

Final Draft

# MOQHAKA SDF

## SPATIAL DEVELOPMENT FRAMEWORK

### 2018 / 2019



REVIEWED SPATIAL DEVELOPMENT FRAMEWORK FOR THE MOQHAKA LOCAL MUNICIPALITY  
IN TERMS OF SECTION 34 OF THE MUNICIPAL SYSTEMS ACT, 2000 (ACT 32 OF 2000),  
SECTION 20(3)(A) OF THE SPATIAL PLANNING AND LAND USE MANAGEMENT ACT, ACT 16 OF 2013 AND  
SECTION 4(2) OF THE MOQHAKA LOCAL MUNICIPALITY LAND USE PLANNING BY-LAWS, NOVEMBER 2015

**JANUARY 2018**

Prepared by the IDP Steering Committee of the Moqhaka Local Municipality  
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## KROONSTAD / MAOKENG / BRENTPARK URBAN AREA .7

### A: CORE

STATUS QUO	FUTURE SPATIAL FRAMEWORK
<p>The Vals River, several attributes and significant wetland areas, drain through the urban area. A series of weirs in the Vals River (dams include the Serfontein, Barend Wessels and Strydom Dams) ensure raw water provision to the urban are. The Bloemhoek Dam (a storage dam) supports raw water provision, as water from the Vals River is pumped thereto to ensure potable water during periods of low rainfall.</p>	<p><i>Optimal development and utilisation of the Vals River riparian and water sources (Bloemhoek Dam), not compromising the outstanding universal value thereof and unduly impairing the safe, undisturbed and quiet enjoyment of the area, must be considered.</i></p> <p>Significant surface water features (several dams in the Vals River and Bloemhoek Dam) as well as its tributaries must be regarded as sensitive to activities that might further deteriorate their quality.</p>

### B: BUFFER

STATUS QUO	FUTURE SPATIAL FRAMEWORK
<p>The Vals River, its tributaries and wetland areas of significance, drain from east to west through urban area. Several dams (manly as raw water sources are constructed in the Vals River and adjacent thereto (Bloemhoek Dam).</p> <p>The riparian to these areas are deemed of extreme environmental significance and controlled development and limiting pollution thereof, are considered as substantial priorities.</p>	<ul style="list-style-type: none"> <li>▪ The Vals River, its tributaries, constructed dams and associated riparian areas thereto, are paramount natural resources and should be protected to minimise pollution thereof.</li> <li>▪ The areas within 32 m and 100 m of water courses, as defined in the National Water Act, and within 500 m of wetlands should be regarded as sensitive and not earmarked for development.</li> <li>▪ <b>S11:</b> Further upgrading and development of the “Noord Oewer” park is considered as a priority. Portions thereof are at present utilised for the purpose of a “wildlife sanctuary”.</li> <li>▪ <b>S12:</b> A prominent vlei area, stretching between the Seeisoville and Marabastad precincts was partially rehabilitated. Although partial</li> </ul>

STATUS QUO	FUTURE SPATIAL FRAMEWORK
	<p>rehabilitation efforts occurred, completion thereof is essential; especially considering flooding and the safety of pedestrians in the area.</p> <ul style="list-style-type: none"> <li>▪ <b>S15:</b> the implementation of appropriate development control at the Serfontein Dam water ski resort, amongst other allowing for access to the general public, must timely be addressed.</li> <li>▪ <b>S 7, 9, 11, 14, 15, 16:</b> Proper management of the riparian must be implemented to intercept misuse and pollution of the area, being a principal source of raw water to the urban area.</li> <li>▪ <b>G8:</b> Two illegal sand winning mining terrains subsequently exist on the Vals River riparian where sand was mined without the necessary permits and need to be rehabilitated as a matter of urgency; especially in view of the unsafe nature of the sites.</li> </ul>

### C: AGRICULTURAL AREAS

STATUS QUO	FUTURE SPATIAL FRAMEWORK
<b>Urban Agriculture</b>	
<p><b>F5 &amp; F6:</b> Substantial land parcels north of Kroonstad, being the hinterland to the urban area, are made available to tendering farmers for cultivation purposes and several small holdings (<b>F5</b>) rented to community members, securing income for the Municipality. Various formal smallholding and a vast number of small farms, occur adjacent the urban area (mostly to the southeast) namely:</p> <ul style="list-style-type: none"> <li>▪ The Meadows (28 smallholdings),</li> <li>▪ Vrischgewaagd (88 smallholdings),</li> <li>▪ Riverside (14 smallholdings),</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>F1, 2 &amp; 3:</b> Small farms and smallholdings, surrounding the urban area, have been included as smallholdings within the 'Urban Fringe', in the prepared Moqhaka Land Use Scheme that is in the process of being approved.</li> <li>▪ Land use control measures, as pertained in the LUS will be applicable to all these premises to ensure the sustainable utilisation thereof.</li> <li>▪ Illegal and undesired residential developments are occurring on smallholdings and must be prohibited as a matter of urgency.</li> </ul>

STATUS QUO	FUTURE SPATIAL FRAMEWORK
<ul style="list-style-type: none"> <li>▪ Kraalkop (33 smallholdings),</li> <li>▪ La Porte Vase (31 smallholdings)</li> <li>▪ Buitenzorg (6 smallholdings).</li> </ul>	
<b>Commonage</b>	
<p>A large number of inhabitants in Maokeng and Brentpark require commonage land for the purposes of small-scale farming or communal grazing. The Department of Land Affairs, in collaboration with the Department of Agriculture, granted funds for the acquisition of:</p> <ul style="list-style-type: none"> <li>▪ Subdivision 1 of the Farm Bospoort 558,</li> <li>▪ Subdivision 1 of the Farm Winningdale 200,</li> <li>▪ The Remainder of the Farm Riverdale 289 to the west of Maokeng.</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>F4:</b> The area to the west of Maokeng has been obtained by the Council for the purpose of small-scale farming and communal grazing; principally for the inhabitants of Maokeng.</li> <li>▪ The sheer extent of the commonage land necessitates a proper investigation to determine whether the land could be utilised more efficiently and to the benefit of the larger community.</li> <li>▪ Stray cattle plague almost all residential precincts and the implementation of a pound system, as a consequence, must be investigated, possibly with the assistance of relevant intuitions such as the SPCA / Veterinarian Services.</li> </ul>

<b>Agricultural Land Identified for Urban Development or Smallholdings</b>	
<p>Land parcels indicted in the table below are earmarked for inclusion within the Urban Fringe pertaining to this SDF and the LUS to ensure management thereof by the Municipality, according to land use control measures, also pertaining to the LUS. Exclusion of these land parcels from agricultural land is therefore evident.</p>	
<ul style="list-style-type: none"> <li>▪ The Farm Bloemspruit 975</li> <li>▪ The Farm Marksman 1024</li> <li>▪ The Farm Retreat 1770</li> <li>▪ The Farm Florida 868</li> <li>▪ The Farm Morris Rest 642</li> <li>▪ Subdivision 1 and Remainder of the Farm The Rest 1193</li> <li>▪ Subdivision 1 and Remainder of the Farm Bethel 657</li> </ul>	<ul style="list-style-type: none"> <li>▪ Subdivision 1 and Remainder of the Farm De Kroon 406</li> <li>▪ Subdivision 1 and Remainder of the Farm The Peak 2127</li> <li>▪ The Farm Buitenzorg 1901</li> <li>▪ The Farm Skibo 504</li> <li>▪ Subdivision 1 and Remainder of the Farm Buitenzorg 930</li> <li>▪ The Farm Berrie's Rust 1304</li> <li>▪ The Farm Jordaans Hoek 339</li> </ul>

**Agricultural Land Identified for Urban Development or Smallholdings**

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| <ul style="list-style-type: none"> <li>▪ The Farm Inverness 1628</li> <li>▪ The Farm Excelsior 1172</li> <li>▪ The Farm Mazelbroch 1578</li> <li>▪ Subdivision 1 and Remainder of the Farm Waterloo 1315</li> <li>▪ The Farm Versailles 1632</li> <li>▪ Subdivision 1 to 5 and Remainder of the Farm La Porte Vase 77</li> <li>▪ The Farm Beverley 1894</li> <li>▪ The Farm Lahai-Roi 2126</li> <li>▪ The Farm Stylte 2222</li> <li>▪ Subdivision 1 and Remainder of the Farm Turin 1912</li> <li>▪ Subdivision 1 and Remainder of the Farm Petrus Heuvel 1862</li> <li>▪ Remainder of the Farm De Kroon 406</li> <li>▪ Subdivision 2 to 5 and Remainder of the Farm Lusthof 707</li> <li>▪ Subdivision 1 of the Farm Half-Kroonsdrift 827</li> <li>▪ Remainder of the Farm Traffic 2162</li> <li>▪ Remainder of the Farm Ballast Gat 964</li> </ul> | <ul style="list-style-type: none"> <li>▪ The Farm Boville 373</li> <li>▪ The Farm Geluk 986</li> <li>▪ Subdivision 1 and the Remainder of the Farm The Rapids 1950</li> <li>▪ The Farm East Mead 2323</li> <li>▪ The Farm De Hoop 2276</li> <li>▪ The Farm Welverdiend 2275</li> <li>▪ Subdivision 1 of the Farm Meadowsweet 1616</li> <li>▪ Subdivision 1 to 3 and Remainder of the Farm Bloemhoek 1212</li> <li>▪ The Farm Ricardum 215</li> <li>▪ The Farm The Knoll 1782</li> <li>▪ The Farm Berries Rust 340</li> <li>▪ Subdivision 1 to 6 of the Farm Buitenzorg 553</li> <li>▪ The Farm Driehoek 1593</li> <li>▪ Subdivision 1 and Remainder of the Farm The Rest 1193</li> <li>▪ Remainder of the Farm Lusthof 707</li> <li>▪ The Farm Steenwerp 2150 and Steenwerp 1840</li> </ul> |
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**D: URBAN RELATED**

**Urban Fringe**

The “urban fringe” represents the outer limits or boundary for urban development. The proposed urban fringe should not be considered as an exact line but as a conceptual boundary to prevent further urban extension. The principle for identifying an urban fringe is primarily to discourage continuous urban sprawl and to promote integration and more compact towns and urban areas.

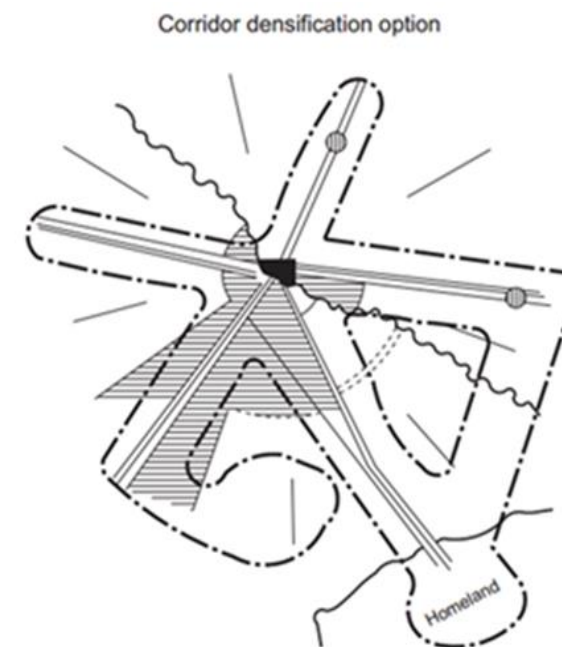
Substantial expansion of the Urban Fringe is not considered for the urban area; neither for short, nor for long term development purposes. The latter is a consequence of proactive planning by the Municipality and the timely attainment of land for long-term urban extension. Expansion of the Urban Fringe considered relating to several small farms and existing smallholding (F1, 2 & 3) surrounding the urban area, These land parcels have been

included as smallholdings within the 'Urban Fringe', similarly in the prepared Moqhaka Land Use Scheme, now in the process of being approved. Land use control measures, as pertained in the LUS will be applicable to all these premises to ensure the sustainable utilisation thereof. Illegal and undesired residential developments are occurring on smallholdings and must be prohibited as a matter of urgency.

### Densification and Corridor Development

Incessant attempts to address infill planning of land between the residential precincts of Maokeng, Brentpark and Kroonstad resulted in urban area being fairly integrated with limited opportunities for infill planning. Restricted land parcels, mostly privately owned, may be available for this purpose. In addressing a more sustainable urban form, densification; especially through higher residential densities and mixed used developments, associated with significant transportation arterials, remains a viable alternative in the larger urban area.

The tendency towards continuing decentralisation of workplace locations is complicating the creation of "compact cities". Although compaction may be achievable as a means of increasing density, it is suggested that the predominant pattern in South Africa should be the "corridor city". Strategies need to be identified to attract decentralising activities toward existing public transport corridors (CSIR, 2000: *Human Settlement Planning and Design, "Red Book"* also the source of the ensuing figure: "corridor densification option"). Urban density is deemed significant in view of the following:



- Densification is deemed a development objective to pursue a more compact and viable urban form, thereby facilitating medium to higher densities by means of infill development and densification".
- Predominantly low densification has taken place in Kroonstad implying possibilities for growth through, amongst other, densification.
- Densification is generally feasible on existing properties and new developments and may well be accompanied by an increased number of units and/or population thresholds, as outline in the Moqhaka Land Use Scheme.
- Residential development in Kroonstad must be prioritised with the focus on densification and infill development rather than expansion.

### Densification and Corridor Development

Rapid neighbourhood expansion of the Maokeng precinct the past 15 years, with resultant urban sprawl westward, must be intercepted through the implementation of an urban fringe up to the gravel road to Bothaville (S183). In attaining further densification, through the identification of corridor bands, the following streets have been identified.

- The formal Smaldeel Road, stretching from the Viljoenskroon road, through Maokeng,
- Piet de Vries Avenue, extending through Marabastad,
- A main access road into Maokeng, from Piet de Vries traffic circle into Seeisoville,
- The link road between Maokeng and Brentpark,
- 11<sup>th</sup> Avenue via the industrial area to Brentpark.

The northern trajectory of Noordweg is naturally developing as a development corridor, as it serves as a main access road from Viljoenskroon and Parys into the Kroonstad CBD, and due to the limited expansion possibilities within the existing CBD. The corridor is earmarked for business related development and probably mixed and higher density residential options. The CBD is similarly extending in a linear manner adjacent Reitz Street, as the main access road into Kroonstad, from the N1 National Road.

**Table 13**

**Summary of Current Housing Tendencies: Kroonstad / Maokeng / Brentpark Urban Area**

(Source: Local Municipality, 2017)

<u>Residential Area</u>	<u>Erven</u>			<u>Erf &amp; Land Requirements (Determined By Council)</u>
	<u>Residential Erven Occupied</u>	<u>Residential Erven Unoccupied</u>	<u>Total Residential Erven</u>	
Kroonstad	3 890	941	4 831	-
Maokeng	16 166	4 969	21 135	-
Marabastad	1 284		1 284	-
Brentpark	883	314	1 197	-
<b>SUBTOTAL</b>	<b>22 223</b>	<b>6 224</b>	<b>28 447</b>	-

STATUS QUO	FUTURE SPATIAL FRAMEWORK
<b>Residential</b>	
<p><b>Maokeng</b> Extensive development occurred specifically in Maokeng and nearly 10 000 new residential erven were developed since 1990. Recent precincts (i) between Maokeng and Brentpark, (ii) on land surrounding the Boitumelo Hospital up to the Viljoenskroon Road and (iii) between the Viljoenskroon Road and the exiting Maokeng precinct, are all unoccupied.</p> <p>The Marabastad neighbourhood was recently formalised, re-planned through applying re-blocking techniques and 1 284 residential sites (some of which were already occupied), were established.</p> <p><b>Brentpark</b> <b>R1 (Infill Planning):</b> Development of Brentpark gradually increased the past few years, but not as rapid as in Maokeng. A need was expressed by the specific community to provide additional residential erven in Brentpark and land between Maokeng and Brentpark was planned for this purposes, also integrating the two communities.</p> <p><b>Kroonstad</b> <b>R6, 7, 8 &amp; 9:</b> Several erven in the most recent extensions of Kroonstad, Jordania and Elandia, are unoccupied (approximately 940 erven). The erven are not provided with infrastructure services.</p>	<ul style="list-style-type: none"> <li>▪ <b>R1:</b> Further long-term development of medium density residential erven adjacent Brentpark; although physical restrictions may impact on the future urban layout.</li> <li>▪ The proposed extension will necessitate the relocation of the existing Landfill Site (refer to <b>D</b>, Landfill Sites in an ensuing section).</li> <li>▪ <b>R2:</b> Long-term high density residential extension of the Maokeng precinct towards the Viljoenskroon Road.</li> <li>▪ <b>R3: (Infill Planning):</b> Erven 14242 &amp; 10790, initially intended for a power line servitude, are available for limited infill planning; especially as the entire servitude is not required for future electricity provision.</li> <li>▪ <b>☒:</b> The most recent extension of Maokeng, earmarked several and well located erven, all on major collector roads, for the provision of inclusionary housing (erven 31415, 31255, 32063, 32675, 33609, 33696)<sup>1</sup></li> <li>▪ <b>R4 &amp; ☒ (Infill Planning):</b> The small farm, Morgenzon 2337, initially required by the Roads Directorate, has, on their request, been transferred to the Municipality and is available for infill planning. Considering the ideal location of the property, a mixed use development and for inclusionary housing, with restricted commercial opportunities should ideally be established.</li> </ul>

<sup>1</sup> The Moqhaka Lund Use Scheme defines inclusionary housing as a mixed housing development, comprising different affordable housing typologies with diverse densities that may be rental units or privately owned, accessible to public transport and related social amenities and may include RDP and GAP housing, semi-detached and or row housing, dwelling houses and the like to the satisfaction of the Municipality.



STATUS QUO	FUTURE SPATIAL FRAMEWORK
<p><b>Informal Settlements</b></p> <p>Unofficial housing settlements on council owned smallholdings are causing alarming concern, since current tenants are illegally and against contract conditions, establishing undesired residential developments.</p> <p>These settlements will cause particular difficulties, since these areas are earmarked for medium and long-term residential extension of Maokeng. It follows naturally that health and building regulations are not adhered to in respect of these developments.</p> <p>Apart from the above, there are neither informal settlements, nor areas identified for <i>in situ</i> upgrading in the larger urban area. A phenomenon ascribed to the continuous efforts by the Municipality to address the housing needs of the community. Although not all serviced, the Municipality comprises a substantial stock in residential erven to address future housing demands.</p> <div data-bbox="203 1042 1102 1241" style="border: 1px solid black; padding: 5px; margin-top: 20px;"> <p>DRDLR <i>Development Potential in Urban Settlements Report (2014)</i> assessment:</p> <ul style="list-style-type: none"> <li>▪ Urban Growth Potential - High</li> <li>▪ Economic Potential - High</li> </ul> </div>	<ul style="list-style-type: none"> <li>▪ <b>R5:</b> A settlement, generally referred to as the Naledi Trust area, occurred on the Farm Steenwerp 2150. The future formalisation thereof is deemed important. Limited extension of the settlement is possible.</li> <li>▪ <b>R6, 7 &amp; 8 (Densification):</b> The low-density residential areas of Kroonstad, Elandia (R6), Heuwelsig (R7) and Tuinhof (R8), located to the north-east of the existing urban area, comprise adequate but un-serviced erven for long-term extension.</li> <li>▪ <b>☒:</b> Infill planning: especially related to higher density residential developed is deemed feasible the vast premise of the former convent premises (erf 7521) in the Jordania precinct. Although privately owned, subdivision thereof will offer ideal prospects for the optimal utilisation of “lost urban space”.</li> <li>▪ <b>R9 (Densification):</b> Long-term, low- and medium-density residential extension to the north of Heuwelsig and Tuinhof neighbourhoods.</li> <li>▪ These areas are ideal for re-planning in offering more dense residential neighbourhoods, comprising smaller erven and a more diverse mix in housing typologies; also providing options for inclusionary housing.</li> <li>▪ <b>R10 (Densification):</b> Open land adjacent Van der Lingen Street and the Kroonpark Holiday Resort may be considered for high cost residential developments, ideally located for densification purposes.</li> <li>▪ <b>R11/S7 (Infill):</b> Possibilities exist to redesign the existing golf course and, in doing so, provide a high cost residential estate, including an open portion of council land to the south east of the golf course.</li> </ul>

STATUS QUO	FUTURE SPATIAL FRAMEWORK
	<ul style="list-style-type: none"> <li>▪ <b>R12 (Low Density Infill):</b> Provision for high cost residential extension, although privately owned land, could be considered to the south of the existing Suidrand precinct. Development in the area will be subject to detail bulk services investigations.</li> <li>▪ <b>I3:</b> Although not finalised, land located in the industrial area, currently owned by Transnet, was granted to the municipality and development proposals were made by the Housing Development Agency, who oversees development of the specific area.</li> <li>▪ <b>Δ4/I2:</b> Incessant residential development towards 11<sup>th</sup> Avenue (main access to Brentpark/ <i>Kroondustría</i>) may result in the remaining industrial erven (6298 – 6303) continuously being converted into mixed use development i.e. service industrial development, commercial and high density residential developments.</li> </ul>
<b>Central Business District</b>	
<p><b>Kroonstad</b></p> <p>Kroonstad comprises a well-defined CBD consisting of 234 businesses. The Vals River (south) and the railway line (north) impede on extension of the CBD. Consequently the CBD is extending:</p> <ul style="list-style-type: none"> <li>▪ linear along Reitz Street as a main access road to Kroonstad from the N1 National Road. The area is presently characterised by a mixed use appeal.</li> <li>▪ linear adjacent to Noordweg up to the Checker Centre business node (Δ6). The southern trajectory of Noordweg naturally developed as development corridor, as it serves as a main access road from Viljoenskroon and Parys. The area is presently characterised by a mixed use appeal.</li> </ul>	<p>Due to the limited extension possibilities of the CBD, future extension will naturally occur along Reitz Street and Noordweg as main access roads to Kroonstad.</p> <p><b>B 1, 2 &amp; 3:</b> Three prominent refuelling stations are provided adjacent the N1, respectively to the north and south of the urban area, namely:</p> <ul style="list-style-type: none"> <li>▪ B1: Existing Shell Ultra City and,</li> <li>▪ B2: Proposed for extension of Shell Ultra City (motor show room).</li> <li>▪ B3: Existing property earmarked for a refuelling station (not yet developed).</li> </ul>

STATUS QUO	FUTURE SPATIAL FRAMEWORK
<ul style="list-style-type: none"> <li>- although the northern trajectory will remain residential, residential densification options and mixed residential land uses are deemed feasible adjacent this trajectory of the corridor.</li> <li>- areas further south, between the Checkers Centre (Δ6) and the railway line (delineating the existing CBD) should be deemed extremely valuable land aiming to accommodate business and mixed, higher density residential land uses (including park erf 1/1402).</li> </ul> <p>The two well-placed neighbourhood centres, the Checkers Centre (Δ6) to the north and Panorama Plaza (Δ7) to the south must remain as neighbourhood centres , not exceeding 8 000 m<sup>2</sup>.</p> <p><b>Maokeng and Brentpark</b></p> <p>Provision was made in Maokeng for an accessible and centrally situated business centre, and is envisaged to develop shortly. Apart from proposed Δ5 and 11 premises earmarked for businesses, in the form of neighbourhood shops, additional nodes have not been identified in Brentpark.</p>	<ul style="list-style-type: none"> <li>▪ <b>Δ8:</b> Long-term development of the Heuwelsig, Tuinhof and Jordania precincts will enhance business development in the area and the establishment of a neighbourhood centre is highly likely in future.</li> <li>▪ <b>Δ9:</b> Commercial/ high and mixed density residential development node.</li> <li>▪ <b>S10:</b> The open area between the Vals River and the CBD, to the west of the CBD, has been identified to be developed as a formal public open space with limited developable portions thereof for business purposes.</li> <li>▪ <b>Δ1:</b> The identified and centrally located business node in Maokeng has adequate capacity for long-term business development.</li> <li>▪ <b>Δ5:</b> It is proposed that provision is made for a business node at Brentpark with the envisaged development of the area between Brentpark and the Phomolong residential area.</li> <li>▪ <b>Δ2 - Δ5:</b> Various other business nodes, varying in size and nature, although not yet developed, have been identified</li> <li>▪ <b>Δ9:</b> The former Kroonstad High School sport ground (erf 5873) was neither maintained nor utilised since the relocation of the school. Although State owned, the premises is exceedingly well-located and visible from the N1. It is deemed a typical example of lost urban space and must be considered for appropriate redevelopment.</li> <li>▪ Direct access thereto from the N1 will, however, not be granted by SANRAL.</li> </ul>

STATUS QUO	FUTURE SPATIAL FRAMEWORK
<p><b>Kroonstad CBD and related Corridors</b></p> <p>It must be accepted that the extension of the Kroonstad CBD, as it exists presently, comprises limited space for expansion due to its locality in relation to the Vals River and the railway grounds (station and tracks). This exerts pressure on the Reitz Street and Noordweg corridors to systematically develop as an elongated extension of the CBD in an eastern and northern direction respectively. The phenomenon is deemed an irreversible urban dynamic, requiring a response to permit, control or prevent its development.</p> <p>Functioning as one of the most important accesses to the Kroonstad CBD, Reitz Street provides direct access to the CBD and the light industrial area of Kroonstad off the N1. From a more holistic perspective, it also connects the heavy industrial area, Brentpark and Maokeng with the national bypass road, thereby cementing this street’s importance as primary access. This gives rise to so-called corridor or lint development. Corridor development, or activity axes development, is a modern, generally-accepted urban design principle. The identification of Reitz Street as a typical corridor is an important stimulus that will support urban development.</p> <p>As previously outlined, the southern trajectory of Noordweg naturally evolved as a development corridor and serves as main access into the Kroonstad CBD, from Viljoenskroon and Parys. The area is presently characterised by a mixed use appeal.</p> <ul style="list-style-type: none"> <li>▪ Although the northern trajectory will remain residential, residential densification options and mixed residential land uses are deemed feasible adjacent this trajectory of the corridor.</li> <li>▪ Areas further south, between the Checkers Centre (Δ6) and the railway line (delineating the existing CBD) should be deemed extremely valuable land, earmarked to accommodate business and mixed, higher density residential land uses.</li> </ul>	
<p><b>Commuting Nodes</b></p>	
<p>The only taxi terminus in Kroonstad is situated south of the railway station, on the northern extreme of the CBD and accommodates both short and long distances commuters. The site is optimally used and functioning beyond capacity.</p>	<ul style="list-style-type: none"> <li>▪ It is suggested that the Municipality urgently considers an Integrated Transport Plan (ITP), prepared in consultation with role-players, to holistically address, amongst other, commuter needs in the urban area.</li> <li>▪ <b>T1:</b> Upgrading of the taxi terminus in Kroonstad (Selborne Square) has been identified as an urgent priority for several years – an alternative and suitably located node could be explored.</li> </ul>

STATUS QUO	FUTURE SPATIAL FRAMEWORK
<p>Apart from distributed and often not well-planned embarking and disembarking points at nodes of significance, no other formal commuting nodes exist in Kroonstad, Maokeng or Brentpark.</p> <p>An informal embarking point exists opposite the Boitumelo Regional Hospital constituting continuous pedestrian/ traffic conflicts. A more suitable location is therefore proposed at T2 (erven since planned and pegged), in relation to the envisaged future main entrance to the hospital premises</p>	<ul style="list-style-type: none"> <li>▪ Apart from several smaller taxi nodes in Maokeng, well-planned (traffic safety and exposure) sheltered embarking points and the provision of taxi bays for the safe embarking of taxis along collector roads are considered imminent priorities.</li> <li>▪ <b>T2:</b> A well located and substantial taxi terminus (or sub terminus) premises is identified and provided opposite the Boitumelo Regional Hospital (erf 30804).</li> <li>▪ <b>T3:</b> Upgrading and/ or more suitable arrangements should be made to better accommodate the current informal node at the Checkers Centre.</li> </ul>
<b>Urban Open Spaces</b>	
<p>Apart from maintenance not adequately being done, Kroonstad has sufficient and well-developed sport and recreation facilities and has various developed parks such as:</p> <ul style="list-style-type: none"> <li>▪ <b>S3:</b> Loubser Park and adjacent Show Grounds</li> <li>▪ <b>S2:</b> The Seeisoville sport terrain has recently been developed to the level of a well-developed neighbourhood sport stadium.</li> <li>▪ <b>S6:</b> Former rugby fields must remain as sport grounds</li> <li>▪ <b>S7:</b> Golf Course</li> <li>▪ <b>S8:</b> Correctional Services Golf Course</li> <li>▪ <b>S9:</b> Jukskei Park (privately owned)</li> <li>▪ <b>S13:</b> “Fanie se Gat”</li> <li>▪ <b>S15:</b> Serfontein Dam water ski resort</li> <li>▪ <b>S16:</b> Boemhoek Dam riparian</li> </ul>	<ul style="list-style-type: none"> <li>▪ Current and old excavated areas do not represent functional open spaces, unless properly rehabilitated and landscaped.</li> <li>▪ Lost urban space and brownfields, not being core, buffer or functional open spaces, could be utilised for infill planning purposes.</li> <li>▪ The identification of desirable parks in Maokeng is necessary to be developed for sport and recreational purposes (informal soccer parks).</li> <li>▪ <b>S1:</b> A centrally accessible sport terrain was provided in Maokeng that should continually be developed.</li> <li>▪ <b>S3:</b> The Loubser Park stadium needs to be upgraded as a regional athletics stadium.</li> <li>▪ <b>S4:</b> The Nyakallong Resort is in a dilapidated state and urgent upgrading thereof is required to prevent it from becoming a ruin.</li> <li>▪ <b>S5:</b> The Brentpark sports ground, although initially well-developed, needs urgent upgrading to prevent further deterioration thereof.</li> </ul>

STATUS QUO	FUTURE SPATIAL FRAMEWORK
<p><b>S1:</b> A centrally accessible sport terrain was provided in Maokeng that, apart from a recently established astro turf soccer field, is not developed.</p> <p>The Nyakallong Resort (<b>S4</b>) is generally in a dilapidated state and urgent upgrading thereof is required to prevent it from becoming derelict.</p> <p>Various formal and functional open spaces are provided; especially in the more recent extensions in Maokeng, adhering to the CSIR’s <i>Guidelines for the Provision of Social Facilities in South African Settlements First Edition (August 2012)</i>, but are mostly undeveloped and unsatisfactory maintained.</p>	<ul style="list-style-type: none"> <li>▪ <b>S7:</b> Possibilities exist to develop and upgrade the golf course and to provide housing in the area to establish a high cost residential estate.</li> <li>▪ <b>S10:</b> The open area between the Vals River and the CBD, to the west of the CBD, has been identified to be developed as a formal public open space with limited developable portions thereof for business purposes. This area renders ideal opportunity to be developed with day visiting and other recreation facilities to provide additional public access to the riverfront.</li> <li>▪ <b>S11:</b> Further upgrading and development of the “Noord Oewer” park is considered as a priority. Portions thereof are at present utilised for the purpose of a “wildlife sanctuary”.</li> <li>▪ Proper management of the riparian must be implemented to intercept misuse and pollution of the area, being a principal source of raw water to the urban area.</li> <li>▪ <b>S12:</b> A prominent vlei area, stretching between the Seeisoville and Marabastad precincts, was partially rehabilitated. Although partial rehabilitation efforts occurred, completion thereof is essential; especially considering flooding and the safety of pedestrians in the area.</li> <li>▪ <b>S14:</b> Possibilities exist to establish mixed residential opportunities, restricted business and institutional land uses and a water bird sanctuary adjacent to the Vals River, subject to the 1:100 year floodline, on the Strydom Dam riparian.</li> <li>▪ <b>S15:</b> The implementation of appropriate development control at the Serfontein Dam water ski resort, amongst other, allowing for access to the general public, must timely be addressed.</li> </ul>

STATUS QUO	FUTURE SPATIAL FRAMEWORK
	<ul style="list-style-type: none"> <li>▪ <b>S16:</b> Proper management of the Boemhoek Dam riparian must be implemented to intercept misuse and pollution of the area, being a principal source of raw water to the urban area.</li> </ul>
<p><i>Continuous subdivision of functional and formal open spaces to accommodate social amenities and business land uses must be prohibited. Several smaller functional open spaces in, are not developed and proposed for cleaning, leveling and gravel surfacing to establish informal sports areas. Reluctance in the development of functional open spaces result in these premises becoming derelict and problematic for the surrounding community, often illegally dumping refuse on the premises and setting fire thereto.</i></p>	
<p><b>Public Open Spaces</b></p> <ul style="list-style-type: none"> <li>▪ Continuous subdivision of functional and formal open spaces to accommodate social amenities and business land uses must be prohibited.</li> <li>▪ A policy relating to numerous applications by faith base institutions is required, ensuring that development of properties occur within a realistic timeframe, and in failing to do so, land must revert back to the Municipality.</li> <li>▪ In supporting the above, several smaller functional open spaces in all urban areas, are not developed and are proposed for leveling and gravel surfacing to establish informal sports areas. Reluctance in the provision of functional open spaces result in these premises becoming derelict and problematic for the surrounding community, often illegally dumping refuse on the premises and setting fire thereto.</li> <li>▪ Provision of open spaces should be maintained according to CSIR Guidelines for the Provision of Social Facilities in South African Settlements – Medium Towns (First Edition: August 2012).</li> <li>▪ Total provision of functional and formal open spaces has to be at least 0.5 ha/1 000 people, 40 % of this allocation is for strategic (regional) and district facilities and 60 % for community, urban and neighbourhood parks, play lots, etc.</li> </ul>	
<p><b>Resorts and Tourism</b></p> <p>The area is not considered as a primary tourist destination, although it is increasingly becoming a favourite weekend destination. The hunting and guesthouse industries displayed an exceedingly rapid growth the past few years. Recreation areas and facilities are predominantly confined to the urban areas. The Kroonpark, Jukskeipark and Serfontein Dam water-ski (to a lesser extent) recreation and holiday resorts in Kroonstad attract interest throughout the region.</p> <ul style="list-style-type: none"> <li>▪ A total of nine provincial and national ‘jukskei’ tournaments are envisaged to take place in Jukskei Park, the national convergence of ‘jukskei’ in South Africa.</li> <li>▪ Revitalisation of the Kroonpark Holiday Resort, as a favoured inland resort, is deemed necessary to enhance its economic vitality.</li> </ul>	

STATUS QUO	FUTURE SPATIAL FRAMEWORK
<ul style="list-style-type: none"> <li>▪ Although the larger segment of the Vredefort Dome World Heritage Site (VDWHS) is located within the Moqhaka Municipality, full advantage thereof is not taken. The economic advantage the area holds, is yet to be exploited by the Municipality.</li> </ul> <p><b>Heritage Considerations</b></p> <p>The Free State Province played a significant role in the Anglo Boer War, resulting in a number of historically important tourist attractions. The Koppies area, for example, is becoming well known for various battlefields that are visited as tourist attractions (Battlefield Tourist Route). These tourist attractions of historical importance include, among other:</p> <ul style="list-style-type: none"> <li>▪ Reverent Mahabane House <sup>2</sup> in Marabastad (Kroonstad), being a National Heritage Site.</li> <li>▪ Conservation of the area below Strydom Dam is additionally evident as archaeological findings (artefacts) are present at this location.</li> <li>▪ Kroonstad Concentration Camp Cemetery</li> <li>▪ Kroonstad Heroes Acre</li> <li>▪ Sarel Cillier’s Farm</li> </ul> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p><i>All known heritage sites in the Moqhaka Region should be documented and listed in a Municipal Heritage Register for submission to the Provincial Heritage Resources Authorities. This is a listing of the heritage resources in the Moqhaka Municipality that are considered to be conservation-worthy in terms of the heritage assessment criteria set out in Section 3(3) of the National Heritage Resources Act.</i></p> </div> <p><b>Vals River</b></p> <p>Due to the significant role the Vals River fulfils in the region, in providing potable water, everything possible must be done to restrict the pollution of these sources to the minimum. Riparian areas must be protected against injudicious use on account of their ecological aesthetic or recreational value taking amongst other, cognisance of:</p>	

<sup>2</sup> “Teacher, court interpreter, minister and first President-General of the ANC, Mahabane was described as a diplomatic, slow-speaking and calm man, who combined politics and Christian ethics to fight racism. He was keen to unite all blacks into one firm and positive political front. Through the ANC he constantly tried to educate Africans about their rights and made frequent representations against the colour bar. Mahabane lived and worked in Kroonstad for most of his long career.” (New Dictionary of South African Biography, 1995).



STATUS QUO	FUTURE SPATIAL FRAMEWORK
<ul style="list-style-type: none"> <li>▪ <i>Leisure Residential and Resort Developments</i> according to Free State Province, Department of COGTA's <i>Development of Rural and Peri-Urban Areas Guidelines</i> (2006),</li> <li>▪ The Free State Province Biodiversity Plan (2015)</li> <li>▪ Implementation of the Strategic Objectives and Management Zones of the Vredefort Dome World Heritage Site EMF and the Moqhaka EMF <sup>3</sup></li> <li>▪ All development application have to be assessed in terms of the management zones proposed in the Moqhaka EMF.</li> </ul>	
<b>Cemeteries</b>	
<p>Adequate provision was made for future extensions of the existing cemeteries of Kroonstad, Wespark (C1) and Maokeng (C2) for the ensuing ten years. The cemetery in Brentpark (C3) is, however, completely occupied.</p> <p>Various older cemeteries are situated in the urban area, generally in a derelict condition and maintenance thereof is urgently required.</p> <ul style="list-style-type: none"> <li>▪ <b>C6:</b> Seeisoville Cemetery</li> <li>▪ <b>C7:</b> Boighsong Cemetery</li> <li>▪ <b>C8:</b> "Old Maokeng Cemetery" located on Transnet property</li> <li>▪ <b>C9:</b> Stilfontein Cemetery</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>C1:</b> Adequate provision was made for the long-term extensions of the Kroonstad Cemetery.</li> <li>▪ Continuous maintenance and protection against vandalism of the Heroes Acre (<b>C4</b>) and Concentration Camp Cemetery (<b>C5</b>), being heritage resources of significance, is a key priority.</li> <li>▪ <b>C6:</b> An area, not subject to the 1:100 year flood line, was identified adjacent the existing Brentpark sports terrain for the possible extension of the Brentpark cemetery</li> <li>▪ <b>C2:</b> Continuous extension of the Maokeng cemetery should be preceded by a proper Geotechnical Report.</li> <li>▪ Continuous maintenance and protection against vandalism of unused cemeteries should be considered as a key priority.</li> <li>▪ The provision of ablution facilities and fencing of cemeteries is urgently required.</li> </ul>
<b>Other Social Amenities</b>	

<sup>3</sup> **VDWHS Environmental Management Framework & Moqhaka Environmental Management Framework 2013** (Source: Department of Environmental Affairs). The VDWHS is located within the North-West and Free State Provinces and falls under the jurisdiction of the Dr. Kenneth Kaunda District and Tlokwe Local Municipalities in the North-West Province and the Fezile Dabi District and Moqhaka and Ngwathe Local Municipalities in the Free State Province.

STATUS QUO	FUTURE SPATIAL FRAMEWORK
<p>(Refer to figure 10)</p> <p>Social amenities have, in the past, mostly been provided according to guidelines, gradually developed by the CSIR. However, older areas are mostly and often typical of under provision. More recently planned areas should reflect guidelines and standard provided by the CSIR, lately culminating in the <i>Guidelines for the Provision of Social Facilities in South African Settlements First Edition (August 2012)</i>.</p> <ul style="list-style-type: none"> <li>▪ Current demands; especially relating to faith based organisations, resulted in a dramatic increase in land parcels for this land use, above and beyond what is specified in the guidelines.</li> </ul> <p>Despite the required provision, demands seems to be ever increasing with a much higher need than what is provided. In order to intercept this need, formal open spaces and other social amenities even are being subdivided, thereby negating the ideal provision of social amenities – a practice that is deemed undesirable and not contributing to sustainable human settlements.</p>	<ul style="list-style-type: none"> <li>▪ A policy/ bylaw is timely required: <ul style="list-style-type: none"> <li>- whereby the continuing subdivision of valuable land earmarked for other social amenities should be prohibited,</li> <li>- to guide and assist faith based organisations in terms of requirements that need to be adhered to when applying for, and once a site has been obtained,</li> <li>- unceasingly protect the incremental use of public open space and other social amenity premises for faith based organisations.</li> </ul> </li> </ul>

*Sustainable human settlements are not achievable without adequate social facilities, differentiated according to varying development densities, community size, mobility levels and socio-economic disparity. The quality and capacity of facilities, in offering the right range of services for a specific community profile and operated by competent staff, together with good maintenance of the facilities, remain critical to the effective delivery of services.*

## E : INDUSTRIAL AREAS

STATUS QUO	FUTURE SPATIAL FRAMEWORK
<b>Industries</b>	
<p>The noxious industrial area, <i>Industria</i> (I1) and light industrial area <i>Kroonindustria</i> (I2) are situated to the north west of Kroonstad. A serious concern is the fact that the main access to the industrial area, from the major road network, is through the Kroonstad CBD resulting in dilapidated road surfaces in the CBD.</p> <p>The Gunhill industrial area is situated north of the Suidrand neighbourhood and is mainly utilised as a petroleum substance depot (I4). Concerns have been raised that fuel tankers, piling up in an event to be refuelled, present a pertinent risk and are also conducive to the current dilapidated road surfaces in the area.</p>	<ul style="list-style-type: none"> <li>▪ <b>I1:</b> The <i>Industria</i> industrial area has several vacant sites and further extension thereof is not foreseen.</li> <li>▪ The former electrical power station, located within the <i>Industria</i> industrial area, is in the process of being commissioned, mainly as a result of private initiatives, with emphasis on a “bio fuel generator” rather than traditionally used coal.</li> <li>▪ <b>Δ4/I2:</b> Incessant residential development towards 11<sup>th</sup> Avenue (main access to Brentpark/ <i>Kroonindustria</i>) may result in the remaining industrial erven (6298 – 6303) continuously being converted into mixed use development i.e. service industrial development, commercial and high density residential developments.</li> <li>▪ <b>I3:</b> Vast portions of open land (Transnet properties) are also available in the industrial area, should a development need arise. The latter is in alignment with Transnet’s policy to alienate land not in use.</li> <li>▪ Although not finalised, land located in the industrial area, currently owned by Transnet, was granted to the municipality and development proposals were made by the Housing Development Agency, who oversees development of the specific area.</li> <li>▪ Proposed upgrading and extension of the current <i>Transnet Goods Shed</i> (if commencing) will also occupy large portions of land.</li> <li>▪ <b>I5:</b> The possibility exists to establish an “Industrial Park” adjacent the N1, north of the existing urban area, if comprehensive investigations in this regard, prove it to be viable.</li> </ul>

STATUS QUO	FUTURE SPATIAL FRAMEWORK
<b>Extractive Industries (Mining)</b>	
<p>Diamond deposits are present in the vicinity of Kroonstad and have previously been mined at the Lace and Voorspoed diamond mines. <i>De Beers</i> commenced with the redevelopment of the two mining areas and exploitation is currently underway (refer to Rural Spatial Framework Plan).</p> <ul style="list-style-type: none"> <li>▪ Current estimates see <i>De Beers</i> mining operations to be ceased in the near future, with opportunities to further exploit the Voorspoed mine, most likely by a different mining company.</li> <li>▪ Gravel is also exploited throughout the area.</li> <li>▪ Limited sand winning (some of which are illegal) further occurs adjacent the Vals River.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Gravel and sand exploitation and the rehabilitation of mining terrains must be preceded by permits (by virtue of the Mineral and Petroleum Resources Development Act, Act 28 of 2002).</li> <li>▪ <b>G8:</b> Various illegal activities adjacent to the Vals River should be seized as a matter of urgency; especially in view of the detrimental effect of unorganised and uncontrolled activities on the environment</li> <li>▪ Several sand winning mining terrains are present on the Vals River riparian (<b>G1-G3</b>) while gravel quarrying pits are distributed throughout the urban area (<b>G4-G7</b>).</li> <li>▪ <b>G8:</b> Two sand winning mining terrains subsequently exist on the Vals River riparian where sand was mined without the necessary permits and need to be rehabilitated as a matter of urgency; especially in view of the unsafe nature of the sites.</li> </ul>

**F : SURFACE INFRASTRUCTURE & BUILDINGS**

STATUS QUO	FUTURE SPATIAL FRAMEWORK
<b>Airfields</b>	
<p>The Kroonstad airfield is perhaps the most ideal for upgrading and presently comprises of a well maintained runway with additional grass covered runways. Its location is ideal in close proximity and with a direct access to the N1 National Road.</p> <p>Ample suitable land is also available for future extension. The airfield presently supports the agricultural orientated industries of the Greater Kroonstad. However, the airfield has recently been leased to a private</p>	<ul style="list-style-type: none"> <li>▪ The Kroonstad airfield may well purposefully be upgraded and extended to further support the agricultural orientated industries in Kroonstad.</li> </ul> <p><b>National air freight hub and dry harbour facility (Kroonstad Airfield)</b></p> <ul style="list-style-type: none"> <li>▪ The Kroonstad airfield is ideally located for upgrading to a national air freight hub and dry harbour facility. Its location is ideal in close proximity and with a direct access to the N1 National Road.</li> </ul>

STATUS QUO	FUTURE SPATIAL FRAMEWORK
<p>company with no capacity to upgrade the existing runway. It is apparent that the lease agreement will have to be revisited in order to resolve the issue of maintaining existing infrastructure.</p>	<ul style="list-style-type: none"> <li>▪ Although the airfield presently supports the agricultural orientated industries of the region, the potential thereof as a national air freight hub should not be overlooked.</li> <li>▪ If maintenance of the airfield is not addressed as a matter of urgency, exceedingly valuable infrastructure will become dilapidated and the risk arises to forfeit its license to operate as a Civil Aviation approved airfield. The detrimental effect of the latter is evident.</li> </ul>
<p><b>Railway Lines and Stations</b></p>	
<p>The main railway line between Bloemfontein and the Gauteng Province stretches through Kroonstad. The railway line to Bethlehem also intersects with the above railway line in Kroonstad.</p> <p>The Kroonstad station is situated in the centre of the urban area. The predominant role that railway transportation plays in the urban context, are further confirmed by vast open areas of land presently owned by Transnet. These properties are distributed through the entire urban area and Transnet previously indicated their willingness to alienate certain portions of land for normal urban development.</p>	<ul style="list-style-type: none"> <li>▪ The Kroonstad railway junction is a strategic node in the Spoornet rail system and will continue to play an important role in this regard. However, the dilapidated condition of the old station in Kroonstad is a matter of grave concern, notwithstanding gross negligence of a heritage site worth conserving.</li> </ul>
<p><b>Landfill Sites</b></p>	
<p>Expansion of the current regional landfill site, west of Brentpark must not be contemplated. Due to continuous complaints and concerns raised by the surrounding public and the current unsatisfactory health and environmental conditions (mainly due to ill-maintenance), relocation of the site has become a priority and general consent was reached that a more suitable regional landfill site should preferably be identified.</p>	<ul style="list-style-type: none"> <li>▪ <b>D:</b> The current regional landfill site has reached capacity and investigations should timely commence in identifying a site, not located within/ close to residential precincts, meeting all legal requirements and with capacity to serve the greater urban area in the longer term.</li> </ul>

STATUS QUO	FUTURE SPATIAL FRAMEWORK
	<ul style="list-style-type: none"> <li>▪ Maintenance, clean up, save closure and rehabilitation of the existing site is deemed a priority and promptly required; especially in view of increasing pollution and incessant illegal dumping on its periphery.</li> <li>▪ <i>The possibility of establishing well located transfer stations to the Kroonstad refuse dumping site (for example in Viljoenskroon, Renovaal, Steynsrus and Vierfontein) could be investigated as a long-term waste management solution in the Moqhaka Region.</i></li> </ul>
<b>Engineering Services</b>	

**Table 8**  
**Bulk Services Provision Kroonstad / Maokeng / Brentpark Urban Area**  
 (Source Moqhaka Municipality, 2017)

<b><u>Water Purification</u></b>
<ul style="list-style-type: none"> <li>▪ Raw water supply: water is pumped from the Vals River to Bloemhoek Dam, requires upgrading (will not be able to provide future demand)</li> <li>▪ Adequate purification capacity (2020)</li> <li>▪ Will require additional reservoir capacity</li> <li>▪ New bulk water supply pipelines and pump stations will be required for future urban extensions</li> </ul>
<b><u>Waste Water Treatment Works</u></b>
<ul style="list-style-type: none"> <li>▪ Residential developed is not allowed within 500 m of a waste water treatment plant</li> <li>▪ Several Waste Water Treatment Works (WWTW) pump stations require upgrading</li> <li>▪ WWTW network requires upgrading</li> <li>▪ WWTW capacity will have to be increased to allow for new extensions</li> </ul>
<b><u>Electricity</u></b>
<ul style="list-style-type: none"> <li>▪ Eskom provides bulk for distribution by the Municipality to all precincts</li> <li>▪ Notified maximum demand from ESKOM is 60 MVA, current load is 55 MVA (winter)</li> <li>▪ Although bulk is available, remote developments may require bulk transfer lines</li> </ul>

## Infrastructure Services

All urban areas were analysed in an attempt to identify shortfalls in infrastructure service delivery and to identify areas for eradication of backlogs or upgrading of services, the following categories were thus applied:

- Areas in the process of establishment (green)
- Areas established, unoccupied, without services (red)
- Areas established, occupied, with rudimentary services (brown for sewer, that will imply buckets and blue for water, that would imply standpipes)
- Areas established, unoccupied, with services, partly or completely (yellow)

<u>Maokeng</u>	<u>Kroonstad</u>	<u>Brentpark</u>
<b><u>Infrastructure Service Provision:</u></b>		
<b><u>Water Network</u></b>		
<ul style="list-style-type: none"> <li>▪ Provided with water network</li> <li>▪ Extension 9: Established, partially occupied, serviced</li> <li>▪ Extension 10: Established, not occupied, no services</li> <li>▪ Extension 11: Established, not occupied, serviced</li> <li>▪ Extension 12: Established, not occupied, no services</li> <li>▪ Extension 13: Established, not occupied, no services</li> </ul>	<ul style="list-style-type: none"> <li>▪ Provided with water network</li> <li>▪ Tuinhof (Ext 71 &amp; Ext 75): Established, not occupied, no services</li> <li>▪ Elandia (Ext 64, 65 &amp; 66): Established, not occupied, no services</li> </ul>	<ul style="list-style-type: none"> <li>▪ Provided with water network</li> </ul>
<b><u>Sewer Network</u></b>		
<ul style="list-style-type: none"> <li>▪ Provided with sewer network</li> <li>▪ Extension 9: Established, partially occupied, serviced</li> <li>▪ Extension 10: Established, not occupied, no services</li> <li>▪ Extension 11: Established, not occupied, serviced</li> <li>▪ Extension 12: Established, not occupied, no services</li> <li>▪ Extension 13: Established, not occupied, no services</li> </ul>	<ul style="list-style-type: none"> <li>▪ Provided with sewer network</li> <li>▪ Tuinhof (Ext 71 &amp; Ext 75): Established, not occupied, no services</li> <li>▪ Elandia (Ext 64, 65 &amp; 66): Established, not occupied, no services</li> </ul>	<ul style="list-style-type: none"> <li>▪ Provided with sewer network</li> </ul>
<b><u>Electricity Network</u></b>		
<ul style="list-style-type: none"> <li>▪ Provided with electricity network</li> </ul>	<ul style="list-style-type: none"> <li>▪ Provided with electricity network</li> </ul>	<ul style="list-style-type: none"> <li>▪ Provided with electricity network</li> <li>▪ Municipality service provider</li> </ul>

<u>Maokeng</u>	<u>Kroonstad</u>	<u>Brentpark</u>
<ul style="list-style-type: none"> <li>▪ Extension 9: Established, partially occupied, partially serviced.</li> <li>▪ Extension 10: Established, not occupied, no services</li> <li>▪ Extension 11: Established, partially occupied, partially serviced</li> <li>▪ Extension 12: Established, not occupied, no services</li> <li>▪ Extension 13: Established, not occupied, no services</li> <li>▪ Municipality service provider</li> </ul>	<ul style="list-style-type: none"> <li>▪ Tuinhof (Ext 71 &amp; Ext 75): Established, not occupied, no services</li> <li>▪ Elandia (Ext 64, 65 &amp; 66): Established, not occupied, no services</li> <li>▪ Municipality service provider</li> </ul>	

### Regional Road Network and Future Access

#### Road Requirements

- **M6:** A future primary collector road will result in a direct link between the Welkom Road (M5) and the Viljoenskroon Road (M2) and in so doing, also increasing accessibility to the industrial zones in the Urban area, Maokeng and Brentpark. The nature of road should, however, not be on the scale of a bypass route but rather a main collector route.
- **M7:** The future northern bypass will provide a direct link between the N1 National Road (M1), the Parys Road (M3) and the Viljoenskroon Road (M2).
- **L1:** An additional link road to the Central Business District (CBD) is proposed across the Vals River in the long-term.
- **L2:** A link road is proposed as an extension of Brits Street to link with the Smaldeel Road.
- **L3:** A direct link road is proposed between Maokeng and the Industria industrial area.
- **L4:** The re-alignment of the eastern portion of the Smaldeel Road past Marabastad is a priority as it will provide an additional link between Maokeng, the industrial area and the CBD via Piet de Vries Avenue. Since the road carries substantial pedestrian and cycle traffic volumes, specific provisions should be made for safe movement once upgrading thereof be considered.
- The latter is pertinent due to the fact that the Noordweg subway is functioning on capacity, while no future upgrading possibilities thereof exist. The Piet de Vries Avenue subway is a double lane subway that can easily accommodate additional traffic.
- The road reserve of the proposed re-alignment of the Smaldeel Road past Marabastad (L4), has already been formalised during the township re-establishment and formulation of Marabastad.
- The construction of this road is deemed a priority, as it will significantly increase accessibility to the CBD and industrial areas from Maokeng.



- **M4:** The major provincial road between Kroonstad and Bethlehem (especially between Kroonstad and Steynsrus), of late, became exceedingly decrepit and resurfacing thereof is deemed an extreme priority.

#### **Access Requirements**

- The proposed primary collector road will improve accessibility by providing a direct access to Brentpark and the light industrial areas ( ) as well as a direct access to Maokeng and Boitumelo Hospital (H) that functions as a regional hospital (A6).
- Appropriate access will also be provided to the proposed new central sport terrain (S1).
- **A7:** With the completion of the Maokeng inner-ring road, an additional access to Maokeng will be obtained from the Viljoenskroon Road (M2).

## STEYNSRUS / MATLWANGTLWANG URBAN AREA .9

### A : CORE

STATUS QUO	FUTURE SPATIAL FRAMEWORK
<p>The Vals River, several attributes and significant wetland areas, drain through the rural area and serve as main source for raw water through an out stream storage dam; water from the Vals River is pumped thereto to ensure potable water during periods of low rainfall.</p>	<ul style="list-style-type: none"> <li>▪ <i>Optimal development and utilisation of the Vals River riparian and water sources in rural settings, not compromising the outstanding universal value thereof and unduly impairing the safe, undisturbed and quiet enjoyment of the area, must be considered.</i></li> <li>▪ Significant surface water features, as well as its tributaries, must be regarded as sensitive to activities that might further deteriorate their quality.</li> </ul>

### B : BUFFER

STATUS QUO	FUTURE SPATIAL FRAMEWORK
<p>A sensitive spruit and vlei system, generally known as “Jas se Spruit” extends through the urban area and needs to be incorporated in an open space system, not considered for further development.</p>	<ul style="list-style-type: none"> <li>▪ <b>S3:</b> Either rehabilitation and/ or safeguarding (should the existing sewerage ponds be used as fish hatcheries) of the decommissioned sewer works is considered as a matter of urgent importance.</li> <li>▪ The current condition poses pertinent health and safety risks for the community.</li> <li>▪ <b>S4:</b> Riparian areas adjacent to “Jas se Spruit” need to be incorporated in an open space system, not considered for further development.             <ul style="list-style-type: none"> <li>- Activities such as urban agriculture and sport fields may be considered should they not impact on specific identified sensitive areas.</li> <li>- Proper management of the riparian must be implemented to intercept misuse and pollution of the area.</li> </ul> </li> </ul>

**C : AGRICULTURAL AREAS**

STATUS QUO	FUTURE SPATIAL FRAMEWORK
<b>Urban Agriculture</b>	
<p>A need existed for additional land for commonage for the purposes of communal grazing and small-scale farming, and as a result, the Council purchased the Farms Stella 762, Erfenis 459 and Subdivision 1 of the Farm Vogelvlei 457 with a Department of Rural Devolvement and Land Affairs grant.</p>	<ul style="list-style-type: none"> <li>▪ The long-term development of the urban area may see the development of Subdivision 1 of the Farm Vogelvlei 457, considered to be the future hinterland of larger urban area, for residential purposes.</li> <li>▪ Proper fencing of the areas is deemed as a matter of pertinent importance.</li> </ul>
<b>Commonage</b>	
<p><b>F1:</b> Although the existing town lands of Steynsrus (west of Matlwangtlwang, on the Farm Mededeel 460) is presently utilised for grazing purposes, it is not adequate in meeting the community’s demands.</p> <p><b>F2:</b> the Farms Stella 762, Erfenis 459 and Subdivision 1 of the Farm Vogelvlei 457 (now <b>R2</b>) forms part of the municipal land that were additionally obtained for agricultural related and commonage practices.</p> <p>Apart from small land parcels associated with the Steynsrus Station, there are neither small farms nor small holdings identified for incorporation within the area earmarked as the urban fringe.</p>	<ul style="list-style-type: none"> <li>▪ <b>F1</b> (southern portions) Remaining portions of the municipal town lands and the Farm Mededeel 460, not earmarked for residential purposes, (R3 &amp; R4) have been identified for the “One Household One Hectare” programme.</li> <li>▪ <b>F3:</b> Portions of Subdivision 1 of the Farm Vogelvlei 457 not earmarked for residential development (R2) should remain for commonage purposes.</li> <li>▪ <b>F4:</b> The Farm Onvergun 458 is owned by the Mabaso Communal Property Association and managed as a communal farm.</li> <li>▪ <b>F5:</b> Portions of the Remainder of the Farm Vogelvlei 457, not considered for urban development (R1) offers ideal land for urban agriculture activities.</li> <li>▪ Sustainable and co-ordinated commonage projects should be developed to ensure the productive utilisation of commonage land in a manner responsible towards the environment.</li> </ul>

### **Agricultural Land Identified for Urban Development or Smallholdings**

Land parcels indicated in the table below are earmarked for inclusion within the Urban Fringe pertaining to this SDF and the LUS to ensure management thereof by the Municipality, according to land use control measures, also pertaining to the LUS. Exclusion of these land parcels from agricultural land is therefore evident. The identified small land parcels are mostly associated with the Steynsrus Station.

- The Farm Bloemhof 1011
- Subdivision 6 of the Farm Benoni 662
- Subdivision 1 and Remainder of the Farm Steynsrust Siding 810
- The Farm Saamwerk 989
- Subdivision 1 and Remainder of the Farm Steynsrust Creamery 1010
- Subdivision 1 to 5 and Remainder of the Farm Op De Tijd 382
- The Farm Ruhr 873
- The Farm Otawi 855

### **D : URBAN RELATED**

#### **Urban Fringe:**

The “urban fringe”<sup>4</sup> represents the outer limits or boundary for urban development. The proposed urban fringe should not be considered as an exact line but as a conceptual boundary to prevent further urban extension. The principle for identifying an urban fringe is primarily to discourage continuous urban sprawl and to promote integration and more compact towns and urban areas. Where the urban fringe is not indicated, it implies that no further extension or development is envisaged in the concerned direction. The urban fringe of the larger town area is determined as follows:

- The boundary of the former area of jurisdiction, which is also the existing town lands, determines the urban fringe to the east, south and west,
- Recent extensions further north required an extended urban fringe to include the remainder and subdivision 1 of the Farm Vogelvlei 457,
- Apart from small land parcels associated with the Steynsrus Station (indicated above), there are neither small farms nor small holdings identified for incorporation within the area earmarked as the urban fringe.

<sup>4</sup> The Moqhaka Land Use Scheme defined the urban fringe as a demarcated line portrayed in the approved Municipal Spatial Development Framework that separates urban areas from rural areas to establish a defined limit, beyond which urban development, must not be permitted to protect land for natural resources, agriculture, conservation and open space use.

**Table 13**  
**Summary of Current Housing Tendencies: Steynsrus / Matlwangtlwang Urban Area**  
 (Source: LMV, 2017)

<u>Residential Area</u>	<u>Erven</u>			<u>Erf &amp; Land Requirements (Determined By Council)</u>
	<u>Residential Erven Occupied</u>	<u>Residential Erven Unoccupied</u>	<u>Total Residential Erven</u>	
Steynsrus	228	174 <sup>5</sup>	402	-
Matlwangtlwang	1 671			
Extension 2		587 <sup>6</sup>		-
Extension 3		804	3 062	
<b>TOTAL</b>	<b>1 899</b>	<b>1 565</b>	<b>3 464</b>	-

**Densification and Corridor Development**

Infill planning of land between the residential precincts of Matlwangtlwang (excluding undevelopable vlei areas,) resulted in urban area being fairly integrated with limited opportunities for infill planning. In addressing a more sustainable urban form, densification, especially through higher residential densities and mixed use developments, associated with significant transportation arterials, remains a viable alternative in the larger urban area. The tendency towards continuing decentralisation of workplace locations is complicating the creation of “compact cities”. Although compaction may be achievable as a means of increasing density, it is suggested that the predominant pattern in South Africa should be the “corridor city”. Strategies need to be identified to attract decentralising activities toward existing public transport corridors (*CSIR, 2000: Human Settlement Planning and Design, “Red Book” also the source of the ensuing figure: “corridor densification option”*). Urban density is deemed significant in view of the following:

- Densification is deemed a development objective to pursue a more compact and viable urban form, thereby facilitating medium to higher densities by means of infill development and densification”.

<sup>5</sup> R5: 18 large residential erven in Steynsrus have since been subdivided and 72 smaller erven provided

<sup>6</sup> Erven not considered for immediate utilisation but for long term development.

**Densification and Corridor Development**

- Predominantly low densification has taken place in Steynsrus, implying possibilities for growth through, amongst other, densification.
- Densification is generally feasible on existing properties and new developments and may well be accompanied by an increased number of units and/or population thresholds, as outline in the Mophaka Land Use Scheme.
- Residential development in Steynsrus must be prioritised with the focus on densification and infill development rather than expansion.

STATUS QUO	FUTURE SPATIAL FRAMEWORK
<b>Residential</b>	
<p><b>Steynsrus:</b> Development in Steynsrus is extremely dormant. Only 228 of the 348 residential sites are occupied. Unoccupied erven were recently densified and 18 large erven were converted into 72 smaller erven.</p> <p><b>Matlwangtlwang:</b> Matlwangtlwang experienced sporadic growth considering that approximately 2 606 erven developed during the past 10 years. However, most of the erven are still vacant and 3 small informal settlements (comprising approximately 150 structure) are prevalent:</p> <ul style="list-style-type: none"> <li>- adjacent to an old quarry in the western periphery of the residential precinct (G2),</li> <li>- in the road reserve adjacent to the Kroonstad/ Bethlehem road (M1)</li> <li>- At the main entrance to Matlwangtlwang (single row erven - at A3)</li> </ul> <p>Long term expansion of the Matlwangtlwang precinct should preferably not occur further south and emphasis is placed on more accessible</p>	<ul style="list-style-type: none"> <li>▪ <b>R1:</b> Extension 3 was recently concluded (erven pegged and township register opened) on the Remainder of the Farm Vogelvlei 457, comprising 804 residential erven.</li> <li>▪ <b>R2:</b> Council land, adjacent to the Kroonstad/ Bethlehem (M1) and Edenville Roads (M3), is deemed to be exceedingly well-located for immediate residential extension.</li> <li>▪ Development on opposite sides of the Kroonstad/ Bethlehem road and across the existing Matlwangtlwang precincts, will necessitate pertinent traffic measure to enhance pedestrian safety.</li> <li>▪ <b>F3:</b> long-term development of the urban area will see the partial development of Subdivision 1 of the Farm Vogelvlei 457, considered to be the future hinterland of larger urban area, for residential purposes.</li> <li>▪ A future access to this foreseen extension is proposed at A5.</li> <li>▪ <b>R3:</b> Long-term residential extension of an approximate 600 erven could in future be considered to the west of the Matlwangtlwang precinct (R3).</li> <li>▪ <b>R4:</b> Long-term residential extension of a further and approximate 300 erven is proposed to the south of Matlwangtlwang.</li> </ul>

STATUS QUO	FUTURE SPATIAL FRAMEWORK
<p>developments, further north. Additional land (the Remainder and Subdivision 1 of the Farm Vogelvlei 457) has been required for future residential development to the north, adjacent to and across the Kroonstad/ Bethlehem provincial road (M1).</p>	<ul style="list-style-type: none"> <li>▪ <b>R5: Infill Planning:</b> 18 large residential erven in Steynsrus have since been subdivided and 72 smaller erven provided.</li> <li>▪ Residential erven in reserve, although not serviced, signal that existing informal settlements could be relocated and all informal settlements resolved.</li> <li>▪ Options for re-blocking, are feasible and pending community liaison.</li> </ul>
<b>Central Business District</b>	
<p><b>Steynsrus:</b> A well-defined CBD, comprising of 49 businesses, exists in Steynsrus extending linear to the north east along the main access road from the Kroonstad / Bethlehem Road and to the north west along the main access road between Steynsrus and Matlwangtlwang.</p> <p><b>Matlwangtlwang:</b> Apart from the town entrance, a defined business centre or node does not exist in Matlwangtlwang. Although, business sites along the main access at the entrance to Matlwangtlwang, are only partially developed. Several neighbourhood shops are dispersed throughout the area.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>DRDLR <i>Development Potential in Urban Settlements Report (2014)</i> assessment:</p> <ul style="list-style-type: none"> <li>▪ Urban Growth Potential – Very Low</li> <li>▪ Economic Potential - Very Low</li> </ul> </div>	<ul style="list-style-type: none"> <li>▪ Extension of the existing CBD of Steynsrus is proposed to the north-east, towards Matlwangtlwang in an attempt to promote integration along the link road (A2) between the two precincts.</li> <li>▪ The road, Haasbroek Street, currently functions as an ill-defined corridor with limited businesses establishing adjacent thereto.</li> <li>▪ Buildings in the area, currently owned by the Municipality, could also be utilised for community activities.</li> <li>▪ <b>R1/ A5:</b> Urban extension further northward (on the Remainder of the Farm Vogelvlei 457) provided for well-located business premises deemed necessary, as commuting distances to existing businesses, especially for pedestrians, are being extended.</li> <li>▪ <b>T2:</b> A new and more appropriately located taxi rank was additionally earmarked for the new precinct</li> <li>▪ This provision was further necessitated by informal disembarking points at extremely unsafe locations on the Kroonstad/ Steynsrus road (M1) posing pertinent safety risks for residents, commuters and the traveling public.</li> </ul>

STATUS QUO	FUTURE SPATIAL FRAMEWORK
	<ul style="list-style-type: none"> <li>▪ Although several business premises and small business nodes are provided in Matlwangtlwang, growth is deemed exceedingly latent in the precinct.</li> <li>▪ It should possibly be viewed against the identified “very low” urban growth potential of the precinct and Steynsrus in general.</li> <li>▪ <b>M1, M2 &amp; M3:</b> The intersection at the Senekal/ Edenville and Bethlehem/ Kroonstad Roads may offer limited commercial opportunities as part of the foreseen long term residential development (R2).</li> <li>▪ Accessibility may be difficult in view of the fact that these roads carry substantial traffic volumes. A more suitable access is proposed on the Edenville road (M3) at A8.</li> </ul>
<b>Commuting Nodes</b>	
<p><b>T1:</b> The taxi terminus, originally located in Matlwangtlwang, adjacent to primary link road (A2) between Steynsrus and Matlwangtlwang, has never been developed. It may well, in view of its ideal location at the entrance of Matlwangtlwang, be utilised for business/ commercial related development.</p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p><i>Development on opposite sides of the Kroonstad/ Bethlehem road, and across from the existing Matlwangtlwang precincts, will necessitate pertinent traffic measure to enhance pedestrian safety.</i></p> </div> <p>Long distance taxis are dropping passengers off adjacent to the Steynsrus / Kroonstad Road (M1). Neither a formal site nor facilities are established</p>	<ul style="list-style-type: none"> <li>▪ <b>T1:</b> The former taxi terminus may well be utilised for business/ commercial related development.</li> <li>▪ <b>R1/ A5/ T2:</b> Urban extension further northward (on the Remainder of the Farm Vogelvlei 457) resulted in well-located business premises and a new and more appropriately located taxi rank (T2) – development of the rank, in view of current illegal and unsafe commuter activities, is deemed a priority.</li> <li>▪ <b>T3:</b> The corner of Haasbroek and Read Streets in Steynsrus is utilised as a pedestrian node for short distance commuters to Matlwangtlwang.</li> <li>▪ However, a more ideal location, with facilities, approximately 200 m from the above site, should preferably be upgraded to a formal pick-up point and sheltered facilities for commuters.</li> </ul>



STATUS QUO	FUTURE SPATIAL FRAMEWORK
<p>and the road reserves are used as drop off zone, posing pertinent safety risks for residents, commuters and the traveling public.</p>	
<b>Urban Open Spaces</b>	
<p><b>S2:</b> Although in derelict condition and poorly maintained, Steynsrus comprises a developed sport terrain and adjacent show grounds area (no longer in use).</p> <p><b>S1:</b> The sport terrain in Matlwangtlwang is only utilised as a soccer field and a need exists to further develop the terrain to accommodate multi-purpose courts and spectator stands to enhance its function as a collective focal point.</p> <p>Various formal and functional open spaces are provided; especially in the more recent extensions in Matlwangtlwang, adhering to the CSIR’s <i>Guidelines for the Provision of Social Facilities in South African Settlements First Edition (August 2012)</i>, but are mostly undeveloped and unsatisfactory maintained.</p>	<ul style="list-style-type: none"> <li>▪ Identification of parks in Matlwangtlwang that may well be developed for sport and recreation purposes, is imperative.</li> <li>▪ <b>S1:</b> The existing sport terrain in Matlwangtlwang must be further developed by providing multi-purpose, all weather courts and spectator stands.</li> <li>▪ <b>S3:</b> An exceedingly large open area in Matlwangtlwang, adjacent to Jas se Spruit, being the result of decommissioned oxidation ponds, ought to be redeveloped as a neighbourhoods sport terrain and also provide in suitable areas for urban agriculture activities.</li> <li>▪ <b>S4:</b> Riparian areas adjacent to “Jas se Spruit” need to be incorporated in an open space system, not considered for further development. <ul style="list-style-type: none"> <li>- Activities such as urban agriculture and sport fields may be considered should they not impact on specific identified sensitive areas.</li> <li>- Proper management of the riparian must be implemented to intercept misuse and pollution of the area.</li> </ul> </li> </ul>
<p><i>Continuous subdivision of functional and formal open spaces to accommodate social amenities and business land uses must be prohibited. Several smaller functional open spaces in Matlwangtlwang, are not developed and proposed for cleaning, leveling and gravel surfacing to establish informal sports areas. Reluctance in the development of functional open spaces result in these premises becoming derelict and problematic for the surrounding community, often illegally dumping refuse on the premises and setting fire thereto.</i></p>	

STATUS QUO	FUTURE SPATIAL FRAMEWORK
<b>Resorts and Tourism</b>	
<p>Although the area is not considered as a primary tourist destination, it is increasingly becoming a favourite weekend destination. The hunting and guesthouse industries displayed an exceedingly rapid growth the past few years. Significant and formal recreation areas are, unfortunately, absent in the Steynsrus area.</p>	
<b>Vals River</b>	
<p>Due to the significant role the Vaal River fulfils in the region, in providing potable water, everything possible must be done to restrict the pollution of these sources to the minimum. Riparian areas must be protected against injudicious use on account of their ecological aesthetic or recreational value taking amongst other, cognisance of:</p>	
<ul style="list-style-type: none"> <li>- <i>Leisure Residential and Resort Developments</i> according to Free State Province, Department of COGTA's <i>Development of Rural and Peri-Urban Areas Guidelines</i> (2006),</li> <li>- The Free State Province Biodiversity Plan (2015),</li> <li>- Implementation of the Strategic Objectives and Management Zones of the Moqhaka EMF,</li> <li>- All development applications have to be assessed in terms of the management zones proposed in the Moqhaka EMF.</li> </ul>	
<b>Heritage Considerations</b>	
<p>The Free State Province played a significant role in the Anglo Boer War, resulting in a number of historically important tourist attractions. The Koppies area, for example, is becoming well known for various battlefields as tourist attractions. These tourist attractions, of historical importance, include, amongst other, the Sarel Cillier's Farm (between Steynsrus and Kroonstad).</p>	
<div style="border: 1px solid black; padding: 5px;"> <p><i>All known heritage sites in the Moqhaka Region should be documented and listed in a Municipal Heritage Register for submission to the Provincial Heritage Resources Authorities. This is a listing of the heritage resources in the Moqhaka Municipality which are considered to be conservation-worthy in terms of the heritage assessment criteria set out in Section 3(3) of the National Heritage Resources Act.</i></p> </div>	

STATUS QUO	FUTURE SPATIAL FRAMEWORK
<b>Cemeteries</b>	
<p><b>Steynsrus</b>  <b>C1:</b> The Steynsrus cemetery comprises adequate capacity and is suitable for long term expansion (subject to geotechnical investigations).</p> <p><b>Matlwangtlwang</b>  <b>C2:</b> The existing cemetery in Matlwangtlwang reached its full capacity and is no longer utilise for burials.</p>	<p>Following detailed geotechnical investigations and feasibility studies, two new cemeteries were identified:</p> <ul style="list-style-type: none"> <li>▪ <b>C3:</b> In the vicinity of the existing Steynsrus sport terrain (S2), although long term extension is limited due to clay soils and low ground water levels.</li> <li>▪ <b>C4/ R2:</b> On Subdivision 1 of the Farm Vogel lei 457, comprising capacity for the medium term. Underlying rock formations prohibits further development of the site.</li> <li>▪ Investigations must commence in the near future should the above cemeteries reach their capacity and an alternative cemetery needs to be identified. Possibilities exist at: <ul style="list-style-type: none"> <li>- F4 being the remainder of Subdivision 1 of the Farm Vogelvlei 457, not considered for residential development,</li> <li>- F5: Limited space is available north of the R1 extension.</li> </ul> </li> <li>▪ Continuous maintenance and protection against vandalism of unused cemeteries should be considered as a key priority.</li> <li>▪ The provision of ablution facilities and fencing of cemeteries is urgently required.</li> </ul>
<b>Other Social Amenities</b>	
<p>Social amenities have, in the past, mostly been provided according to guidelines, gradually developed by the CSIR. However, older areas are mostly and often typical of under provision. More recently planned areas should reflect guidelines and standards provided by the CSIR, lately culminating in the <i>Guidelines for the Provision of Social Facilities in South African Settlements First Edition (August 2012)</i>.</p>	<ul style="list-style-type: none"> <li>▪ A policy/ bylaw is timely required: <ul style="list-style-type: none"> <li>- whereby the continuing subdivision of valuable land earmarked for other social amenities should be prohibited,</li> <li>- to guide and assist faith based organisations in terms of requirements that need to be adhered to when applying for, and once a site has been obtained,</li> </ul> </li> </ul>

STATUS QUO	FUTURE SPATIAL FRAMEWORK
<ul style="list-style-type: none"> <li>▪ Current demands, especially relating to faith based organisations, resulted in a dramatic increase in land parcels for this land use, above and beyond what is specified in the guidelines.</li> <li>▪ Despite the required provision, demands seems to be ever increasing with a much higher need than what is provided. In order to intercept this need, formal open spaces and other social amenity erven are being subdivided, thereby negating the ideal provision of social amenities – a practice that is deemed undesirable and not contributing to sustainable human settlements.</li> </ul>	<ul style="list-style-type: none"> <li>- unceasingly protect the incremental use of public open space and other social amenity premises for faith based organisations.</li> </ul>

**E: INDUSTRIAL AREAS**

STATUS QUO	FUTURE SPATIAL FRAMEWORK
<b>Industries</b>	
<p>No formal industrial area or sites are provided in Steynsrus due to the fact that there is no large-scale industrial development at present. A limited number of service industries, of which the Salem Pottery (although activities have largely been downscaled) is the most significant, exist in the CBD.</p>	<ul style="list-style-type: none"> <li>▪ <b>A2:</b> If a need arises, a suitable commercial and service industrial premises should be located adjacent to the access road between Matlwangtlwang and Steynsrus.</li> <li>▪ <b>I1:</b> Light industrial sites in Matlwangtlwang are concentrated next to the main access to Matlwangtlwang that are only partially developed.</li> <li>▪ <b>I2:</b> Agricultural related industrial development is feasible in the vicinity of the Steynsrus station. Similar activities have since been established in the area.</li> </ul>
<b>Extractive Industries (Mining)</b>	
<p><b>G1, G2 &amp; G3:</b> Gravel, mostly related to road building programmes, was exploited to the west and south of Matlwangtlwang.</p>	<ul style="list-style-type: none"> <li>▪ <b>G2 &amp; G3:</b> Rehabilitation of previously exploited gravel quarries, now incorporated in the urban area, should continuously be addressed until the areas could be converted into informal neighbourhood sport terrains / parks.</li> </ul>

STATUS QUO	FUTURE SPATIAL FRAMEWORK
<p><b>G1:</b> An active gravel burrowing pit was established in close proximity of the recently constructed waste water treatment plant [s] and is exploited solely for municipal use.</p>	<ul style="list-style-type: none"> <li>▪ The un-rehabilitated nature thereof, poses pertinent health and safety risks for the community; especially for an informal settlement on the western periphery of the Matlwangtlwang precinct.</li> </ul>

**F: SURFACE INFRASTRUCTURE & BUILDINGS**

<p><b>Airfields</b></p>
<p>Steynsrus neither comprises an airfield nor an airstrip.</p>
<p><b>Railway Lines and Stations</b></p>
<p>The main railway line between Bethlehem and Kroonstad, still an active line, delineates the northern boundary of the urban area. The Steynsrus station is, however, not utilised in view of it being appallingly vandalised. Limited agricultural related activities are present in the area.</p>
<p><b>Landfill Sites</b></p>
<p><b>D:</b> The existing landfill site has recently been enlarged and is of adequate capacity to serve the larger area for the longer term. New “cells” should, however, timely be excavated to ensure sustainable utilisation thereof.</p>

**Infrastructure Services**

**Table 15**  
**Bulk Services Provision Steynsrus / Matlwangtlwang Urban Area**  
 (Source LMV Engineers, 2017)

<p><b><u>Water Purification</u></b></p>
<ul style="list-style-type: none"> <li>▪ Raw water supply: Vals River piped to storage dam</li> <li>▪ Purification capacity is not adequate</li> <li>▪ Additional reservoir capacity is required</li> <li>▪ New bulk water supply pipelines and pump stations will be required for future urban extensions</li> </ul>

<b><u>Waste Water Treatment Works</u></b>
<ul style="list-style-type: none"> <li>▪ Residential developed is not allowed within 500 m of a waste water treatment plant</li> <li>▪ WWTW capacity will have to be increased to allow for new extensions</li> <li>▪ Pump stations and pipelines will be required to allow for new extensions</li> </ul>
<b><u>Electricity</u></b>
<ul style="list-style-type: none"> <li>▪ Eskom provides bulk electricity for distribution by the Municipality in Steynsrus</li> <li>▪ Distribution in Matlwangtlwang by Eskom directly</li> <li>▪ Notified maximum demand from Eskom is 1 MVA (Steynsrus only), Bulk is available for future developments</li> </ul>

### Infrastructure Services

All urban areas were analysed in an attempt to identify shortfalls in infrastructure service delivery and to identify areas for eradication of backlogs or upgrading of services, the following categories were thus applied:

- Areas in the process of establishment (green),
- Areas established, unoccupied, without services (red),
- Areas established, occupied, with rudimentary services (brown for sewer, that will imply buckets and blue for water, that would imply standpipes),
- Areas established, unoccupied, with services, partly or completely (yellow).

<b><u>Infrastructure Service Provision:</u></b>	
<b><u>Water Network</u></b>	
<b><u>Matlwangtlwang</u></b>	<b><u>Steynsrus</u></b>
<ul style="list-style-type: none"> <li>▪ Provided with water network</li> <li>▪ Extension 2: Established, not occupied, no services</li> <li>▪ Extension 3: Established, not occupied, no services</li> </ul>	<ul style="list-style-type: none"> <li>▪ Provided with water network</li> </ul>
<b><u>Sewer Network</u></b>	
<ul style="list-style-type: none"> <li>▪ Provided with sewer network</li> <li>▪ Extension 2: Established, not occupied, no services</li> <li>▪ Extension 3: Established, not occupied, no services</li> </ul>	<ul style="list-style-type: none"> <li>▪ Provided with sewer network</li> </ul>

<ul style="list-style-type: none"> <li>▪ Subdivision 7 &amp; Portion of old town: Established, occupied, no services, (VIP system in use)</li> </ul>	
<b><u>Electricity Network</u></b>	
<ul style="list-style-type: none"> <li>▪ Provided with electricity network</li> <li>▪ Extension 2: Established, not occupied, no services</li> <li>▪ Extension 3: Established, not occupied, no services</li> <li>▪ ESKOM service provider</li> </ul>	<ul style="list-style-type: none"> <li>▪ Provided with electricity network</li> <li>▪ Municipality service provider</li> </ul>

<b>Regional Road Network and Future Access</b>
<b><u>Road Requirements</u></b>
<ul style="list-style-type: none"> <li>▪ Apart from the provincial primary road network, between Kroonstad and Bethlehem (M1) and Steynsrus and Senekal (M2) and the secondary provincial road network to Edenville (M3) and Ventersburg (M4), no other significant roads are provided.</li> </ul>
<b><u>Access Requirements</u></b>
<ul style="list-style-type: none"> <li>▪ <b>A5:</b> Access from the Kroonstad/ Bethlehem Road (P23/1) was granted by the Department of Roads, Transport and Police allowing direct access to Extension 3 and also the serve as a more direct access to the Matlwangtlwang precinct.</li> <li>▪ The configuration is deemed a high priority to revolve existing informal and exceedingly dangerous accesses from the provincial road by commuters from Matlwangtlwang.</li> <li>▪ A cross intersection must be established at this intersection, once the northern hinterland (R2) of Matlwangtlwang is developed.</li> <li>▪ <b>A6:</b> Additional accesses, from the Ventersburg secondary road (M4) were provided to Extension 2.</li> <li>▪ <b>A7:</b> A similar access to the above, will have to be provided should a further residential extension be established at R4.</li> <li>▪ The construction of a link road, across the spruit, between the existing Matlwangtlwang Extension 2 and future extensions (R4) will be required to ensure amalgamation between the two southern and northern precincts of Matlwangtlwang.</li> <li>▪ <b>A8:</b> Development of the northern hinterland, adjacent to the Edenville Road (M3), will necessitate a new access to the provincial road.</li> <li>▪ <b>A9:</b> Development at R4 and R3, although deemed long term, will require a higher order collector road between the Ventersburg road (at A7) and the Kroonstad Road (at A5) to contribute to the feasible integration of the various extensions of the Matlwangtlwang precincts.</li> </ul>

## VIERFONTEIN & RENOVAAL VILLAGES AND THE VAAL REEFS MINING AREA .10

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In addition to the existing formal urban areas, several residential areas and proclaimed town areas are situated in the Moqhaka Region with reference to Renovaal and Vierfontein. Renovaal was established during 1974, adjacent the Vaal River, with the intention to provide residence in the proximity of the gold mining activities in the North West Province. The town was also later marketed as a leisure residential area with recreation potential at the confluence of the Renoster and Vaal Rivers. Development of the town is, however, extremely latent and only the proposed first phase of the town was established with a limited number of properties comprising residences. According to Proclamation No. 167 of 1975, the concerned area represented by General Plan SG No. 459/1974, was proclaimed a township under the name Renovaal.

The main purpose of the initial Vierfontein power station was to promptly assist in meeting the heavy demand for power that was developing in the goldfields of the Free State and in the Klerksdorp area in the middle forties. It was in operation for nearly 38 years, being decommissioned in November 1990. The power station plant was sold as scrap and the buildings and cooling towers demolished. Vierfontein (referred to as “Vierfontein South”) is also a proclaimed town. The area was initially developed to provide residence for workers at the adjacent mine and electrical power station and was owned by ESKOM. After mining activities ceased and the power station discontinued, a township establishment was done to formalize the existing town area during 1993. According to Proclamation No. 35 of 1995 (Provincial Gazette of 24 February 1995), the concerned area represented by General Plan SG No. 786/1993, was proclaimed a township under the name Vierfontein. The individual properties were sold and the majority of the inhabitants of Vierfontein are retired residents with a limited number of inhabitants that are employed in Viljoenskroon.

To the north of the town Vierfontein, a sectional title scheme was established and is referred to as “Vierfontein North”. As in the instance of Vierfontein, this sectional title scheme also developed to provide residence for workers at the Vierfontein mine and power station, but most of the current inhabitants are also retired. The area was developed by the Dutch Reformed Church who was the initial property owner of the concerned farms. The concerned farms are currently the property of Vierfontein Developers Group Scheme, who is also the current home owners association.

The Vaal Reefs hostel complex subsequently exists adjacent the Vaal River and in close proximity of Viljoenskroon. The hostels were developed by AngloGold who is the property owner of the concerned farms and provide residence to mine workers of the company. Although mining activities ceased on the Free State side of the Vaal River, the complex still exists and provides housing to approximately 9 000 residents. An informal settlement subsequently developed adjacent the Vaal Reefs hostels, consisting of approximately 720 residents.



**Table 16**  
**Summary of Current Housing Renovaal and Vierfontein Rural Villages & Vaal Reefs Mining Area**  
 (Source: LMV, 2017)

<u>Residential Area</u>	<u>Hostel Units / Temporary Structures</u>	<u>Residential Erven Occupied</u>	<u>Residential Erven Unoccupied</u>	<u>Total Residential Erven</u>	<u>Estimated Population</u>
Vierfontein North (Sectional Title Scheme)	-	96		96	449
Vierfontein South (Approved Township, General Plan SG No 786/1993)	-	182	19	201	600
Renovaal (Approved Township, General Plan SG No 459/1974)	-	37	302	339	120
Vaal Reefs					
▪ Hostel Units at Kopanang and Great Nologwa Mine	3 000	-	-	-	9 000
▪ Temporary Structures	180				720
<b>TOTAL</b>	<b>3 180</b>	<b>315</b>	<b>321</b>	<b>636</b>	<b>10 889</b>

**Vierfontein**

CURRENT SPATIAL FRAMEWORK	FUTURE DEVELOPMENT FRAMEWORK
<p><b>Vierfontein North:</b>            The concerned sectional title scheme is referred to as Vierfontein North and comprises 96 residential units and other social amenities.</p>	<ul style="list-style-type: none"> <li>▪ Future extension of the precinct is not envisaged.</li> <li>▪ The prepared Moqhaka Land Use Scheme includes the precinct in an attempt to ensure appropriate land use control and the feasible management and future development of the urban area.</li> <li>▪ Further liaison and co-operation is required between the private property owners and the Moqhaka Municipality to ensure effective management of the areas.</li> </ul>

CURRENT SPATIAL FRAMEWORK	FUTURE DEVELOPMENT FRAMEWORK
<p><b>Vierfontein South:</b>  The town Vierfontein comprises 201 residential erven of which 182 are developed. Various other land uses were allocated to erven during the formal township establishment process.</p> <p>These erven include:</p> <ul style="list-style-type: none"> <li>▪ Motel and retirement village : 3 erven</li> <li>▪ Businesses : 5 erven</li> <li>▪ Post office : 1 erf</li> <li>▪ Municipal purposes : 5 erven</li> <li>▪ Clinic : 1 erf</li> <li>▪ Private open spaces : 2 erven</li> <li>▪ Public open spaces : 1 erf</li> </ul>	
<p><b>Engineering Services:</b></p> <ul style="list-style-type: none"> <li>▪ The area is completely serviced by means of electricity, water and sewer networks.</li> <li>▪ Bulk water supply is obtained from the water purification works of Vierfontein South and the sewerage treatment plant is also jointly utilised by the Vierfontein town and the sectional title scheme based on an agreement.</li> <li>▪ The management and the provision of bulk and infrastructure services in Vierfontein are administrated by Vierfontein Developers CC.</li> <li>▪ The Municipality, at present, does not render engineering services in Renovaal.</li> </ul> <p><b>Road Network:</b></p> <ul style="list-style-type: none"> <li>▪ Vierfontein is accessible from the provincial road network via the Viljoenskroon/ Orkney Road (P15/2).</li> <li>▪ <b>A1:</b> the precinct is more directly accessible via a tarred secondary provincial road, Road S632 linking onto the Viljoenskroon/ Bothaville Road (Road P33/2).</li> </ul>	

## Renovaal

CURRENT SPATIAL FRAMEWORK	FUTURE DEVELOPMENT FRAMEWORK
<p>Development of Renovaal is extremely latent. The town comprises a total of 339 residential erven. Since the establishment of the town during 1974, only 37 of the 339 residential erven were developed. Various other erven were provided for the development of a wide range of amenities normally associated with town development, but were never developed. These erven include the following:</p> <ul style="list-style-type: none"> <li>▪ Businesses : 2 erven</li> <li>▪ Caravan park : 1 erf</li> <li>▪ Garage business : 1 erf</li> <li>▪ Hotel : 1 erf</li> <li>▪ Boat club : 1 erf</li> <li>▪ Private open spaces : 3 erven</li> <li>▪ Municipal purposes : 6 erven</li> <li>▪ School : 1 erf</li> <li>▪ Government : 1 erf</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>R1 &amp; R2:</b> Apart from limited extension possibilities adjacent to the Renoster River (R2), infill opportunities (R1) exist to further extend the Renovaal Village and is supported by the Municipality.</li> <li>▪ Further development of these areas must favourably be considered, but subject to availability of services.</li> <li>▪ The prepared Moqhaka Land Use Scheme includes the precinct in an attempt to ensure appropriate land use control and the feasible management and future development of the urban area.</li> <li>▪ Further liaison and co-operation is required between the private property owners and the Moqhaka Municipality to ensure effective management of the areas.</li> </ul>
<p><b>Engineering Services:</b></p> <ul style="list-style-type: none"> <li>▪ The area is completely serviced by means of electricity and water networks.</li> <li>▪ Sewer is treated by means of sewerage tank for regular removal by the township developer.</li> <li>▪ The management and the provision of bulk and infrastructure services in Renovaal are administrated by the township developer.</li> <li>▪ The Municipality, at present, does not render engineering services in Renovaal.</li> </ul> <p><b>Road Network:</b></p> <ul style="list-style-type: none"> <li>▪ <b>A1:</b> Renovaal is less accessible through a secondary gravel provincial road, Road S641.</li> </ul>	

CURRENT SPATIAL FRAMEWORK	FUTURE DEVELOPMENT FRAMEWORK
<ul style="list-style-type: none"> <li>▪ The road links onto the Viljoenskroon/ Potchefstroom Road (R501), from where a secondary provincial gravel road (S641), provides access to the substantially isolated precinct.</li> </ul>	

### Vaal Reefs

CURRENT SPATIAL FRAMEWORK	FUTURE DEVELOPMENT FRAMEWORK
<p>Gold is actively mined by <i>Anglogold Ashanti</i> at the Vaal Reefs. Three shafts are currently being mined and the mining operations are considered, by the company, as a long-term enterprise. The shafts are known as:</p> <ul style="list-style-type: none"> <li>- Great Nologwa Mine</li> <li>- Kopanang Mine</li> <li>- Moab Khotsong Mine</li> </ul> <p>Existing mining activities are undertaken on a vast area, comprising of 5 489 ha of which approximately 2 600 ha are, at present vacant. Three mines are operational and the mining terrains include plants, storage, residences, dumps, workshops and the like.</p> <p>Hostel complexes were developed Great Nologwa and Kopanang mines and comprises an approximate 3 000 hostel units with an estimated population of 9 000 residents.</p>	<ul style="list-style-type: none"> <li>▪ Gold will be mined for the long-term at Vaal Reefs - land use control in these areas is imposed in terms of Land Use Scheme under the zoning "Mine and Mining Activities".<sup>7</sup></li> <li>▪ Future development of vacant land for residential purposes is, however, not envisaged by the concerned mining company.</li> <li>▪ Current informal settlements at the mining terrains need to be promptly addressed and resolved with the mining company to prevent the disorderly settlement.</li> </ul>

<sup>7</sup> The zoning "Mine and Mining Activities" permits the following uses: agricultural purposes, extractive industry, industry, mine and mining activities, motor workshop, residential building, scrap yard, service industry (all the mentioned uses, only in conjunction with mining activities).

CURRENT SPATIAL FRAMEWORK	FUTURE DEVELOPMENT FRAMEWORK
An informal settlement, comprising an estimated 180 temporary structures, subsequently developed adjacent the Vaal Reefs hostels with an approximate 720 residents.	
<p><b>Engineering Services:</b></p> <ul style="list-style-type: none"> <li>▪ The area is completely serviced by means of electricity, sewer and water networks.</li> <li>▪ The management and the provision of bulk and infrastructure services in Vaal Reefs are administrated by <i>Anglogold Ashanti</i>.</li> <li>▪ The Municipality, at present, does not render engineering services in Renovaal.</li> </ul> <p><b>Road Network:</b></p> <ul style="list-style-type: none"> <li>▪ The three shafts of the <i>Anglogold Ashanti</i> mining activities at the Vaal Reefs are linked with the R30 via the Stokkiesdraai Road; the R30 link via the R76 with Viljoenskroon, being the primary link road between Orkney and Viljoenskroon.</li> <li>▪ The areas are, however, well and directly linked with Orkney, just opposite the Vaal River, through two tar roads and bridges crossing the river, affirming its more direct association with Orkney and the North West Province.</li> </ul>	