

TABLE OF CONTENTS

1.	BACKGROUND	4
1.1.	STUDY BRIEF AND OBJECTIVES	4
1.2.	METHODOLOGY	4
2.	SITUATIONAL ANALYSIS	5
2.1.	REGIONAL CONTEXT	5
2.2.	CURRENT POLICY GUIDELINES	6
2.2.1.	BACKGROUND	6
2.2.2.	NATIONAL BREAKING NEW GROUND POLICY	6
2.2.3.	POLOKWANE SDF	7
2.2.4.	HIERARCHY OF ACTIVITY NODES AND SHOPPING CENTRES	8
2.2.5.	DENSITY CRITERIA	12
2.2.6.	POLICY ON GATED COMMUNITIES IN POLOKWANE	15
2.3.	EXISTING/HISTORIC LOCAL PLANS	19
2.3.1.	<i>PUBLIC TRANSPORT INTEGRATION CORRIDOR DEVELOPMENT PLAN ALONGSIDE NELSON MANDELA DRIVE (AUGUST 1999)</i>	20
2.3.2.	<i>FRAMEWORK PLAN FOR THE AREAS BETWEEN PIETERSBURG AND SESHEGO: STRATEGIC DEVELOPMENT AREA 1</i>	24
2.4.	LAND USE AND SPATIAL STRUCTURE	28
2.4.1.	RESIDENTIAL USE	28
2.4.2.	TRANSPORTATION NETWORK	30
2.4.3.	SHOPPING CENTRES/FACILITIES	31
2.4.4.	OTHER USES	32
2.5.	OWNERSHIP AND LAND DISTRIBUTION	32
2.6.	ENVIRONMENTAL FEATURES	33
2.6.1.	GENERAL	33
2.6.2.	SENSITIVE AREAS	35
2.6.3.	CORRIDORS – NATURAL DRAINAGE CHANNELS	36
2.7.	ENGINEERING SERVICES	37
2.8.	SOCIO-ECONOMIC PROFILE	37
2.9.	CONCLUSIVE SUMMARY: OPPORTUNITIES AND CONSTRAINTS	38
3.	DEVELOPMENT FRAMEWORK	40
3.1.	DEVELOPMENT VISION, OBJECTIVES AND PRINCIPLES	40
3.1.1.	DEVELOPMENT VISION	40

3.1.2.	DEVELOPMENT OBJECTIVES	41
3.1.3.	DEVELOPMENT PRINCIPLES	41
3.2.	SPATIAL DEVELOPMENT FRAMEWORK	44
3.2.1.	REGIONAL OPEN SPACE	44
3.2.2.	REGIONAL TRANSPORTATION NETWORK	44
3.2.3.	LAND USE	47
3.2.4.	LAND USE BUDGET	50
4.	DEVELOPMENT GUIDELINES	51
4.1.	ENVIRONMENTAL MANAGEMENT	51
4.2.	GENERAL RESIDENTIAL GUIDELINES	55
4.3.	DEVELOPMENT CONTROL MEASURES	55
4.4.	MULTI PURPOSE COMMUNITY CENTRES/ACTIVITY NODES	56
4.5.	ECONOMIC DEVELOPMENT	61
4.6.	MOVEMENT GOALS	61
4.7.	MAINTAIN AND ENHANCE THE ATTRACTIVENESS AND “GENIUS LOCI”/SENSE OF PLACE OF THE STUDY AREA	61
5.	IMPLEMENTATION PRIORITIES	62

LIST OF FIGURES

- Figure 1: Study Area
Figure 2: Local Spatial Development Plan for the Clusters of Polokwane
Figure 3: Regional Context
Figure 4: Nelson Mandela Corridor Development Framework
Figure 5: Framework Plan Area between Pietersburg and Seshego
Figure 6: Land Use and Spatial Structure
Figure 7: Developable Areas
Figure 8: Shopping Centres/Facilities
Figure 9: Community Facilities
Figure 10: Land Ownership
Figure 11: Vegetation Map
Figure 12: Sensitivity Map
Figure 13: Environmental Corridors
Figure 14: Engineering Services
Figure 15: Spatial Development Framework
Figure 16: Spatial Development Framework
Figure 17: Locality Plan
Figure 18: Future Expansion Areas
Figure 19: Multi Purpose Service Centre Concept

LIST OF TABLES

- Table 1: Classification of the Hierarchic System in respect of Provision of Suburban Shopping Facilities in Polokwane
Table 2: Sub Classification of Regional Shopping Centres within the Hierarchic System in respect of Provision of Suburban Shopping Facilities in Polokwane
Table 3: Assessment of Gross Leasable Floor Area according to the Hierarchic System in respect of Provision of Suburban Shopping Facilities in Polokwane
Table 4: Table of Permitted Densities and Minimum Erf Sizes of Erven in Townships/Areas under control of the Pietersburg/Seshego Town Planning Scheme, 1999
Table 5: Policy Guidelines and Gated Communities
Table 6: Access Restriction Guidelines
Table 7: Guidelines Pertaining to Access Gates and Access Control Facilities
Table 8: Approved Townships in SDA 1
Table 9: Potential No of Erven on Vacant Land
Table 10: SDA 1 Total Potential
Table 11: Decentralised/Suburban Shopping Centres/Facilities
Table 12: Land Use Budget
Table 13: Guidelines and Management Principles

FRAMEWORK PLAN FOR STRATEGIC DEVELOPMENT AREA 1 (SDA 1)

1. BACKGROUND

1.1. Study Brief and Objectives

During January 2007 the Polokwane Municipality commissioned the compilation of a Framework Plan for Strategic Development Area 1 (SDA 1) which comprises the expansion area of the area between Seshego and the main urban complex of Polokwane (see **Figure 1**). In line with the study brief the study objectives are as follows:

- To compile a Development Framework plan for the area concerned (SDA 1) around the Nelson Mandela Corridor.
- To determine that future land uses to be allowed in the area.
- To determine the area developed to date, and also the area that can be used for future developments (Developable areas).
- To determine the future transport needs in the area based on the development proposals, and the possible areas for interventions to address projected problems.
- To formulate development alternatives and different development scenarios.
- To formulate development guidelines towards future development in the area.
- The development area should in future be characterised by mixed land uses with mixed density. It should also link the inner city with the surrounding settlement with the aim of reducing travel expenses and also to encourage the usage of public transport. The corridor must in future provide investment opportunities and attract development.

1.2. Methodology

The project broadly comprises two phases:

- **Phase 1: Situational Analysis** which commenced with an assessment of the regional context of the study area, both physically and in terms of current development policies and guidelines applicable to the area. This was followed by a more extensive analysis of the natural environment, existing land uses and land use development trends, existing

and proposed transportation network, engineering services, and a socio-economic/demographic evaluation of the area.

The Situational Analysis was concluded by the end of May 2007 by way of a summary of Development Opportunities and Constraints identified for the area.

- **Phase 2: Development Proposals** commenced in June 2007 and comprised the formulation of Development Objectives for the area; the design of a Spatial Development Framework for the area including proposals pertaining to a regional open space/conservation, land use, public amenities and a road (movement) network; the calculation of a capacity future population and associated public amenities required; development guidelines and an implementation programme.

Part of this phase was also a process of public consultation which included an open public meeting held at the Millennium College on 12 July 2007 (see **Annexure B**).

2. SITUATIONAL ANALYSIS

2.1. Regional Context

Figure 2 reflects the study area within the context of the Polokwane Spatial Development Plan. It forms part of the Polokwane-Perskebult cluster which represents the central urban core of the municipal area and forms the eastern part thereof. The study area is one of three Strategic Development Areas in the Polokwane-Perskebult cluster – the other two areas being located at the southern entrance to the town (SDA 2) and the eastern expansion areas (SDA 3) of the town.

The development of this SDA is essential to comply with the Land Development Principles stipulated in the DFA as it will go a long way towards functionally integrating the historically segregated Pietersburg and Seshego communities.

From **Figure 3** it is evident that SDA 1 is well located relative to the Polokwane CBD and the bulk of the industrial areas and nodes of economic activity in Polokwane. To the south-east the area borders onto Westernburg and Nirvana, the central-eastern parts to the Ladine and Industria industrial areas, followed by Annadale and Laboria further to the north.

To the north-west the study area borders onto the Seshego urban complex. The areas to the north and south of SDA 1 are rural in nature.

The study area is served by three main routes:

- the Percy Fyfe and Matlala regional route to the south;
- the Nelson Mandela Corridor in the central part which is more local in nature; and
- the Dendron regional route to the north.

2.2. Current Policy Guidelines

2.2.1. Background

The following sections highlight some of the most important national policy guidelines pertaining to an area like SDA 1, as well as policy guidelines contained in the Polokwane SDF and supplementary documentation, which are applicable to SDA 1.

2.2.2. National Breaking New Ground Policy

The policy document, *Breaking New Ground: A Comprehensive Plan for the Development of Sustainable Human Settlement*, which was compiled by the National Department of Housing, provides the following guidelines which are all relevant to the future development of SDA 1:

- Residents should live in a safe and secure environment, and have **adequate access** to economic opportunities, a mix of safe and secure housing, and tenure types, reliable and affordable basic services, educational, entertainment and cultural activities, and health, welfare and police services.
- Ensure the development of **compact, mixed land use**, diverse, life-enhancing environments with maximum possibilities for **pedestrian movement and transit** via safe and efficient public transport in cases where motorised means of movement is imperative.
- Ensure that low-income housing is provided in **close proximity to areas of opportunity**.
- Integrate previously excluded groups into the city, and the benefits it offers, and to ensure the development of more **integrated, functional and environmentally sustainable** human settlements, towns and cities. The latter includes densification.
- Encourage **Social (Medium-Density) Housing** – Social Housing is generally medium-density, and this housing intervention may make a strong contribution to urban renewal and integration.

- There is a need to move away from a housing-only approach to a more **holistic development of human settlements**, including the provision of social and economic infrastructure.
- **Multi-purpose cluster concept** will be applied to incorporate the provision of primary municipal facilities, such as parks, playgrounds, sports fields, crèches, community halls, taxi ranks, satellite police stations, municipal clinics, and informal trading facilities.
- More **appropriate settlement designs and housing** products, and more acceptable housing quality.
- Enhancing settlement design by including design professionals at planning and project design stages, and developing **design guidelines**.
- There is a need to focus on changing the face of the stereotypical RDP houses, and settlements, through the promotion of **alternative technology and design**.
- Social housing must be understood to accommodate a **range of housing product** designs to meet spatial and affordability requirements. Social housing products may include:
 - Multi-level flat, or apartment options, for higher income groups, incorporating beneficiary mixes to support the principle of integration and cross-subsidisation;
 - Co-operative group housing;
 - Transitional housing for destitute households; and
 - Communal housing with a combination of family and single-room accommodation with shared facilities and hostels.
- **Funding support** will shift away from the current emphasis on uniform individual subsidies towards equity support for social institutions, determined as a percentage of the total capital cost of the project, including medium-density housing, communal housing, hostels and transitional housing.

The directives presented above should be incorporated into the Spatial Development Framework to be designed for SDA 1.

2.2.3. Polokwane SDF

The Polokwane Spatial Development Framework (May 2007) provides the following guidelines pertaining to the development of Strategic Development Areas:

“The SDA’s should be the main focus areas for the future development/expansion of townships and especially residential areas. In the Strategic Development Areas located

within the identified urban edge, the municipality must actively support, promote and facilitate development through:

- the provision of bulk infrastructure;
- the provision of incentive schemes like requiring no bulk service contributions from prospective developers;
- the provision of administrative support to developers through the streamlining of application procedures;
- the compilation of detailed local framework or land use plans and implementation programmes for each of these areas;
- the active marketing of these areas.

The 2005-SDF further indicates that: *“The development potential of land in this area (SDA 1) is in general highly suitable for development. In the short term the portions to the north of Nelson Mandela Drive and New Pietersburg, and directly adjacent to the south of New Pietersburg should be developed as a priority, especially for residential purposes. However this SDA also holds the potential to accommodate various land uses which inter alia could include industrial uses”.*

2.2.4. Hierarchy of Activity Nodes and Shopping Centres

The Polokwane SDF states that, apart from the CBD which is the primary activity node especially for providing specialised and expensive goods and services in respect of retail and personal/professional services, perspective should not be lost of the need to allow the necessary secondary activity nodes (including shopping centres) which provide in convenience goods needs of residents in the different areas of Polokwane.

Therefore a hierarchic system in respect of the provision of shopping facilities, as indicated in Tables 1, 2 and 3 is included in the Polokwane SDF. The guidelines contained in these tables should thus be considered and implemented in all developments in Polokwane. These secondary activity nodes are however focused on services for the suburban residents (e.g. convenience goods) rather than to serve as a substitute which duplicate services and goods (e.g. specialised, expensive goods), which normally associated with the CBD as primary activity node.

TABLE 1: CLASSIFICATION OF THE HIERARCHIC SYSTEM IN RESPECT OF PROVISION OF SUBURBAN SHOPPING FACILITIES IN POLOKWANE

Hierarchy Type of centre	Criteria				Compilation and function		
	Popu- lation	Area ser- ved	Gross leasable floor area, (GLFA) in m ²	Location	Main functions	Number and type of shops	Compilation (conv. goods vs expensive goods etc: % GLA of total)
Corner shop (Spaza)	Up to 1000	Up to 0,4 km	Up to 200, but as deter-mined in specific policy.	Accessible to target market	Only convenience goods.	1 Shop, comprising: a) "Spaza shop" or kiosk not exceeding 30m ² ; or b) Convenience store (as in filling stations) not exceeding 200m ² ; or c) Other specific policies.	100% convenience goods
Local shopping centre	1000-5000	0,5 km	400-2000	Access collector in residential area	Only convenience goods.	Up to 15 shops comprising: Café, vegetable shop, butchery, take aways etc.	80% convenience goods
Neighbour-hood shopping centre	5000-30 000	1,5 km	2000-15 000	Crossing of access collector and main road	Convenience goods and personal services	Supermark complex with 15-40 shops comprising: Café, vegetable shop, butchery, hair salon, hardware, doctor consulting rooms etc.	At least 60% convenience goods
Community shopping centre	30 000-80 000	2,5 km	15 000-30 000	Close to main roads. (Traffic impact study may be required)	Conv. goods, personal services, expensive goods, and some-times specialized goods.	Larger shopping centre complex with 20-60 shops comprising: Large super market(s), retail stores, clothing shops, amusement places, restaurants, coffee bars, bars etc.	At least 40% convenience goods
Regional shopping centres	See Table 5B for separate classification						

Sources: Derived from:- Pietersburg/Polokwane IDP/LDO, July 1998. Vol. 1 p. 63 *et al*; Polokwane Municipality IIDP, 2001; "Die Beleid Rakende die Hierargie van Sakesentrums", October 1982 Dept. Local Government, Transvaal; Viruly Consulting & Plan Associates Town & Regional Planners, August 2004 & SA Council of Shopping Centres.

TABLE 2: SUB CLASSIFICATION OF REGIONAL SHOPPING CENTRES WITHIN THE HIERARCHIC SYSTEM IN RESPECT OF PROVISION OF SUBURBAN SHOPPING FACILITIES IN POLOKWANE

Regional shopping centre sub-class	Population	Households	Area served	Travel time Minute	Gross leasable floor area, (GLFA) in m ²	Location & *access	Main functions	Number and type of shops	Compilation (conv. goods vs expensive goods etc: % GLA of total)
Small Regional	80 000 – 125 000	23 000- 35 700	3 km	10	35 000- 50 000	On main road	Expensive & specialised goods.	Large supermarket, 1 or 2 large national clothing, restaurants, services	Up to 70% - 80% expensive and specialised goods
Regional	100 000 – 200 000	28 500 – 57 150	8 km	16	50 000- 100 000	On main road & access from national or provincial road	(Includes specialist traders, home improvement stores, value marts)	Large supermarket or hyper market, 2 or more clothing, small clothing boutiques, entertainment, restaurants, services and convenience	
Super Regional	200 000 – 400 000	57 150 – 114 300	10 km+	20	100 000+	On main road & access from national or provincial road		As regional but more emphasis on entertainment	
<i>Notes:</i>	<i>*Traffic impact study required in all categories of Regional centres</i>								

Sources: Derived from:- Polokwane Municipality IIDP, 2001; "Die Beleid Rakende die Hierargie van Sakesentrums", October 1982 Dept. Local Government, Transvaal; Viruly Consulting & Plan Associates Town & Regional Planners, August 2004 & SA Council of Shopping Centres.

TABLE 3: ASSESSMENT OF GROSS LEASABLE FLOOR AREA ACCORDING TO THE HIERARCHIC SYSTEM IN RESPECT OF PROVISION OF SUBURBAN SHOPPING FACILITIES IN POLOKWANE

Type of centre	*glfa per capita of population within service area	Service radius	Other criteria
Local shopping centre	0,4m ² /capita	Within 0,5km	Geographical factors; Population densities; Size of property; Slopes; Surrounding land uses; Street front -vehicle and pedestrian movement; Provision of parking; Economic and market trends; Healthy competition; Interests and well-being of total community. Sustainable communities.
Neighbourhood shopping centre	0,4m ² /capita	0,5 – 1,0km	
	0,8m ² /capita	Within 0,5km	
Community shopping centre	0,4m ² /capita	1,5-2,5km	
	0,8m ² /capita	0,5-1,5km	
	1,2m ² /capita	Within 0,5km	
Small regional shopping centre	0,4m ² /capita	2,5-3,0km	
	0,8m ² /capita	1,5-2,5km	
	1,2m ² /capita	0,5- 1,5km	
	1,6m ² /capita	Within 0,5km	
Regional centre	**Detail market research required	3 - 10km	
Super regional centre			
<p>Notes: * figures represent a 20% over-supply. This allows for market trends and expansions due to higher population densities etc. Flexibility allowed: if deviation occurs from these figures it must be accommodated by a **detail market study/research which can substantiate higher figures without any doubt and to proof that the community will be served best.</p>			

Source: Derived from: "Die Beleid Rakende die Hiërgarie van Sakesentrums", October 1982 Dept. Local Government, Transvaal.

The future development of these secondary nodes should be done and preferably be planned in advance, in accordance with the detailed Framework Plans and/or land use management policies in each of the areas and/or strategic development areas.

The hierarchic system is essentially based on the following criteria:

- Hierarchic levels;
- Locational Criteria;
- Service population, densities and thresholds;
- Service radius;
- Location in respect of access routes;
- Gross leasable floor areas; and
- Composition and function. (Note: "specialised centres" such as value centres or theme centres are not treated separately and form part of the hierarchy set out in Tables 1 and 2).

The controlled or planned approach as reflected above is favoured by Polokwane Municipality for the following reasons:

- The controlled or planned approach is aimed towards the interests of the total community of Polokwane (issues of urban decay, underutilised resources are some issues of concern);
- Not only the aspects of need (demand) are considered, but also desirability in terms of aspects such as parking, aesthetics etc. The private market approach is mostly aimed at economical opportunities over a shorter period and sometimes neglects to consider the well-being of the total community;
- The hierarchic approach is indeed based on a well founded system which developed over time and which is a result of spontaneous development and addressing the needs of the consumer. Drastic deviation from this system may result in prejudice to consumers;
- This approach also provides for healthy competition.

The controlled and hierarchic approach implies sustainable and co-ordinated development and should not be seen as an obstruction for development. The following principles are applied in conjunction with the guidelines highlighted above:

- Control must also be flexible, but if deviation on accepted norms and standards are applied, it must be substantiated;
- Control must contribute towards healthy competition;
- Focus should not only be placed on the need, but also include the desirability aspects of an application;
- Changes in community needs and consumer patterns must also be recognised as aspects which may contribute towards a continuing process of amending this policy and standards;
- The composition and function of a centre are also determined by economic factors which change over time.

2.2.5. Density Criteria

a) Residential 1

In terms of the Pietersburg/Seshego Town Planning Scheme, 1999 the maximum densification possible under "Residential 1" zoned erven by means of consent use in terms of clauses 21 and 20 of the scheme, is 30 units per hectare, or 1 dwelling unit per 300m².

However the maximum densities permitted should be consistent with Table 4 as reflected on the next page. This means that although the town planning scheme provides for a maximum density of 30 units/ha, it should not be permitted should such density exceed the densities as set out in the municipality's policy as reflected for the various geographic areas referred to in Table 4.

TABLE 4: TABLE OF PERMITTED DENSITIES AND MINIMUM ERF SIZES OF ERVEN IN TOWNSHIPS/AREAS UNDER CONTROL OF THE PIETERSBURG/SESHEGO TOWN PLANNING SCHEME, 1999

Neighbourhood/ Area	“Residential 1”	“Residential 2 & 3”
	Max. Densities permitted	Max. Densities Permitted
	*Min. Erf size i.r.o. Subdivided Portion/s (detachable units)	*Min. Erf size i.r.o. Subdivided Portion/s (detachable units)
Polokwane “bo-dorp”, Pietersburg x 4, 6. (excluding CBD)	20 units/ha 500m ²	64 units/ha 500m ²
Polokwane CBD	30 units/ha 300m ²	>64 units/ha 300m ²
Seshego all zones, Pietersburg x 65, (SDA 1)	30 units/ha 300m ²	44 units/ha 300m ²
Pietersburg x 40	30 units/ha 300m ²	64 units/ha 300m ²
Pietersburg x 44, new Pietersburg	30 units/ha 300m ²	64 units/ha 300m ²
Pietersburg x 11, Bendor, Bendor x 7, 8, 10, 11, 12 Welgelegen and extensions,	20 units/ha 500m ²	44 units/ha 500m ²
Bendor (north of De Wet Dr.) Pietersburg x 11 (Ster Park north of Orion Ave.)	14 units/ha 700m ²	44 units/ha 700m ²
Bendor new extensions SDA 3 (Koppiefontein) & Pietersburg x 28	25 units/ha 400m ²	44 units/ha 400m ²
Annadale	30 units/ha 300m ²	>64 units/ha 300m ²
Penina Park	25 units/ha 400m ²	64 units/ha 400m ²
Penina Park x1	30 units/ha 300m ²	64 units/ha 300m ²
Ivy Park	25 units/ha 400m ²	44 units/ha 400m ²
Ivy Park extensions (SDA2)	30 units/ha 300m ²	64 units/ha 300m ²
Nirvana and extensions	20 units/ha 500m ²	44 units/ha 500m ²
	30 units/ha	64 units/ha

Framework Plan for Strategic Development Area 1

August 2007

C:\Davel Consulting Planners\Spatial Planning&LUM\SDA1 Framework Plan\Framework Plan for Strategic Development Area 1.doc

Westenburg and extensions	30 units/ha	64 units/ha
Notes: Refer to relevant densification maps for exact location and boundaries of areas/zones identified in table.		
= Minimum erf sizes of subdivided portions is applicable should even be subdivided.		

From Table 4 it is evident that in SDA 1 the maximum density for Res 1 erven is 30 units per hectare with a minimum erf size of 300m². In the case of Res 2 and 3 densities can increase to between 44 and 64 units per hectare.

In terms of the criteria, clause 19.1 of the town planning scheme stipulates that the proposed use (densification) if a consent use application is lodged, should be considered against the backdrop of the following criteria as well:

- The amenities of the area;
- Health and safety of the area;
- The nature of other uses in the area;
- The need and desirability of the use concerned; and
- IDP and the SDF as well as any other policy guidelines contained therein.

b) Residential 2 & 3

In terms of the Pietersburg/Seshego Town Planning Scheme, 1999 the following densification is possible under the higher density uses, namely:

- “Residential 2” zoned erven the existing right (primary right) is 30 units per hectare and by means of consent use in terms of clause 20 of the scheme, a maximum density of 44 units per hectare is possible. The maximum densities permitted should be consistent with Table 4;
- “Residential 3” zoned erven the existing right (primary right) is 44 units per hectare and by means of consent use in terms of clause 20 of the scheme, a maximum density of 64 units per hectare is possible. Again, the maximum densities permitted should be consistent with Table 4.

Apart from the criteria listed above, the following **additional criteria* should be applied/motivated which forms part of consideration in respect of the desirability and amenities of the area:

- Proximity of the proposed development in respect of Open Spaces (parks) and recreational facilities;
- Proximity of the proposed use in respect of schools;
- Proximity of the proposed use in respect of shopping facilities for convenience goods;

- Proximity of proposed use in respect of other community facilities and services such as medical facilities, community libraries, places of public worship etc.
- Proximity of the proposed use in respect of high order routes/bus routes and public transport facilities;
- The suitability of the property in respect of access to individual units as well as access to and from the adjoining public street system. Panhandle erven/entrances are not permitted with any density exceeding 44 units per hectare;
- The suitability of the property in respect of the shape of the property, taking site layout of individual units into consideration as well as taking possible negative impacts on adjacent property into consideration, with reference to the following:
 - Orientation;
 - Privacy; and
 - Convenience.
- The suitability of the property in respect of the size and street frontage.
 - densification exceeding 44 units/ha will not be permitted on property with an area smaller than 1 400m² and with a street front less than 18 meters;
 - densification exceeding 30 units/ha will not be permitted on property with an area smaller than 700m² and a street front less than 12 meters;
- The suitability of the property and individual dwelling units in respect of parking, including parking for visitors on the property.

2.2.6. Policy on Gated Communities in Polokwane

The policy basically introduces Categories and Development Models (types) in respect of gated communities as well as how it can be introduced in an area.

The categories and models are set out in Table 5 below:

TABLE 5: POLICY GUIDELINES AND GATED COMMUNITIES

Matrix: Category Model	Normal Accepted Practise	*Only Accepted in Exceptional Circumstances	Not accepted
	<i>Column 1</i>	<i>Column 2</i>	<i>Column 3</i>
Model 1 (Private complex)	Category A & B Green fields & Conversion		
Model 2 (Enclosed neighbourhood)		Category B Conversion	Category A Green fields

Model 3 (Security Village)	Category A Green fields	Category B Conversion	
Model 4 (Lifestyle Estate)	Category A Green fields		Category B Conversion

Source: Polokwane Municipality; 2005: Policy on Gated Communities in Polokwane, May 2005

The major element of this policy is the level of access or access restriction and status of the roads (i.e. private or public), which differs according to the different models.

The policy therefore provides in the following levels of access and connection with different models, namely:

“Level 1: Full restricted access: (Applied to Model 1; Private complex)

Access is limited to the residents/occupants in the gated area and their guests only.

Level 2: Partially restricted access: (Applied to Models 3 and 4; Semi-private complex)

Access is limited to the residents/occupants in the gated area, their guests and emergency services, the local municipality and the post and telecommunication services.

Level 3: Passive access control: (Applied to Model 2; Public complex)

The passive Monitoring of movement of pedestrians and vehicles through an access point(s) in such a way that which shall not cause restriction of free movement of pedestrians or vehicles to a public road or a street and/or across any other portion of land or erf leading to a public road or street that are normally used by members of the public to gain access to such an area.”

The policy subsequently deals with evaluation criteria which specifically refer to spatial implications and long term affects on the urban form. The following is provided in the policy, namely:

“All the applications or proposed developments pertaining to Models No. 2 to 4 of this policy must at least address and be motivated according to the following criteria:

- *Spatial implications*
 - *Urban form;*
 - *Legibility and accessibility of entire city;*
 - *Urban sustainability and socio-economic impacts;*
 - *Urban fragmentation and integration;*

- *Land uses;*
- *Impact on traffic flow and transport patterns;*
- *Sense of community.*

- *Safety and security*
 - *Long term vs short term approach towards crime prevention;*
 - *Built environment and combination approach towards crime prevention;*
 - *Displacement of crime and false sense of security;*
 - *Alternative methods of crime prevention:*
 - ♦ *Surveillance;*
 - ♦ *Environmental design;*
 - ♦ *Use of space;*
 - ♦ *Involving policing forums and city police force;*
 - ♦ *Assisting in local economic development.*

- *Lifestyle living (if applicable)*
 - *Security and privacy;*
 - *Conditions ensuring a specific character and standard of buildings and property;*
 - *Communal facilities;*
 - *Information technology (internet connections); and*
 - *Landscaping and open space.*

- *Management aspects*
 - *Maintenance of roads and services;*
 - *Managing bodies and compliance with conditions;*
 - *Public functions;*
 - *Section 21 Company (Registration, title conditions of erven, articles of association).*

- *Technical aspects*
 - *Classification of roads in area/affected;*
 - *Traffic impact study;*
 - *Land uses affected by closure/development;*
 - *Long term spatial planning;*
 - *Generic requirements.*

- *Legal implications*
 - *Procedure in legislation;*
 - *Public liability;*

- *Access Control (Controlled Access and Partially Restricted Access);*
 - *Interference with normal traffic and pedestrian movement;*
 - *Constitution of South Africa;*
 - *Liability of Section 21 company.*
- *Public participation/role players*
 - *100% owner directly affected by conversion and to form Section 21 Company (where applicable);*
 - *67% of owners in adjacent area indirectly affected;*
 - *SAPS;*
 - *City Police (Community safety);*
 - *Traffic police;*
 - *Fire Brigade;*
 - *Local/Ward Councillor;*
 - *Taxi associations/forums (where applicable)".*

Lastly the policy deals with the important aspect of traffic movement and mobility (accessibility) and provides the guidelines as reflected in Table 6 below:

TABLE 6: ACCESS RESTRICTION GUIDELINES

Roads which must not be restricted	Roads where access restriction may be considered subject to traffic impact study	Roads where access restriction will normally be acceptable without traffic impact study
Primary routes (Class 1)	Local distributors (Class 4) that carry low volumes and which have close alternative routes	Cul-de-sacs shorter than 100m
Major arterials (Class 2)	Accesses to offices and other businesses, not dependant on passing traffic	Access streets (Class 5)
Minor arterials (Class 3)	Informal public transport routes	
Local distributor (Class 4) with no convenient alternative route	Cul-de-sacs longer than 100m	
Local distributor (Class 4) carrying high volumes (1000 vehicles/day or 100 vehicles/peak hour)		
Bus or other formal public transport routes		

Access to any public facility (e.g. schools, parks, hospital) or retail facilities or public office (e.g. shops, government offices).		
Access to service facilities (e.g. substations, reservoirs, sewer pumps, etc.)		

Source: Polokwane Municipality; 2005: Policy on Gated Communities in Polokwane, May 2005

The policy also provides for specific requirements/standards when access gates and access control facilities are introduced/planned. The following is an extract in this regard:

TABLE 7: GUIDELINES PERTAINING TO ACCESS GATES AND ACCESS CONTROL FACILITIES

Facet/Measures		Preferred	Required minimum
Set back of gates/booms from nearest through kerbline along public road	Vehicles (access control point)	20m	
	Maintenance vehicles gate	10m	
Minimum opening (width) gates/booms for vehicles (access control point)	Two-way traffic	The existing roadway or minimum of 7m	6m (Lightly trafficked)
	Single vehicle		3,5m (Lightly trafficked)
Minimum opening (width) of maintenance vehicle gates		4m	3,5m
Minimum vertical clearance of vehicle gates or any structures		5,1m	5,1m
Where access to gated area is from a busy through road, the following should be provided:	Turning lanes-:	25m long at 3m width	Other measures to cater for queuing vehicles
	Lay-bys-:	12m long at depth of 2,5	

Source: Polokwane Municipality; 2005: Policy on Gated Communities in Polokwane, May 2005

2.3. Existing/Historic Local Plans

Previously the municipality adopted the following specific frameworks or development plans to guide development in this area, namely:

- A development framework adopted by the municipal Council on 31 October 2000 titled: *“Framework Plan for the areas between Pietersburg and Seshego: Strategic Development Area 1 (SDA 1)”*; and
- A development plan in respect of Functional Development Area 1(F1) adopted by the municipal Council on 5 September 2000 titled: *“Public Transport Integration Corridor Development Plan alongside Nelson Mandela Drive, August 1999”*.

Framework Plan for Strategic Development Area 1
August 2007

C:\Davel Consulting Planners\Spatial Planning&LUM\SDA1 Framework Plan\Framework Plan for Strategic Development Area 1.doc

The strong emphasis of the Pietersburg/Polokwane LDO study on both the SDA between Pietersburg and Seshego (SDA 1) as well as the development of Nelson Mandela Drive as a Functional Development Area, formed the basis for these two studies.

2.3.1. Public Transport Integration Corridor Development Plan alongside Nelson Mandela Drive (August 1999)

The Pietersburg/Polokwane Integrated Development Plan/Land Development Objectives Volume 1; July 1999: page 66-67 provided the following guidelines for the development of the Nelson Mandela Corridor:

- Design which facilitates public transport rather than private vehicles;
- Strong emphasis on the movement of pedestrians;
- Nodal development (the “string of beads” concept) which allows for nodal land use development around the major intersections along this road;
- The optimal integration between land use and transportation;
- The development of Small and Medium Enterprises related to Local Economic Development and job creation;
- Mixed land uses, including the formal and informal sector, and medium and high density residential developments should be allowed around these nodes; and
- Development standards e.g. floor ratios, coverage and height restrictions should also be relaxed (not rejected) in this area.

Following from these directives the Polokwane Municipality commissioned the project for detailed planning of the Nelson Mandela Corridor.

The following is a brief summary of the main proposals following from the study.

❖ “Major Development Proposal

This development is large in both size and its impact on the area. The following major developments were proposed for the area (see **Figure 4**):

- Residential development
- Transport related facilities
- N1-Development Node
- Pedestrian orientated development

- SMME development (Small and Medium Enterprise)
- Residential Development

Most of the area will be utilised for residential development. As wide a range of housing units, income groups and densities as possible must be provided.

- Transport Related Facilities

At each of the intersections such a facility will be provided. The following developments will be provided for at such facilities:

- On and off loading of passengers
- Shelter
- Toilets
- Informal trading
- Limited commercial use e.g. small café or spaza shop

Further details related to the proposed Transport Related Facilities will be finalised at a later stage as it forms the subject of a proposed further study. All the existing Policies of the Council will form the cornerstone of this future study.

- N1-Development Node

At the intersection of the N1 toll road and Nelson Mandela Drive a development node will be created. This is in line with the proposals of the Pietersburg/Polokwane LDO and provision will be made for the following activities that are directly related to people that may travel on the road.

- 24 hour garage with tyres, spares and exhaust outlets
- Restaurant and take away facilities.

No commercial activities, like offices that will be in direct competition with the Pietersburg/Polokwane CBD, will be provided for.

Applications by the private sector will determine the scope and exact locality of future facilities.

Note: One of the current shortcomings of this plan is the fact that the proposals took the previously planned N1-Toll road (western by-pass) into consideration. Currently the status and intention of this road is unsure and may influence proposals/strategies in respect of this study.

- Pedestrian Orientated Development

The total development will be done in such a way that it will be pedestrian friendly. Demarcated positions to cross the road will be provided. Safety measures e.g. reduced speed limits, different types of paving etc. can be implemented to improve the safety of pedestrians. Pedestrian bridges may be considered between intersections to enable residents and school children to cross the road safely. Sidewalks will be provided near the places of employment for people who travel by foot along the route.

Landscaping will be done along the route with a strong emphasis on the various intersections and in particular the intersection with the N1.

- SMME Development

An area must be created for these type of business activities by the small entrepreneurs. An area near the existing Malt factory may be considered. The necessary supporting infrastructure must also be catered for.

The newly established Local Economic Development Forum and the studies currently in progress will provide more detail regarding the matter.

❖ **Minor Development Proposals**

A wide range of minor development proposals for the area will be done. They can be categorised into one of the following:

- Traffic Control Measures

The following traffic control measures are proposed and a Traffic Engineer must finalise the details:

Possible change of speed limit: To enable traffic to flow easier along the road research must be done regarding the speed limit along the road.

Setting of traffic lights: The synchronising of traffic lights must also be considered as well as the setting of traffic lights to enable drivers to turn right at intersections.

- Possible Facilities

A wide range of facilities, that will not be in competition with the Pietersburg CBD, can be provided in this area. The following are examples only and each application will be considered on its own merit by Council in line with their existing policies.

Education facilities: The possible provision of large-scale education facilities must be investigated. The relationship with Edupark must form the basis of this investigation.

Fire station: The possible construction of a regional fire station must be investigated in consultation with all the stakeholders.

Commercial facilities: Commercial facilities will be provided as part of the N1 development node as well as within each of the residential neighbourhoods. Details will be finalised as part of each application for township establishment.

Light industries: The provision of light industries, as part of the proposed SMME development, must be considered.

Soccer stadium: The development of a soccer stadium on the old Taxi Rank is currently under investigation by the private sector. As more details become available, it will be used as input for the future studies.

- Infrastructure Development

The following minor development proposals related to infrastructure are proposed. Details must be in line with a Traffic Plan:

Stormwater control: The control of stormwater must receive attention and underground stormwater pipes can be one of the options to address the problem.

Mountable kerbs: The provision of mountable kerbs will facilitate the flow of traffic and in particular in cases where vehicles broke down and can be pushed out of the road to allow traffic to pass.

Construction of a physical barrier: To ensure the safety of passengers, pedestrians and residents a clear division must exist between Nelson Mandela Road and the adjacent

residential area. The construction of a physical barrier like a fence, wall or stormwater channel can be considered.

Street lighting: Proper street lighting must be provided along the road. The lights must work throughout the nights.

Parking facilities for busses: In consultation with Great North Transport a locality for the parking of busses during off-peak times must be investigated.

The influence of the proposed soccer stadium on the existing bus rank must also be investigated.

Finalise position of future N1 Toll Road: The final position, either east or west of Pietersburg, must be determined as soon as possible. This will have a major impact on the future development alongside Nelson Mandela Drive as well as the total development in the area between Pietersburg and Seshego.

Bulk services: The provision of future bulk services for the total area between Pietersburg and Seshego must be considered to facilitate development. The Pietersburg/Polokwane LDO also earmarked this area as the one with the highest priority for development where infrastructure provision must get first priority.

The need/demand for development will determine the rate at which the TLC will provide infrastructure. Applications for township development will also provide guidance to the TLC in this regard.

Service road: The construction of a service road along the Nelson Mandela Drive is recommended in the areas that will be used for future commercial or industrial development. The provision of a service road in the residential areas is not recommended, but the particular details will have to be finalised as part of each particular township establishment.”

2.3.2. Framework Plan for the areas between Pietersburg and Seshego: Strategic Development Area 1

Parallel to the Nelson Mandela Corridor Study, the Polokwane Municipality initiated the compilation of a Framework Plan for SDA 1. The Framework Plan is reflected in **Figure 5** and contained the following proposals:

❖ Major Roads

The **Pietersburg/Matlala road**, with a 30 metre wide servitude runs through the southern portion of SDA 1. Access to this road is limited (permission for access from other roads must be obtained from the Department of Public Works: Roads) to access every 500 metres subject to sight distances. No direct access will be allowed from erven.

A building restriction of 95 metres from the middle of the road is applicable. This road occupies 5,8 hectares.

Nelson Mandela Drive, a double carriage way of approximately 4 km from Pietersburg to Seshego with a 50 metre wide servitude, basically divides the area into a northern and southern portion. Access to this road is limited as in the case of Matlala Road.

Two junctions to this road have already been planned. This road occupies 9 hectares.

Monama Drive, the old Pietersburg/Seshego road with a 30 metre wide servitude, enters SDA 1 from the Pietersburg/Dendron Road and turns towards Seshego in a north western direction.

Access to this road is the same as the Matlala road. This road occupies 15 hectares.

The Pietersburg/Dendron road, with a reserve of 40 metres wide, enters SDA 1 from the south-east, cuts through the eastern portion and leaves the area in the north-east.

Access to this road is the same as the Matlala road. This road occupies 7 hectares.

❖ **Rail Servitudes**

Provision has been made for a railway line between Pietersburg Railway Station and the Seshego industrial area along Monama Drive.

The servitude is 25 metres wide with a building restriction of 15 metres from the middle of the servitude.

A railway line places a severe limitation on crossings by vehicles and pedestrians.

This servitude has been cancelled with the establishment of Pietersburg Extension 29 and it is accepted that the rest of the servitude will be cancelled during new town establishments.

❖ **Major Water Lines**

One major waterline with a 3 metres wide servitude runs through the south western portion of the study area.

This waterline should be accommodated within a road reserve, park area, or a servitude should be registered.

SDA 1 mainly drains in 3 directions:

- the western third of the area drains to the north (720 hectares) via the Makglakaneng rivulet to the Blood River,
- the south eastern area; 25 hectares towards the east, and
- the rest of the area drains towards the north east, flowing into the Sand River.

The highest point in the south of the area is 1 282 metres above sea level with the lowest points to the east and north at 1 200 metres above sea level.

The area is generally flat with mild slopes of 1:30 to 1:40. Steeper slopes occur to the south east (New Pietersburg area) of 1:20.

The topography of the study area does not place an absolute limitation on the future development of the area but can dictate phases of development pending the availability of bulk services.

❖ **Nature Areas**

The Remainder of Portion 28 to the west of the Sand River in the study area forms part of the Pietersburg/Polokwane Transitional Local Council's bird sanctuary. The rest of the bird sanctuary locates on the same farm to the east of the river.

The Pietersburg/Polokwane sewage farm locates on last mentioned portion.

❖ **Flood Areas**

The areas subject to a possible flood one to every fifty years have not been determined by the standard calculation method. During town establishment accurate calculations in this regard will have to be done.

For the purpose of this Framework Plan, an area of 50 to 100 metres next to prominent draining channels, rivers and other drainage channels have been accepted as potential 1:50 year flood areas.

Three prominent possible 1:50 year flood areas occur in the study area:

- The area adjacent to the Sand River. This flood area will have an effect on the future development of the south eastern part of the study area.

This area can be utilised to form part of a larger open space/nature area joining the bird sanctuary in the north and the rest of the flood area next to the Sand River to the south as proposed by the LDO's.

- A drainage system to the north-west and north of the study area has already partially been accommodated in the towns Extension 9D, Extension 9C and Extension 9L. This flood area can in future form part of a larger open space area/nature area to be integrated with the Blood River flood area/nature area, and
- A drainage system forms the centre of the study area in a north eastern direction toward the Sand River also to be incorporated in a larger open space/nature area system.

❖ **Business Development**

The Framework Plan catered for the proposed future activity node in the vicinity of the planned intersection between the toll road bypass and Nelson Mandela Drive (S2). The 1998 LDO stated that this node could develop as two distinct/separate nodes – one linking to, and serving the markets related to the future toll road – e.g. ultra city, accommodation, retail etc., and the other part more orientated towards serving the future community to be settled in Strategic Area 1.”

Other businesses were calculated as follows in the Framework Plan:

- local business centre : 1 of 0,4 hectares per 1 087 residential units,
- corner shops : 1 of 200m² per 217 residential unit.

Corner shops were not indicated on the framework plan.

❖ **Open Space System**

The proposed open space system was to a large extent determined by:

- 1:50 year flood area next to the Sand River,
- the existing Bird Sanctuary,

- the 70 metres wide electrical servitude, and
- the 1:50 year flood area at Development Areas G, F and D.

A link between the Sand River area and the electrical servitude was proposed via a small valley with a possible 1:50 year flood area via Development Areas F, A and E.

This proposed open space system created the opportunity for the development of recreational activities and linked up with the Bird Sanctuary and the area south of the study area next to the Sand River.

❖ **Phasing of Development**

The tendency of town establishment that took place in SDA 1 is:

- from Seshego towards Pietersburg next to Nelson Mandela Drive and Monama Drive, and
- from Pietersburg towards Seshego along Monama Drive.

The main reason being the availability of roads, main sewage lines and electricity connections.

The Framework Plan furthermore indicated that future town establishment and development will to a large extent be determined by:

- the need for residential erven and houses as dictated by free market forces, and
- the availability of bulk services.

It also stated that ninety percent of the area is privately owned and the nature and time of development will to a large extent be determined by economical forces, and that the tempo and location of the future development can be directed by the provision of bulk services by the Pietersburg/Polokwane Transitional Local Council.”

The study determined the total development capacity of the area to be 24 204 residential units at an average density of 335m² per unit and an overall density of 349m² per unit.

2.4. Land Use and Spatial Structure

2.4.1. Residential Use

Since 1994 the spatial structure in this area has been mainly characterised by low and middle income housing developments by the private as well as public sector. Madiba Park is located next to the existing Seshego and south of Nelson Mandela Drive and consists of middle income housing development, whilst Lethuli Park is situated north of the old Seshego Road and consists of low income/subsidised housing (see **Figure 6**).

Pockets of other private townships are spread throughout the area. These townships mainly comprise middle income housing development and are located at Extensions 29, 61 and 65.

The old township of New Pietersburg (X78) is currently occupied by an informal settlement, but the Polokwane Municipality intends commissioning a total redesign of the township layout within the next few months.

In the past 2 to 3 years the Polokwane Municipality has been playing a greater role in ensuring provision/establishment of residential townships in this area, comprising a mixture of low and middle income development. The townships of Polokwane Extensions 73, 75 and 76 were proclaimed recently. The industrial township of Pietersburg Extension 40 has been converted to a residential township and functionally complements Extension 44, which is a successful low income subsidy housing development.

Other townships in process include X71, X72, X79 and X82 while applications will soon be lodged for X86 and the site immediately adjacent to the north thereof.

Table 8 below is a brief summary of the number of residential units planned for in the various new townships as indicated on **Figure 6**:

TABLE 8: APPROVED TOWNSHIPS IN SDA 1				
TOWN	RES 1	RES 2 & 3	TOTAL	POPULATION
Pietersburg x 71			1800	5532
Pietersburg x 72			800	2459
Pietersburg x 73			790	2428
Pietersburg x 75			494	1518
Pietersburg x 76			1030	3166
Pietersburg x 78			3000	9221
Pietersburg x 79			500	1537
Pietersburg x 82			2100	6454
TOTAL	0	0	10514	32315

From Table 8 it is evident that the current planned and approved townships in SDA 1 caters for about 10 500 residential units.

The remainder part of the study area comprises four distinct precincts (see **Figure 7**) with development capacity estimated as follows (see Tables 9 and 10).

TABLE 9: POTENTIAL NO OF ERVEN ON VACANT LAND				
AREA	RES 1	RES 2 & 3	TOTAL	POPULATION
1	3051	1678	4729	14534
2	2434	1339	3773	11598
3	2570	1414	3984	12244
4	3218	1770	4988	15330
5	0	0	0	0
TOTAL	11273	6200	17474	53706

TABLE 10: SDA 1 TOTAL POTENTIAL				
AREA	RES 1	RES 2 & 3	TOTAL	POPULATION
APPROVED	0	0	10514	32315
VACANT	11273	6200	17474	53706
TOTAL	11273	6200	27988	86021

The southern portions of SDA 1 – areas 1 and 2 as reflected on Figure 7 – can accommodate about 4 729 and 3 773 units respectively. Area 3 which is immediately to the north of Nelson Mandela Drive could result in a yield of about 3 984 units and the northern parts of SDA 1 (area 4 on Figure 7) about 4 988 units.

At a ratio of 80% of developable land developing at 20 units per hectare (Res 1), and 20% of developable land at 44 units per hectare (Res 2 and 3) the vacant areas can accommodate about 11 237 single residential units and 6 200 medium and higher density units which brings the total additional units in the area to about 17 474 with an estimated population of about 53 706 people.

This brings the total development capacity of the area to 27 988 residential units in SDA 1 with a potential population of 86 021 people (excluding the already existing townships in the area).

2.4.2. Transportation Network

One of the main features of SDA 1 is the historically planned N1 western bypass route which was intended to run through the central part of SDA 1. The N1 route will now however follow the alignment of the eastern bypass through SDA 3, and a decision will have to be taken in due course regarding the future utilisation of the road reserve declared for the N1 western bypass (see Figure 6).

Nelson Mandela Drive, which basically links the Polokwane CBD with Seshego and Perskebult / Bloedriver settlements further away to the north-west, plays an important role in providing good access to SDA 1 and adjacent areas.

The Dendron and Percy Fyfe/Matlala Roads also provide access from rural areas located to the north and south-west and to the inner city of Polokwane. The old Seshego Road (Polokwane Drive) links Seshego via the Dendron Road and the neighbourhood of Annadale to Polokwane's CBD.

Other important routes in SDA 1 include Market Street which serves the eastern portion of SDA 1 in a north-south direction and which links extensions 40, 44, 78 (New Pietersburg), 29, 61 and 82 to one another, but also link the three main radial routes traversing SDA 1 to one another.

To the west of Market Street is a second route which will serve extensions 71, 65, 75 and 79 and which will link to Market Street in the vicinity of extension 29 to the north.

The third local north-south route in SDA 1 is located to the west of the proposed freeway and links extensions 76, 72 and 73 to Madiba and Luthuli further to the north. Ken Harris Street links Pietersburg extensions 40 and 44 to one another in the southern parts of the study area.

2.4.3. Shopping Centres/Facilities

The usual ancillary land uses such as crèches, schools, churches, etc. are also found in the townships comprising SDA 1. Apart from Spaza shops and Convenience Stores at filling stations very limited shopping facilities in the form of local and neighbourhood shopping centres for convenience goods exist in this SDA. (see **Figure 8** and Table 11 below).

TABLE 11: DECENTRALISED/SUBURBAN SHOPPING CENTRES/FACILITIES

Ref No.	Name/Location	Classification of shopping centre it.o. hierarchy	Status
1	Seshego 9E	Local (Specialised)	Existing
2	Seshego 9G	Local	Approved
3	Seshego 9H	Local	Approved
4	Seshego Circle	Neighbourhood	Approved
5	Seshego business area (old Seshego CBD)	Community	Existing
6	Westernburg (Ben Harris Street)	Neighbourhood	Existing
7	Extension 29	Local	Existing

8	Extension 61	Local	Approved
9	Pietersburg Ext. 17 (next to bus terminus/CBD)	Local	Approved
10	Annadale (Witklip St) business strip	Neighbourhood/Community	Existing
11	Polokwane Ext 71	Neighbourhood	Proposed
12	Polokwane Ext ?	Neighbourhood (various local centres and other rights)	Proposed
13	Polokwane X44	Neighbourhood	Approved

As reflected in Figure 8 only four of these facilities already exist, with only one of these actually located within SDA 1 (Extension 29). There are several approved centres in SDA 1 (five), and two additional facilities are currently being applied for.

2.4.4. Other Uses

Other land uses of significance to SDA 1 are reflected on **Figure 9** and comprise the following:

- Place of Safety;
- Malt factory;
- Millennium College Private School.

Apart from residential uses and uses mentioned above, the following types of land uses also adjoin the SDA, namely:

- Industrial uses to the east of SDA 1;
- Municipal sewer works and Bird Sanctuary to the north and north-east;
- Agricultural and rural occupation to the north and south of SDA;
- Recreation;
- Sand excavation/mining; and
- Business (Polokwane CBD).

2.5. Ownership and Land Distribution

Land ownership in SDA 1 comprises either privately owned land (land owned by individuals) or land owned by the municipality.

Figure 10 reflects the land owned by the Polokwane Municipality.

The areas in green are farm portions owned by the municipality, whilst the yellow and brown are townships or erven within townships still owned by the Municipality.

Within the green marked area and on Portions 80 and 81 of the farm Doornkraal 680 LS, the municipality recently established/proclaimed the townships of Polokwane Extensions 73, 75 and 76. However, there are still remaining portions suitable for development.

South of the Matlala Road lies approximately 200ha of land owned by the municipality.

The area in brown represents the township of New Pietersburg. This area forms part of an area where people were forcefully removed during the Apartheid era and the land was transferred to the municipality. It also forms part of land claim and restitution case, which is in the final stages of settlement between the municipality and Land Claims Commissioner. Although the municipality owns the largest part of this township, there are still single erven owned by other individuals. This makes the cancellation of the township and re-planning of the area difficult. The municipality is currently dealing with the issue.

The area in yellow represent the township of Pietersburg Extension 40 which has been converted from industrial planned township into a residential township just recently. The area south-east of Extension 40 represents single erven in the township of Pietersburg Extension 17. These erven also belong to the municipality and although outside the SDA, it is located strategically along the Nelson Mandela Drive integration corridor and part of the CBD and worth mentioning in this report.

Lastly it is also worth mentioning the farms north adjacent to SDA 1 marked in green, which also belong to the municipality. These are located next to the Sand River and were bought by the municipality in the 1990's for the exclusive purpose of protecting underground water sources of the municipality.

2.6. Environmental Features

2.6.1. General

The following sections comprise extracts from a more detailed environmental investigation conducted for SDA 1. The full report, which is titled: "*Strategic assessment of environmental issues and identification of environmentally sensitive areas in SDA 1*" is included in Annexure A of this report.

SDA 1 comprises three main catchment areas and associated drainage systems (see **Figure 11**):

- the western third of the area drains to the north via the Makglakeng rivulet to the Blood River;
- the southern portion drains towards the east into the Sand River; and
- the remaining north-eastern part of the area drains towards the north-east, flowing into the Sand River.

As reflected in Figure 11 below the bulk of SDA comprises Degraded Bushveld with some Cultivated Fields occurring to the north and south-east.

The Bird Sanctuary which is located to the northeast of SDA 1 is deemed to be an environment of high ecological and aesthetic value.

There are no major environmental constraints in SDA 1, but the Sodic Areas in the southern parts as reflected on Figure 11 where large scale erosion occurs, is a matter of concern.

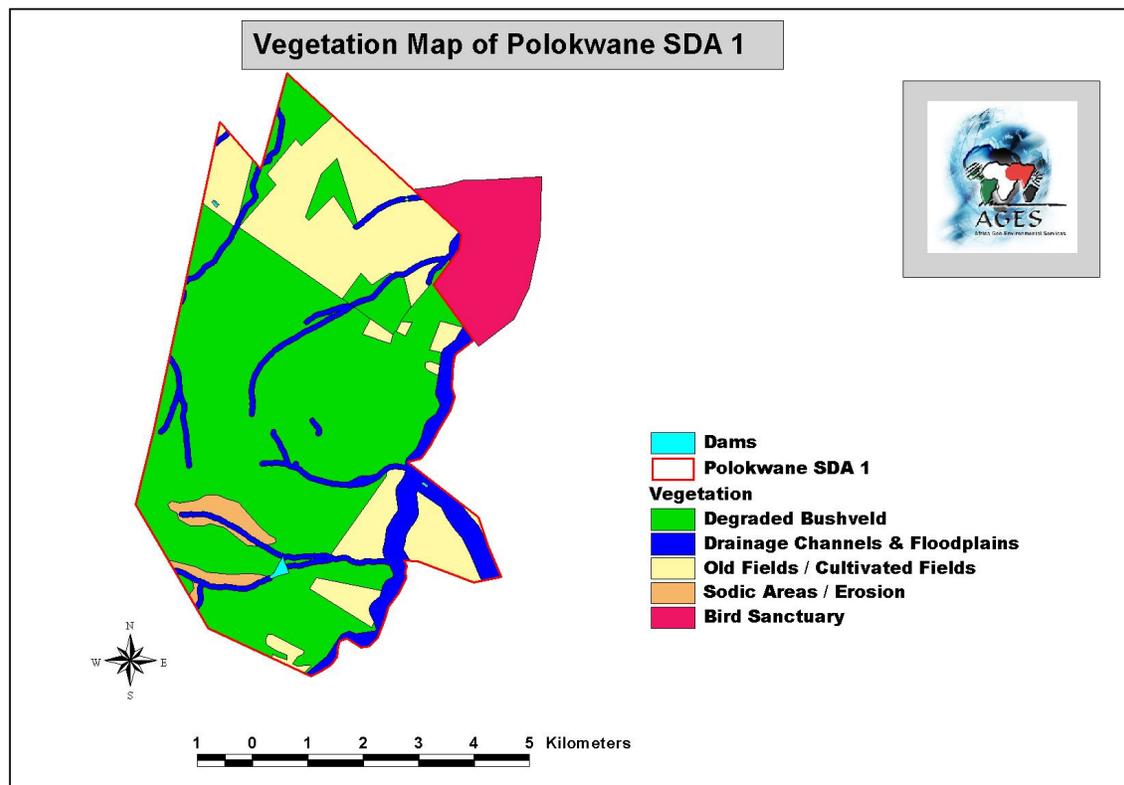


Figure 11: Vegetation Map

2.6.2. Sensitive Areas

"Ecological sensitivity" refers to a system's ability to resist disturbance and its capability to recover from disturbance once it has occurred. Any area for which a sensitivity analysis is performed can be divided into two main zones namely:

- Natural habitats
- Modified habitats

Natural habitats are still in its natural state, and the degree of influence either by humans or animals are minimal. Modified habitats are habitats that have been significantly altered either by humans or animals. Following the environmental sensitivity analysis, the study area was classified into the following three categories as reflected in **Figure 12**.

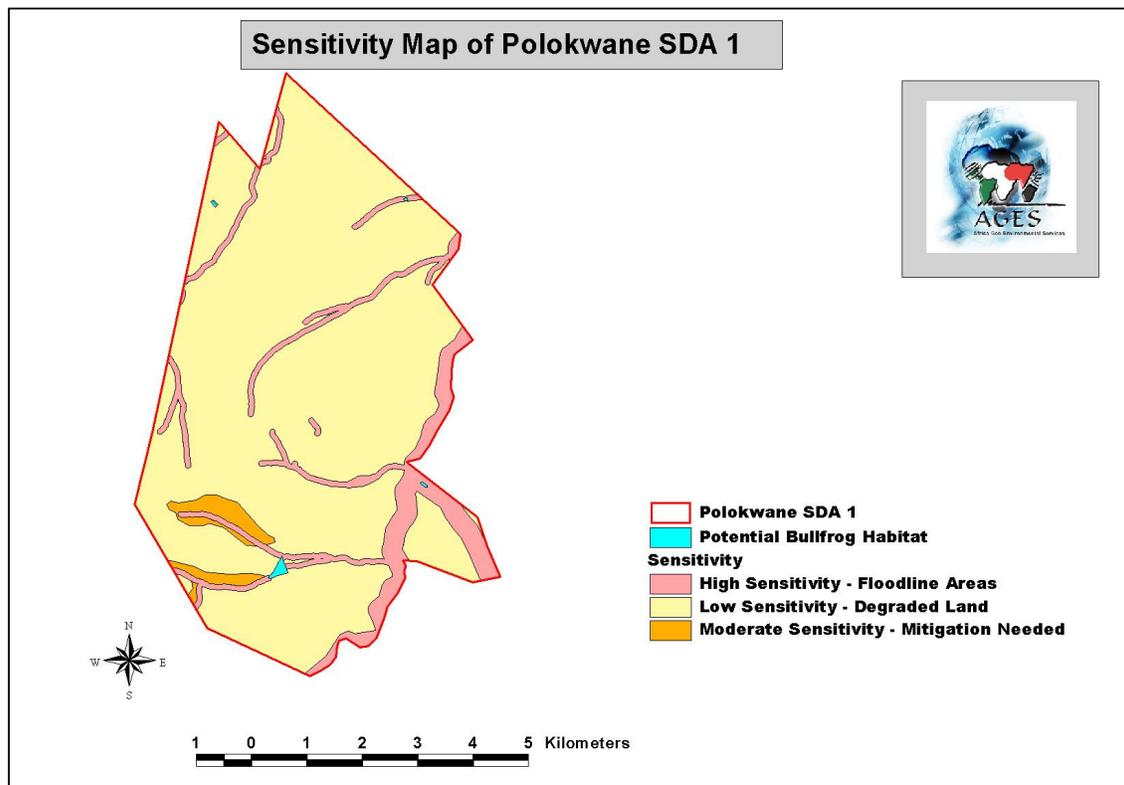


Figure 12: Sensitivity Map

- **High sensitivity areas (High Impact Zone)** - Conservation priority areas are identified according to the following criteria and no development can be supported in these areas
 - 50 – 100 year floodlines and sensitive catchment areas
 - Rare and endangered species habitats
 - Rocky slopes

- **Moderate sensitivity (High Impact Zone)** – Specific mitigation measures needed for development as follows:
 - Erosion prevention during road construction or construction of residences/ other buildings
 - Large trees / protected species should be preserved as part of the development. This includes the natural woodland areas.
 - Many exotic species should be eradicated
 - Use of a professional landscape designer to show the areas where the development will have the least impact

- **Low Sensitivity (Low Impact Zone).** The development won't have any significant impact on the natural environment.

2.6.3. Corridors – Natural Drainage Channels

In the development of a large area where future residential and town development will destroy or modify most of the natural habitat for plants and animals it is important to link the conservation and sensitive areas with natural corridors to ensure a network of natural vegetation to provide for the movement of animals between these areas. Proposed corridors are indicated on the sensitivity and corridor map (**Figure 13**) to link the existing bird sanctuary with most of the other identified sensitive areas to provide for the movement of birds, small mammals and herpetofauna.

These corridors will traverse fences, roads and existing developments. Most of the corridors are proposed as part of rivers or drainage lines that should be protected to maintain the drainage system and ecological integrity of the area. The idea is not to preserve these areas as no-go areas for development but certain compatible developments can be allowed outside the river and drainage line buffers in these corridors as long as corridors of natural vegetation remains to provide food and shelter and barriers for smaller animals are minimized. The width of the corridors will vary but should be \pm 300 m.

Areas in the Polokwane SDA 1 area of particular importance as corridors include the sensitive wetland and drainage areas as well as areas where the rare and endangered giant bullfrog occurs (see Figure 13).

2.7. Engineering Services

No major constraints pertaining to the availability of bulk engineering services were reported. **Figure 14** schematically illustrates the location and extent of bulk engineering services.

Water is provided from a fairly extensive bulk network serving the southern, central and northern part of the study area. The new 30 ML reservoir which is under construction in the south-western part of the study area will add significant capacity to meet the expected increased future demand.

SDA 1 is served by both the sewer treatment works indicated on Figure 14 with the majority of the area being served by the treatment works at the bird sanctuary. A concern was expressed that the development of SDA 1 may necessitate the construction of a Regional Sewer Treatment Works further downstream in the Sand River sooner than initially anticipated. For the time being, however, there is sufficient capacity to deal with the projected short term demand.

The entire SDA 1 falls under the jurisdiction of the Polokwane Municipality as far as electricity supply is concerned. There are four substations (two to the east in Seshego (Hospital and Sigma), and two to the east in Westernburg and Pietersburg X9 (Absalom and Laboria)) from which to serve the study area.

The Alpha substation is located in the southern part of SDA 1 and received the main electricity feed from Eskom from where electricity is distributed locally to the four substations referred to above.

2.8. Socio-Economic Profile

The data used in compiling the brief overview of Polokwane's socio-economic profile has primarily been extracted from a market research survey conducted by Urban-Econ: Development Economists (2006). The rationale being that this study contains the most up to date demographic data.

The Municipality's population is estimated at 508 277, an increase of 19.60% if compared to the 1996 census data. Polokwane's annual turnover is estimated at R7.8 billion (2004). The economy of Polokwane is fairly specialised with four tertiary sectors driving the economy. These include inter alia, financial services, trade sector, government services, and transportation. For the period 1996 to 2004, Polokwane experienced an annual economic

growth rate of 5.1% per annum – higher than the provincial average of 3.9%. In 2006, an estimated 234 824 people or 69 354 households resided within the primary trading area of Polokwane, giving an estimated household size of 3.7 members. At the prevailing rate of growth, this is estimated to increase to 86 427 households by 2011 and 107 704 households by 2016. Thus, the expected annual increment in households for the period 2006 to 2011, and 2011 to 2016 is 3415 and 4255 per annum respectively.

The largest segment (10.8%) of the population falls within the age group 25 to 29 years. This segment is followed by the age groups 30 to 34 years (10.1%), 10 to 14 years, and 15 to 19 years at 9.4% respectively. Polokwane's population is therefore characterised by a large segment of more mature individuals, supported by a young and upcoming segment.

A large segment, approximately 71% of the population forms part of the economically active population, with only 28.8% of the population not forming part of the economically active segment – i.e. younger than 15, older than 65 years of age, or disabled. The primary trading area of Polokwane is characterised by relatively low unemployment levels, with only 14% of the population being unemployed. The dominant occupations include elementary occupations (17.3%), clerks (15.9%), and professionals (14.3%). These occupations are supported by technicians and associate professionals (13.3%), legislators, senior officials, managers (11.6%), and service workers; shop and market sales workers (10.7%).

A large segment (34.6%) of the population residing within the primary trading area of Polokwane has at least obtained Matric, with 25.4% of the population having achieved a higher level of education. Furthermore, some 24.9% of the population has some secondary level education, 3.3% has completed primary education, and 6.3% has some primary level education. Only 5.5% of the population has no level of schooling. The relatively high levels of education could possibly explain why such a large segment of the population is employed in middle to high wage occupations.

The dominant segment of the population (17%) earns annual household incomes ranging between R76 801 to R153 600 per annum; 13.6% earn between R4 801 and R9 600 per annum; 12.9% of the households earn incomes between R38 401 and R76 800 per annum; and 2.3% earn incomes in excess of R614 400 per annum. Notably, 13.2% earn no income at all, and 38.2% of households earn incomes below R38 400. Considering the above given data, the population residing within the primary trading area of Polokwane reflects household income levels ranging from low, to middle, to high. More specifically, 51% of households fall into the low income category, 13% into the middle, and 36% into the high income category.

2.9. Conclusive Summary: Opportunities and Constraints

- The location of SDA 1 holds the potential to accommodate various land uses ranging from residential to industrial use. In the short term development should be aimed at the priority areas as identified by the Polokwane SDF (portions to the north of Nelson Mandela Drive and New Pietersburg, and areas to the south of New Pietersburg).
- Important policy guidelines pertaining to the area include the Polokwane SDF and the National Breaking New Ground Policy document. The directives presented by them should be incorporated into the development framework for SDA 1 to ensure environmental, social, and urban sustainability.
- SDA1 should in future be characterised by mixed land uses with mixed density. Furthermore, SDA 1 should link the inner city with the surrounding settlements, with the aim of reducing travel expenses and to encourage the usage of public transport. The proposed Nelson Mandela Drive corridor should provide investment opportunities and attract development.
- One of the current shortcomings of the existing framework plan for SDA 1 is the fact that the proposal took the previously planned N1-Toll road (western-bypass) into consideration. The N1 route will now however follow the alignment of the eastern bypass through SDA 3, and a decision will have to be taken regarding the future utilisation of the existing road reserve.
- A number of man-made physical features shape the development environment of SDA 1. These include the Pietersburg / Matlala road traversing the southern portion of SDA 1; the Nelson Mandela Drive which basically divides the area into a northern and southern portion; Monana Drive; and the Pietersburg / Dendron road to the south-east.
- SDA 3 is characterised by a number of environmental form-giving elements and features, and include inter alia the three main drainage systems; the Sand River and its major tributaries; the generally flat topography; the steeper slopes to the southeast; and the areas identified as environmentally sensitive. These elements and features should guide and direct all future development to ensure environmental and urban sustainability.
- The spatial structure of SDA 1 is characterised by low and middle income housing developments, isolated pockets of private townships spread throughout the area, and an informal settlement. Limited shopping and community facilities exist in SDA1. The most prominent land uses adjoining SDA 1 include inter alia industrial, business (CBD), agriculture, municipal, and recreation and conservation.

- The tendency of town establishment that took place in SDA 1 has been determined by the availability of roads, main sewage lines, and electricity connections. Consultation with engineers from the Municipality indicated a preference for an incremental development process from north to south.
- The remaining land in SDA 1 (of which 90% is privately owned) is generally highly suitable for development, except for small portions where development may be limited by floodline restrictions and environmental sensitivity. Area 3 along Nelson Mandela Drive is prime land for development due to its central location, and being largely owned by the Municipality.
- The predicted development capacity of approved townships in SDA 1 amounts to 10514 units, whilst the latent development potential on vacant land amounts to 17 474 units (53 706 individuals). Hence, SDA 1 has the potential to more or less triple its currently approved number of units, giving a total potential of 27988 units (86 021 individuals).
- Although SDA 1 is served by three prominent radials, and a number of arterials, local traffic is not provided with sufficient access to regional distributors such as Nelson Mandela Drive. Two junctions are currently being planned for Nelson Mandela Drive.
- No major constraints pertaining to the availability of bulk engineering services were reported. The construction of a new reservoir will add significant capacity to meet increased future water demand. However, a Regional Sewer Treatment Works may have to be constructed sooner than anticipated. Four electricity sub-stations are found throughout the area, and hence no problems with regard to increased future demand are expected.
- The predicted annual increment in households up to 2011 is high, and more than 50% of households within Polokwane's primary trading area fall into the low income category. This should be kept in mind so as to ensure that new residential developments within SDA 1 promote equitable access to housing.

3. DEVELOPMENT FRAMEWORK

3.1. Development Vision, Objectives and Principles

3.1.1. Development Vision

The Development Vision for the study area is to create a sustainable residential neighbourhood comprising a variety of housing typologies and densities which suits a variety of income and tenure needs, and which supports and complements surrounding residential areas. Economic activity nodes, community facilities and services infrastructure should be concentrated around the Nelson Mandela Development Corridor which should be the economic and social backbone to the area.

3.1.2. Development Objectives

The following development objectives are pertinent:

- to optimise the development capacity of the study area within the constraints as defined by the formgiving elements;
- to provide an internal movement network which serves the entire community and which optimises the linkages with the surrounding regional movement network;
- to provide access to road based public and private transport and to develop the Nelson Mandela corridor as a public transport and development corridor;
- to promote public transport and land use activities within walking distance from residential areas;
- to promote residential densification in and around nodes and along major arterials in support of a viable public transport system;
- to promote sustainable development – development that delivers basic environmental, social and economic services to all, without threatening the viability of the natural, built and social systems upon which these services depend;
- to functionally incorporate the natural environmental features into the development and ensure easy access and optimal utilisation of these areas;
- to ensure easy access to surrounding community facilities, but also make provision for local facilities at centralised Multi Purpose Community Centres;
- to allow for local retail and commercial needs within the Multi Purpose Community Centres;
- to create a diverse range of housing typologies at varying densities;
- to provide for both rental stock and full ownership; and
- to protect public and private investment.

3.1.3. Development Principles

In addition to the above, there are eight fundamental principles to the future development of the study area which should serve as prerequisites for the successful future development of the study area. The development principles are as follows:

- **The effective use of all resources available within the study area**

In this regard it is important to utilise all the physical, natural, cultural historic and economic resources available in the study area in order to optimise these in the development process.

- **Natural Resources:** In the first place the Sand River and associated fauna and flora (including the bird sanctuary) can and should be utilised in an effective and active way. This natural resource could also support some of the other principles highlighted below.
 - **Road Network:** The next important element is the road network in the broader study area which includes the three main radial routes and the western bypass highlighted in the status quo report, as well as the proposed third order network which has been designed to service and unlock the development potential of the entire area.
 - **Economic Development Potential:** A second major objective regarding the effective utilisation of resources in the area would be to utilise the economic development potential associated with the areas surrounding the Nelson Mandela Corridor by complimenting these areas with a high density residential base adjacent (bringing residential and employment opportunities in close proximity to one another).
- **The generation of proper opportunities for all future stakeholders in the area**

In this regard it is important that this framework caters for a wide variety of needs and ensure that it optimises the opportunities for future residents and stakeholders in the area in order to develop the area to the benefit of all.

This implies that provision has to be made for users of private vehicles, public transport, pedestrians and cyclists.

It is also important to highlight the need for a fair diversity in land uses to be developed in the area at a range of densities and affordability levels. Another important objective in this regard is to create a proper balance between accessibility to the area as a whole and access to individual pockets of land within the area.

The area should also be planned as a system in which all the parts/components are interdependent and are developed to the mutual benefit of one another. It is thus important not to allow the area to be developed as a single, exclusive type of development which does not allow any interaction with surrounding communities (e.g. one large low income town).

The last component pertaining to this principle is that provision should be made for both large and small scale developments (corporate and individual participation). It is also necessary to ensure that the retail component which normally follows a residential development is properly catered for at sufficient scale at the identified strategic locations within the study area.

- **To provide convenience to all users of the area**

It is a requirement that provision be made for cyclists, pedestrians and vehicles (public and private) within the study area, both in terms of accessibility and in terms of access. In addition to this, attention should also be given to public transport in order to ensure that people making use of this mode of transport are sufficiently catered for.

The layout and design of all developments should promote easy access to both social and economic activities, as well as the natural features in the surrounding environment.

- **Choice**

Complementary to the principle of opportunity generation, the development of the study area should provide a choice to future residents to the area in terms of the housing typologies in which they wish to live, different tenure alternatives, and in terms of activities. It is important to cater for the full range of needs in this regard in order to ensure that the area is as accommodative as possible and caters for a wide spectrum of people (income groups) and activities.

- **Equality of Access**

The fundamental principle in this regard is that there should be proper and easy access to both movement systems and community facilities in the area. This implies that community facilities should not be provided as exclusive nodes within exclusive developments but that community facilities should be provided along the main movement systems which should be part of the public domain in the broader area. This principle both ensures the optimal utilisation of community facilities and it also ensures the proper interaction of various communities restricting the possibilities of exclusive, isolated developments and communities.

- **Quality of Place**

It is important to maintain the existing natural character and quality of the environment in the vicinity of the study area. There are also several natural and cultural-historical features in the area which should be conserved and which could be functionally integrated into future development in order to enhance the quality of place in the study area.

- **Sensory Qualities**

As far as sensory qualities are concerned, the principle is that all public spaces (especially the streets or movement network) be viewed and constructed as social spaces within which people can interact with one another and which provides for both pedestrians and vehicle movement. As highlighted above these spaces should also provide for communal uses like community facilities and the retail nodes within the broader study area.

- **Sustainability**

It is important that the development concept which is eventually decided upon be a timeless concept which will enhance the opportunity for future generations to adopt and further build upon it. This will allow for the long term sustainable development of the area where all new developments are incremental to the original concept. As far as environmental sustainability is concerned it is important to conserve the continuity of the open space systems within the area in order to ensure long term active utilisation and conservation of these areas as functional units.

The above guidelines represent the principles for the future development of the area and all development proposals/applications in future can and should also adhere to, and be evaluated against these principles.

3.2. Spatial Development Framework

Following from inputs received during the public participation process it was decided to put forward two alternative Spatial Development Frameworks for the area – one which reflects the proposed western bypass (N1) along its planned alignment through the central part of SDA1 (**Figure 15**) and the second (**Figure 16**) which runs along the eastern boundary of the Study Area. There are no major differences in the land use proposals between the two alternatives, and therefore the alternatives will not be discussed separately.

3.2.1. Regional Open Space

The regional open space reflected on Figures 15 and 16 comprises the environmental corridors identified during the environmental assessment (see Figure 13) and which mainly coincides with the main drainage systems in SDA 1. As highlighted in the environmental assessment it includes the three main drainage systems in the study area and which have a strong formgiving impact on the area.

3.2.2. Regional Transportation Network

The regional transportation network for SDA 1 comprises of three classes of road:

- **First Order: National Distributor** which is the historically proposed western bypass to Polokwane.

On **Figure 15** the route runs through the central part of the Study Area and it crosses the local road network eight times with at least three access interchanges to be provided. On the second alternative (**Figure 16**) the route passes along the eastern boundary of SDA 1 and it crosses the local road network three times with two possible access interchanges.

The alternative route alignments are graphically illustrated as Route 1 and Route 2 on **Figure 17** which is an extract from a report titled: **Pietersburg Bypass New Route Alignment Investigation (February 2001)** and which was commissioned by the South African National Roads Agency. The report concluded as follows on the alternative alignments:

“Route 1: No fatal flaws were found.

Route 2: Fatal flaws are listed as follows:

- **the road passes through the new Regional Cemetery;**
- **the road will isolate a portion of land between the road and the Sand River from the rest of Pietersburg. This may cause significant negative social and traffic impacts, depending on the specific land use proposed;**
- **the road passes through an established SANDF residential community southwest of the Pietersburg International Airport.**

Conditions along all the routes are favourable for road construction and no noteworthy problems are expected except along the Sand River banks where problems with clay may be experienced. This needs to be investigated during the following design stage of the project.

Ample sources of road construction materials are available next to all routes although Route 2 may have a problem in this regard. The suitability of the commercial sources for sand and aggregate would have to be confirmed at a later stage”.

Since the completion of this report it has been decided that Route 3 to the east of Polokwane as reflected on Figure 17 will be constructed as the N1 bypass route.

However, from recent discussions with the NRA it was indicated that the NRA is keen to

retain the possibility of either Route 1 or 2 open to cater for future development in SDA1, and to promote sustainable development in the area as contemplated in the 1997 LDO document. This would also provide for a future circular high order route around Polokwane as reflected on Figure 17.

It is crucial to clarify the matter as soon as possible as development pressure is mounting in the area. Should the concept of a western bypass be scrapped in totality it will also have an impact on the configuration of the systems interchange to the south of Polokwane (see Figure 17) where the three alternative routes converge, and such decision should thus be taken before finalisation of the design of the southern systems interchange.

- **Second Order: Urban District Distributor:** This network mainly comprises the radial road network traversing SDA, and which links the Polokwane CBD to the surrounding rural areas, except for Nelson Mandela Drive which links the CBD to Seshego. This network sufficiently serves the northern, central and southern parts of SDA 1 in an east-west direction, and provides for three crossings across the Zand Spruit linking the communities to the west and east together.
- **Third Order: Urban Collector:** This network links to the second order network and ensures access to all pockets of land within the study area. It utilises accesses on the second order network according to the set access spacing standards along these routes. From Figure 15 it is clear that the third order network comprises two main north-south routes parallel on both sides of the western bypass. No additional north-south third order road is provided for along the N1 road reserve on Figure 16 should the N1 be moved further to the east along the Sand River. In this case the N1 road reserve area could be filled in with residential development.

The network was also designed to provide north-south linkages between the Dendron road in the north, Nelson Mandela Drive in the central area, the Matlala Road and the Percy Fyfe route to the south – all of which give access to the Polokwane CBD and surrounding industrial areas. One third order route (Ben Harris) crosses the Zand River floodplain which forms the eastern boundary of SDA 1.

The proposed minimum road reserve width for the third order road network in SDA 1 is 20 to 25 metres in order to ensure that these facilities have sufficient capacity to accommodate trips to be generated by the future community (28 000 households), and that provision can be made for pedestrian movement and public transport on-off loading facilities in the same reserve.

3.2.3. Land Use

- **South of Matlala Road (Southern Precinct)**

Approximately 200 ha of vacant land owned by the municipality lie south of the Matlala road. In 1997/98 the municipality compiled a localised Framework Plan for this area to determine the development potential as well as to provide guidance for future development in this area. This plan eventually led to the establishment of Extension 44, which now accommodates approximately 1700 residential erven.

Although this plan was adopted by Council, it was never formally incorporated into the Integrated Development Plan after 1998, and the Spatial Development Framework (SDF) which followed. According to the framework plan, the area south of the Matlala road is suitable to locate approximately 3200 single residential erven with an average erf size of 450m² and some 400 higher density dwelling units (town houses).

Privately owned land is also situated in this area adjacent to Westernburg and the Sand River.

This precinct is ideally situated with good access via the Percy Fyfe and Matlala Roads entering the inner city of Polokwane at Rissik Street/Nelson Mandela Drive, but development potential may be limited due to possible floodline restrictions along the Sand River.

Multi Purpose Community Centres/Activity Nodes are proposed around the intersection between the Motlala Road and the road passing through extension 71, and the third order road and the Percy Fyfe Road further towards the east respectively.

- **Area along Nelson Mandela Drive (Central Precinct)**

The area along Nelson Mandela Drive, and up to the “old Seshego Road” (Polokwane Drive), is prime land for development. The largest part of this area (approximately 400 ha) is owned by the Polokwane Municipality with only a few pockets of land which is owned by other private entities.

The New Pietersburg township functionally also forms part of this area and as indicated earlier in this report, there may be factors restricting development in this area in the short term. However, it is believed that in the medium to long term this land (X78) will be re-developed into a proper modern township with various amenities and community facilities to serve this SDA.

This is the highest priority section of SDA 1 to be developed due to its central strategic location and public transport function, and it will play the single most important role to integrate Polokwane with Seshego.

Figures 15 and 16 also indicate the proposed activity nodes at the three most prominent crossings along Nelson Mandela Drive. It is suggested that these three nodes be earmarked for the development of Multi Purpose Community Centres which should comprise a combination of community facilities and economic activities (also see section 4.4 of this document for more detail on the composition of Multi Purpose Community Centres (MPCC)).

Nelson Mandela Drive is also the main public transport route in SDA 1 which leaves an opportunity for high density residential development (80 units/ha) along the entire route which would bring more people in close proximity to the road and thus enhance the public transport function thereof.

Following from proposals made during the consultation process the area to the north of the Nelson Mandela Corridor between Madiba and Luthuli is earmarked for future Business, Commercial and even Light Industrial uses in an effort to bring more job opportunities into the area. Residential use may eventually also be incorporated into this area to enhance the envisaged mixed use character of the area.

At the southern end of the Nelson Mandela corridor it functionally links to the area recently incorporated into the CBD and which will eventually comprise of a bus terminus taxi rank, the Itsoseng Entrepreneurial Centre, SMME Development with dwellings, and three Industrial 2 sites. This provides an opportunity for the development of a fourth Multi Purpose Community Centre at the southern end of the Nelson Mandela Corridor.

- **The area north of Polokwane Drive towards the Dendron road (Northern Precinct)**

Land in the area north of the “old Seshego Road” (Polokwane Drive) and towards the Dendron road is mainly owned by private entities. However, there are portions owned by the municipality, but those portions have either been planned already or townships have been established and developed.

This area also has proper access to the CBD via the Landros Mare and Market Street one way pair, and via Witklip Street in Annadale, which significantly enhances its suitability for development. The proposed third order network of SDA 1 provides for three local accesses onto the Dendron Road.

It is furthermore suggested that at least two Multi Purpose Community Nodes be developed in the northern precinct as indicated on Figures 15 and 16.

- **Area adjacent and north of SDA 1**

Although this area lies outside the SDA it covers a very large portion of land owned by the Polokwane Municipality and worth mentioning in this study. Although it can not be earmarked for township development at this point in time, it definitely holds potential to be used for other purposes such as recreation and tourism, especially because it is located next to the existing Municipal Bird Sanctuary.

- **Area adjacent and south-west of SDA 1**

During the consultation process it was indicated that the SDA 1 will only cater for the development needs of this part of Polokwane for the next five years. Due to the huge housing backlog (22 000 housing units) in Polokwane, the bulk of SDA 1 (total capacity = 28 000 units) will probably be utilised to cater for the existing backlog which is RDP housing. This would result in a ratio of 75:25 between RDP housing and other typologies. This is, however, not consistent with the principles of the Breaking New Ground Policy which calls for a more even composition of various income categories and tenure alternatives in any given area.

To achieve such more sustainable development would thus require that an area larger than SDA 1 be earmarked for development in order to distribute the low income housing backlog component over a larger area and to make provision for more middle and high income developments in the same area.

The most logical area to expand SDA 1 would be to the southwest. This would include the area from south of Seshego up to the railway line in the vicinity of Ivydale (SDA 2) (see **Figure 18**). This area comprises of three functional areas (A, B and C) as reflected on Figure 18 of which Area A could be well served by the new water tower, the sewer outfall system running along the eastern boundary of Seshego, and the bulk electricity supply running along the southern boundary of the area. The existing road network in Seshego could also be extended to serve this area and to link to the Matlala road which runs through the central part of this precinct.

Area C could in turn be developed in tandem with the redevelopment of Ivydale/SDA 2 which is located immediately to the east thereof in order to share the required upgrading of services once SDA 2 starts redeveloping.

Area B would require the development of the area adjacent to the east within SDA 1 to first take place before it will be able to develop because it will rely on linking to the bulk services to be provided in this area.

Although Area D falls within the same catchment area as Area A, it is spatially further removed from the Polokwane Core Area than areas B and C, and therefore areas B and C should have preference to be developed before area D commences.

3.2.4. Land Use Budget

Table 12 below represents a land use budget for SDA 1 based on the development capacity for the area as determined in Tables 8, 9 and 10.

TABLE 12: POLOKWANE SDA 1: LAND USE BUDGET

LAND USE	VACANT AREAS 1 - 4								APPROVED TOWNS & OTHER NON-RESIDENTIAL USES		TOTAL		
	1		2		3		4		6		no	ha	%
	no	ha	no	ha	no	ha	no	ha	no	ha			
BASE DATA													
Residential ha		166.8		133.1		140.5		175.9		840.7		1457.1	52.8
Density du/ha (net)	28		28		28		28		13				
Dwelling Units	4729		3773		3984		4988		10514		27988		
Population	14534		11598		12244		15330		32315		86021		
Education													
Primary	1.9	5.3	1.5	4.2	1.6	4.5	2.0	5.6	4.2	11.8	11	31.3	1.1
Secondary	0.7	3.3	0.5	2.6	0.6	2.7	0.7	3.4	1.5	7.2	4	19.3	0.7
Business													
Local retail centre (floor area in m ²)	5814	1.9	4639	1.5	4898	1.6	6132	2.0	12926	4.3	34408	11.5	0.4
Neighbourhood retail centre (floor area in m ²)	5814	1.9	4639	1.5	4898	1.6	6132	2.0	12926	4.3	34408	11.5	0.4
Community, small regional retail centre (floor area in m ²)	5814	1.9	4639	1.5	4898	1.6	6132	2.0	12926	4.3	34408	11.5	0.4
Offices (floor area in m²)	1744	0.6	1392	0.5	1469	0.5	1840	0.6	3878	1.3	10323	3.4	0.1
Community Facilities													
Religious places	4.0	0.6	3.2	0.5	3.4	0.5	4.3	0.6	9.0	1.3	24	3.6	0.1
Clinic	1.5	0.1	1.2	0.1	1.2	0.1	1.5	0.2	3.2	0.3	9	0.9	0.0
Hospital	58	1.2	46	0.9	49	1.0	61	1.2	129	2.6	344	6.9	0.2
Post Office	1.3	0.1	1.1	0.1	1.1	0.1	1.4	0.1	2.9	0.3	8	0.8	0.0
Police	0.6	0.1	0.5	0.0	0.5	0.0	0.6	0.1	1.3	0.1	3	0.3	0.0
Municipal Office	0.3	0.1	0.2	0.1	0.2	0.1	0.3	0.2	0.6	0.3	2	0.9	0.0
Community Centre / Library	0.3	0.1	0.2	0.1	0.2	0.1	0.3	0.2	0.6	0.3	2	0.9	0.0
Open Space													
Active		6.7		5.3		5.6		7.0		14.8		39.5	1.4
Passive										477.7		477.7	17.3
Other Uses													
Industrial										25.8		25.8	0.9
Street		50.7		40.4		42.7		53.5		469.0		656.3	23.8
TOTAL		241.5		192.7		203.5		254.7		1866.6		2759.0	100.0
%		9		7		7		9		68		100	

The study area has a total development capacity of about 27 988 households which would represent about 86 021 people. This would justify about:

- 11 Primary schools
- 4 Secondary schools
- 24 Churches
- 9 Clinics
- a Hospital comprising about 344 beds
- 8 Postal outlets
- 3 Police centres
- 2 Community centres

As indicated in section 3.2.3 above the community facilities for SDA 1 should be consolidated around the eight proposed Multi Purpose Community Centres as reflected on Figures 15 and 16. The resulting concentration of people and activities at the MPCC's will also generate opportunities for a variety of business/retail activities which in turn pose opportunities to develop the MPCC's as public-private partnerships.

A population of between 80 000 and 100 000 as envisaged for SDA 1 and with income levels ranging between low and middle, could sustain about 34 000m² retail space in the form of Local Centres, 34 000m² for Neighbourhood Centres (± 2), and one small Regional Centre of about 34 400m². This can be translated to a total of 100 000m² of retail space for the area which could be left to market forces to determine the distribution between local, neighbourhood and regional centres to be developed in future. The key figure is however 100 000m² of retail space.

It is estimated that the area will develop at a rate of about 2 000 households per annum which implies that SDA 3 would take about 10 years to develop to its full capacity (± 2018) – except if there is a significant change in the rate of delivery of subsidised housing.

4. DEVELOPMENT GUIDELINES

4.1. Environmental Management

The different sensitivity classes referred to in section 2.6.2 of this document play an important role in determining whether specific areas will be more or less suitable for sustainable development. A matrix was therefore created to act as a facilitator in the development process. Specific provision was made for developers, consultants and other role-players in the development process to follow specific guidelines. Furthermore,

**Framework Plan for Strategic Development Area 1
August 2007**

C:\Davel Consulting Planners\Spatial Planning&LUM\SDA1 Framework Plan\Framework Plan for Strategic Development Area 1.doc

management principles also need to be implemented to ensure that the development is sustainable in terms of the natural environment. These guidelines and management principles are presented in Table 13 below:

Sensitivity Classes	Management Principles for Development in different Sensitivity Classes	Guidelines for Sensitivity Classes
High Sensitivity	<ul style="list-style-type: none"> • Perennial rivers and main non-perennial streams <ul style="list-style-type: none"> ○ No clearance of riparian vegetation should be allowed within the demarcated 40 m each side of the river or stream or existing riparian vegetation line. ○ No development should be allowed within the 1:100 year flood line. ○ An impact assessment needs to be conducted prior to the construction of any new weirs or dams. ○ No exotic vegetation should be planted and the encroachment of exotic vegetation must be prevented and existing exotic plants should be eradicated. ○ Erosion should be prevented and existing erosion should be monitored and controlled. 	<ul style="list-style-type: none"> • Detailed ecological surveys (including a flora and fauna survey and river health analysis by a specialist) by a registered qualified specialist on all aspects of the natural environment. The survey should preferably be conducted under summer survey conditions, although it depends on the general state of the site. Any red data species observed on site should be mapped and buffer zones should be provided to mitigate deleterious edge effects. Protected tree species should be preserved. Long-Term Monitoring programme should be implemented on site in such a case. • An independent, suitably qualified individual must act as environmental control officer and do a site visit. • Maps to be included in the report should be as follows: <ul style="list-style-type: none"> • Vegetation Map • Sensitivity Map (including a description of sensitivity mapping rules) • Buffer zone map for red data species • Photographic guide of the site and vegetation characteristics
Moderate Sensitivity	<ul style="list-style-type: none"> • Areas with natural vegetation and minimum modification <ul style="list-style-type: none"> ○ Development within the demarcated areas should be restricted to environmentally compatible development. The impacts of any proposed development should be assessed prior to construction and mitigation measures must be adopted. ○ The clearing of these areas for large-scale residential development, monoculture crops, mining or commercial developments should be prevented. ○ No exotic vegetation should be planted and the encroachment of exotic vegetation must be prevented. • Areas sensitive for erosion <ul style="list-style-type: none"> ○ These soils are sensitive for erosion and mitigation measures to prevent erosion are need for any new development. Rehabilitation and stabilization of existing erosion also need to be addressed. 	<ul style="list-style-type: none"> • A site visit by a qualified botanist (at least BSc (hons) in plant ecology or botany) and preferably a qualified environmental officer which would indicate the following: <ul style="list-style-type: none"> • Photographs of the site and its related vegetation communities • A plant species list indicating the degraded state of the vegetation (indicator species) • A vegetation map of the site, if any natural vegetation is found on the site, a full survey of the area should be conducted. Such an area should receive high priority as a public open space. • Rehabilitation plan for the site, would it be deemed necessary, after site inspection. • If any protected plant species occur on site, such as marula, they should be preserved, while all exotics should be eradicated. • Floodline determination of drainage areas, with mitigation measures

Sensitivity Classes	Management Principles for Development in different Sensitivity Classes	Guidelines for Sensitivity Classes
Low Sensitivity	<ul style="list-style-type: none">• Areas that have been completely modified or modified to such an extent that it would probably never return to its original state. Areas include encroached areas, old cultivated fields, quarries etc.	Unlimited development can be supported provided that an officer from Department of environmental affairs does a site visit with the consultant.

4.2. General Residential Guidelines

- The proposed medium density living in the study area should not be equated with compromised and inferior environmental quality, over-crowding and separation from natural environments.
- Provision must be made for a mix of housing-types, which takes into account affordability constraints and life-cycle considerations.
- Although the emphasis of future residential development will be for middle and higher income people, a balanced urban environment requires that entry level bonded housing income groups also be accommodated, e.g. young people who start working.
- Focus on higher density urban development between 30 and 80 units per hectare with a mix of residential densities and where possible concentrations of the highest density developments at points and lines of high accessibility, e.g. along the public transport routes. Low density development could be considered in the areas further away from the public transport routes.
- Restore, rehabilitate and develop a wide diversity of accommodation and supportive community services for all ages, income, ethnic and social groups.
- A range of housing options must be generated to provide accommodation for young, entry level as well as older, higher income groups.
- Encourage the upgrading and maintenance of the existing housing stock.
- Promote an urban pattern of development which is predominantly low rise (generally not more than 3 floors) to enable the provision of walk-up apartments which are more economical to construct and also are not hostile to the human scale.
- Establish a positive attitude to the principle of much greater numbers of people living in close proximity to the main public transport routes in the area.
- Withstand the continued invasion of incompatible non-residential activities into sensitive residential areas which are not only reducing the residential fabric, but also impacting negatively on the remaining residential activities.
- Existing residential areas should be selectively rehabilitated so as to increase overall densities, while retaining the existing environmental character.
- Promote the inclusion of non-noxious, non-noisy, non-disrupting activities within living environments to afford families the opportunity to increase their level of living by setting up income oriented “cottage industries” within homes.

4.3. Development Control Measures

- Parking should preferably not be placed in front of buildings but to the sides and backs. Open parking areas should be appropriately landscaped. Sharing of parking facilities could be considered to avoid duplication. Parking areas should be arranged in smaller entities.

- Street facades should reflect a restrained and dignified architectural character.
- Signage should be restrained and care should be taken not to disrupt coherence by over-sized and/or too bold signage.
- Building lines adjoining any core residential areas must be 10 meters. This restriction will create a buffer area and enhance privacy for the residential component. This buffer area must be landscaped in order to reduce noise levels, visual impacts of the new buildings and enhance the privacy of the residents.
- As far as possible, non-residential development should incorporate a significant residential component on upper floors as part of the mixed use philosophy.
- New activities should not negatively affect the existing residential component.
- No blank walls on street frontages of large-scale developments (commercial and residential) should be allowed.
- Particular care should be taken to achieve appropriate semi-private spaces (interface) between the fronts of buildings and the street to afford a measure of privacy for residential development.
- Landscaping is a better option than a solid wall which has a negative effect although safety concerns are recognised.
- Architectural design of new and refurbished houses must be in line with the present designs and character of the neighbourhood.
- Home undertakings that are non-noxious, non-noisy and non-disrupting can be promoted in the residential areas.
- Home-based cottage industries should be encouraged, but particular care should be taken that the residential activity remains predominant.
- 2.5 meter walls on all non-residential erf boundaries next to residential uses.
- Promote the usage of covered colonnades along street frontages – it impart a human scale to multi-storied buildings and adds protection for pedestrians from the elements and vehicles.
- Open parking areas such as parking lots of business centres are to be landscaped with trees to soften the area.

4.4. Multi Purpose Community Centres/Activity Nodes

A Multi Purpose Community Centre/Rural Service Centre is “**a focal point at which a comprehensive range of essential services can be obtained by people living in its vicinity. In turn it acts as a pool of human and physical resources from which the inputs necessary for development can be distributed efficiently, and from which a community can draw to promote their development**”.

This concept allows for national, provincial and local governments to join their efforts in providing services at local level, by means of the establishment of Multi Purpose Community

Centres. These centres allow for the provision of a combination of essential services by the relevant tiers of government, according to their roles and responsibilities, at a central location accessible to the community. These services are mutually supportive and ensure co-ordination of services, rather than duplication or deprivation. These centres can also provide one stop comprehensive services to members from surrounding communities which are in many cases very poor and cannot afford multiple trips.

The development of Multi Purpose Community Centres can furthermore act as economic injection, by means of initiating investment into previously marginalised areas, and lowering the perceived risk to private sector development. It allows for a hierarchy in the provision of services, to ensure that existing cores are strengthened and services become more accessible to remote sections of the population. The appropriate design of these Centres can also achieve the realisation of the principle of stimulating diverse and complex urban areas, as opposed to dormant townships. In the long run this can enhance the sustainability of these settlements.

MPCCs focus on basic services required by the public on a regular basis, such as clinics, pension payout points, registration of births and deaths, application for identification documents, health and welfare services, libraries, emergency services, social support programmes such as HIV/Aids awareness and support, human resource development programmes and skills transfer programmes. These services are typical services provided by national, provincial and local government, but are largely inaccessible to marginalised communities. It relies on the pooling of service provision, as well as resources, to provide more efficient and accessible services

There are a number of institutions involved in service delivery, which should play a primary role in the establishment of the MPCCs Centres, such as:

- National Departments;
- Provincial Departments;
- Municipalities;
- Non-Government Organisations and Community Based Organisations;
- Private Sector; and
- Parastatals.

Once such a centre is established and start attracting people to it, the private sector also has an incentive to establish in the area and initiate some private sector driven economic activity (formal and informal) e.g. retail, light industrial etc. It usually also becomes a priority destination of public transport services – especially the taxi industry with the resultant establishment of a taxi rank.

A Multi Purpose Community Centre can consist of, inter alia, the following functions (refer to **Figure 19**):

1. **Primary Health Care Clinic**, to deal with daily health care needs of the community.
2. **Pension Pay-Out Point**, where the elderly can collect pensions in a safe and user-friendly environment.
3. **Home Affairs Office**, for birth and death registration and applications for identity documents.
4. **Satellite municipal offices**, for the payment of municipal accounts, account and service queries, reporting of problems, applications for driver's licences).
5. **Emergency Services Call Centre** – this should be a reception centre for emergency calls and emergency situations, including accidents, fires, crime and medical emergencies. The municipal police force should participate in this centre and would therefore also ensure that pension pay-outs can be done in a safe environment.
6. **Postal services** – this would include post boxes and postal services.
7. **Police station** – this could be a fully fledged satellite station working with the Emergency Call Centre/municipal police force.
8. **Library**, to ensure that information is readily available to scholars and assist in adult literacy programmes.
9. **Developmental Welfare Service Office**. This could include office space, a workshop area for meetings as well as space for projects and programmes, e.g. arts and crafts, projects for the disabled, or the poor. This workshop area can be shared by e.g. the Local Economic Development Offices, or for the implementation of Adult Basic Education and Training (ABET).
10. **A temporary place of safety** for battered and abandoned women, children in need of welfare services and street children as well as temporary social relief. The place of safety should be seen as a transit facility, where persons in distress can be housed overnight, before being referred to an institution that can help them in the longer term. This place of safety can also serve to assist people who lost their homes due to fire or flooding on a temporary basis and should include facilities for a soup kitchen.

11. **Office space for a Referral Network.** There are various groups which can provide assistance, but do not have access to the necessary infrastructure, which could benefit from this clustering of facilities. This includes non-government organisations and voluntary organisations involved in developmental welfare.
12. **LED Office.** This office could work closely with the Developmental Welfare Service Office and library to initiate sustainable projects in the community and conduct ABET and youth development programmes.
13. **Community hall** – this should be a multi-purpose hall which could be used for various community activities, such as meetings, social gatherings or church gatherings.
14. **Sport and recreational facilities** – this should be operated by the local authority and should provide basic sport facilities used by the community. This could also be shared with the community hall.
15. **Secondary Schools** - not all towns and villages have a secondary school. Therefore secondary schools should, as a priority be located at such Multi Purpose Community Centres. The school facility must also be flexible to provide ABET training, skills transfer courses, and launching of awareness programmes.
16. **Cemeteries.** In view of the lack of formalised cemeteries in rural areas, the deceased's family members are often dependent on the "mercy" of landowners to allow burials on farms. Providing for cemeteries at service centres could partly alleviate this problem.
17. **Light Service Industries.** Light service industries that are dependent on engineering infrastructure, accessibility, labour etc. can and should be established at these centres. This gives strategic direction to the municipalities as to where to focus in terms of the provision of engineering services in rural areas, as it is virtually impossible for a local authority to provide each and every farm on which there is potential for the establishment of a light service industry with the necessary infrastructure.
18. **Public Transport Facility.** The Multi Purpose Community Centre must provide an area to be developed as a Taxi Rank. A petrol filling station could also be considered within or in close proximity to the centre.
19. **Residential.** As a principle Multi Purpose Community Centres in towns and rural villages are surrounded by residential development. In rural areas characterised by extensive agriculture, the Multi Purpose Service Centres can and should also provide

for a residential component. Although it is difficult to determine the exact number of stands to be provided per rural service centre, the guideline should not be more than 250 stands. The intention is not to create large townships in the rural environment, but to provide an option to farm labourers and rural dwellers to obtain security of tenure.

20. **Retail.** The proposed retail component will be in the form of a small local shopping centre, and this feature will normally follow once the centre draws a sufficient number of people on a regular basis.

The Centre and the number of people attracted to it will make it an ideal location for small business, retail and residential activities, due to the buying power associated with large numbers of people. The design of Multi Purpose Centres can anticipate this development and allow for the provision of these services. This can be done in a manner which will allow for the Centre to profit from this development and become self-sufficient in the long run. It will also allow for an entry point to the formal market for small, medium and micro enterprises in a viable and affordable manner.

This implies that the Multi Purpose Service Centre should, from the outset provide for the development of a retail component. The “community centre component” can initially be developed, and once a market has been established, the retail component can either be developed in a partnership approach, or sold to a developer. This can generate a long-term income for the local authority, or provide capital for further investment and development. A residential component can also be added, based on the local needs and circumstances.

21. **Informal Market.** The function of public markets is essentially to provide assistance to informal sector manufacturers and traders, to improve access to lower income customer’s commercial services, and to provide a space for community interaction. Public markets enable many unemployed to generate income through small-scale manufacturing, service and retail activities. Markets are very accessible to entrepreneurs.

The Centre would essentially be a “One Stop Centre” for information and services, at a central and accessible point. The combination of these services will ensure that optimum use is made of resources in order to allow for the development to be mutually beneficial and more affordable to all service providers and the community at large. Because such a centre also draws people a local market will establish (formal and informal), and this could be the nucleus around which an economic activity node starts developing.

The principle is also in line with national directives of the establishment of partnerships in service delivery, and in this regard it can give effect to a Public-Private and Public-Public Partnership.

4.5. Economic Development

- Reinforce complementary mixed land usage, developed at varying levels of intensity and complexity in the vicinity of Nelson Mandela Drive, also in the form of Multi Purpose Community Centres (see Figure 19).
- Provide opportunities for small-scale, self generated economic activity such as informal trading and cottage industries in the vicinity of the activity nodes along Nelson Mandela Drive.

4.6. Movement Goals

- Focus on minimizing dependence on private cars and provide multi-functional streets in which the ease, safety and comfort of movement on foot is paramount.
- Maximise the accessibility of the study area by upgrading public transport from all surrounding areas, with special emphases on areas to the north.
- Promote pedestrianism as the essence of the movement system, supplemented by a co-ordinated and integrated public transport system in the study area.
- Extensively upgrade forms of public transport to promote it as the desired means of transport for the majority.
- All road upgrading projects to focus on minimising dependence on cars, with an emphasis on the provision of more multi-functional streets.
- Acknowledge and reinforce streets as the “foundation of community life” and not only movement arteries for vehicles.
- Encourage improvement in image and level of service of public transport.
- Pay particular attention to the requirements of disabled people in the upgrading of all public transport facilities.
- Ensure that Pedestrians/Cyclists can move freely along the earmarked priority pedestrian and cyclist routes in the area by providing proper sidewalk facilities, lighting, pedestrian crossings and public transport shelters along these routes.

4.7. Maintain and enhance the attractiveness and “Genius Loci”/Sense of Place of the Study Area

- Establish a positive attitude towards the protection and maintenance of both manmade and natural elements which contribute to the uniqueness of the study area.

5. IMPLEMENTATION PRIORITIES

The following represent the priority actions/projects to be undertaken in SDA 1:

- Finalise discussions with NRA around the future alignment of N1 West (or scrapping of the route) in order to determine configuration of southern systems interchange.
- Commission detailed planning of each of the proposed eight Multi Purpose Community Centres and Activity Nodes in SDA1 (Figures 15 and 16).
- Commission planning for the future expansion areas to SDA 1 in order to achieve greater diversity in income categories in any given part of SDA 1 – or else SDA 1 will be predominantly used to cater for the current housing backlog of 22 000 units with only about 6 000 units of the total capacity left for other income groups.
- Facilitate and speed up development applications on all land portions in the area in order to promote development.
- Formalise the informal settlements in SDA 1 in order to enhance the development potential of the area and attract private sector investment.
- Provide for the construction of the third order road network in the area in order to unlock the development potential and make all areas accessible/developable.