Police Station Existing Buildings Existing Beestekraal mine Conveyor Haul road Proposed Overburden Dump Road Regional Road Street Proposed new location of Police station Proposed road diversion by Asengwe mine Proposed road diversion Powerline Proposed powerline alignment - Phase 1 Proposed powerline alignment - Phase 2 Assen start-up pit Stockpile to Haul Trucks Crusher Assen Orebody Tambotie South Orebody Tambotie West Orebody Proposed Overburden Dump Area Farm Protes (2007-S.G) Parent Farms (2007-S.G) <p>Land type</p> <ul style="list-style-type: none"> Ae64 Fs148 Fs149 Fs122 Ib117 	<p>National Department of Agriculture, 2002: Final Report to Directorate Agricultural Land Resource Management. Development and application of a land capability classification system for South Africa. (Report GW/A/2000/57 of the Agricultural Research Commission - Institute for Soil, Climate and Water). Pretoria: ARC.</p> <p>* Appropriate for applying at a scale of 1:1 000 000 to 250 000.</p>

INDICATORS	SITE DETAILS	SOURCE
Land capability		<p>National Department of Agriculture, 2002: Final Report to Directorate Agricultural Land Resource Management. Development and application of a land capability classification system for South Africa. (Report GW/A/2000/57 of the Agricultural Research Commission - Institute for Soil, Climate and Water). Pretoria: ARC.</p> <p>* Appropriate for applying at a scale of 1:1 000 000 to 250 000.</p>
Aviational infrastructure	NONE	<p>Department of Rural Development & Land Reform. Chief Directorate: Surveys & Mapping. 2009: Avian Infrastructure. City of Cape Town: CDSM.</p> <p>* Appropriate for applying at a scale of 1:50 000.</p>
Medical facilities	NONE	<p>Municipal Demarcation Board 2003, Municipalities. Pretoria: MDB.</p> <p>* Appropriate for applying at a scale of 1:50 000.</p>

INDICATORS	SITE DETAILS	SOURCE
Educational facilities		<p>Municipal Demarcation Board 2003, Municipalities. Pretoria: MDB. * Appropriate for applying at a scale of 1:50 000.</p>
Heritage sites & Cultural sites	NONE	<p>Department of Environmental Affairs and Tourism 2001, ENPAT. Pretoria: DEAT * Appropriate for applying at a scale of 1:250 000.</p>
Conserved areas or Biosphere Reserves	NONE	<p>Department of Environmental Affairs and Tourism 2001, ENPAT. Pretoria: DEAT. * Appropriate for applying at a scale of 1:250 000.</p>

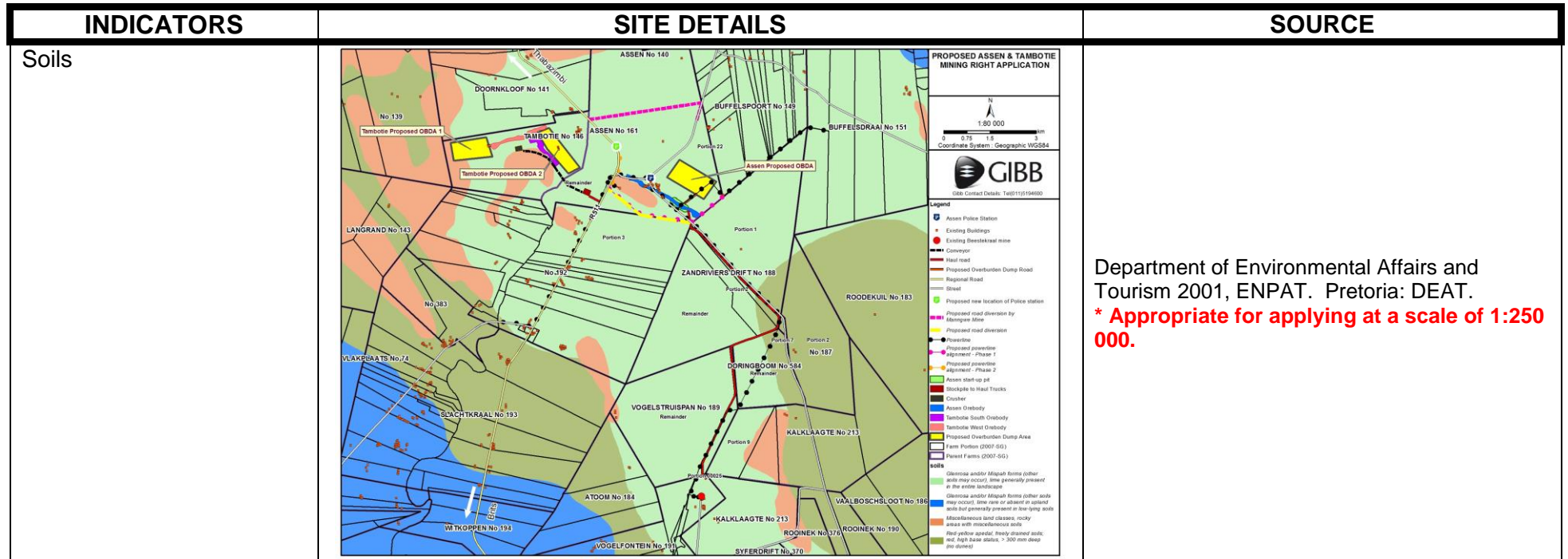
INDICATORS	SITE DETAILS	SOURCE
Protected areas		Department: of Environmental Affairs:2016
National Parks	NONE	Department: of Environmental Affairs:2016
National Protected Area Expansion Strategy Focus Areas	NONE	South African National Botanical Institute 2010. NPAES. Cape Town: SANBI. * Appropriate for applying at a scale of 1:250 000

INDICATORS	SITE DETAILS	SOURCE
<p>Powerlines</p>	<p>PROPOSED ASSEN & TAMBOTIE MINING RIGHT APPLICATION</p> <p>Scale: 1:50 000 Coordinate System: Geographic WGS84</p> <p>GIBB GIBB Contact Details: Tel:011 0158460</p> <p>Legend</p> <ul style="list-style-type: none"> High Voltage stations High Voltage Powerlines Assen Police Station Existing Buildings Existing Swastika mine Conveyor Haul road Proposed Overburden Dump Road Regional Road Street Proposed new location of Police station Proposed road diversion by Abongwe Mine Proposed road diversion Powerline Proposed powerline alignment - Phase 1 Proposed powerline alignment - Phase 2 Assen startup pit Stockpile to Haul Trucks Crusher Assen Crebody Tambotie South Crebody Tambotie West Crebody Proposed Overburden Dump Area Farm Portion (2007-SG) Parent Farms (2007-SG) 	<p>ESKOM, 2004. ESKOM Distribution and Transmission lines. Johannesburg: ESKOM. * Appropriate for applying at a scale of 1:50 000.</p>

INDICATORS	SITE DETAILS	SOURCE																																						
Land cover	 <p>PROPOSED ASSEN & TAMBOTIE MINING RIGHT APPLICATION</p> <p>Scale: 1:80 000 Coordinate System: Geographic WGS84</p> <p>GIBB Gibb Contact Details: T461115194900</p> <p>Legend</p> <table border="0"> <tr> <td> Assen Police Station</td> <td> Existing Beestekraal mine</td> </tr> <tr> <td> Existing Buildings</td> <td> Existing Beestekraal mine</td> </tr> <tr> <td> Contour</td> <td> Proposed Overburden Dump Road</td> </tr> <tr> <td> Cultivated</td> <td> Regional Road</td> </tr> <tr> <td> Erosion (donga)</td> <td> Street</td> </tr> <tr> <td> Grassland</td> <td> Proposed new location of Police station</td> </tr> <tr> <td> Indigenous Forest</td> <td> Proposed road diversion for Ekangwe Mine</td> </tr> <tr> <td> Low shrubland</td> <td> Proposed road diversion</td> </tr> <tr> <td> Mines</td> <td> Proposed powerline alignment - Phase 1</td> </tr> <tr> <td> Plantations</td> <td> Proposed powerline alignment - Phase 2</td> </tr> <tr> <td> Shrubland fynbos</td> <td> Assen start-up pit</td> </tr> <tr> <td> Thicket /Dense bush</td> <td> Backlogs to haul Trucks</td> </tr> <tr> <td> Urban Areas</td> <td> Crusher</td> </tr> <tr> <td> Water permanent</td> <td> Assen Orebody</td> </tr> <tr> <td> Water seasonal</td> <td> Tambotie South Orebody</td> </tr> <tr> <td> Wetlands</td> <td> Tambotie West Orebody</td> </tr> <tr> <td> Woodlan/Open bush</td> <td> Proposed Overburden Dump Area</td> </tr> <tr> <td></td> <td> Farm Portals (2007-SS)</td> </tr> <tr> <td></td> <td> Fenced Farms (2007-SS)</td> </tr> </table>	Assen Police Station	Existing Beestekraal mine	Existing Buildings	Existing Beestekraal mine	Contour	Proposed Overburden Dump Road	Cultivated	Regional Road	Erosion (donga)	Street	Grassland	Proposed new location of Police station	Indigenous Forest	Proposed road diversion for Ekangwe Mine	Low shrubland	Proposed road diversion	Mines	Proposed powerline alignment - Phase 1	Plantations	Proposed powerline alignment - Phase 2	Shrubland fynbos	Assen start-up pit	Thicket /Dense bush	Backlogs to haul Trucks	Urban Areas	Crusher	Water permanent	Assen Orebody	Water seasonal	Tambotie South Orebody	Wetlands	Tambotie West Orebody	Woodlan/Open bush	Proposed Overburden Dump Area		Farm Portals (2007-SS)		Fenced Farms (2007-SS)	<p>Satellite Application Center, 2000. Landcover. Pretoria: SAC.</p> <p>* Appropriate for applying at a scale of 1:50 000.</p>
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INDICATORS	SITE DETAILS	SOURCE
<p>Land use</p>		<p>Department of Environmental Affairs and Tourism 2001, ENPAT. Pretoria: DEAT. * Appropriate for applying at a scale of 1:250 000.</p>

INDICATORS	SITE DETAILS	SOURCE
Soil potential	<p>PROPOSED ASSEN & TAMBOTIE MINING RIGHT APPLICATION</p> <p>Scale: 1:80 000 Coordinate System: Geographic WGS84</p> <p>GIBB Gibb Contact Details: Tel:011(0)154600</p> <p>Legend</p> <ul style="list-style-type: none"> Assen Police Station Existing Buildings Existing Beestekraal mine Conveyor Haul road Proposed Overburden Dump Road Regional Road Street Proposed new location of Police station Proposed road diversion by Jaangraal Mine Proposed road diversion Powerline Proposed powerline alignment - Phase 1 Proposed powerline alignment - Phase 2 Assen Make-up pit Stockpile to Haul Trucks Crusher Assen Orebody Tambotie South Orebody Tambotie West Orebody Proposed Overburden Dump Area Team Portals (2007-03) Parent Farms (2007-03) <p>soilpot</p> <ul style="list-style-type: none"> Not suitable for agriculture or commercial forestry, suitable for conservation, recreation or water catchments Soils highly suited to arable agriculture where climate permits Soils not suitable for arable agriculture, suitable for forestry or grazing where climate permits Soils of poor suitability for arable agriculture where climate permits 	<p>Department of Environmental Affairs and Tourism 2001, ENPAT. Pretoria: DEAT.</p> <p>* Appropriate for applying at a scale of 1:250 000.</p>



INDICATORS	SITE DETAILS	SOURCE
<p>Geology</p>		<p>Department of Environmental Affairs and Tourism 2001, ENPAT. Pretoria: DEAT. * Appropriate for applying at a scale of 1:250 000.</p>
<p>North West Critical Biodiversity Areas</p>		<p>North West Department of Agriculture, Conservation & Environment, 2008: North West Critical Biodiversity Areas: DRAFT. Mmabato NWDACE. * Appropriate for applying at a scale of 1:250 000.</p>