Appendix J

Selection of Alternatives

for Final Basic Assessment

Multi-Purpose Lifestyle Complex - Postmasburg





1 Alternatives Selection Process

A number of sites within the town of Postmasburg were selected to possibly form part of the Multi-Purpose Lifestyle Complex. Several aspects of these sites were taken into account in order to revise this list of sites and to determine the ones which will be included as part of this development.

The following process and considerations apply to the selection of alternatives for this process.

2 Town Planning evaluation of alternatives

2.1 Legislative frameworks in terms of town planning

The relevant town planning legislation at present is the Spatial Planning and Land Use Management Act, Act 16 of 2013, or SPLUMA in short and came into effect on 01 July 2015 in the Northern Cape Province. In the Tsantsabane Local Municipality the Municipality has already approved and adopted their own Land Use Management Scheme (LUMS) that is SPLUMA compliant. The mentioned LUMS is the guide for any applicant in terms of the SPLUMA application process and the related requirements of the said process are stipulated in the LUMS documents.

Applications are submitted to the Tsantsabane Local Municipality, as authority of first instance, these applications are processed by the said municipality and eventually prepared and referred for decision-making to the ZF Mgcawu District Planning Tribunal. The final letter of decision-making is however compiled by the Local Authority and send to the applicant.

- 1. **The site accessibility is assessed.** Whether it is accessible and very central to the larger community of Postmasburg, Tsantsabane LM, but do not have the correct zoning to allow immediate development of the site.
- 2. **The site context is evaluated** for example, does it also form part of the commonage and thus do not have a separate erf number to refer to at present.
- 3. **Zoning is determined.** In order for the developer to obtain the correct zoning and to subdivide the property to have a new erf number, the process described later on in this letter will have to be followed. Please note that this letter only gives a summary of all possible application procedures and the detail will be sorted out as soon as clarity on the scale of development is received.
- 4. **The conceptual site development plan** that will be compiled by the appointed Architects will provide insight into the functioning of the planned multi-purpose centre, the various land uses that must be included and the SPLUMA process that will have to be followed will become clear.

2.2 Legal compliance for township expansion/ township establishment

In order for the project to achieve its end goal of approval by the ZF Mgcawu District Municipal Planning Tribunal, a myriad of legal inputs and approvals must be obtained in accordance with the Spatial Planning and Land Use Management Act, Act 16 of 2013 (SPLUMA), the relevant and approved LUMS, as well as the relevant application procedures. The act is very clear in its indication regarding the necessary components and steps to be taken and any normal application must include and discuss the following aspects where relevant, upon application submission. These components may include, but are not limited to the following:

- 1) Completed SPLUMA Comprehensive Application form;
- 2) Completed SPLUMA Motivation Report;
- 3) Power of Attorney from the Local Municipality (landowner);
- 4) Copy of Title Deed(s);
- 5) Map showing all existing services and servitudes (land surveyor function in cooperation with consulting engineers);
- 6) Zoning Certificate issued by the Local Authority;
- Orientating Locality Map;
- 8) Zoning Map Extract;
- 9) Land Use Map;
- 10) Detail Layout Map;
- 11) Orthophoto / Aerial survey map;
- 12) Site Development Plan;
- 13) Surveyor general diagrams (cadastral information);
- 14) Status report from Surveyor General street closure or state-owned land (if land portion is a registered public open space);
- 15) Detail Engineering Services plan (Bulk and internal);
- 16) Environmental Authorisation (EA);
- 17) Traffic impact study;
- 18) Geological (soil) report (NHRB Standards);
- 19) Flood line certificate /engineering report certificate from relevant Department;
- 20) List of sections in Title Deed conditions to be removed /amended or confirmation of no conditions found in the deed; and
- 21) Adherence to NSDF and PSDF.

Steps to be taken in order to ensure legal compliance for a township expansion/ establishment application:

- 1) **Site verification**, obtaining all data, 0.5m contours, servitudes, determining the flood lines and influencing factors, including detail discussions with all sub-consultants and the District Municipal Town Planner: The first phases will take the form of a coordinated effort by all the involved team specialists to ensure the project timeframe is compressed to as short a timeline as possible. After considering the various options available, it is imperative before the next step can commence to determining the status-quo of the site. This will include site visits to the site as part of the team, which will allow the team members to adequately familiarise themselves with the site at ground level, including meeting up with the community leaders. Verifying the contour surveys (0.5m contours), as well as verifying the exact location of the existing infrastructure, determining possible flood lines, servitudes and restrictive title conditions, will all be important and critical at this stage.
- 2) Drafting of Town Planning layout options for the site: Upon the establishment of the site boundaries and contour survey, servitudes, etc., the project team from Macro plan will commence with the drafting of concept layout plans for township expansion, which must include detail discussions with all relevant stakeholders. This is an important phase due to the fact that all other specialists and consultants need to have guidance to the future layout and design of the community. The inclusion of various layout options, densifications, adherence to inputs from all the role players and following a greenlayout approach must all be included.
- 3) **Discussions and gathering inputs** regarding the draft layout options, finalisation and final layout preparation, including determining of future land uses and again obtaining the input from the community: Upon completion of the concept layouts, the concept layouts will have to be presented to the Project Steering Committee for input and approval and selection of the preferred layout. The inputs from the various Specialists, e.g. Geotechnical investigations, Environmental Impact process and Engineers all play a vital role and will have influence on the options and layouts. The following stage would be to make any adjustments to the preferred layout which may be deemed necessary and submit this to the Project Steering Committee for further input and approval.
- 4) Compilation of SPLUMA application for land use change: After identification and finalisation of the preferred layout, the choice of preferred layout will be communicated to the project team, which needs to study and take into consideration these proposals. The Town Planning wing of the project team will use the preferred layout as the basis upon which to commence with the compilation of the draft motivation report and application for land use change in terms of the relevant SPLUMA legislation.
- 5) **Submission of the application:** Upon completion of the land use change motivation report and application, this documentation will be submitted to the local authority for processing. Please note that, when applicable, the completion of the following segments will be critical before the application can be submitted to the local authority and this includes the following:
 - a) Environmental Impact Assessment The SPLUMA application must be submitted with either an Environmental Authorisation (EA from the NEMA process) or a letter stating that 'no activities are triggered in accordance with NEMA. With special permission of the Local Authority, it is proposed that the Town Planning process be allowed to proceed up to the point of scheduling of the application for final decision-making by the Planning Tribunal.
 - b) Bulk infrastructure investigation The SPLUMA application must be submitted with the input of the Engineers of the Local Authorities input on the availability of the engineering services to the development.
 - c) Geo-technical investigation The SPLUMA application must be submitted with the approved Geo-Technical report by the NHBRC. With special permission, it is proposed that the public participation process be conducted without the final report.
 - d) Flood line Assessment The SPLUMA application must be submitted with the Professional signed off Flood line delineation, if applicable to any of the sites the sites do not pose a flood line problem at this stage.
 - e) Social Impact Assessment and various other studies it could be determined that other studies and role players will also need to play a role in the planning process, and this will be determined and included.
 - f) Inputs from various state and semi-state departments the inclusion of all inputs, approvals, no objections and feedback from Departments such as Rural Development, COGHSTA, DAFF, Heritage, Telkom, Transnet, SANRAL, Roads and Public works, must all be included in the SPLUMA application.
- 6) **Launching of the Public Participation Process**: After submission of the application for land use change to the local authority and payment of the Admin fees, the process of public participation (inviting public comment) pertaining to land use changes will commence. This will include:
 - a) Publication of a legal notice in the local print media that circulates in the area.
 - b) Placement of a legal notice on the involved terrain.
 - Distribution of a legal notice to all surround landowners/ residents.
- 7) **Responding to comments and any possible adjustments to the layout Plans:** After the public participation period, all public comments must be taken into account. The team will have to provide a response to each concern to the benefit of the decision-making body, in this case the responsible authority identified within the structures of the local authority this is called the secondary phase of our public participation process.
- 8) **Decision by the relevant Planning Tribunal**: After the response to all comments from the public have been submitted to the local authority, the application for land use change is scheduled for decision-making by ZF Mgcawu District Municipal Planning Tribunal). The date of the decision-making is subject to scheduling of the local authority and the project team does unfortunately not have any control over this. The project team will continually follow up with the local authority in this regard and as soon as a date is set, this will be communicated to the Project Steering Committee. As soon as a decision (approval) has been reached by the responsible authority (relevant Planning Tribunal), the decision is normally transcribed on a Municipal letterhead and can then be circulated to any party involved.
- 9) Possible Appeal Tribunal Process: If objections were received during the formal public participation process and the inputs and objections could not be mediated during the process, the objectors will have the opportunity to object the decision of the Planning Tribunal. If this situation arises, macro plan will attend any scheduled meeting in the appeal process as requested by die Local Authority.
- 10) Completion of the SPLUMA Application process: After the received appeal has been appropriately dealt with or no appeal has been received, the SPLUMA application process is fully and successfully completed.

3 Environmental evaluation of alternatives

3.1 Legislative frameworks in terms of environmental screening

The legal framework applied to consider whether any authorisation or environmental / biodiversity / resource is affected in a significant negative manner is tabled below.

Table 1: List of environmental legislation applied in screening of alternatives

Abbreviation	Act	No	Year	Function
Constitution	Constitution of the Republic of South Africa	108	1996	Introduces a Constitutional framework for post 1994 South Africa
GNR704	Government Notice Regulation 704 of the National Water Act	704		National Water Act
NEMA	National Environmental Management Act	107	1998	Provides for cooperative environmental management
NEMA A	National Environmental Management Amendment Act	56	2002	Amends the National Environmental Management Act
NEM-BA	National Environmental Management Biodiversity Act	10	2004	Regulates the management and conservation of biological diversity within the Republic of South Africa
NEM-WMA	National Environmental Management Waste Management Act	59	2008	Regulates the management of all wastes, including contaminated soils
NFA	National Forest Act	84	1998	Reforms the law on forests
NHRA	National Heritage Resources Act	25	1999	Provides for the protection of heritage resources
NWA	National Water Act	36	1998	Regulates all matters relating to water

3.2 Desktop review

It is understood that a land suitability evaluation is required to identify the best land management options available to Kolomela for this development. The aim of the desktop evaluation will be to understand the existing land use patterns.

Integration of regional SDP, local IDP, the current Kolomela land management plan and detailed closure plan will be referenced and overlain to understand existing segregation of competing or integration of complementing enterprises.

Existing authorizations and legal requirements applicable to the relevant options will be reviewed. Review input as team member and/or reviewer of documents to ensure elements of sound environmental practice, closure planning alignment and sustainability is provided for.

3.3 Site Assessment

A screening level site assessment identifying key risks to the environmental, ecological sensitivities and potential environmental risks to the project will be completed of the alternative sites.

3.4 Needs and Desirability Assessment

The strategic context for informing need & desirability should firstly be addressed & determined during the formulation of the sustainable development vision, goals, objectives of the development set out in alignment with the strategies & policies of Integrated Development Plans ("IDPs") & Spatial Development Frameworks ("SDFs").

In this context the need & desirability (N&D) assessment is the link between the strategic concept and final design that will be submitted for environmental (EIA) approval.

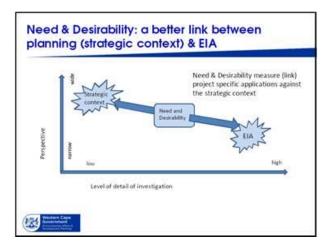


Figure 1: Needs and desirability model applied to environmental screening

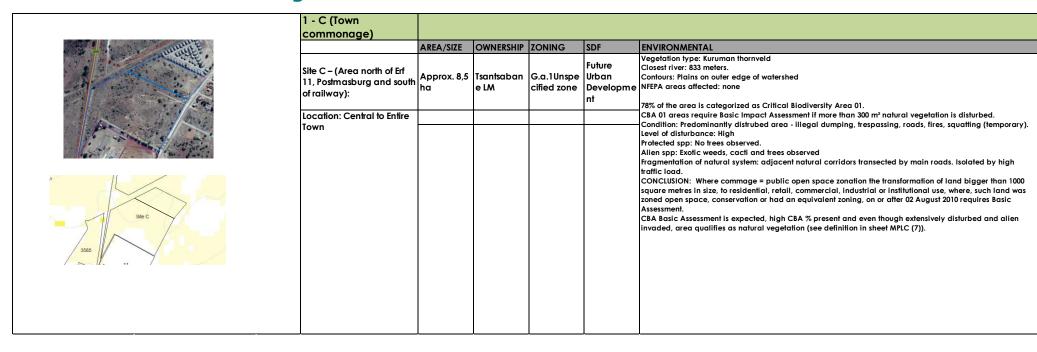
Need & desirability relates to the type of development being proposed, its location, timing and relevance.

The assessment considers addressing the key questions for the different alternative options and indicating the best solution / adjustment to make sure it is the most need and most desired development in terms of environmental, legislative, biodiversity, ecological, water resources, protected species, heritage, economic and social aspects.

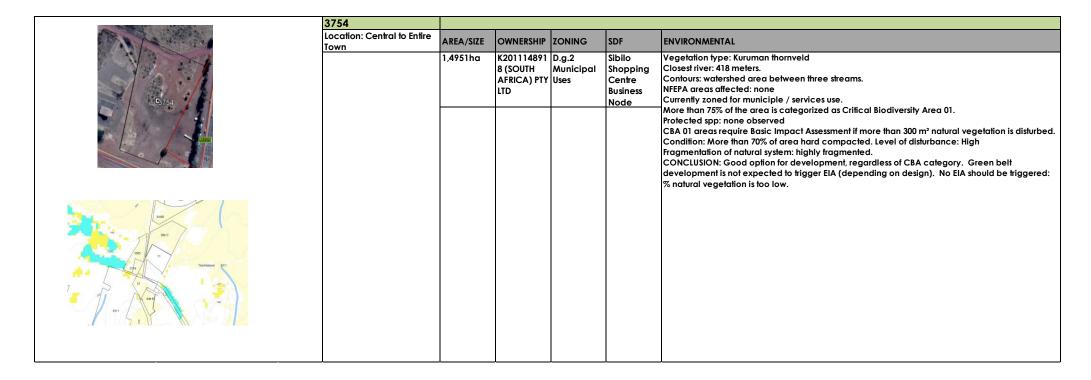
It is proposed that the alternative options be workshopped by the project team and the results be written up as a needs and desirability assessment as part of the project.

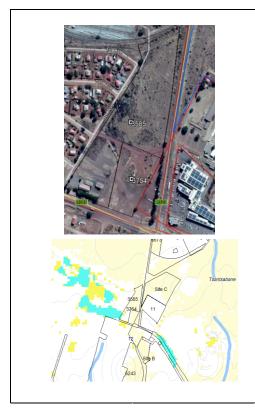
The screening assessment and results of the final selection of sites are tabled below.

4 Environmental Screening



		3585					
		Location: Central to Entire Town	AREA/SIZE	OWNERSHIP	ZONING	SDF	ENVIRONMENTAL
100 Jan J	Sec 1		5,2037ha	Tsantsaban e LM		uses and	Vegetation type: Kuruman thornveld Closest river: 438 meters. Ecological corridors: Adjacent to ecological support area. Contours: watershed area between three streams.
Jun Jun							NFEPA areas affected: none Half of the area is categorized as Critical Biodiversity Area 01. Protected spp: No trees observed. Bulbs expected, but not seen. CBA 01 areas require Basic Impact Assessment if more than 300 m² natural vegetation is disturbed.
							Condition: Predominantly natural vegetation. Level of disturbance: Moderate Alien spp: Single specimens present throughout Fragmentation of natural system: highly fragmented. CONCLUSION: Good option for development, regardless of CBA category. High % of natural vegetation will trigger EIA if development footprint exceed 300m2.

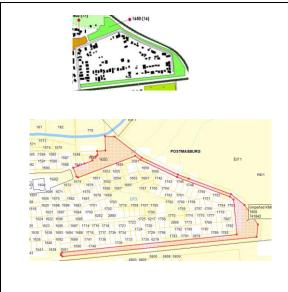




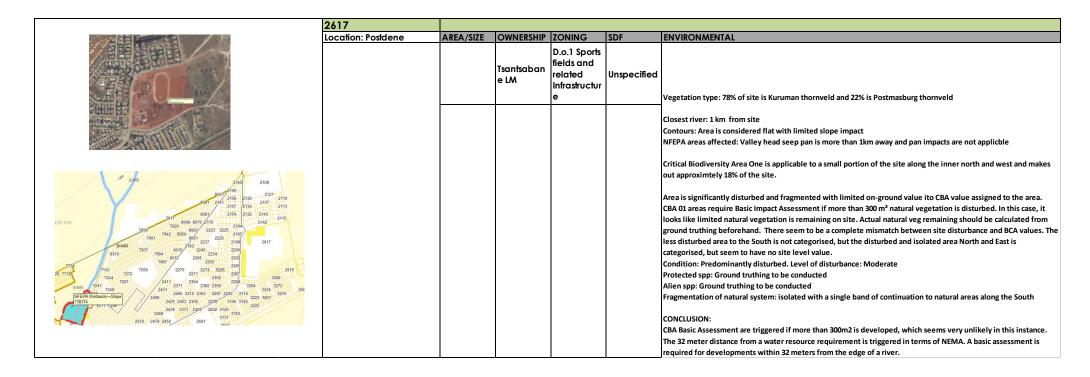
1 - B (Town commonage)	AREA/SIZE	OWNERSHIP	ZONING	SDF	ENVIRONMENTAL
Site B - (Adjacent to Andrisha Motel and Hoof Street - R325)	Approx. 3,5 ha	Tsantsaban e LM	D.n.1 Cemeteries	Unspecified	Vegetation type: Kuruman thornveld Closest river: 454 meters. Contours: NW shallow drainage towards Groenwater spruit. Numerous other developments linbetween.
Location: Central to Entire Town					NFEPA areas affected: none 97% of the area is categorized as Critical Biodiversity Area 01. CBA 01 areas require Basic Impact Assessment if more than 300 m² natural vegetation is disturbed Condition: Predominantly natural vegetation. Level of disturbance: Low to Moderate Protected spp: No trees observed. Aloes observed that can be transplanted. Alien spp: Single specimens present throughout Fragmentation of natural system: continuous on erf and into erf 12, but isolated from adjacent ecosystem areas. CONCLUSION: Where commage = public open space zonation the transformation of land bigs than 1000 square metres in size, to residential, retail, commercial, industrial or institutional use, where, such land was zoned open space, conservation or had an equivalent zoning, on or afte 02 August 2010 requires Basic Assessment. CBA Basic Assessment are triggered if more than 300m2 is developed, which seems very likely this instance.

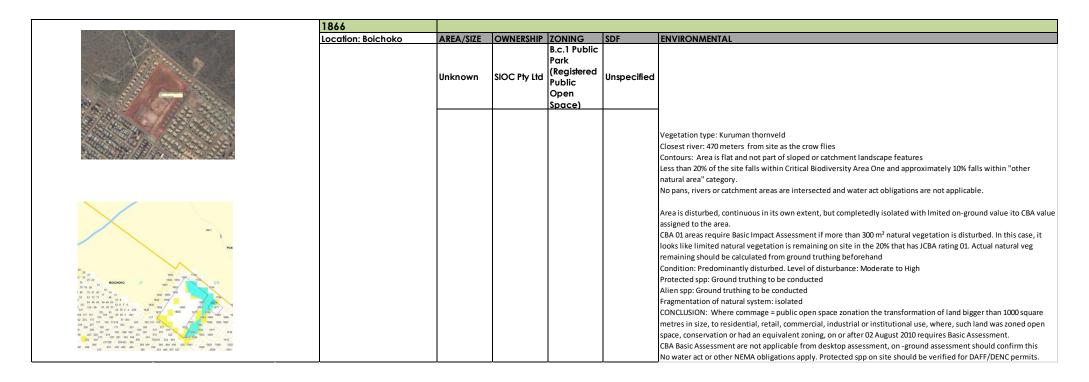


6797					
Location: Airfield	AREA/SIZE	OWNERSHIP	ZONING	SDF	ENVIRONMENTAL
	2.1575ha	SIOC Pty Ltd	D.i.1 Business Premises	Business Area	Vegetation type: Kuruman thornveld Closest river: 137 meters. Contours: Plains NFEPA areas affected: none
					23% of the area is categorized as Critical Biodiversity Area 01. CBA 01 areas require Basic Impact Assessment if more than 300 m² natural vegetation is disturbed. Condition: Predominantly distrubed area. Level of disturbance: High Protected spp: No trees observed. Alien spp: Exotic weeds primarily Fragmentation of natural system: extensive CONCLUSION: Where commage = public open space zonation the transformation of land bigger than 1000 square metres in size, to residential, retail, commercial, industrial or institutional use, where, such land was zoned open space, conservation or had an equivalent zoning, on or after 02 August 2010 requires Basic Assessment. CBA Basic Assessment not applicable: low % Natural veg + low CBA %.



1650					
Location: North of Airfield	AREA/SIZE	OWNERSHIP		SDF	ENVIRONMENTAL
	3.8477ha	Tsantsaban e LM	B.c.1 Public Park (Registered Public Open Space)	Unspecified	1650 consists of two portions and two linear areas (North and Eastern). Vegetation type: North is situated in Kuruman thornveld and Eastern area is situated in Postmasburg thornveld Closest river: 8 meters from Northern area, intersecting river zone and 348meters from Eastern area Contours: From East to North (in direction of river) 10 meter decline over extent of area. NFEPA areas affected: none
					The Northern, linear and some of the Eastern areas crossing Critical Biodiversity Area One in some places, approximately 50% of total area. No pans, rivers or catchment areas are intersected and water act obligations are not applicable. Area is significantly disturbed and fragmented with limited on-ground value ito CBA value assigned to the area. CBA 01 areas require Basic Impact Assessment if more than 300 m² natural vegetation is disturbed. In this case, it looks like limited natural vegetation is remaining on site. Actual natural veg remaining should be calculated from ground truthing beforehand Condition: Predominantly disturbed. Level of disturbance: Moderate to High Protected spp: Ground truthing to be conducted Alien spp: Ground truthing to be conducted Fragmentation of natural system: isolated and highly fragmented CONCLUSION: Where commage = public open space zonation the transformation of land bigger than 1000 square metres in size, to residential, retail, commercial, industrial or institutional use, where, such land was zoned open space, conservation or had an equivalent zoning, on or after 02 August 2010 requires Basic Assessment. CBA Basic Assessment are triggered if more than 300m2 is developed, which seems very unlikely in this instance. The 32 meter distance from a water resource requirement is triggered in terms of NEMA. A basic assessment is required for developments within 32 meters from the edge of a river.







7802					
Location: Central in Town, North of Erf 1-C	AREA/SIZE	OWNERSHIP	ZONING	SDF	ENVIRONMENTAL
	Unknown	SIOC Pty Ltd	B.c.1 Public Park (Registered Public Open	Unspecified	Vegetation type: Kuruman thornveld Closest river: 833 meters. Contours: Plains on outer edge of watershed NFEPA areas affected: none
					78% of the area is categorized as Critical Biodiversity Area 01. CBA 01 areas require Basic Impact Assessment if more than 300 m² natural vegetation is disturbed. Condition: Predominantly distrubed area - illegal dumping, trespassing, roads, fires, squatting (temporary). Level disturbance: High Protected spp: No trees observed. Alien spp: Exotic weeds, cacti and trees observed Fragmentation of natural system: adjacent natural corridors transected by main roads. Isolated by high traffic load CONCLUSION: Where commage = public open space zonation the transformation of land bigger than 1000 square metres in size, to residential, retail, commercial, industrial or institutional use, where, such land was zoned open space, conservation or had an equivalent zoning, on or after 02 August 2010 requires Basic Assessment. CBA Basic Assessment is expected, high CBA % present and even though extensively disturbed and alien invaded, area qualifies as natural vegetation (see definition in sheet MPLC (7).

5 Sites Assessed/Considered

The sites identified to form part of the Multi-purpose lifestyle complex in Postmasburg, Northern Cape, are illustrated on the map below.

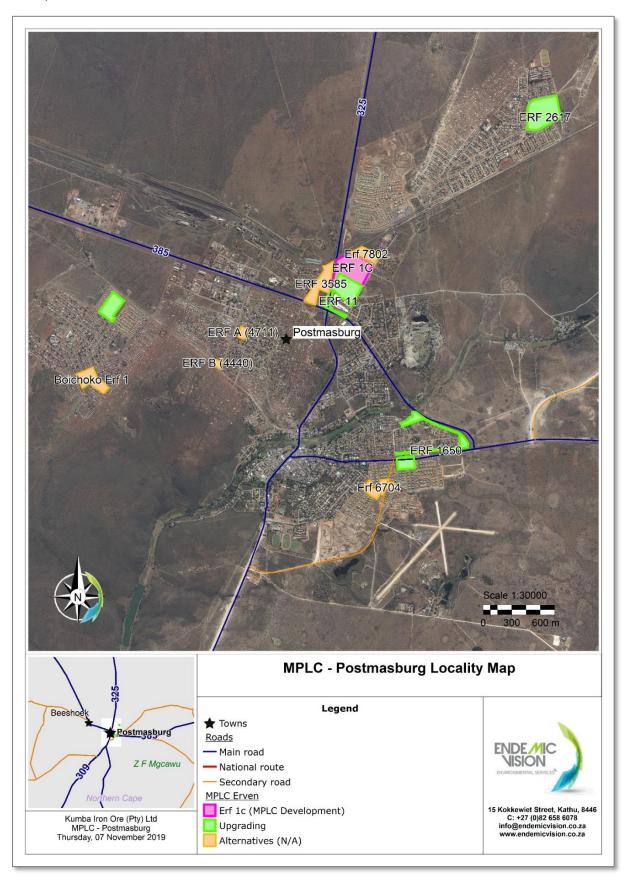


Figure 2: All sites assessed as part of the MPLC Development

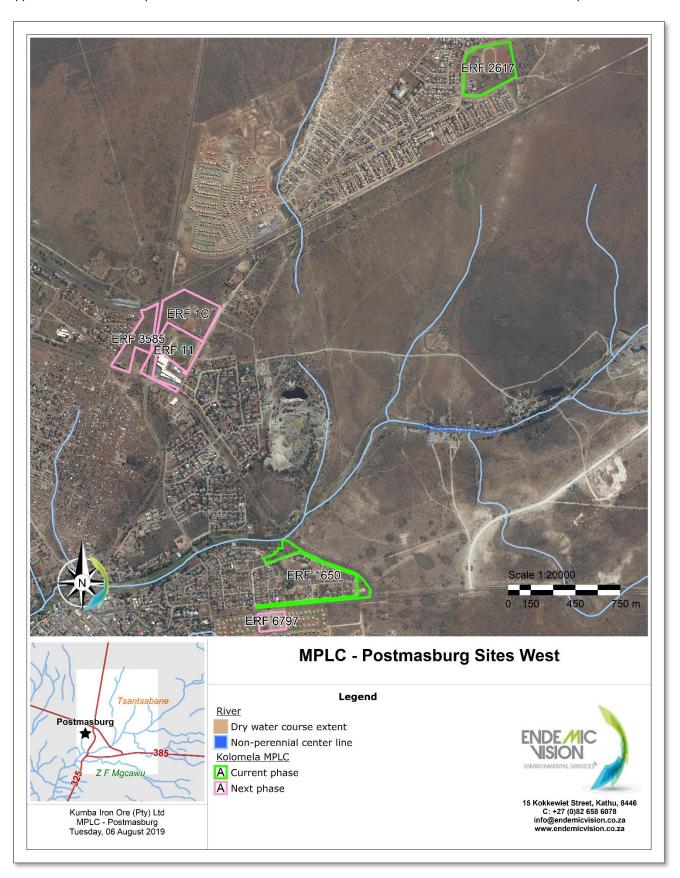
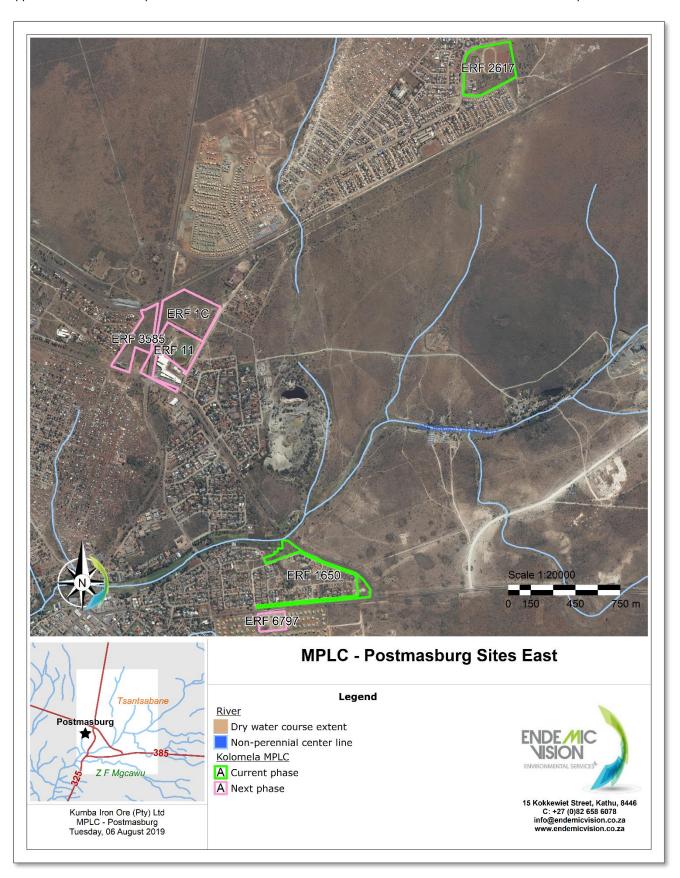


Figure 3: Western sites assessed as part of the MPLC Development



6 Final site and design selection

The final site selected are mapped below and designs of this site is detailed in the appended design drawings.

6.1 Final sites selected for development

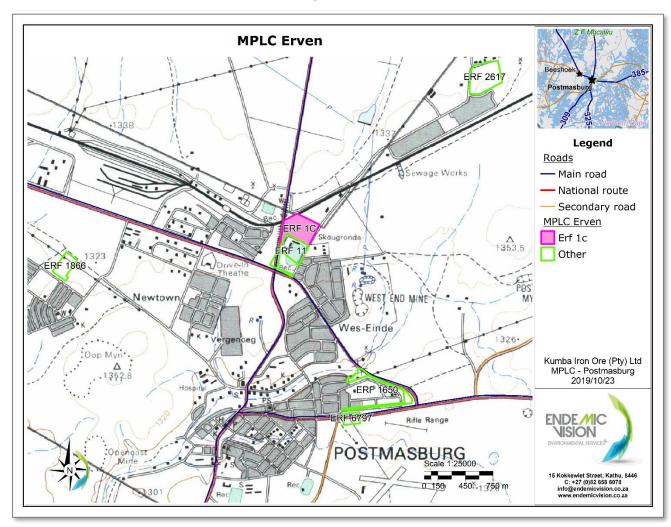


Figure 5: Final sites selected

6.2 Site and development footprint of main infrastructure component

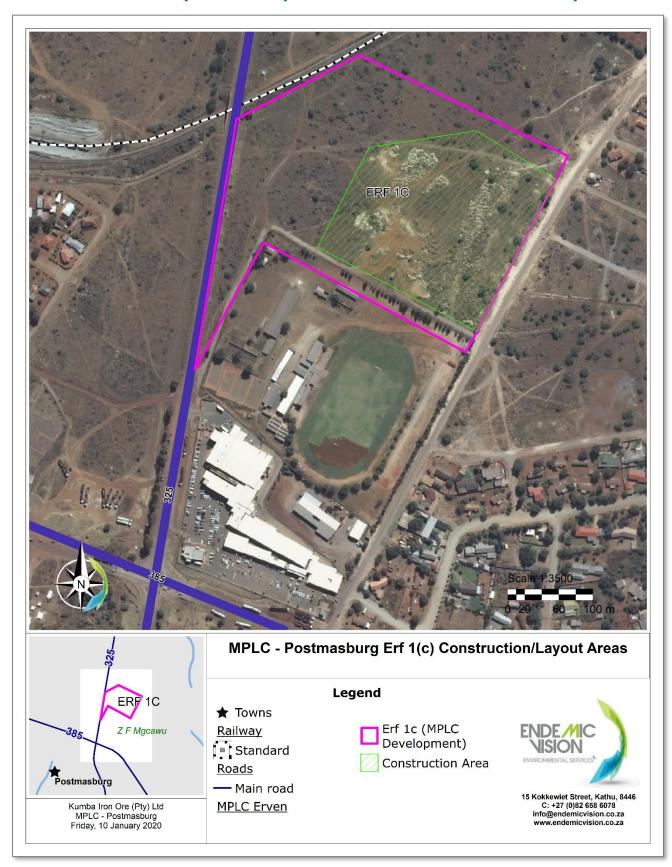


Figure 6: Erf 1c development footprint