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MOTIVATING MEMORANDUM

**IN SUPPORT OF THE APPLICATION FOR TOWNSHIP
ESTABLISHMENT IN TERMS OF SECTION 44 (1) OF THE MIDVAAL
LOCAL MUNICIPALITY SPATIAL PLANNING AND LAND USE
MANAGEMENT BY-LAW**

RIETSPRUIT

(to be situated on part of Portion 8 of the farm Rietspruit 152-IR)

Midvaal Local Municipality



Date: November 2021
Ref: 577-Memo2

CONTENTS

1. INTRODUCTION

2. GENERAL INFORMATION

- 2.1 The Property, Registered Owner and Extent
- 2.2 Servitudes
- 2.3 Title Conditions
- 2.4 Mineral Rights
- 2.5 Bondholder
- 2.6 Zoning
- 2.7 Local Authority
- 2.8 Name

3. PHYSICAL INFORMATION

- 3.1 Locality
- 3.2 Topography
- 3.3 Floodlines
- 3.4 Existing Structures and Development
- 3.5 Surrounding Development
- 3.6 Geology
- 3.7 Civil Engineering Services
- 3.8 Electrical Engineering Services
- 3.9 Environmental
- 3.10 Traffic
- 3.11 Waste and Refuse Removal
- 3.12 Social Services

4. THE PROPOSED TOWNSHIP RIETSPRUIT

- 4.1 Development Concept of Rietspruit
- 4.2 Formative Elements
- 4.3 Proposed Development Parameters
- 4.4 Proposed Title Conditions
- 4.5 Special Conditions
- 4.6 Street names

5. MOTIVATION

- 5.1 Spatial Planning
- 5.2 Need
- 5.3 Desirability

6. TOWN PLANNING REQUIREMENTS PRIOR TO PROCLAMATION

- 6.1 Spatial Development Framework and Urban Development Boundary
- 6.2 Parks contribution
- 6.3 Phasing of Development

7. CONCLUSION

Motivating Memorandum

1. INTRODUCTION

Application is herewith made in terms of Section 44 (1) of the Midvaal Local Municipality Spatial Planning and Land Use Management By-law for the establishment of a new township to be known as Rietspruit.

2. GENERAL INFORMATION

2.1 The Property, Registered Owner and Extent

The proposed township will be established on part (± 162 ha) of Portion 8 of the farm Rietspruit 152-IR measuring 171,3064 hectares in extent vide Deed of Transfer T24444/1989.

Portion 8 of the farm Rietspruit 152-IR is registered in the name of "Shapiro Farms CC" (Registration Number CK89/08851/23) vide Deed of Transfer T24444/1989. A Special Power of Attorney and Close Corporation Resolution were signed by Mr Michael Shapiro on behalf of the Close Corporation. The Special Power of Attorney was also signed by Mr Anton Crouse on behalf of Cosmopolitan Projects Johannesburg Pty Ltd which company has entered into an agreement with the land owners to acquire the farm for purposes of township establishment. A Company Resolution by Cosmopolitan Projects Johannesburg Pty Ltd is also submitted.

2.2 Servitudes

Two servitudes are registered against Deed of Transfer T24444/1989 which affect the proposed township as confirmed on the Servitude Certificate compiled by Mr Eamon Swart of SVR Land Surveyors:

- "(a) A 6 metre Pipe Line servitude as indicated by ab on diagram S.G. No. A 4079/1975, Deed of Servitude K1696/1976s.*
- "(b) A servitude area as indicated by figure ABCDEFGHJK on diagram S.G. A 7585/1980, Deed of Servitude K2818/1983s."*

The location of these servitudes will be indicated on the layout plan of the proposed township and needs to be accommodated.

2.3 Title Conditions

Van Staden Booyen Attorneys Incorporated were responsible for the compilation of a Conveyancer's Certificate (in which it is described how to deal with the various conditions registered against the title deed) for the proposed township on part of Portion 8 of the farm Rietspruit 152-IR in respect of Deed of Transfer T24444/1989. A summary of the Certificate is quoted below:

2.3.1 The following conditions must be cancelled:

- "A. Gedeelte 1 van Gedeelte B van die plaas Rietspruit 152-IR distrik Vereeniging, waarvan die gedeelte hiermee getranspoteer 'n deel uitmaak, is spesiaal geregtig tot en onderworpe aan:*

"Met de rechten en onderworpen aan de voorwaarden en servituten betrekkelijk de rechten van en tot dammen, water en watervoren op de plaats Rietspruit voormeld,

zoals breedvoerig omschreven in Akte van Servituut tussen de eigenaren van gezegd eigendom aangegaan voor de Notaris Arnt Leonard Reite op 1 September 1913, geregistreer onder Nr 22/1914S."

- C. *Onderhewig aan die regte van die Staatspresident soos in Artikel vier en dertig van die Kroongrond Nederzettingwet 1912, bepaal, betreffende sekere werke op die grond.*
- D. *Onderhewig aan die voorwaarde dat alle paaie en deurgange wat wettig op die hiermee getransporteerde grond aangelê is, vry en onbelemmer moet bly tensy hulle op bevoegde gesag opgehef, gesluit of verander word."*

2.3.2 The following entitlement will not be carried over to the erven in the township:

"B. Spesiaal geregtig tot a reg van weg 9,14m wyd oor:

- (i) Gedeelte 9 ('n gedeelte van Gedeelte 1 van Gedeelte B) van die plaas Rietspruit 152 distrik Vereeniging; en*
- (ii) Die Resterende Gedeelte van Gedeelte 1 van Gedeelte B van dieselfde plaas, Soos meer volledig sal blyk uit Notariële Akte van Servituut Nr 957, 52S."*

2.3.3 The following conditions affect erven in the township and will be registered against the relevant erven in the township:

- "E. Onderhewig aan 'n Akte van Sessie K1696/1976S waarby 'n pyplyn serwituut sedeer is aan die Republiek van Suid-Afrika."*
- F. Onderhewig aan 'n Akte van Sessie K 2818/1983S waarby 'n serwituut vir riool doeleindes sedeer is aan die Stadsraad van Germiston."*

The conditions of establishment will deal with above mentioned conditions in Deed of Transfer T24444/1989.

2.4 Mineral Rights

When the township proceeds to registration, all historic references to mineral rights and associated matters will be deleted from the record, given the provisions of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002). Given that mineral resources now vest in the State, it requires of the applicant to procure from the Department of Mineral Resources a written consent as contemplated in Section 53(1) of the aforesaid Act. A separate application in this regard will be presented to the Department of Mineral Resources and, upon receipt of the consent, same will be submitted to the Municipality as proof of compliance.

2.5 Bondholder

No mortgage bond is registered against the property in question.

2.6 Zoning

The property is governed in terms of the Midvaal Land Use Scheme, 2017 and is zoned "Agriculture" as confirmed on the attached Zoning Certificate. Uses permitted under "Agriculture" are "agricultural buildings, agricultural uses, commercial farm, conservation areas, cultivation shed. Dwelling house, dwelling unit, farm stall, greenhouse, nature reserve, street".

2.7 Local Authority

The property falls within the area of jurisdiction of the Midvaal Local Municipality. The Meyerton municipal office deals with town planning matters related to the proposed application.

2.8 Name

It is foreseen that this area in Midvaal will experience pressure for township development in the near future due to the southerly expansion of the Sky City development in Ekurhuleni and the proximity to the R59. In light thereof, it is the proposal of the Midvaal Local Municipality that these townships be named "Rietspruit" of which this township is the first.

3. PHYSICAL INFORMATION

3.1 Locality

The proposed township falls within the area of jurisdiction of the Midvaal Local Municipality which forms part, together with Lesedi and Emfuleni Local Municipalities, the Sedibeng District Municipality. Midvaal Local Municipality is furthermore situated along the R59 Freeway which connects Emfuleni Local Municipality to the south and Ekurhuleni Metropolitan Municipality (Alberton region) to the north thereof.

The proposed township will be located along the northern boundary of Midvaal Local Municipality, in close proximity to the Sedibeng Heineken Brewery which was the catalyst with the establishment of a new node in Midvaal. The proposed township Rietspruit is...

- ± 6 km east of the Heidelberg Road exit on the R59 Freeway;
- ± 5 km north-west of the boundary of the Suikerbosrand Nature Reserve;
- ± 7 km east of the Sedibeng-Heineken Brewery and Klipriver Business Park;
- ± 14 km north of Meyerton;
- ± 3 km south of the Sky City Mall;
- ± 4 km east of the Erwat Waste Water Treatment Works;
- ± 10 km south of Tokoza; and
- ± 3 km south-east of the Sky City residential township (Waterval Spruit townships).

The location of the proposed township is indicated on the attached Locality Plan.

3.2 Topography

A detailed contour survey has been conducted by SVR Land Surveyors.

The Rietspruit traverses the southern part of the site which also represents the lowest point at 1482 masl. This highest point in the proposed township is at 1516 masl at the northern corner of the township. The contours of this part of the site slopes in a southern direction towards the Rietspruit. This part of the site has a gradient of 1:50 or 2% which is extremely flat and suitable for the proposed development.

The area south of the Rietspruit has a high point at 1493 masl along the south-eastern corner of the site. The gradient towards the lowest point of the Rietspruit is 1:85 or 1,2 % and is also extremely flat. Special attention will be paid to the accommodation of stormwater run-off and gravitation of sewer.

3.3 Floodlines

The proposed development will be affected by 1:50 and 1:100 year floodlines as defined in terms of the National Water Act, 1998 (Act 36 of 1998). The 1:50 and 1:100 year floodlines along the Rietspruit have been indicated on the layout plan of the proposed township and were certified by Mr Munro Jansen of Intraconsult Engineering.

3.4 Existing Structures and Development

A contemporary farmhouse complex with historical elements and the ruins of farm labourer housing are located on the property as well as two historical graveyards. The farmhouse complex is indicated on the aerial photo below and is in close proximity to the eastern boundary of the site.



Two graveyards are located on the site and are found along the eastern boundary of the site. The location thereof has been surveyed and will be indicated on the layout plan of the township.

The remainder of the site is used for agricultural uses.

3.5 Surrounding Development

Portion 8 of the farm Rietspruit 152-IR is currently surrounded by rural residential / agricultural holding and agricultural activities. A site visit revealed that non-agricultural uses (schools, scrap yards, wedding venue, builder's yard and a waste transfer station are located to the north-west of the site, in close proximity to Heidelberg Road (R550).

The northern boundary of the site is adjacent to Ekurhuleni and applications for township establishment have been submitted and approved up to the boundary. It is the extension of the Watervalspruit (Sky City) development.

The Kliep Abattoir is furthermore situated to the east of the site.

A Land Use Plan indicating above mentioned accompany the application.

3.6 Geology

A Phase 1 geotechnical investigation was carried out by Dr Dave Buttrick of Intraconsult CC known as "GFSH-2, Phase 1, Geotechnical Investigations: Portion 8 of the farm Rietspruit 152-IR (Shapiro): Provisional" with reference IR1733S during September 2021. The following information is derived from the report:

"The site is largely located on andesitic rocks and soil derivatives of the Klipriviersberg Group, Ventersdorp Supergroup and blanketed by colluvium. Alluvium occurs along the flood plain of the Rietspruit.

The soil map presented in this report sub-divides the site into (preliminary) Site Class sub-areas in terms of the NHBRC Manual and the Code of Practice. A broad overview of the assumptions made and analytical processes adopted for these classifications is provided. The terrain slopes gently (approximately at 1%) from the northern sector of the site to the low lying areas along the Rietspruit. The ground then rises gently towards the southern boundary.

The presence of open-textured (potentially collapsible) and active (potentially swelling / shrinking) near surface soils is discussed in detail.

Although well developed pedocretes mantle these clays over some sections of the site, the thickness of the pedocretes is known to vary and be completely absent in some areas. Therefore, geotechnical inspection (at GFSH-2 Phase 2 stage) will be a crucial design requirement in refining and finalizing the final individual Soil Site classifications for housing foundation design.

The following broad preliminary zonation is provided:

Sub-Area Designations shown on the Soil Map	Commentary
2 (R3) (H1/C-C1/S)	<i>Anticipate sectors of potentially active soils and potentially collapsible materials, also pockets of difficult excavation conditions in the 0.0 to 1.5m profile (and below).</i>
2 (R3) (H1-H2/C/S)	<i>Anticipate potentially highly active soils, also pockets of difficult excavation conditions in the 0.0 to 1.5m profile (and below).</i>
2 (H2-H3/C/S)	<i>Anticipate potentially highly active soils</i>
2 (H1-H2/C-C1/S)	<i>Anticipate potentially highly active soils and potentially collapsible materials</i>

Possible foundation solutions for structures are further complicated by the possible presence of "hard" and "soft" materials immediately beneath individual building footprints as a consequence of local rock sub-outcrop. In such circumstances, differential settlement/movement is equal to total movement due to variable bedrock depth on the lava. The individual erf "Sub-Area" designations will need to be confirmed during the GFSH-2, Phase 2 Implementation Stage Investigations, before foundation designs are finalized as required by the NHBRC.

The report also includes recommendations with regards to:

- *Foundation designs*
- *Road construction and installation of underground services*
- *Seismic activity*
- *Drainage*

The Preliminary Sub-Area site boundaries for this site are shown on the Soil Map and are based upon our interpretation of the data recorded in this report. It is recommended that all layout plans for this development are revised on an ongoing basis and finally certified by the geotechnical specialist. While every effort has been made to determine overall ground conditions on this site, poorer sub areas may have been missed. For this reason, it is further recommended that a competent specialist is always invited to inspect opened workings during the development of this site in order to confirm the findings described in this report."

The geotechnical report confirms that the site is suitable for the proposed residential development and is submitted with the application.

3.7 Civil Engineering Services

Infraconsult Engineering CC has been appointed by Cosmopolitan Projects Johannesburg Pty Ltd to act as Consulting Engineers for the proposed development. They have compiled a report named "Preliminary Investigation Services Outline Scheme Report into the availability of Bulk Engineering Services" for the proposed Rietspruit Residential Development dated October 2021 and the following information is derived from the report:

3.7.1 Water Reticulation

The proposed development falls within the area of jurisdiction of the Midvaal Local Municipality who confirmed in writing that they do not have available capacity within their bulk infrastructure to support this development. They have agreed to consider a cross-border agreement with Ekurhuleni Metropolitan Municipality for the supply of bulk water and sewer drainage to this proposed development. The proposed Rietspruit development can be incorporated into the Palm Ridge and Eden Park Reservoir Zones.

A capacity analysis report for the bulk water will be drafted by GLS Consulting Engineers on behalf of Ekurhuleni MM which will then verify the availability of the capacity.

It is estimated that 7,24 Ml storage is required for the proposed Rietspruit development.

3.7.2 Sewerage Drainage

The proposed development falls within the area of jurisdiction of the Midvaal Local Municipality who confirmed in writing that they do not have available capacity within their bulk infrastructure to support this development. They have agreed to consider a cross-border agreement with Ekurhuleni Metropolitan Municipality for the supply of bulk sewer to this proposed development.

The entire proposed Rietspruit development falls within the area draining towards the Waterval Waste Water Treatment Works (WWTW).

ERWAT, who is the custodian of the WWTW, have previously confirmed that the WWTW is extremely over capacitated and will not be approving / accepting any new developments and flows into the facility. Ekurhuleni MM and the developer are currently engaging with ERWAT to provide detailed plans to make available spare capacity at the WWTW to accommodate the proposed development.

A capacity analysis report for the bulk sewer will be drafted by GLS Consulting Engineers on behalf of Ekurhuleni MM, this report will then verify the availability of the capacity of the necessary outfall sewers and WWTW.

It is herewith proposed that the proposed Rietspruit development be drained via one of the following possible options:

Option A:

The proposed development will be majority gravity reticulated through the development. The infrastructure will be located and planned in road reserves at 1,5m from stand boundaries, with connections to individual erven. The internal sewer will drain towards the lowest points of the development. However, portions of the proposed site will need to be pumped as they are lower than the proposed discharge connection point.

For Option A, the proposed connection point for the discharge of the entire proposed development's sewer wet weather peak flow will be into the existing 1500mm dia Germiston Outfall Sewer Pipeline that crosses the proposed development from east to west. This Outfall Sewer Pipeline is currently problematic and needs to be upgraded. However, Ekurhuleni MM do not have a confirmed timeline on when this necessary upgrade will be constructed. Furthermore, approval from ERWAT will need to be granted as this outfall sewer discharges into their Waterval WWTW as mentioned above.

Option B:

The proposed development will be majority gravity reticulated through the development. The infrastructure will be located and planned in road reserves at 1.5m from stand boundaries, with connections to individual erven. The internal sewer will drain towards the lowest points of the development. However, portions of the proposed site will need to be pumped as they are lower than the proposed discharge connection point.

For Option B the proposed connection point for the discharge of the entire proposed development's sewer wet weather peak flow will be into a proposed new 400mm diameter outfall sewer line along the north-western boundary of the development towards the Waterval Waste Water Treatment Works. This line increases from a 400mm diameter uPVC to a 525mm diameter concrete pipe toward the treatment works. (Pipe sizes indicated above are based on preliminary designs, actual required pipe sizes will be finalized at Detailed Design Stage.) Furthermore, approval from ERWAT is required as this outfall sewer discharges into their Waterval WWTW as mentioned above.

Option C:

The proposed development will be majority gravity reticulated through the development. The infrastructure will be located and planned in road reserves at 1.5m from stand boundaries, with connections to individual erven. The internal sewer will drain towards the lowest points of the development. However, portions of the proposed site will need to be pumped as they are lower than the proposed discharge connection point.

For Option C the proposed connection point for the discharge of the entire proposed development's sewer wet weather peak flow will be into a proposed New On-Site Waste Water Treatment Plant / Package Plant which will cater for the wet weather peak flow produced by this proposed development ONLY. This will be seen as a temporary solution unit ERWAT can

upgrade their WWTW to accommodate the discharge flow for this development. Midvaal LM confirmed that they will consider On-Site Treatment based on design approval.

Please note that there has been a portion of the development allocated to accommodate this proposed WWTW/Package Plant on site.

Furthermore, for ALL the options mentioned above:

- *Two (2) new sewer pump stations (total capacity of $\pm 32,5$ l/s) will be required to drain a portion on the southern section of the proposed development which falls beneath the proposed discharge options mentioned above and a 250mm diameter rising main is recommended.*

The Total Peak Wet Weather Flow is estimated at 62,87 m/s.

3.7.3 Roads

Access to the proposed development will be provided from the existing Heidelberg Road (R550) through the future Watervalspruit residential development via standard Gautrans and municipal intersections which need to be constructed.

3.7.4 Stormwater

The proposed Rietspruit development is traversed by the Rietspruit in the southern part of the development. The Rietspruit runs through the development in an east-west direction. The 1:50 and 1:100 year flood lines are indicated on the Stormwater Management Plan Layout.

Stormwater will be contained on the surface within the roadways as far as possible. Underground stormwater systems will be installed in areas where the surface run-off overtops the kerbing (for 1:2 year minor storms only).

Designs will be such that the 1:20 year major storm is contained within the road reserve.

Attenuation facilities will be constructed. Therefore, no post-development stormwater to be discharged onto lower-lying erven.

Majority of the stormwater run-off emanating from the proposed development will eventually be discharged into the Rietspruit via formal stormwater piped systems linked to kerb-inlets positioned at strategic points on the road network.

3.7.5 Cross-Border Agreements

A cross-border agreement will need to be drafted and signed between the two municipalities Midvaal LM and Ekurhuleni MM for the usage of cross-border bulk water and sewer infrastructure.

The cross-border agreement is currently being drafted and the client is awaiting templates and requirements from either Municipality.

3.8 Electrical Engineering Services

Eksteen & le Roux Electrical Engineers requested "Confirmation of Capacity: Portion 8 of the farm Rietspruit 152-IR" dated 6 August 2021 from Eskom.

The proposed township is located within the Midvaal Municipal area, though within Eskom's area of supply. The Midvaal Engineering Department have acknowledged that they do not have any infrastructure in the area and consented that Eskom remain the electricity service provider.

The estimated electrical capacity required for the proposed development is $\pm 7\ 000$ kVA.

Eskom's Planning Department have indicated per e-mail that capacity can be made available, though not the entire 7 000 kVA from the existing 11 kV lines. This followed a high-level investigation which is considered adequate at this stage.

On 11 October 2021, Eskom confirmed the following in writing:

This is to confirm that Eskom has no objection to the issuing of a Section 46(11) clearance letter for the abovementioned PTN 8 of THE FARM RIETSPRUIT – IR.

Eskom has an existing network in the vicinity that is capable of providing the indicated supply of 7MVA.

Eskom application received with reference number: 7181517866.

Electricity supply will be provided in accordance with the standards conditions indicated below:

- *All required contributions as stipulated in the budget quote are paid.*
- *All Conditions as stipulated in the budget quote are adhered to including all required electrical network infrastructure extension and/or modifications.*
- *Eskom obtains all wayleaves and/or servitude which are to be registered*

This is thus confirmation that electricity capacity is available for the proposed development.

3.9 Environmental

iSquare Information Systems CC has been appointed to attend to the Environmental Authorization for the proposed development. The Environmental Authorization (EA) application will be submitted to the Gauteng Department of Agriculture and Rural Development (GDARD) in terms of the National Environmental Management Act, 1998 (Act 107 of 1998) and the 2014 Environmental Impact Assessment Regulations, as amended. The following activities trigger the required application:

Listing Notice 1 of 2017

- Activity 9: The development of infrastructure exceeding 1 000 metres in length for the bulk transportation of water or stormwater – (i) with an internal diameter of 0,36 metres or more.*
- Activity 10: The development and related operation of infrastructure exceeding 1 000 metres in length for the bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes - (i) with an internal diameter of 0,36 metres or more.*
- Activity 19: The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock more than 10 cubic metres from a watercourse.*
- Activity 23: The development of cemeteries of 2 500 square metres or more in size.*
- Activity 25: The development and related operation of facilities or infrastructure for the treatment of effluent, wastewater or sewage with a daily throughput capacity of more than 2 000 cubic metres but less than 15 000 cubic metres.*

Activity 28: Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture, game farming, equestrian purposes or afforestation on or after 01 April 1998 and where such development - (ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare.

Listing Notice 2 of 2017

Activity 15: The clearance of an area of 20 hectares or more of indigenous vegetation.

Activity 27: The development of a road - (iv) catering for more than one lane of traffic in both directions.

Listing Notice 3 of 2017

Activity 4: The development of a road wider than 4 metres with a reserve less than 13,5 metres in (c) Gauteng on (iv) Sites identified as Critical Biodiversity Areas (CBAs) or Ecological Support Areas (ESAs) in the Gauteng Conservation Plan or in bioregional plans and (vii) Sites identified as high potential agricultural land in terms of Gauteng Agricultural Potential Atlas.

Activity 12: The clearance of an area of 300 square metres or more of indigenous vegetation in (c) Gauteng (ii) Within Critical Biodiversity Areas or Ecological Support Areas identified in the Gauteng Conservation Plan or bioregional plans.

The following supportive studies have been attended to as part of the Environmental Impact Assessment Process:

3.9.1 An Ecological Assessment of the Flora & Fauna and Riverine Area: Portion 8 of the farm Rietspruit 152-IR

Enviroguard Ecological Services CC has been appointed to present an ecological report on the flora and fauna as well as a watercourse assessment of Portion 8 of the Farm Rietspruit (Shapiro) 152, Gauteng (hereafter referred to as the study area).

The objectives of this study were to:

- *Identify, describe and delineate the different vegetation units present on the study site.*
- *Provide a description of the fauna (**mammals, avifauna (birds), reptiles, amphibians**) occurring within the study area.*
- *Identify species of conservation importance that could possibly occur on the proposed site.*
- *Identify and delineate the stream present on the property.*
- *To provide a sensitivity map of the study area (where applicable).*
- *To provide management recommendations to mitigate negative and enhance positive impacts of the proposed development.*

Conclusions and Recommendations:

The study site is surrounded by various agricultural and small holdings. The study area is partly fenced (along the western and northern boundary), while a deep trench has been dug along the eastern boundary. The section south of the Rietspruit is not fenced and easily accessible. Various informal roads traverse the study site as well as what seems old water channels that were (are) used to channel water to the various lower-lying cultivated fields.

The largest part of the study area (71%) is used for agricultural purposes comprising a large number of cultivated fields with various crops planted (e.g. maize, vegetables, pasture grasses etc.).

Vegetation unit 1 (Rocky grassland) comprises 11 ha (7%) of the study area. This grassland is rocky with rock cover varying from 30% to 50%. The rocks that were cleared from the adjacent cultivated fields have been packed in places within this vegetation unit. These areas have become overgrown with pioneer weedy species from where they easily spread their seeds into this grassland. The vegetation of this unit consists of a mixture of climax, secondary successional and pioneer species with the latter two the most. The vegetation is however, still dominated by the climax grass *Themeda triandra* although the encroacher dwarf shrub *Seriphium plumosum* is slowly encroaching and displacing the grass vegetation. The co-dominance of the secondary successional grass *Eragrostis curvula* is also an indication of disturbance. This vegetation unit has a low-moderate species richness and only some resemblance to the original native Carletonville Dolomite Grassland vegetation type. This vegetation unit has a **medium ecological sensitivity**.

Vegetation units 2, 3 and 5 (*Hyparrhenia hirta* grassland; Cultivated fields & Developed areas respectively) are all influenced by anthropogenic activities. The *Hyparrhenia hirta* grassland has been ploughed / grazed in the past and as a result has become dominated by this anthropogenic grass. This unit has a low species richness and ecosystem functioning and is very homogeneous dominated by *Hyparrhenia hirta*. The native vegetation of both the Cultivated fields and the Developed area have been totally destroyed and apart from the planted crops consists of pioneer weedy species. These two units have a low species richness. These three vegetation units are regarded as being transformed with a **low ecological sensitivity**.

The Stream area (vegetation unit 4) consists of a moderately wide perennial stream (Rietspruit) with a narrow riverbank. In some areas there are small floodplain sections while in most the stream is deeply incised with a narrow and steep embankment. Due to the cultivation activities and resultant anthropogenic influences the largest section of the embankment is degraded and the natural vegetation displaced by the invasive alien grass *Pennisetum clandestinum* with a large number of pioneer weeds. Towards the western part of the study area the vegetation along the stream consists of more indigenous (although secondary successional species) grasses with a slightly more natural habitat. The stream vegetation is indicative of disturbance, but due to the area being a water course it has a **high ecological sensitivity**. A 32m buffer zone is recommended around the stream within which no development should take place.

Although vegetation units 1 and 4 together with sections of vegetation unit 3 are classified as CBA and ESA areas the vegetation of these units ranges from degraded to transformed with little to no resemblance to the natural vegetation that existed in this area. The same applies to the area being listed as "high terrestrial diversity" according to DEFF. Except for a few natural plant species, insects and small mammals the area is devoid of high diversity due to habitat destruction and anthropogenic activities. There is little connectivity with any terrestrial ecosystem and vegetation unit 1 is a small, isolated section that is already degraded to some extent and low in species richness.

No red data species was found to be present within the different vegetation units although marginal habitat exists within vegetation units 1 and 4. The area has relatively few declared alien invasive species with most occurring within the stream area (vegetation unit 4). None of the few medicinal plants found to be present are threatened and they occur abundantly in other areas outside the property, while some are pioneer weeds and declared alien invader weeds.

It is not thought that development of the degraded areas with low ecological sensitivities on the study site should have a negative impact on the environment provided that the mitigation measures as indicated in this report is incorporated into the management plan and adhered to. No development is recommended within the stream area and its associated 32m buffer

zone. The vegetation within the buffer zone should be rehabilitated to improve the degraded conditions that exist.

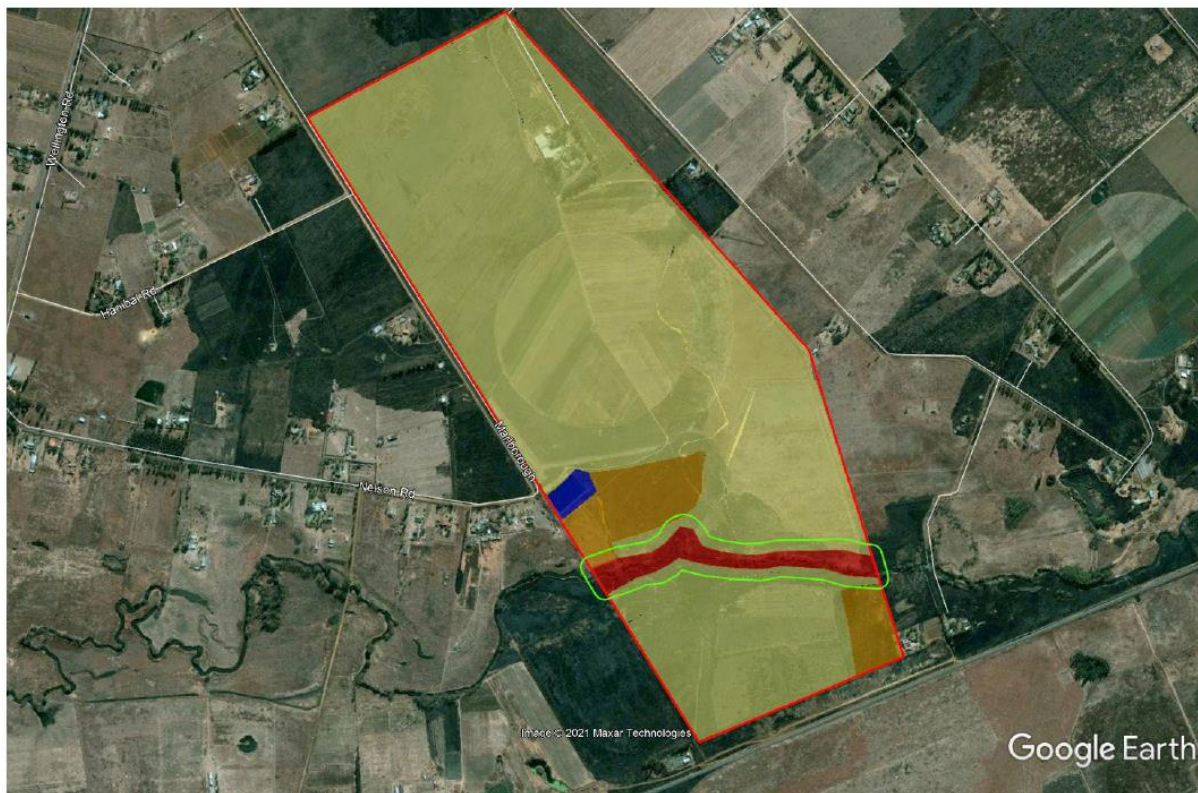


Figure 16. Sensitivity map of the different vegetation units of the study area (Yellow = Low; Orange = Medium; Red = High; Blue = artificial irrigation dam; Green line = 32m buffer around stream) (Source: Google Earth, 2021).

It is evident from the report that only the Rietspruit and 32m buffer along the river must be protected. The remainder of the site can be developed.

3.9.2 Heritage Impact Assessment

J van der Walt from Beyond Heritage was appointed to attend to a Heritage Impact Assessment on Portion 8 of the farm Rietspruit 152-IR. The study was attended to during August 2021.

Isquare Environmental Planning & GIS was appointed as the Environmental Assessment Practitioner (EAP) by Cosmopolitan Projects Johannesburg (Pty) Ltd to undertake the required Environmental Authorisation Process for the proposed Sky City Township Development on Portion 8 of the Farm Rietspruit 152-IR, Gauteng Province. Beyond Heritage was appointed to conduct a Heritage Impact Assessment (HIA) for the project and the study area was assessed on desktop level and by a non-intrusive pedestrian field survey. Key findings of the assessment include:

- *The study area is characterised by extensive cultivation that would have impacted on surface indicators of heritage resources if any ever existed in these areas;*
- *The survey recorded two cemeteries (Sites RS 001 & RS003), a contemporary farmhouse complex with historical elements (RS004) and the ruins of farm labourer housing (Sites RS002);*
- *The study area is of low to moderate paleontological sensitivity and an independent study was conducted for this aspect. The study concluded that the chance of finding fossils is extremely low, nonetheless, a Fossil Chance Find Protocol should be added to the EMP. Based on this information it is recommended that no further palaeontological assessment is required unless the responsible person on site finds fossils once excavations for*

foundations have commenced. As far as the palaeontology is concerned, the project may be authorised (Bamford 2021)

Prior to mitigation the impact of the project on heritage resources is high. The potential impact of the project on the recorded heritage resources can be mitigated to an acceptable level (low) with the implementation of mitigation measures and recommendations made in this report. The project can commence provided that the recommendations in this report are adhered to, based on the South African Heritage Resource Authority (SAHRA) 's approval.



Recommendations:

- The development layout should be adjusted to preserve the burial sites (Site RS001 and RS003) in-situ with a 30 m buffer zone with access for family members;
- Implementation of a development heritage management plan (DHMP) to ensure ongoing protection of the burial sites;
- At the farm labourer dwelling ruin (Site RS002) it should be confirmed whether any still born graves occur through the stakeholder process. The site should be mapped and monitored during construction. This site is not indicated on historical maps and it is assumed to be younger than 60 years;
- The historical farm house complex (Site RS 004) should be recorded and assessed by a conservation architect, and a destruction permit applied for from PRHA-G.
- Implementation of a chance find procedure for the project (as outlined in Section 10.2).

3.9.3 Geo-hydrological Study

In order to accommodate a cemetery in the proposed township, it is required to attend to a Geo-Hydrological Study to determine the underground water levels. This study is currently being attended to and will be included in the environmental report.

The Environmental Authorization process runs parallel with the township establishment application and a copy of the authorization will be forwarded to Midvaal LM once received.

3.10 Traffic

Dhubecon Consulting Engineers (Pty) Ltd have been appointed to undertake a Traffic Impact Assessment (TIA) as part of the township application for a proposed new mixed land-use development, which is to be situated on Portion 8 of the Farm Rietspruit 152-IR.

The following key conclusions and recommendations are relevant:

The subject site, as a whole, is approximately 163ha in extent. Rietspruit will be a mixed land-use development and will comprise a total of 3,782 single residential erven (zoned 'Residential 1'). Provision is also made for 'Institutional' land uses in the form of two new public primary schools and one new public secondary school, given the large extent of the residential component. Without the necessary details with regards to the sizes of the proposed schools at this stage, it was assumed in this study that the proposed public primary schools would each have a capacity of 800 students (thus 1,600 students in total), while the proposed public secondary school would have a capacity of 1,200 students. The proposed township layout also makes provision for erven with 'Community Facility' and 'Utilities' zonings, as well as ample public open spaces/ parks.

It can be noted that the subject site is bordered by the Watervalspruit Townships (also known as Sky City) to the north-west, which has the same developer as the proposed development. Similar to these neighbouring Watervalspruit Townships, the proposed development is expected to mostly cater for lower income households and it is anticipated that a similar housing product will be developed, with erf sizes ranging between 155m² and 202m². The proposed development is not planned to be security controlled at this stage. These houses on the single residential stands are typically known as "charter housing", which is the lowest level where households qualify for a home loan.

PROPOSED SITE ACCESS INTERSECTIONS: *Given the lack of proper (formal/ paved) roads in the study area, it is proposed that the subject township gain access via the future internal road network of the neighbouring Watervalspruit Townships, which border the subject site to the north-west. Access to these townships, and therefore the subject townships, will be provided via two (2) new access intersections with Heidelberg Road (R550/ future K154. The positions of the proposed site access intersections are also reflected on the proposed local road master plan which has been accepted by Midvaal Local Municipality in principle. The proposed access roads that will intersect with Heidelberg Road will be known as Silver Dory Street and Yellow Jack Street, respectively.*

The main north-south collector and distributor road through the subject township, which will essentially be the future extension of Yellow Jack Street, is referred to as 'Road A' for now in this TIA. It is confirmed that the locations of the proposed two site access intersections with Heidelberg Road, as mentioned above, are in line with the location on Gautrans' latest preliminary design of the future K154, past the site, which has been accepted by the MEC of GPDRT. The proposed Township Layout Plan for the neighbouring Watervalspruit Townships has taken full cognisance of the road reserve of the future K154, including the necessary splays for these proposed site access intersections. However, it must be noted that the internal layout of the neighbouring Watervalspruit Townships to the south of Heidelberg Road (i.e. bordering the subject site) is not fixed yet and will be adjusted to accommodate the proposed internal road network of the subject township.

INTERNAL TOWNSHIP LAYOUT & ROAD NETWORK: *Given the fairly large extent of the subject township, this study focusses on access provision at a township level, instead of at a micro level for individual erven. As can be noted from **Annexure A**, a complete new network*

of local Class 3, 4 and 5 public roads and access streets are proposed as part of the township development, in order to provide vehicular access to all individual stands.

It is confirmed that, from a traffic engineering point of view, inputs have already been provided with regards to the proposed township layout. It is therefore confirmed that the proposed internal road network of the subject townships is supported in this TIA. Where necessary or requested, continued input will be provided to the township layout. To that is that the proposed township is not planned to be security controlled upon completion and therefore stacking distance requirements become less relevant at this stage. It can be noted, however, that the proposed township layout makes provision for the implementation of security control in future, if required.

DEVELOPMENT TRIP GENERATION: It is estimated that the proposed development of Rietspruit, as a whole, will generate a total of approximately **1,478** and **1,352 new trips** (total IN plus OUT) during the weekday AM and PM peak hours, respectively. It is confirmed that the theoretical trip generations of the neighbouring Watervalspruit Townships (based on the trip rates applied in the approved TIA) had been compared with the actual trip generations (based on the recent traffic counts), given the existing overall development extent, which had been confirmed by the client/ developer. It was found that, overall, the theoretical and actual trip generations are very similar and given that a slightly more conservative residential trip rate had been applied in this TIA, the estimation of the total trips that will be generated by the subject township, as a whole, is viewed as representative/ adequate.

PROPOSED ROAD & INTERSECTION UPGRADES: Based on the estimated additional traffic generations of the proposed development (as a whole) and the projected trip distribution onto the surrounding road network during the weekday AM and PM peak hours, the impact of other nearby developments (i.e. latent rights), the capacity analyses as well as on-site observations during the peaks, the road/ intersection upgrades as discussed further below are proposed. Important to note is that all of the required upgrades at the external key intersections have been split into two (2) phases. The first phase of upgrades will be required as part of the complete development of the neighbouring Watervalspruit Townships. The second phase of upgrades will be required as part of the development of the proposed Rietspruit Township, which is only expected to happen after the neighbouring Watervalspruit Townships have been completed. The external intersection upgrades required as part of the Watervalspruit Ext. 54 Township have also been taken into account.

It must further be mentioned that the Heidelberg Road (R550 / K154) and K91 intersection is due for the upgrades which have been approved by the relevant road authorities and a Wayleave is already in place for construction to commence in due course. Therefore, the proposed first and second phase upgrades (as mentioned above) are taken as additional upgrades to these upgrades that will be implemented in the near future. All of the proposed upgrades on Heidelberg Road (future K154) and the K91 are to be implemented to Gautrans' minimum design standards.

PHASE 1 UPGRADES: Required as part of the neighbouring Watervalspruit Townships
 Heidelberg Road (R550/ K154) / K91 [Intersection 5]
 Heidelberg Road (R550/ K154) / Kingfish Street / Garthview Street [Intersection 12]
 K91 / Cosmopolitan Drive [Intersection 13]
 Heidelberg Road (R550/K154) / Silver Dory Street / Salamanderfish Street [Intersection 14]
 Heidelberg Road (R550/K154) / Yellow Jack Street [Intersection 15]

PHASE 2 UPGRADES: Required as part of the proposed Rietspruit Township)
 Heidelberg Road (R550/ K154) / K91 [Intersection 5]
 Heidelberg Road (R550/ K154) / Kingfish Street / Garthview Street [Intersection 12]
 K91 / Cosmopolitan Drive [Intersection 13]
 Heidelberg Road (R550/K154) / Silver Dory Street / Salamanderfish Street [Intersection 14]
 Heidelberg Road (R550/K154) / Yellow Jack Street [Intersection 15]

INTERNAL ROAD & INTERSECTION UPGRADES: All of the proposed upgrades outlined below are required as part of the proposed Rietspruit Township.

'Road A' (Extension of Yellow Jack Street):

'Road A' / 'Road B' Intersection

'Road A' / 'Road C' Intersection

'Road A' / 'Road D' Intersection

'Road A' / 'Road E' Intersection

In the event of bulk engineering contributions payable with respect to roads and stormwater, it is recommended that at least part of the contribution be off-set against the proposed road and intersection upgrades, as outlined above, since the upgrades will also benefit other future developments and the relevant road authorities. It is acknowledged that the off-setting of costs against provincial roads could be a problem in terms of the legislation, but it is recommended that the CoE, Midvaal Local Municipality and Gautrans come to some agreement in this respect.

NON-MOTORISED & PUBLIC TRANSPORT: Heidelberg Road (R550/K154) and Road K91, which are both located in close proximity to the subject site, are known to be very popular public transport routes for minibus-taxis and buses. Cosmopolitan Drive and Kingfish Street, which had been constructed as part of the neighbouring Watervalspruit Townships, have also become popular public transport routes in recent years. Given the undeveloped status of the subject site and surrounding properties, the site itself is not currently served by public transport services, nor is there any proper public transport facilities in place (such as walkway and laybys). However, the implementation of the proposed new public roads will connect the subject site to such services and facilities and it is expected that the proposed development, together with other developments in the area, will further stimulate the demand for public transport services as they develop over time and it is expected that particularly minibus taxis would respond to this demand by providing more services. It is also expected that 'Road A' will become an important north-south public road in future, while Heidelberg Road (K154) and Road K91 are expected to become even more popular public transport routes in the future. It can therefore be concluded that the subject site will be well located with respect to the availability of public transport facilities and -services in future.

In order to make provision for the users of public transport that will be generated by the proposed development, the following facilities are proposed:

Public Transport Laybys: Since a notable number of residents and employees associated with the proposed development are expected to make use of public transport services, it is suggested that public transport laybys be constructed at the following locations:

- Heidelberg Road (R550/K154) / Silver Dory Street / Salamanderfish Street Intersection: A set of Gautrans standard bus laybys along Heidelberg Road, upstream and downstream of the intersection.
- Heidelberg Road (R550/K154) / Yellow Jack Street Intersection: A set of Gautrans standard bus laybys along Heidelberg Road, upstream and downstream of the intersection.

In addition, public transport laybys are also proposed at the following locations inside the subject township development:

- 'Road A' / 'Road B' Intersection: A set of laybys along 'Road A', upstream and downstream of the intersection,
- 'Road A' / 'Road C' Intersection: A set of laybys along 'Road A', upstream and downstream of the intersection,
- 'Road A' / 'Road D' Intersection: A set of laybys along 'Road A', upstream and downstream of the intersection.

The final location of these laybys can be discussed with Midvaal Local Municipality at design stage.

Paved Sidewalks: In order to ease and formalize the movement of pedestrians to and from the subject township, it is proposed to construct paved pedestrian sidewalks of at least 1.8m wide along both sides of 'Road A'. More details of the above would be submitted as part of the final Site Development Plans (where relevant) and/or detail designs of the external road and intersection upgrades.

From a traffic engineering perspective, the proposed new mixed land-use township known as Rietspruit is supported, provided that the proposed site access intersections and internal roads, external road and intersection upgrades and public transport- and non-motorized facilities as proposed in this TIA are implemented to the relevant design standards of the Midvaal Local Municipality, the City of Ekurhuleni (CoE) and Gautrans.

This Traffic Impact Assessment is submitted with the application.

3.11 Waste and Refuse Removal

Midvaal Metropolitan Municipality will be responsible for the waste and refuse removal.

The proposed township will be located \pm 2,5 km south-east of the existing Klip River Transfer Station in Garthview Street – it will thus not be required to provide for such a facility within the proposed township.

3.12 Social Services

The following social facilities are in close proximity to the proposed township:

- Benvenuti Function Venue, in Eike Road, \pm 3km north-west;
- Dutch Reformed Church in Klip River in Croft Road, \pm 3km north-west;
- Royal School Sky City, \pm 2,5 north-west;
- Sibonile School for the visually impaired, directly south of the Klip River Transfer Station and also \pm 2,5 km north-west of the proposed township;
- Kanguru Institute for disabled, also located in Garthview Street;
- OAC Klip River – church in Bouven Street;
- La B'elle Vita Wedding Venue in Edge Road, \pm 1,5 km north-west;
- Kidz 4 Africa Creche, also \pm 1,5 km north-west;
- ZCC Daleside Church, \pm 800 m east; and
- Blessed Jerusalem Church, \pm 500m east.

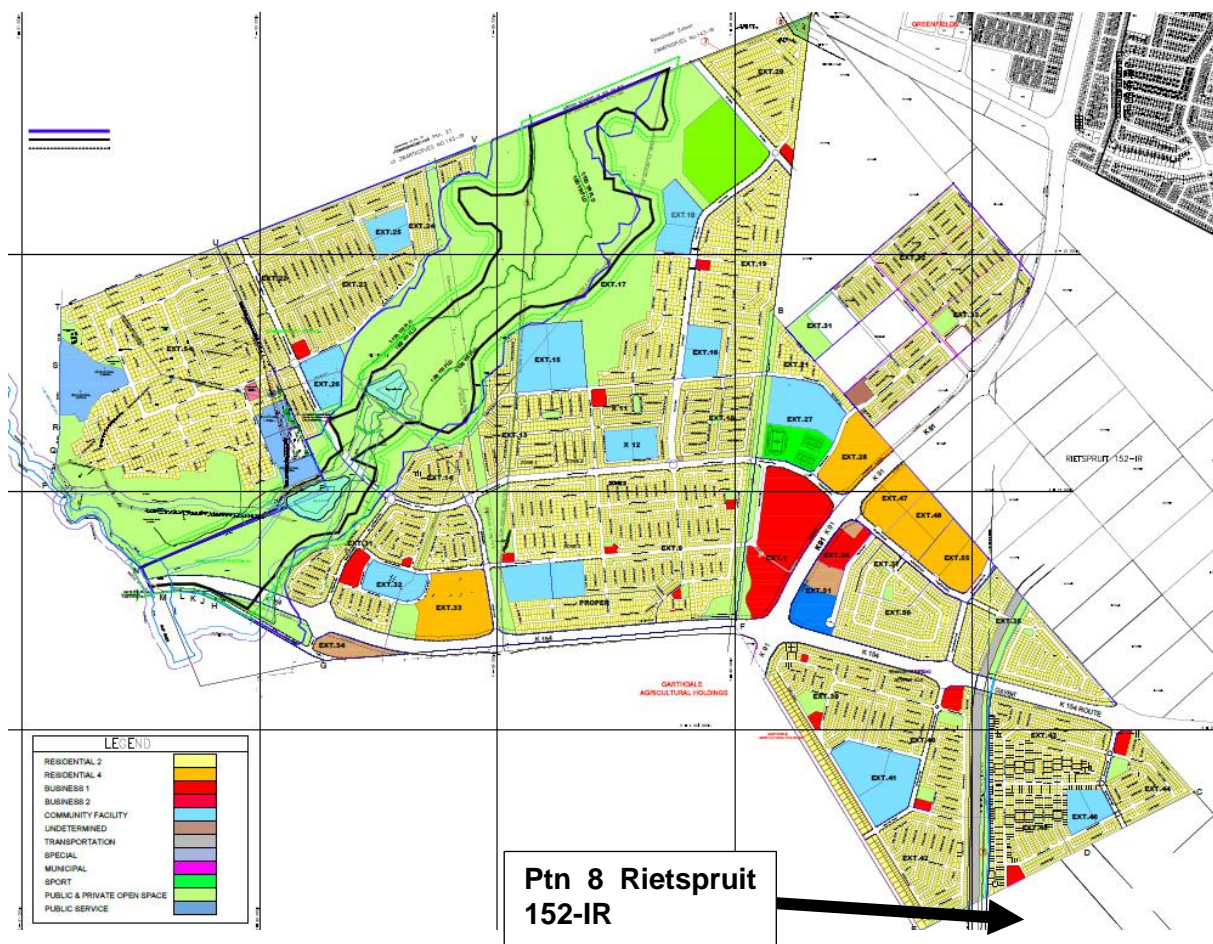
As a residential township is proposed, provision must be made for supportive land uses to cater in the social needs of the proposed residents of the township. Above mentioned facilities are a "nice to have", but it will not cater in the needs of all the residents in the proposed township.

4. THE PROPOSED TOWNSHIP RIETSPRUIT

Application is herewith made in terms of Section 44 (1) of the Midvaal Local Municipality Spatial Planning and Land Use Management By-law for the establishment of a new township to be known as Rietspruit.

4.1 Development Concept of Rietspruit

Cosmopolitan Projects Johannesburg Pty Ltd is the developer of the Watervalspruit townships in Ekurhuleni which has a marketing name of Sky City. The Development Plan of Sky City is copied below and it is evident that the township will comprise of \pm 12 000 "Residential 1"-erven, a shopping centre, high density components, business and educational facilities.



To date, Sky City has been developed north of the Heidelberg Road (R550) and it is estimated that a third of the development has been completed. The success of the development has urged the developer to acquire more land in a southerly direction for the long term expansion of the township.

Portion 8 of the farm Rietspruit 152-IR falls within the area of jurisdiction of the Midvaal Local Municipality and the southerly expansion of Sky City will thus establish a new residential area in Midvaal. Due to the proximity of the site to the Heidelberg exit onto the R59 and the Klipriver Business Park and Everite, it is foreseen that a much larger area will be earmarked for residential development than Portion 8. The provision of engineering services is at this point in time the challenge but the magnitude of the development and potentially other residential developments will justify the cost of bringing bulk services to the area.

Rietspruit will accommodate 3 782 "Residential 1"-erven at a density of "One dwelling per erf". A security estate is not planned at this point in time. Yellow Jack Street is planned to intersect with Heidelberg Road (R550) in Watervalspruit Extension 45. This road will be extended through the Rietspruit township as a boulevard (spine road) and will cross the proposed Provincial Road PWV18 by means of a bridge, then the Rietspruit, also by means of a bridge and then the railway line to the south of the township which will require the construction of a third bridge. From this boulevard, access is provided to the residential areas and supportive land uses.

Provision is also made in the layout plan of the township for a Secondary School and 2 Primary Schools due to the number of erven.

The existing grave yards on site have been accommodated in the layout plan as proposed cemetery sites. The southern graveyard has been increased to 2,5 ha to provide a cemetery for the residents of the townships as there is a critical need for cemetery sites in Midvaal at present.

It is important to create a "hub" in this township, therefore the decision to provide an erf for a community facility and informal trading place. This erf is located along the boulevard for good accessibility and visibility. It is also opposite the secondary school so that facilities can be shared.

The underlying philosophy of the development advocated is one of a comprehensive residential environment with supportive and complimentary land uses to be able to function on this own, but also to integrate with adjoining existing and proposed developments. The application to be submitted is therefore intended to form part of a larger area although it is viable and sustainable in its own right.

Rietspruit will provide for a variety of freehold stands varying between 155m² and 202m² in size. 3 782 full title erven will be provided. The average size of the residential erven is ± 191m². The density of the proposed development is 23 units per hectare.

The proposed development's lay-out, street design and utilization of aesthetical resources are intended to optimize the aesthetical and quality giving opportunities posed by this site. The orientation of stands, placement and linking of open space and management of surface runoff is meant to emphasize the advantages of the slope of the site.

The proposed township will consist of the following erven and land uses:

PROPOSED TOWNSHIP RIETSPRUIT				
Proposed Zoning	No of erven	Erf numbers	Area (ha)	%
Residential 1	3 782	1 – 3782	72,5278	44,64
Institutional	3	3783 to 3785	10,6737	6,57
Utilities	27	3786 to 3812	4,7179	2,91
Institutional (Community Facility and Informal Trading Place)	1	3813	0,8137	0,50
Cemetery	2	3814, 3815	3,4317	2,11
Transport (Railway)	2	3816, 3817	1,8181	1,12
Open Space	11	3818 to 3828	12,9647	7,98
Transport (Public Road)			55,5136	34,17
Total	3 828	-	162,4601	100

4.2 Formative Elements

The following elements have played an important role with the compilation of a layout plan for Rietspruit:

➤ **Topography**

The site is extremely flat and special attention was given to the run-off direction of stormwater. Stormwater attenuation can be done at all the low points and erven to be zoned "Utilities" have been provided in this regard.

➤ **Provincial Road PWV18**

The route determination of PWV18 had to be taken into account. Mr Desmond Hundermark of Dhubecon Consulting Engineers determined a possible location of future PWV18 with a reserve of 80 wide. A line-of-no-access and 30m (multi-storey buildings) and 20m (single storey) building lines are applicable to all the erven along this road. Application will be made to Gautrans for the encroachment of the building line to establish multi storey buildings at 20m.

It is however required to cross the future PWV18 and as a planned intersection is not on Portion 8 of the farm Rietspruit 152-IR, provision is made to construct a bridge.

The road reserve of the proposed Provincial Road PWV18 is excluded from the township boundary.

➤ **Geotechnical Investigation**

The site is not underlain by dolomite. The Phase 1 geotechnical investigation by Intraconsult confirmed that the entire site is developable, except for the river and associated floodlines.

➤ **Floodlines**

A 1:50 and 1:100 year floodline is applicable along the Rietspruit. The floodlines have been determined by Intraconsult Engineering and are indicated on the layout plan. The layout plan has also been certified by Mr M Jansen in this regard.

It is also recommended in the ecological assessment that a 32 m buffer be applied along the Rietspruit.

The highest line between the 1:100 year floodline and the 32m buffer determines the development boundary of the site.

➤ **Residential**

The following three categories of residential erven are provided:

Size	No of erven	%
155m ² (11,5m x 13,5m)	1 482	39 %
180m ² (12m x 15m)	1 723	46 %
202m ² (13,5m x 15m)	577	15 %
	3 782	100 %

The erven along Marlborough Road in Gardenvale Agricultural Holdings won't have access to and from Marlborough Road. Erven 1 to 12 are ± 500m² in extent to act as a buffer.

The erven along the boulevard (32m wide) and a 25m road to the east, won't have access to and from the said roads as indicated on the layout plan.

➤ **Utilities**

As mentioned, stormwater attenuation must be attended to throughout the township. 27 erven will be zoned Utilities of which 17 represent retention facilities.

Two erven are provided which will accommodate the proposed sewer pump stations, being Erven 3809 and 3811.

Erf 3807 measures 4 674m² which is planned to accommodate a proposed WWTW or package plant, should Option 3 for the provision of sewer to the township be chosen.

Erven 3787 and 3788 accommodate the existing water pipeline servitude vide SG No A4079/1975, 6m wide.

➤ **Community Facility**

Erf 3813 is earmarked as a community facility and informal trading place. The location thereof has excellent accessibility and visibility along the boulevard. The purpose of this erf is to create a "hub" for the residents. As it is located opposite the proposed Secondary School, facilities can also be shared. The erf measures 8 137m² in extent.

➤ **Railway line**

Transnet plans a north-south railway line which has already been accommodated in the Watervalspruit townships. A reserve width of 40m applies and it has been accommodated in the north-western corner of the township. Provision is made to cross the railway line as a second link to Heidelberg Road (R550) is required.

➤ **Educational facilities**

Provision is made for 3 educational facilities in the proposed development.

- Erf 3783 is earmarked as a Primary School and it accommodates the existing farmhouse complex.
- Erf 3784 is earmarked as a Secondary School and it is situated along the boulevard.
- Erf 3785 is earmarked as a Primary School and is situated in the southern part of the township.

Each Primary School will accommodate 800 learners and the Secondary School 1 200 learners.

➤ **Graveyards / Cemetery**

Erf 3814 accommodates ± 66 graves and a 30m buffer is provided around the grave area.

Erf 3815 accommodates ± 8 graves and provision is made to utilize this erf as a future cemetery. The location thereof lends itself to a cemetery as it is on the southern boundary of the township and access to the cemetery can be obtained via a 16m wide access road.

The erf measures 2,5 hectares in extent and according to the latest standards, 1 000 graves can be accommodated on 1 hectare. It is thus evident that ± 2500 graves can be provided on this property.

The approval of Erf 3815 for purposes of a cemetery also requires Environmental Authorization which forms part of the process for the entire development.

➤ **Farmhouse complex**

The existing farmhouse complex is located along the eastern boundary of the township and it is accommodated in an erf to be zoned "Institutional" for purposes of a primary school. The existing buildings can be utilized for educational purposes in the interim.

➤ **Roads**

All the roads in the township are "public roads" and will become the ownership of the Midvaal Local Municipality upon proclamation of the townships.

4.3 Proposed Development Parameters

4.3.1 Proposed Economic Revitalisation Overlay Zone

Section 21 of the Midvaal Land Use Scheme of 2017 makes provision that certain areas / townships be earmarked as an "Economic Revitalisation Overlay Zone". The purpose of such an overlay zone is to promote and revitalise economic development on Residential 1 zoned properties within townships such as Savannah City.

It is proposed that the following land uses be included under the "written consent" procedure on all the "Residential 1"-erven (Erven 1 to 3782):

"Day Care Facility, Home enterprise, Creche, Guest house, Gymnasium, Institutional use, Internet café, Place of Instruction, Place of Public Worship, Private Club, Service Enterprise, Service Industry, Social Hall, Sports Facility, Confectionary, Dry-cleaners, Garden Centre, Launderette, Offices."

It will be required to amend the Midvaal Spatial Development Framework to include "Rietspruit" as an "Economic Revitalisation Overlay Zone".

4.3.2 Proposed Rights

(i) ERVEN 1 TO 3782

USE ZONE: RESIDENTIAL 1

Uses Permitted: Dwelling house and street

Uses with written consent: Day Care Facility, Home enterprise, Creche, Guest house, Gymnasium, Institutional use, Internet café, Place of Instruction, Place of Public Worship, Private Club, Service Enterprise, Service Industry, Social Hall, Sports Facility, Confectionary, Dry-cleaners, Garden Centre, Launderette, Offices.

Uses with consent: Backpacker, Boarding house, Children's home, Commune, Government purpose, Municipal use, Place of Assembly, Recreation, Retirement Village, Spa/Hydro and Wellness Centre.

Height: 2 storeys

Coverage: 60 %

F.A.R.	1.2
Density:	One dwelling per erf
Access:	No access shall be allowed from PWV 18 and 32m boulevard.
Building lines:	Along PWV18: 20m for single storeys, no multi-storey buildings allowed along PWV18 Street: 3 metres (2 metres along internal (private) streets) to the satisfaction of the Executive Director: Development Planning Side and rear – 2 metres (and 1 metre along internal boundary)
Parking	As per Clause 15 of the Midvaal Land Use Scheme, 2017 Space to be provided to the satisfaction of the Municipality

(ii) ERVEN 3783 TO 3785

USE ZONE: INSTITUTIONAL

Uses Permitted:	Creche, Educational Use, Place of Instruction, Place of Public Worship, Sports facility, Social Hall, Street
Uses with written consent:	Children's home, Clinic, Community Facility, Dwelling house, Drive-thru restaurant, Government purpose, Hospital, Hostel, Institution, Municipal Use, Place of Assembly, Place of Refreshment, Recreation, Rehabilitation Centre,
Uses with consent:	Boarding house, Commune, Helicopter Landing Pad, Laboratory, Electrical Purposes, Public Parking, Retail Trade, Shop, Substation.
Height:	4 storeys
Coverage:	60 %
F.A.R.	As approved by the Municipality
Density:	N/A
Building lines:	Street: 5 metres Side and rear – 5 metres

Access: Erf 3784: No access shall be allowed from 32m boulevard.

Parking As per Clause 15 of the Midvaal Land Use Scheme, 2017

A Site Development Plan shall be submitted to the Executive Director: Development Planning prior to the approval of any building plans.

(iii) ERVEN 3786 TO 3812

USE ZONE: UTILITIES

Uses Permitted: Electrical purposes, Municipal use, sewage works, utility service

Height: As approved by the Municipality

Coverage: As approved by the Municipality

F.A.R. As approved by the Municipality

Density: As approved by the Municipality

Building lines: As approved by the Municipality

(iv) ERF 3813

USE ZONE: INSTITUTIONAL

Uses Permitted: Community Facility, Informal Trading Place

Uses with written consent: Municipal Use, Dwelling House, Drive-Thru-Restaurant, Government Purpose, Municipal Use, Place of Refreshment

Uses with consent: Children's Home, Clinic, Crèche, Educational Use, Hospital, Hostel, Institution, Place of Assembly, Place of Instruction, Place of Public Worship, Public Open Space, Recreation, Rehabilitation Centre. Sports Facility, Social Hall, Street, Boarding House, Commune, Helicopter Landing Pad, Laboratory, Electrical Purposes, Public Parking, Retail Trade, Shop, Substation

Height: 4 storeys

Coverage: 60 %

F.A.R. As approved by the Municipality

Density: N/A

Building lines: Street: 5 metres

Side and rear – 5 metres

Access: No access shall be allowed from 32m boulevard.

Parking As per Clause 15 of the Midvaal Land Use Scheme, 2017

A Site Development Plan shall be submitted to the Executive Director: Development Planning prior to the approval of any building plans.

(v) ERVEN 3814 TO 3815

USE ZONE: CEMETERY

Uses Permitted: Cemetery

Height: As approved by the Municipality

Coverage: As approved by the Municipality

F.A.R. As approved by the Municipality

Density: As approved by the Municipality

Building lines: As approved by the Municipality

(vi) ERVEN 3816 TO 3817

USE ZONE: TRANSPORT

Uses Permitted: Railway purposes

Height: As approved by the Municipality

Coverage: As approved by the Municipality

F.A.R. As approved by the Municipality

Density: As approved by the Municipality

Building lines: As approved by the Municipality

(vii) ERVEN 3818 TO 3828

USE ZONE: OPEN SPACE

Uses Permitted: Public open space

Height: As approved by the Municipality

Coverage: As approved by the Municipality

F.A.R. As approved by the Municipality

Density:	As approved by the Municipality
Building lines:	As approved by the Municipality

4.4 Proposed Title Conditions

The following title conditions will be registered against the proposed erven:

(a) All erven:

- (i) *The erf is subject to a servitude, 1m wide, in favour of the local authority, for sewerage and other municipal purposes, along any two boundaries other than a street boundary and in the case of a panhandle erf, an additional servitude for municipal purposes, 2m wide across the access portion of the erf, if and when required by the local authority: Provided that the local authority may dispense with any such servitude.*
- (ii) *No building or other structure shall be erected within the aforesaid servitude area and no large-rooted trees shall be planted within the area of such servitude or within 2m thereof.*
- (iii) *The local authority shall be entitled to deposit temporarily on the land adjoining the aforesaid servitude such material as may be excavated by it during the course of the construction, maintenance or removal of such sewerage mains and other works as it, in its discretion, may deem necessary, and shall further be entitled to reasonable access to the said land for the aforesaid purpose subject to any damage done during the process of the construction, maintenance or removal of such sewerage mains and other works being made good by the local authority.*

(b) Water Pipeline Servitude:

Erven 3787 and 3788 are affected by a water pipeline servitude, 6m wide, vide SG No A 4079/1975 as indicated on the layout plan.

(c) Sewer servitude:

Erven 1422, 3796 to 3802, 3821 are subject to a sewer servitude vide SG No A7585/1980 as indicated on the layout plan.

4.5 Special Conditions

The following erven are subject to the following title conditions / servitudes / town planning conditions:

(a) Line-of-no-access:

- Erven 132 to 171, 348, 366 to 384, 695 to 720, 1083, 1090 to 1122, 1135 to 1137, 1392 to 1409, 2118 to 2136, 2493, 2513 to 2517, 2525 to 2542, 2556, 2806, 2817 to 2830, 3339 to 3358, 3408 to 3421, 3428, 3565 to 3573, 3580, 3651, 3658 to 3671, 3784, 3789, 3792 to 3794, 3804, 3807, 3809, 3811, 3813, 3825 and 3816 are subject to a line-of-no-access along the proposed boulevard (32m wide).
- Erven 947 to 959, 1138 to 1147, 1170, 1379, 1386 to 1392, 1497, 1504 to 1514, 1537, 1717, 1724 to 1729, 3794 and 3795 are subject to a line-of-no-access along the proposed 25m street.
- Erven 1 to 12, 295 to 312, 1933 to 1963, 1970, 3786, 3788, 3791, 3796 and 3817 are subject to a line-of-no-access along Marlborough Street.

(b) 30m and 20m building lines:

- Erven 313 to 347, 1410 to 1442, 2063 to 2084, 2099 to 2118, 2597 to 2613, 2634 to 2659 are subject to a 30 m building line for multi storey and 20 m building line for single storey buildings.

4.6 Street Names

Street names are not indicated on the layout plan of Rietspruit. Feedback is awaited from Midvaal Local Municipality on a theme for proposed streetnames whereafter it will be added to the layout plan.

5. MOTIVATION

5.1 Spatial Planning

5.1.1 National Development Plan, 2030

According to the National Development Plan, 2030, the Commission proposes a national focus on spatial transformation across all geographical scales. Policies, plans and instruments are needed to reduce travel distances and costs, especially for poor households. By 2030 a larger proportion of the population should live closer to places of work, and the transport they use to commute should be safe, reliable and energy efficient. This requires:

- (a) Strong measures to prevent further development of housing in marginal places;
- (b) Increased urban densities to support public transport and reduce sprawl;
- (c) More reliable and affordable public transport and better coordination between various modes of transport;
- (d) Incentives and programmes to shift jobs and investments towards the dense townships on the urban edge; and
- (e) Focused partnerships with the private sector to bridge the housing gap market.

The proposed township will increase urban densities in Gauteng by providing ±3 782 additional housing opportunities. It might seem that the proposed development will be established in a marginal place, but taken the location thereof into account with regards to the Klipriver Business Park and industrial developments to the west thereof and the southern parts of Johannesburg and Ekurhuleni, to the north thereof, and the future integration with the Sky City development, then the location thereof can be justified. The proximity to the R59 corridor must also be taken into account which can support public transport to Ekurhuleni and Emfuleni, also major sources of employment. It is known that Ekurhuleni and Johannesburg grow faster than Emfuleni and Midvaal and it is therefore possible that the proposed residents of Rietspruit will stay within the area of jurisdiction, but will most probably work in Johannesburg / Ekurhuleni. The location of the proposed township in close proximity to the R59 will ensure that residents who work in Meyerton, Vereeniging and Vanderbijl Park can easily commute on a daily basis.

5.1.2 Gauteng Spatial Development Framework 2030

Gauteng Province finalized a Provincial Spatial Development Framework, which was informed by the Gauteng 2055 Development Vision. The Gauteng Spatial Development Framework (GSDF) proposed a spatial development pattern in pursuit of planning for shared, equitable, sustainable and inclusive growth and development of the province.

The Gauteng Spatial Development Framework has a number of aspects that need to be taken into account when developing the Sedibeng District SDF. In particular, this framework is “premised on building Gauteng as a City Region that allows agriculture to provide a line between rural and urban economic development, shaped by infrastructure led investment”.

The framework seeks to:

1. *Provide a clear future provincial spatial structure that is robust to accommodate growth and sustainability.*
2. *Specify a clear set of spatial objectives for municipalities to achieve in order to ensure realisation of the future provincial spatial structure.*
3. *Propose a set of plans that municipalities have to prepare in their pursuit of these objectives.*
4. *Provide a common language and set of shared planning constructs for municipalities to use in their planning processes and plans.*
5. *Enable and direct growth.*

The desired outcomes of the Gauteng Spatial Development Framework through infrastructural investment and the management of activity patterns are:

1. *Integration of the apartheid fragmented municipalities in the province and the municipalities in the wider Gauteng City Region.*
2. *Safe, affordable and sustainable public transport, in contrast with private mobility, on which the present provincial structure is focused.*
3. *Quality of life and living through proximity to, or easy and affordable access to quality open space and social and cultural facilities.*
4. *Shared, sustainable and inclusive economic growth, ensuring that everyone in the province can get access to economic opportunities and contribute to, and share in the economic development of the province.*
5. *Protection and enhancement of the natural environment, ensuring the sustainability of natural systems and the fauna and flora habitats within these and their connectivity and bio-diversity. This should be enshrined in a comprehensive system of green corridors and spaces effectively forming a basic 'lattice' upon which urban development grows as the movement and infrastructural layers on which a quality urban life depends.*
6. *Choice, enabling individuals and communities to decide within an overarching framework what works for them, where opportunity presents itself and where to locate in the urban system without incurring inordinate premiums.*
7. *Creativity and innovation, ensuring that the province can adapt to change in constructive ways.*

The Gauteng Spatial Development Framework identifies specific spatial structuring elements that were used in the development of the Sedibeng District Spatial Development Framework, including the two corridors formed by the R59 and the N1 and the urban concentration (conurbation) in the Vereeniging, Vanderbijlpark and Evaton areas.

The proposed Rietspruit is situated in close proximity to the R59 and although it is situated outside the urban edge, it will eventually link with the Sky City development in Ekurhuleni which is currently developed in a southerly direction.

5.1.3 Sedibeng District Spatial Development Framework

The Sedibeng District Spatial Development Framework (SDF) of 2030 is a plan outlining the desired spatial form of the metropolitan area as contemplated in Section 26 (e) of the Municipal Systems Act, Act 32 of 2000. It also highlights priority investment and development

areas and will serve as a guide to decision-makers and investors. It is also an integral component of the IDP and translates this plan into spatial implications and guidelines for development.

Sedibeng District Municipality completed and adopted a Spatial Development Framework as part of its Integrated Development Plan (IDP). The need for more detailed land use guidelines was identified and it was decided to formulate Spatial Development Frameworks for each of the 3 municipalities in Sedibeng, being Lesedi, Midvaal and Emfuleni.

The main principles upon which the Sedibeng District Spatial Development Framework is based are to:

- Support and align with national and provincial planning, in particular the National Development Plan, Gauteng City Region, Gauteng Vision 2050, the 25 Year Integrated Transport Master Plan and the Gauteng Spatial Development Framework.
- Support and align with the IDPs and SDFs of Sedibeng, the Gauteng Province and the Local Municipalities within the District (Emfuleni, Lesedi and Midvaal).
- Promote higher densities and infill in the urban core in line with the national and provincial policy.
- Promote environmentally sustainability. *(The proposed development takes environmental sensitive areas into account and is in process of obtaining Environmental Authorization.)*
- Promote effective appropriate use of high potential agricultural areas. *(The proposed development does not affect high potential agricultural land.)*
- Facilitate the development of a continuous sustainable open space system. *(Continuous open spaces and linkages are supported and promoted by this development.)*
- Ensure functionally defined activity nodes. *(The proposed development will strengthen the Kliprivier Node)*
- Maximize efficiency of service infrastructure and transport systems. *(The proposed development will link with the existing R59 corridor, K154 and engineering services will be provided for the development.)*
- Build sustainable internal linkages.
- Establish urban development boundaries to reduce sprawl and support strategic infill. *(This development is outside of the urban development boundary, but it is evident that it will strengthen the Sky City development in Ekurhuleni which will be extended now into the area or jurisdiction of Midvaal.)*
- Support appropriate major current development initiatives and new initiatives. *(It is a new initiative to introduce a development in Midvaal to the extent of 3 782 erven.)*
- Support identified precincts.
- Support cross border integration of functionality linked areas. *(This development will be "cross border" integrated as it is foreseen that most of the residents will be employed in Ekurhuleni and Johannesburg.)*
- Facilitate the upgrading of existing settlements.
- Support identified development nodes and corridors. *(This development will strengthen the Klipriver Node.)*

Corridors:

In spatial planning, different types of corridors can be used. These range from Economic Corridors, promoting development within the corridor, to Movement Corridors, which have limited access points and are intended to facilitate movement through an area. Development corridors can also have a specific focus, such as tourism development. Generally, corridors form a functional area along a main route connecting 'anchoring nodes'.

The R59 corridor, originally planned as a corridor for Midvaal, acts as a corridor linking Sasolburg to Vereeniging through Midvaal to Alberton. The R59, as described in the R59

corridor document, has previously been identified as an Economic and Provincial Development Corridor in the GSDF. The function of this corridor is not only to provide an efficient transport route but also to support economic development along and around the corridor.

In terms of the Sedibeng District Spatial Development Framework, Portion 8 of the farm Rietspruit 152-IR falls within an area called "Agriculture" and outside the urban edge/urban development boundary. Developments which require municipal services are to be limited and low density residential development and land uses that provide local community facilities and/or amenities compatible with a low density residential are supported.

It is thus evident from the above that the proposed development will strengthen the Klipriver Node and industrial development along the R59 and that it will over time link with Sky City to the north in Ekurhuleni.

5.1.4 Midvaal Spatial Development Framework 2021-2022

The proposed township Rietspruit is not in line with the Spatial Development Framework as...

- It is situated in an area earmarked as "Conservancies" and
- It is located outside the urban development boundary.

Because of that, it is also not in line with the Midvaal Density Policy of 2021.

Application is however made, in addition to the application for township establishment, for the amendment of the SDF:

- for the township area from "Conservancies" to "Residential";
- for the re-alignment of the urban development boundary and
- for the inclusion of the township as an "Economic Revitalization Overlay Zone".

In the Midvaal Spatial Development Framework, it is proposed that Midvaal evolves around the following key elements:

- To align Midvaal's spatial development strategy with that of surrounding municipalities, especially with Emfuleni, Lesedi, Ekurhuleni and the City of Joburg in view of the envisaged Gauteng City Region Concept. *(The proposed development will have an impact on the southern parts of Ekurhuleni which must be taken into account, as cross border agreements are required for the provision of water and sanitation to the proposed township.)*
- To promote and facilitate corridor development along the R59 and R82 corridors. *(The proposed development will strengthen the R59 corridor).*
- To establish a strong functional hierarchy of towns and settlements in the municipal area. *(A new greenfields development is proposed which will set a precedent for development in the north-eastern part of Midvaal, although it is the extension of the Sky City development in Ekurhuleni. But for Midvaal, it will be a new, greenfields development with potential to expand.)*
- To consolidate urban development in order to protect the rural residential and rural character of the remainder of the study area. *(The proposed township Rietspruit will be adjacent to Sky City (Watervalspruit) – no leap frogging.)*
- To diversify the economy so that the dependence on manufacturing is reduced.
- To prioritize and promote the development of the Elandsfontein precinct in the north-west, along the N1 National Freeway.

- To strengthen and maintain regional linkages with the City of Johannesburg, Ekurhuleni and Emfuleni economic centres. *(The proposed development will strengthen linkages with Ekurhuleni south.)*
- To optimally utilize latent high potential agricultural land for agricultural production. *(The ecological study confirmed that the land has not high potential agricultural value.)*
- To enhance the latent tourism potential in the study area, including the Suikerbosrant Nature Reserve in the north-east and the Vaal River in the south. *(The proposed township is in close proximity to the Suikerbosrand Nature Reserve, but will not have a negative impact thereon.)*
- To identify and prioritize catalytic public investment projects that will contribute to corridor development and the urbanization of certain parts of Midvaal.

Key Features and Structuring Elements:

- The study area has strong regional linkages to major economic cores like Johannesburg, Ekurhuleni and the Vereeniging-Vanderbijlpark complex. These include routes R59 and R82, and the Vereeniging-Germiston railway line. *(The proposed development will strengthen regional linkages and the R59 corridor.)*
- Midvaal is predominantly rural, with urban development predominantly consolidated along the R59 and R82 in the north-western parts of the municipal area. *(Rietspruit will strengthen the Klipriver Node and will, due to the magnitude thereof, become a major residential area in Midvaal.)*
- Meyerton is the highest order town in the area with a relatively large business and residential component. Smaller settlements and agricultural holdings in the surrounds act as service centres to the surrounding local communities.
- The local population is relatively well educated, and unemployment levels are low compared with provincial and national averages.
- The strongest economic drivers in Midvaal are: Manufacturing (29,5 %), Financial and Business Services (18,5%), Trade (14,5%) and General Government Services (9,4%). There are indications that the Manufacturing sector is declining – there is a need to diversify the Midvaal economy.
- The urban areas and agricultural holdings exhibit the highest population growth rates.
- The official backlog with regards to informal settlements and backyard units (according to Census 2011) was determined to be 5546.
- The population is projected to grow between 3288 and 4681 people per annum for the next six (6) years. The related projected household growth is between 1034 and 1472 housing units per annum. *(The addition of 4 184 units over the next 5 – 10 year in Midvaal will be an injection for the growth of Midvaal.)*
- The total housing supply of existing housing projects is calculated at 23 825 units comprising 8858 middle and high income units and 14994 subsidised units. *(The addition of 4 184 units over the next 5 – 10 year in Midvaal will be an injection for the growth of Midvaal.)*

Development Opportunities:

- Midvaal is located midway between two major industrial cores in Gauteng Province – Ekurhuleni MM and Emfuleni LM. The three areas are all linked via the R59 freeway. *(The location of Rietspruit is as such that it is easily accessible from Joburg, Ekurhuleni and Emfuleni.)*
- The study area will in future gain direct access onto the N1 corridor at Elandsfontein, via a new access interchange from K154 which is already partially constructed.
- The Vaal Marina and Suikerbosrant Nature Reserve are potential major tourist attractions.
- There are a number of important ridges in the study area which also have potential for tourism development.

- There may be potential for further mining in the area – especially in the Randvaal-Daleside area.
- The south-eastern extents of Midvaal were identified as a provincial agricultural hub.
- The R59 freeway and routes R82 and R550 were earmarked as development/industrial corridors in the GSDF. *(Any development which create more jobs along the R59 will be to the benefit of the residents of the proposed development.)*
- It might be viable to reroute cargo flights from the OR Tambo International Airport to the Vereeniging Airport which would hold opportunities for extensive industrial and commercial development around Meyerton.
- Walkerville has potential for development as a tourism town similar to Clarens / Cullinan.

Development Constraints:

- Localised dolomitic conditions are a concerning development constraint; dolomite mainly occurs in the central-northern parts of the municipal area. *(The proposed township is not situated on dolomite.)*
- Environmentally sensitive areas such as the Suikerbosrand Nature Reserve and important ridges must be conserved. *(The proposed township does not affect the Suikerbosrand Nature Reserve and important ridges.)*
- The condition of provincial roads in the MLM is generally poor, mitigating economic development and access to the area. *(Heidelberg Road provides access to Sky City and long term to Rietspruit. The condition thereof needs to be monitored as it may impact on the development.)*
- Insufficient water and sanitation infrastructure in urban areas and along routes R59 and R82 may deter development. *(This is a challenge that will be addressed during the application for township establishment as a cross border agreement is required between Midvaal and Ekurhuleni Municipalities and the upgrade of the ERWAT WWTW is required.)*
- Spatial discrepancy with the largest concentration of low-income residential development being located towards the west of route R82 while the bulk of economic activities/job opportunities are located to the east of route R59. *(The proposed township will be situated east of the R59 and in close proximity to the Klipriver Node and various industrial activities.)*
- The urban footprint of Midvaal is very fragmented. The long term vision for the area is thus extensive corridor development along routes R59, R82 and K154 and K164 (Johan le Roux) in an effort to functionally consolidate the urban fabric of the municipality along two north-south and two east-west routes. *(Midvaal has a fragmented urban footprint and Rietspruit will contribute to it, BUT over time it is foreseen that the development will grow in a western direction towards the R59.)*

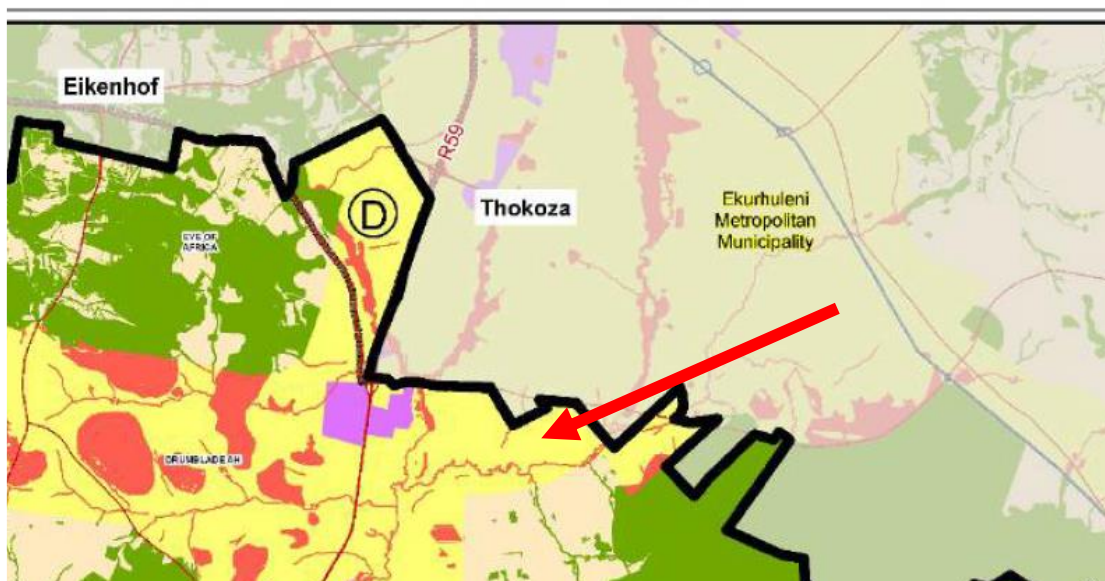
The reviewed Midvaal SDF is based on a number of Development Principles associated with the various functional and structuring elements within the Midvaal area.

The 10 Development Principles are summarized below:

- (i) **Environmental Management:** To protect and actively manage the natural environmental resources in the Midvaal Municipal Area in order to ensure a sustainable equilibrium between agricultural, tourism, industrial/manufacturing and mining activities, as well as urbanisation pressures in the area.

The Development principle is guided by the Gauteng Environmental Management Framework 2014 (GEMF) and its subsequent revisions. The GEMF is illustrated by 5 Control Zones:

Gauteng Environmental Management Framework



- Zone 1: Urban Development Zone

The intention with Zone 1 is to streamline urban development activities in it and to promote infill development, densification and concentration of urban development within the urban development zones as defined in the Gauteng Spatial Development Framework (GSDF). Certain currently listed activities may be exempted from environmental assessment requirements at the discretion of the competent authority.

The proposed township falls within Zone 1. The entire area around the R59 Development Corridor as well as the east-west link from Klip River towards Walkerville, Elandsfontein and Ennerdale are included in this zone. Large scale developments around route R82 in the western parts of Midvaal like Lakeside/De Deur and Savanna City are, however, excluded.

- Zone 2: High Control Zone (within the Urban Development Zone)

Sensitive areas within the urban development zone must be conserved and where linear development (roads etc.) cannot avoid these areas, a proper assessment and implementation of alternatives must be undertaken.

Sensitive areas within the Urban Development Zone 2 include:

- Conservation priority areas (CBAs);
- *Rivers (including 32m buffers);*
- Ridges;
- Areas that are sensitive (as determined in the sensitivity assessment); and
- Protected areas.

- Zone 3: High Control Zone (outside the Urban Development Zone)

Special control zones are sensitive areas outside the urban development zone. These areas are sensitive to development activities and in several cases also have specific values that need to be protected.

The following areas have been identified in this zone:

- *Rivers (including a 32m buffer on each side)* and currently undeveloped Ridges that must be conserved;
- The maintenance of current protected areas;
- The creation of the Vaal Dam conservation and recreation area with the focus on grassland conservation and extensive recreation activities;
- The creation of the Johannesburg south conservation, recreation and intensive small scale agriculture area

- Zone 4: Normal Control Zone

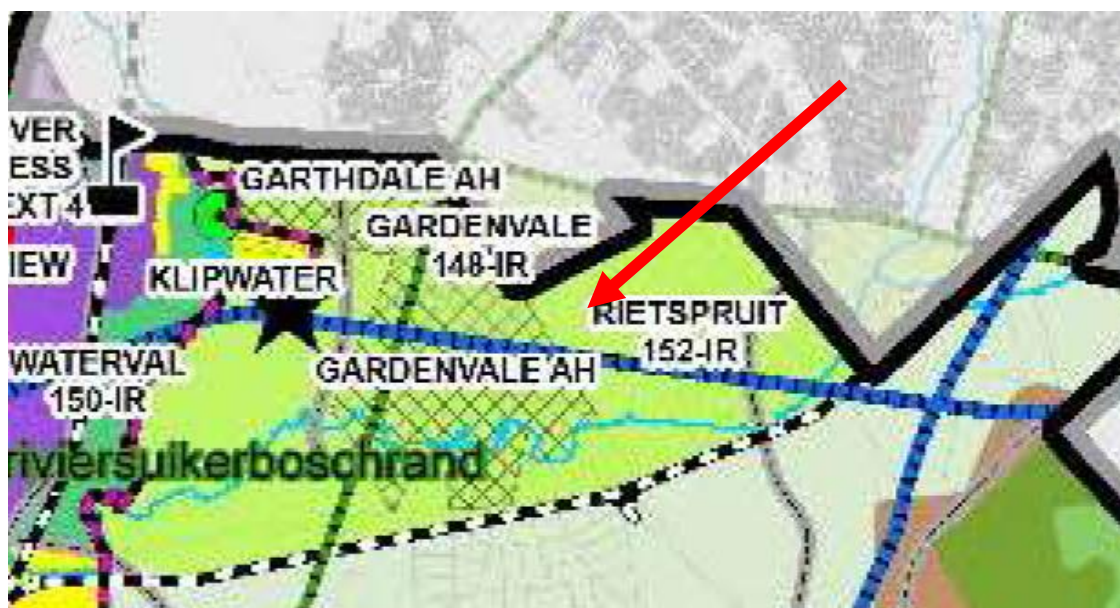
- Zone 5: Industrial and Large Commercial Focus Zone

This confirms that a long term vision for the area in question in terms of the GEMF is "urban development", contrary to the "Conservancies" in the SDF.

Conservancies:

The proposed township falls within an area earmarked as "Conservancies":

*The Suikerbosrand Provincial Nature Reserve located in the north-eastern part of Midvaal is a major structuring element and is legally protected from development (refer to **Figure 15**). There are also eight registered conservancies in the LM, namely Kliprivier-Suikerboschrand Conservancy, Welverdiend Triangle Conservancy, Thorntree Conservancy, Henley-on-Klip Conservancy, Drumblade Conservancy, Apple Orchards Conservancy, Klipkraal Conservancy, and Vaaldam Conservancy.*



All the studies conducted to date confirm that the property is not high potential agricultural land and not ecological sensitive. The proposed development took environmental sensitivity areas into account, therefore the provision of a buffer around the Rietspruit and the accommodation of the existing graveyards. The surrounding area has been fragmented by agricultural holdings and various non-residential and non-agricultural uses have been established close to the Heidelberg Road. The need for this area as a "Conservancy" is questioned.

- (ii) Agricultural Production: To facilitate and enhance agricultural production in the municipal area by actively protecting all land earmarked for agricultural purposes, and to maintain agricultural holdings for small scale agriculture and rural residential purposes.

The proposed development does not affect high potential agricultural land as confirmed by the ecological study conducted for the Environmental Authorization process.

- (iii) Tourism Promotion: To promote tourism development in the Midvaal area by way of the active utilization of tourism resources available like the Vaal Dam, the Ridges Precincts, and the Nature Reserves in the area.

The proposed township will bring more people in the area which can visit the Suikerbosrand Nature Reserve.

- (iv) Corridor Development: To pre-actively plan, design and facilitate the establishment of a Development Corridor along the R59 freeway.

The establishment of a new residential area at Rietspruit will strengthen the R59 Corridor and the Klipriver Business Park / node as residential opportunities will be provided in close proximity to the industrial / commercial areas.

- (v) Nodal Development (Economic and Social Facilities): To facilitate the development of a hierarchy of Activity Nodes and a number of Multi Purpose Community Centres in the Midvaal area to ensure equitable access to social infrastructure, and to promote Local Economic Development in the Urban and Rural parts of the Municipality.

A new node is not proposed as the Sky City node, ± 2,5km north-west of the proposed township, is in close proximity. It is also foreseen that mini-bus taxi's will commute between the Mall and the residential township Rietspruit.

The community facility proposed in the township can fulfil in various needs such as a satellite Municipal office, clinic, social hall, informal trading place, etc.

Application is also made to include the township Rietspruit as an Economic Revitalization Overlay Zone which aim is to promote the establishment of small scale economic and social facilities within residential areas.

- (vi) Movement network: To capitalise on the strategic location of the municipality by way of regional and provincial linkages, and to establish an internal movement network comprising a hierarchy of roads which include a comprehensive public transport network and services.

The proposed links to K154 will open up the area for public and private transport.

- (vii) Industrial, Commercial, Mining Activity: To promote the development of a diverse range of industrial, commercial and mining activities in the Midvaal area with specific focus along the R59 Corridor and at the designated nodal points.

- (viii) Human Settlement Development: To provide for a wide range of housing typologies and tenure alternatives within the municipal area by way of clearly defined Strategic Development Areas, and to manage residential densification by way of the Midvaal Density Policy.

Midvaal Density Policy – May 2021

The aim of the Midvaal Density Policy is to focus on location-specific densification to achieve a sustainable and efficient urban structure.

The base density applied in this Density Policy is 20 units per ha for all single residential areas, for development located within the Urban Development Boundary presented in the adopted Midvaal SDF.

*The proposed township will thus be motivated in terms of the Midvaal Density Policy as "Residential" and for land inside the "urban development boundary". The residential density of the township is 3 782 erven / 162 ha = **23 units per hectare**. According to the base density of 20 units per hectare, application can be made for 3 240 erven. The additional 542 erven can be justified in the following manner:*

Social Amenities

Walking-distance access to community facilities, such as clinics, schools and public parks, is a fundamental requirement of sustainable urban development. To encourage the above, it is necessary to allow residential densification near community facilities, because this will increase the number of people living within walking distance of such facilities.

A residential density of 5 units per ha can be added to the base residential density of 'Residential 1' if the residential development is:

- located adjacent to a public open space; and
- located within 200m of a community facility, such as a school, clinic, library or sports facility. (See plan below.)
- *The provision of open spaces in Rietspruit can be used in the calculation of density. Large open spaces occur along the Rietspruit and small children play parks are provided throughout the township. 81 Residential erven are directly adjacent to the children play parks or adjacent / opposite the Rietspruit open space. The increase in density on these erven from 20 units/ha to 25 units/ha justifies another 20 erven.*
- *The plan below indicates a 200m radius around the proposed 3 schools and community facility. It is evident that a large portion of the site falls within these areas which measure 91,5766 ha in total. And for this area, an additional density of 5 units per hectare applies. The additional number of units within this area is 457.*
- *542 – 20 – 457 = 65 erven.*

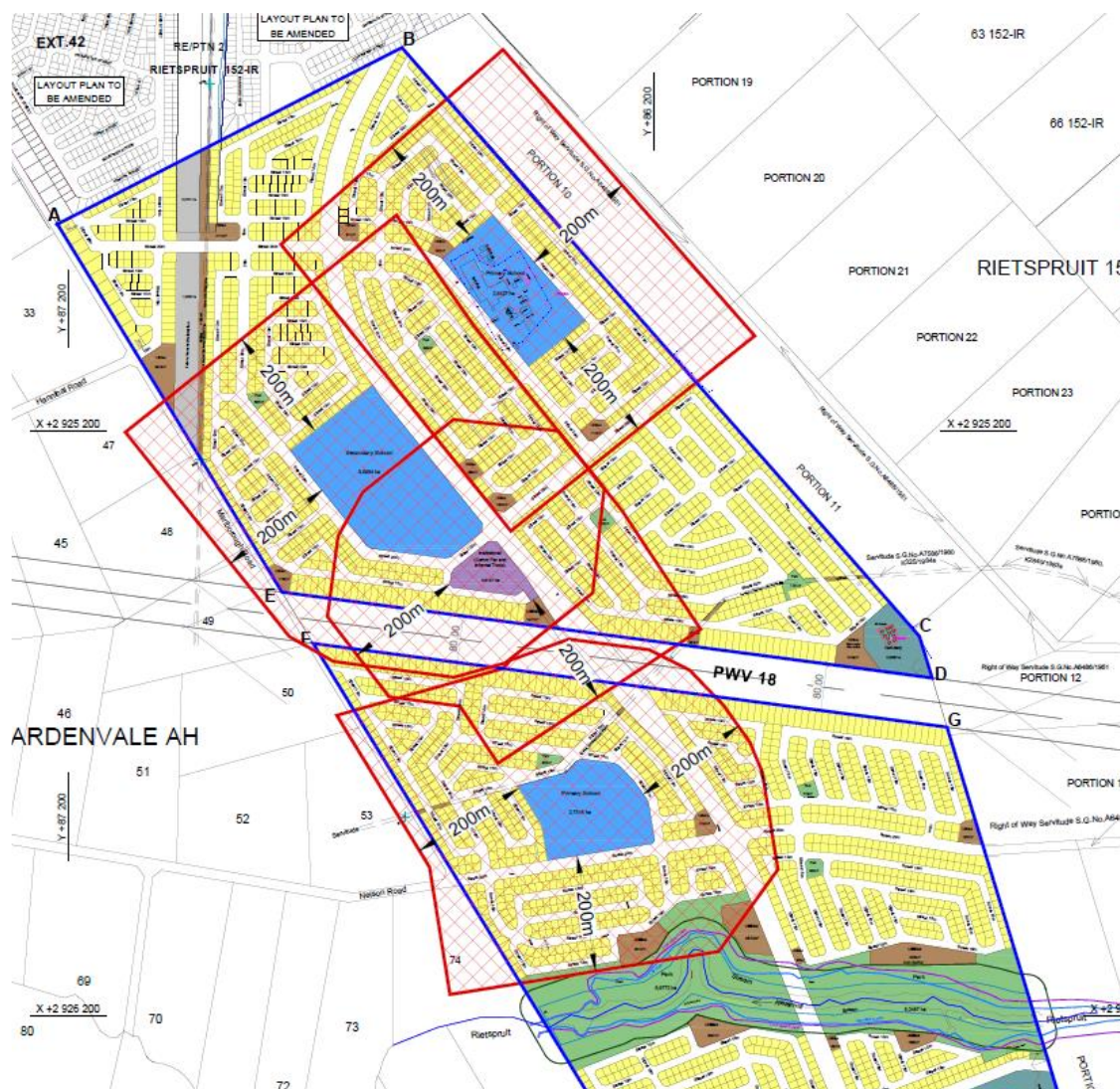
Transit stations

A residential density of 10 units per ha for 'Residential 1' can be added to the base residential density of a residential development if the residential development is:

- located within 400m of commuter railway station, bus rank or taxi rank, or similar public transportation facility.

It is foreseen that public transport (mini bus taxi's) will use the entire boulevard (spine road) which is less than 400m from the western and eastern boundaries of the township. The Traffic Impact Assessment also proposes that at 3 prominent intersections, provision be made for laybys for mini bus taxi's.

The remaining 65 stands, which represent 1,71 % of the erven, can be justified taking the location of the spine road and the proposed taxi laybys into account.



Densification is bound by several parameters which guide and influence urban development and densification.

(i) Sustainable Neighbourhoods

Sustainable urban development needs to be a primary goal when developing urban areas. The Municipality and the community at large need to share a common goal to create more sustainable urban areas within Midvaal, which:

- o Prioritise walking and public transport and minimises the need to use private vehicles;

The proposed boulevard (spine road) in Rietspruit is centrally located within the township and is between 300m and 400m from the eastern / western boundary of the township. This confirm that all residents will be able to walk to this road to access public transport.

“A 20 minute walk or 2km drive delineates the outer ring of the neighbourhood.”

It will be possible for all residents to reach the boulevard (spine road) within a 20minute walk.

- o Deliver a quality of life and provide access to economic opportunities;

Application is made to amend the Spatial Development Framework to include the township Rietspruit as an Economic Revitalization Overlay Zone. This purpose of this request is to stimulate economic activities in the township, but in a controlled manner. It will be possible for the residents in Rietspruit to apply for various land uses on a "Residential 1" erf.

- o Provide a range of social amenities that are easily accessible;

Provision is made for 3 public schools in the township in addition to a "Community Facility" which is easily accessible for all residents. Three of these facilities are located in the northern part of the township and one primary school is located in the southern part.

Another social facility is also the provision of a cemetery site along the southern boundary of the township.

- o Present an attractive and quality public realm that is easily maintained;

The proposed township can easily be divided into various residential "neighbourhoods" which gain access from the east-west collector roads by one or two access points. Limited access to the residential neighbourhoods will enhance the security thereof. Each of these areas can have an own identity and each has access to an open space. This will ensure that residents take ownership of the small neighbourhoods and open spaces.

- o Enhance and protect the natural environment and biodiversity.

The Rietspruit is regarded as environmental sensitive and as stated above, four residential "clusters" or "neighbourhoods" border onto this area. Although these parks are accessible to the larger community and general public, it is foreseen that the adjoining residential areas (small neighbourhoods) will mostly make use of the open space and will hopefully take ownership thereof in the sense of upkeep and security.

(ii) Land Use and Transportation Integration

Land use and transportation integration forms the backbone of an efficient urban structure. It not only ensures the cost-effective operation of a city's public transportation system, but it also tends to limit urban sprawl by concentrating urban development at higher densities close to major transportation routes.

It is stated above that all of the residential areas are within a walking distance of 300m to 400m from the proposed boulevard (spine road). It is foreseen that public transport will make use of this road for pick up and dropping of commuters as proposed in the Traffic Impact Study.

The proposed township does not make provision for high density residential as this township is regarded as an extension of the Sky City development and provision is made for high density close to the Sky City Mall. A node has been established around the node which is $\pm 2,5$ km from Rietspruit.

(iii) Urban Development Boundary

The Urban Development Boundaries (UDB) is a mechanism to contain urban sprawl and to define a line beyond where only limited municipal services are provided.

An Urban Development Boundary does not necessarily prohibit development outside the demarcated boundary, but it does prohibit intensive, high-density development, which is more suited for urban environments, outside the boundary. As such, the demarcation of an Urban Development Boundary must be done with urban density in mind. The Urban Development Boundary must enable the densification of strategic areas, such as areas that are located in close proximity to bulk infrastructure and social amenities.

The proposed township does not represent in-fill development or a brownfield development, but can be justified as it will borders onto the southern expansion of Sky City. It will not be regarded as a "leap frog" development. It is foreseen that more than this one township will be established in this area as the Sky City development needs to expand in a southern direction. The close proximity to the Heidelberg exit onto the R59 Freeway confirms the suitable location for a new residential area in Midvaal. It is however important that the provision of engineering services (water and sewer) to this area be unlocked / solved as this holds the key to the establishment of a major residential area.

(iv) Infrastructure Services

Infrastructure availability or potential availability is a pre-requisite for densification. However, existing infrastructure alone should not dictate future areas for densification. The location criteria for densification, such as proximity to nodal areas, should also be used to determine appropriate locations for future densification and infrastructure provision. If a criteria-based approach is taken, infrastructure provision should follow densification and strategic investment in infrastructure should occur accordingly.

It is imperative that bulk services contributions be maintained at a level that effectively contributes to the upgrading of bulk infrastructure in order to increase densities in strategic locations. This may result in higher bulk services contributions to fund infrastructure provision in certain localities that support urban densification.

The provision of bulk water and sewer to this Rietspruit area will be the catalyst for many more applications to be submitted. The proposed township makes provision for 3 782 residential erven – a large development in itself. The cross border agreements to be concluded between Midvaal and Ekurhuleni Municipalities, and the upgrade of the ERWAT WWTW, will determine and confirm the residential potential of this area.

(v) Protection of Agricultural Land

Large parts of Midvaal comprise high-potential agricultural land, implying that many parts of Midvaal are not advisable for urban development from an agricultural point of view. In selected cases, the development of moderate-potential agriculture areas could be considered for urban development. This is especially relevant in areas where higher urban densities are required. For example, areas abutting public transportation spines or stations are often more suitable for higher-density development than for agricultural development. Developing such areas at higher densities will limit urban sprawl and

lessen the pressure for urban development on peripheral, high-potential agricultural areas.

The ecological study done as part of the Environmental Authorization process confirmed that the land is not regarded as high-potential agricultural land.

- (ix) Compact City: To delineate an Urban Development Boundary to encourage consolidated urban development.

This development falls outside the urban development boundary, but taking the potential of growth from Sky City and then towards the R59 into account, then the proposed amendment to the Midvaal Spatial Development Framework can be justified.

- (x) Targeted Engineering Infrastructure Investment: To prioritize the bulk of short to medium term upgrading/provision of engineering services in accordance with the Urban Development Boundary.

It is evident that the developer will contribute towards the establishment (installation) of bulk engineering services in order to develop Rietspruit.)

Although the proposed development is not in line with the Midvaal Spatial Development Framework and the urban development boundary, it can be argued that, due to the magnitude thereof, the node at Klipriver will be strengthened and that ultimately it will be linked to Sky City. Midvaal Local Municipality will be benefitted by a development of this scale which will create future development opportunities in the area.

It is thus evident that the proposed township Rietspruit, and the establishment of a wider residential area, can be supported although amendments to the Midvaal SDF are required.

5.1.5 Spatial Planning and Land Use Management Act 2013,

The following principles apply to spatial planning, land development and land use management:

- (a) The principle of spatial justice, whereby -
- (i) past spatial and other development imbalances must be redressed through improved access to and use of land;
 - (ii) spatial development frameworks and policies at all spheres of government must address the inclusion of persons and areas that were previously excluded, with an emphasis on informal settlements, former homeland areas and areas characterized by wide spread poverty and deprivation;
 - (iii) spatial planning mechanisms, including land use schemes, must incorporate provisions that enable redress in access to land by disadvantaged communities and persons;
 - (iv) land use management systems must include all areas of a municipality and specifically include provisions that are flexible and appropriate for the management of disadvantaged areas, informal settlements and former homeland areas;
 - (v) land development procedures must include provisions that accommodate access to secure tenure and the incremental upgrading of informal areas; and
 - (vi) A Municipal Planning Tribunal considering an application before it, may not be impeded or restricted in the exercise of its discretion solely on the ground that the value of land or property is affected by the outcome of the application;

The proposed development has taken into account the spatial development frameworks and policies at all spheres of government which was discussed above. The proposed development is not in line with the goals and strategies of the SDF's at all levels of planning but the benefit to Midvaal can be justified and the developers are therefore confident that the Midvaal Spatial Development Framework will be amended to accommodate Rietspruit.

- (b) the principle of spatial sustainability, whereby spatial planning and land use management systems must –
- (i) promote land development that is within the fiscal, institutional and administrative means of the Republic;
 - (ii) ensure that special consideration is given to the protection of prime and unique agricultural land;
 - (iii) uphold consistency of land use measures in accordance with environmental management instruments;
 - (iv) promote and stimulate the effective and equitable functioning of land markets;
 - (v) consider all current and future costs to all parties for the provision of infrastructure and social services in land developments;
 - (vi) promote land development in locations that are sustainable and limit urban sprawl; and
 - (vii) result in communities that are viable;

The principles of spatial sustainability were taken into account by the proposed township establishment and development thereof. The proposed development does not affect prime agricultural land negatively and promotes development in locations that are sustainable.

- (c) the principle of efficiency, whereby –
- (i) land development optimise the use of existing resources and infrastructure;
 - (ii) decision-making procedures are designed to minimise negative financial, social, economic or environmental impacts; and
 - (iii) development application procedures are efficient and streamlined and timeframes are adhered to by all parties;

The proposed township will utilise and optimise existing infrastructures and resources in the area.

- (d) the principle of spatial resilience, whereby flexibility in spatial plans, policies and land use management systems are accommodated to ensure sustainable livelihoods in communities most likely to suffer the impacts of economic and environmental shocks; and

The proposed township will ensure sustainable livelihoods by the development of high quality dwelling units and sustainable residential developments as provision is made for 2 primary schools, one secondary school, a community facility and other supportive land uses.

- (e) the principle of good administration, whereby –
- (i) all spheres of government ensure an integrated approach to land use and land development that is guided by the spatial planning and land use management systems as embodied in this Act;
 - (ii) all government departments must provide their sector inputs and comply with any other prescribed requirements during the preparation or amendment of spatial development frameworks;
 - (iii) the requirements of any law relating to land development and land use are met timeously;

- (iv) the preparation and amendment of spatial plans, policies, land use schemes as well as procedures for development applications, include transparent processes of public participation that afford all parties the opportunity to provide inputs on matters affecting them; and
- (v) policies, legislation and procedures must be clearly set in order to inform and empower members of the public.

The proposed development is in line with the development principles of SPLUMA. The principles of spatial justice, spatial sustainability, efficiency, spatial resilience and good administration are also promoted through the development of residential dwelling units in close proximity to job opportunities and by utilising the vacant land more economically. Special consideration was given to the protection of prime and unique agricultural land and the proposed development does not affect agricultural land negatively. The proposed application for township will be circulated to all the relevant stakeholders for comment and input.

5.2 Need

The need in favour of the proposed Rietspruit is based on a number of primary considerations, being the principle need for housing, the need for housing within the local context and the need for a comprehensive approach to residential neighbourhoods.

5.2.1 Housing need

It is a well-known fact that basic housing remains one of the fundamental challenges along the road to the general enhancement of quality of life in South African. The primary focus at this need lies undoubtedly with the population segment that have difficulty in accessing housing opportunities by means of market mechanisms. It is, however, also accepted that the creation of housing opportunities at any level of affordability contributes positively towards the total housing stock, hence also the availability of housing opportunities to vertically mobile populations and thus as a result also to the availability of opportunities at lower levels of affordability. In other words: the establishment of market driven housing indirectly facilitates the availability of subsidized housing opportunities.

The basic need for housing in general is undisputed and the provision of housing as advocated by this proposal supports the need in favour of this application.

5.2.2 Local Housing Need

Although the subject property forms part of the Midvaal Local Municipality area of jurisdiction, the local housing need can only be regarded in context within the demand for housing in the Gauteng environment. Residential opportunities of any significant scale are still lacking in Gauteng and the proposed development is ideally located to cater in the needs of the Ekurhuleni and Midvaal communities.

If this area could enjoy local residential growth in addition to the proposed commercial development along the R59 corridor, such residential opportunities could well favour a scenario of employment and residential opportunities in close and functional proximity to each other. This can contribute to a decrease in dependence on regional traffic routes and therefore impact positively on the current traffic scenario. The establishment of more effective urban form in respect of the employment and residential interaction is also a defined objective and the need in favour of this proposal is therefore also supported from this perspective.

5.2.3 Comprehensive approach

As raw or undeveloped land is often subdivided into small portions in areas surrounding urban settlement, its development for residential purposes is often forced to happen piece-meal and on an add-on basis. Pieces of land less than 5 hectare in extent are developed as additions and extensions to existing settlement patterns. Authorities must then make sense of this phenomenon by trying to maintain meaningful spatial format and provide for supportive uses (or force investors to provide land for same). At best this results in a reactionary approach with less than ideal land-use interaction and movement planning and even conflicting land-use priorities.

The subject property, however, provides the unique opportunity for comprehensive land-use planning on a scale that allows for the establishment and management of a residential settlement of true neighbourhood quality. The design approach as contemplated in paragraph 4 is in fact direct response to the need posed by the subject property in this regard.

The nature of the subject property thus requires that a residential settlement area inclusive of its supportive uses such as schools and community facilities be planned from the outset. Accordingly, the proposal at hand provides for various residential erf sizes, open space, educational and community component, etc. It is further envisaged that the later phases of the development of the subject property may include certain additional supportive uses as and when the threshold population or critical mass is reached. The need in favour of this proposal is therefore also supported from this perspective.

5.3 Desirability

The proposed township on the subject property is considered desirable based on the following considerations:

- The proposed township is not situated on valuable and high potential agricultural land.
- The proposed township accommodates the environmental sensitive area, being the Rietspruit and associated buffers and floodlines.
- The proposed township accommodates the existing two graveyards and proposes a new cemetery on the southern site.
- The proposed development is not in conflict with surrounding land uses on development proposals on surrounding land.
- The proposed lay-out is sensitive to and recognizes the existing features of the site. The existing farmhouse complex is accommodated on an erf to be zoned "Institutional".
- The proposed development took cultural of historical significance into account.
- The proposed lay-out, and in particular the proposed road network and stormwater management system is designed in sympathy with the natural topography and preferential drainage pattern. Provision is made for stormwater attenuation within the boundaries of the township.
- The proposed layout makes provision for the establishment of small neighbourhoods to enhance the quality in life and to promote security and maintenance of the open spaces.

6. TOWN PLANNING REQUIREMENTS PRIOR TO PROCLAMATION

The following must be attended to prior to the proclamation of the township:

6.1 Spatial Development Framework and Urban Development Boundary

The proposed development falls outside the Urban Development Boundary and is not in line with the Spatial Development Framework. Discussions with the Midvaal Local Municipality confirmed that Council can attend to the amendment of the SDF and Urban Development Boundary during the annual review thereof. This will be attended to once the application for township establishment has been approved by the Midvaal Local Municipality.

The amendment of the SDF will also deal with the inclusion of the township Rietspruit as an "Economic Revitalisation Overlay Zone".

6.2 Parks contribution

Open space must be provided in the township at a ratio of 24m²/erf. For 3 782 erven, open space of 9,0768 hectares must be provided. The layout plan indicates that a total of 12,9647 hectares is provided as Open Space. All of this exclude the stormwater attenuation areas which are not zoned Open Space, but Utilities.

Parks contribution will therefore not be payable.

6.3 Phasing of Development

It is impossible to develop a township of this magnitude in one phase. It is foreseen that application will be made for the division of the township into smaller townships / phases after approval has been obtained.

7. CONCLUSION

We trust that the application for township establishment Rietspruit will receive your favourable consideration. Any queries can be forwarded to our office.



Sonja Meissner-Roloff

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