

MEMORANDUM

PROPOSED TOWNSHIP ESTABLISHMENT: VAN DER HOFFPARK EXTENSION 71 ON A PORTION OF THE REMAINDER OF HOLDING 12, VYFHOEK AGRICULTURAL HOLDINGS-IQ

CHAPTER 1: INTRODUCTION

1.1 **BACKGROUND**

Maxim Planning Solutions Proprietary Limited (2002/017393/07) was appointed by Annemarie Coetzee (ID Number 500302 0023 080) on 12 February 2015 to attend to the establishment of the proposed township area of Van der Hoffpark Extension 71 comprising two (2) "Residential 1" erven on a portion of the Remainder of Holding 12, Vyfhoek Agricultural Holdings-IQ.

The project stems from the fact that the owner of the Remainder of Holding 12, Vyfhoek Agricultural Holdings-IQ i.e. Mrs. Annemarie Coetzee currently reside on the fore-mentioned property and intends to utilize the far eastern portion of the subject property, located adjacent to Hennie Bingle Avenue, for the creation of two (2) "Residential 1" erven with the ultimate intent to relocate to one of the newly created erven whereas the second newly created erf will be alienated. The proposed township establishment is on a portion of the Remainder of Holding 12, Vyfhoek Agricultural Holdings and will be known as Van der Hoffpark Extension 71. The site is located in the Mooivallei area in the northern suburbs of Potchefstroom and adjacent to Hennie Bingle Avenue.

As integral part of the township establishment process, the following studies were commissioned by Maxim Planning Solutions (Pty) Ltd as part of the pre-planning activities:

- Geotechnical investigation of the development area conducted by Geoset CC.;
- 1:100 year floodline determination conducted by Moedi Consulting Engineers (Pty) Ltd;
- Detail civil engineering services investigation conducted by Moedi Consulting Engineers (Pty) Ltd;
- Detail electrical services investigation conducted by Moedi Consulting Engineers (Pty) Ltd;

The results of the studies referred to above will be addressed in the respective sections of this Memorandum.

This chapter will provide a concise background to the project as well as a project outline.

1.2 APPLICATION

Maxim Planning Solutions Proprietary Limited (2002/017393/07) is hereby applying on behalf of Annemarie Coetzee (ID Number 500302 0023 080) for the establishment of the proposed township Van Der Hoffpark Ext. 71 on a portion of the Remainder of Holding 12, Vyfhoek Agricultural Holdings-IQ in terms of the provisions of Section 96 of the Town Planning and Townships Ordinance, 1986 (Ordinance 15 of 1986) read together with SPLUMA (Act 16 of 2013).

1.3 PUBLIC PARTICIPATION

The application in respect of the establishment of the proposed township Van Der Hoffpark Extension 71 will be advertised in accordance with Section 69(6)(a) read with Section 96(3) of the Town Planning and Townships Ordinance, 1986 (Ordinance 15 of 1986) in the Beeld, Citizen and North-West Provincial Gazette on 27 October 2015 and 03 November 2015. Objectors will be afforded a period of 28 days from 27 October 2015 to submit objections or comments in respect of the proposed township area to the Municipal Manager.

The application will also, in accordance with the prescriptions of Section 69(6)(b) read with Section 96(3) of the Town Planning and Townships Ordinance, 1986 (Ordinance 15 of 1986) be referred to the following external organizations / departments for comments or objections:

- ✘ Department of Public Works and Roads
- ✘ Telkom SA Limited
- ✘ Eskom
- ✘ Dr. Kenneth Kaunda District Municipality
- ✘ Department of Rural, Environment and Agricultural Development
- ✘ Department of Minerals and Energy
- ✘ Department of Agriculture, Forestry & Fisheries
- ✘ South African Heritage Resources Agency
- ✘ Department of Water Affairs
- ✘ Department of Local Government and Human Settlements
- ✘ Department of Education
- ✘ Department of Health
- ✘ South African Post Office
- ✘ Transnet

- ✧ South African Heritage Resources Agency
- ✧ South African National Roads Agency Limited (SANRAL)

The fore-mentioned organizations / departments will be afforded a period of 60 days to comment in this matter in accordance with the prescriptions of Section 69(6)(b) read with Section 96(3) of the Town Planning and Townships Ordinance, 1986 (Ordinance 15 of 1986).

1.4 STUDY AREA DELINEATION

The proposed development area comprises a portion of the Remainder of Holding 12, Vyfhoek Agricultural Holdings-IQ as described in detail in section 2.1. and reflected on the following map.



Map1: Locality map of development area

1.5 REPORT OUTLINE

The remainder of the report is structured in terms of the following main headings:

- Chapter 2: Particulars of the development area
- Chapter 3: Physical aspects
- Chapter 4: Proposed development
- Chapter 5: Provision of Engineering Services
- Chapter 6: Motivation

CHAPTER 2: PARTICULARS OF THE DEVELOPMENT AREA

2.1 LOCALITY

The proposed township area of Van Der Hoffpark Extension 71 will be located on a portion of the Remainder of Holding 12, Vyfhoek Agricultural Holdings-IQ comprising 0,4120 hectares.

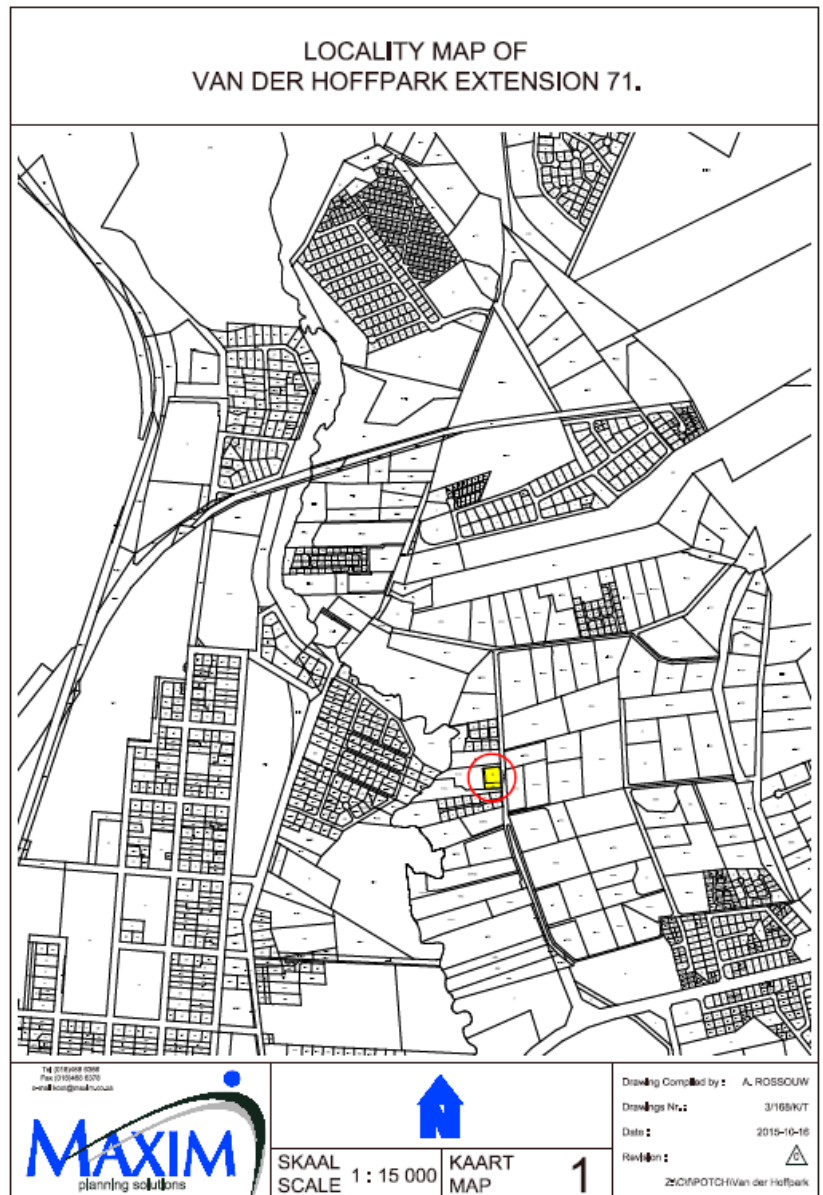
The Remainder of Holding 12, Vyfhoek Agricultural Holdings-IQ is located directly adjacent and to the west of Hennie Bingle Avenue (formerly Main road).

The proposed township area is located within the north-eastern portion of the urban area of Potchefstroom as reflected on the following map.

The proposed township area detailed above is located within the area of jurisdiction of the Tlokwe Local Municipality which in turn falls within the area of jurisdiction of the Dr. Kenneth Kaunda District Municipality.

2.2 SG DIAGRAM

The initial Holding 12, Vyfhoek Agricultural Holdings IQ is reflected on SG Diagram A3720/57 (attached to the application for township establishment as **Annexure E**). Holding 12, Vyfhoek Agricultural Holdings-IQ was subdivided during 2003 with the creation of Portion 1 of Holding 12, Vyfhoek Agricultural Holdings-IQ. This subdivision is reflected on



Map 2: Locality of development area

subdivision diagram SG No. 3042/2003.

2.3 OWNER

The Remainder of Holding 12, Vyfhoek Agricultural Holdings IQ is currently registered as follows:

Property description	Details of owner	Deed of Transfer Number
Remainder of Holding 12, Vyfhoek Agricultural Holdings IQ	Annemarie Coetzee (5003020023080)	T23110/2000

2.4 AREA

The proposed township Van Der Hoffpark Extension 71, on a portion of the Remainder of Holding 12, Vyfhoek Agricultural Holdings IQ will comprise a total area of 0,4120 hectares.

2.5 EXISTING LAND USE AND ZONING

The portion of the Remainder of Holding 12, Vyfhoek Agricultural Holdings-IQ, on which the proposed township Van der Hoffpark Extension 71 is to be established, is currently used for the purposes of an art gallery (refer **Plate 1**).



Plate 1: View of existing art gallery

The remainder of Holding 12, Vyfhoek Agricultural Holdings (located west of the proposed township area) is currently utilized for a single dwelling unit (refer **Plates 2 and 3**).



Plates 2 and 3: View of existing dwelling house on the remainder of the property

The Remainder of Holding 12, Vyfhoek Agricultural Holdings-IQ is currently not included in the Potchefstroom Town Planning Scheme, 1980 and may in terms of the conditions of title, imposed in terms of the Agricultural Holdings (Transvaal) Registration Act, 1919 (Act 22 of 1919), only be used for the purposes as contemplated in terms of the fore-mentioned Act. Cognisance must be taken of the fact that supplementary land use rights in respect of the use of the property for the purposes of an “intimate theatre for performing arts, conference facility and serving place of refreshment all under one roof and a chapel” was granted during 2000 in terms of the Physical Planning Act, 1967 (Act 88 of 1967). The proposed township area of Van der Hoffpark Extension 71 will be incorporated into the Tlokwe Town Planning Scheme, 1980 in terms of Section 125 of the Town Planning and Townships Ordinance, 1986 through the extension of the town planning scheme area.

2.6 MINERAL RIGHTS

According to Deed of Transfer T23110/2000 (attached to the application for township establishment as **Annexure G**), the Remainder of Holding 12, Vyfhoek Agricultural Holdings IQ is subject to the following old order reservation of rights to minerals:

“All rights to minerals and precious stones together with all rights which may be or become vested in the freehold owner to share in any proceeds which may accrue to the State from the disposal of the undermining rights of the land including the share of claim licence money and any share of rentals or profits which may accrue to any owner under any mining lease granted in respect of the land covered by the agricultural holdings and

the like are reserved in favour of the said IVOR KNOWLES-WILLIAMS and his successors in title to the agricultural holdings, in respect whereof Certificate of Mineral Rights No 282/1958 R.M. was registered on 20 June 1958.”

The above-mentioned reservation of rights to minerals is however subject to the provisions of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002) that came into force on 01 May 2004. Indications are that the fore-mentioned old order rights have since lapsed and the application for township establishment will subsequently also be referred to the Department of Mineral Resources for its consent in respect of the proposed township.

2.7 **BONDHOLDER**

A portion of the Remainder of Holding 12, Vyfhoek Agricultural Holdings IQ is subject to the following mortgage bond:

Property description	Details of Bondholder	Mortgage Bond Number
On a portion of the Remainder of Holding 12, Vyfhoek Agricultural Holdings IQ	ABSA Bank Limited	B41769/2012

The consent of the bondholder i.e ABSA Bank Limited in respect of the application for township establishment on a portion of the Remainder of Holding 12, Vyfhoek Agricultural Holdings IQ was requested and said consent is currently awaited. The application for the consent of ABSA Bank Limited in respect of the establishment of the proposed township Van der Hoffpark Extension 71 is attached to the comprehensive application for township establishment as **Annexure H**. The consent of the bondholder will be forwarded to the Tlokwe Local Municipality following receipt thereof.

2.8 **RESTRICTIVE TITLE CONDITIONS**

According to Deed of Transfer T23110/2000 (**attached to the application for township establishment as Annexure G**), the Remainder of Holding 12, Vyfhoek Agricultural Holdings IQ is subject to the following title conditions, which will be dealt with as indicated:

- “A. *Die vorige Lot Nr 258 van die plaas VYFHOEK Nr 428, Registrasie Afdeling IQ, Provinsie Noordwes (waarvan die eiendom hiermee getranspoteer ‘n gedeelte uitmaak) is onderhewig aan die volgende kondisies:*
 1. *Die hierby getranspoteerde grond is onderhewig aan ‘n serwituu van die watervore, damme, reservoors, waterpype en pypeleidings wat tans*

bestaan of te eniger tyd later aangelê mag word vir die gebruik van huurders of eienaars van die verskillende gedeeltes van die plaas VYFHOEK 428, distrik Potchefstroom, waarvan die grond hieronder getranspoteer deel uitmaak”.

This condition affects the proposed township area as the existing irrigation canal of the Department of Water Affairs traverses the south-western portion of the development area, as reflected on the layout plan. Both erven 1800 and 1801 will be made subject to this condition.

“2. Die grond hieronder getranspoteer is geregtig tot ‘n reg tot water vir die algemene doeleindes uit die hoofwatervoor lopende deur die gedeeltes soos beskrywe in Akte van Transport T 1511/1894, van die plaas WITRAND 141, distrik Potchefstroom, gemaak ten gunste van John Crause Baillie en ‘n reg van weg oor genoemde gedeeltes van genoemde plaas Witrand 141, om genoemde watervoor, soos in Akte van Transport T 1511/1894 beskrywe, in orde te hou, en onderworpe aan die reg gereserveer ten gunste van ARTHUR ALEXANDER BAILLIE en FRANK WILLIAM BAILLIE op ‘n voldoende stroom water vir landbou- en huishoudelike doeleindes uit die hoof Witrand- Vyfhoek watervoor, na die gedeelte van die plaas VYFHOEK 61, groot 20,5568 hektaar kragtens Aktes van Transport T 3203/1903 en 3204/1903 deur hulle gehou”.

The Remainder of Holding 12 Vyfhoek Agricultural Holdings is currently not abstracting any water from the irrigation canal of the Department of Water Affairs and it is proposed that the erven in the township area will similarly not abstract water from the canal and this condition will subsequently not be transferred to the erven in the proposed township area.

“3. Die eienaar het, net soos die eienaars van die verskillende gedeeltes van die noordelike gedeelte van die plaas VYFHOEK 428, Registrasie Afdeling IQ, Provinsie Noordwes, die gebruik van soveel water vir besproeiing en algemene doeleindes as van tyd tot tyd in die bestaande watervore, waterpype, pypleidinge of in vore wat te eniger tyd later aangelê mag word beskikbaar mag wees”.

The Remainder of Holding 12 Vyfhoek Agricultural Holdings is currently not abstracting any water from the irrigation canal of the Department of Water Affairs and it is proposed that the erven in the township area will similarly not abstract water from the canal and this condition will subsequently not be transferred to the erven in the proposed township area.

“4. *Onderhewig aan die bepalings van Wet Nr 39 van 1935, en enige regulasies daaronder gemaak, het die eienaar, net soos die eienaars van die verskillende gedeeltes van die noorderlike gedeelte van die plaas VYFHOEK 428, Registrasie Afdeling IQ, Provinsie Noordwes, en alle persone van tyd tot tyd daartoe geregtig, en met inagneming van sodanige weiregte as aan hulle toegeken of verleen mag word, die reg om twintig (20) stuks grootvee, waarmee bedoel en waarby ingereken word aanteelvee of trekdiere met inbegrip van donkies, muile, perde en osse, en eenhonderd (100) stuks kleinvee, sy bona fide eiendom synde, te laat wei op Gedeelte G van die plaas VYFHOEK 428, Registrasie Afdeling IQ, Provinsie Noordwes, groot 4 998,7407 hektaar, soos voorgestel en beskrywe op die kaart SG Nr A 506/34 en sekere perseel Nr 408 geleë op genoemde plaas, groot 50,9779 hektaar, soos voorgestel en beskrywe op die kaart SG Nr A 831/31, soos meer volledig omskryf in bylae C van die Vyfhoek Bestuurswet (Wet Nr 39 van 1935).*

Die hoewe hieronder getransporeer is nie geregtig tot die reg van weiding vir 20 beeste en 100 skape op Gedeelte G van die plaas VYFHOEK 428, Registrasie Afdeling IQ, Provinsie Noordwes, of op sodanige gedeelte as wat deur die Regering van die Republiek van Suid-Afrika vir die doel voorbehou is nie”.

It is evident from the second paragraph of this condition that the right to grazing does not apply to this holding and this condition will in terms of Section 4(1)(b) of the Deeds Registries Act be removed from the relevant Deed of Transfer prior to the opening of the concerned township register.

- “B. *All rights to minerals and precious stones together with all rights which may be or become vested in the freehold owner to share in any proceeds which may accrue to the State from the disposal of the undermining rights of the land including the share of claim licence moneys and any share of rentals or profits which may accrue to any owner under any mining lease granted in respect of the land covered by the agricultural holdings and the like are reserved in favour of the said IVOR KNOWLES-WILLIAMS and his successors in title to the agricultural holdings, in respect whereof Certificate of Mineral Rights No 282/1958 R.M. was registered on 20 June 1958”.*

Condition B relates to the reservation of rights to minerals and will be addressed as set out in Section 2.6 supra.

- “C. *SUBJECT to the following further conditions imposed under Section 2 of Act 22 of 1919:*

- (a) *The holding is held as an Agricultural Holding and it may be used only for the purpose contemplated by the definition of that term contained in the Agricultural Holdings (Transvaal) Registration Act, 1919. That definition reads as follows-
“Agricultural Holding shall mean a portion of land not less than 8,565 square metres in extent, used solely or mainly for the purpose of agriculture or horticulture or for breeding or keeping domestic animals, poultry or bees.”*
- (b) *The applicants and any other person or body of persons, so authorised in writing by the Minister, shall, for the purpose of securing the enforcement of these conditions, have the right and power at all reasonable times to enter into and upon the holding for the purpose of such inspection or inquiry as may be necessary to be made for the abovementioned purpose.*
- (c) (i) *The holding may not be subdivided nor may any portion of it be sold, leased or disposed of in any way without the written approval of the Board first had and obtained.*
- (ii) *The holdings shall not be sold to or held jointly by two or more persons.*
- (d) (i) *Not more than one dwelling house together with such outbuildings as are ordinarily required to be used in connection with a holding may be erected on the holding except in special circumstances and then only with the consent, in writing, of the Board which may prescribe such further conditions as it may deem necessary.*
- (ii) *The dwelling house exclusive of the outbuildings to be erected on the holding shall be of the value of not less than R4000,00.*
- (iii) *Except with the consent of the Board and subject to such conditions as it may impose, the dwelling house shall be erected simultaneously with or before the erection of the outbuildings, and it shall be a completed house and not one partly erected and intended for completion at a later date.*
- (iv) *No building erected on the holding shall be located within a distance of 31,49 metre from the boundary of that holding abutting on a road.*
- (v) *No wood and/or iron buildings or buildings of unburnt clay brick shall be erected on the holding.*
- (vi) *Pending the constitution of a local authority plans and specifications of all buildings or additions or alterations shall be submitted to the applicants whose approval, in writing, shall be obtained before the commencement of building operations. The applicants shall be entitled to charge a fee not exceeding R6,30 for such approval. All*

buildings or additions or alterations to buildings shall be completed within a reasonable time after commencement.

- (e) No store or place of business whatsoever may be opened or conducted on the holding.*
- (f) The owner shall fence the holding and maintain such fence in good order and repair.*
- (g) Neither the owner nor any other person shall have the right to make or permit to be made upon the holding for any purpose whatsoever any bricks, tiles, earthenware pipes, or other articles of a like nature.*
- (h) The owner of a holding shall install and use a chemical or such other system of sanitation as may be approved by the Magistrate in consultation with the Department of Health, or by a local authority when established, provided that the effluent from the said system so used, shall not be deposited within a distance of 1,89 metre from any borehole or well on or outside the holding.*
- (i) Neither piggeries nor kennels shall be conducted on the holding and the number of large stock which may be kept on the holding shall not exceed six.”*

Following approval of the application for township establishment, an application will be submitted to the Department of Local Government and Human Settlements or its successors in title for the excision of a portion of the Remainder of Holding 12, Vyfhoek Agricultural Holdings-IQ from the provisions of the Agricultural Holdings (Transvaal) Registration Act, 1919. This consent will be required prior to the approval of the required General Plan in respect of the proposed township area by the Surveyor-General as the conditions contained in the Agricultural Holdings (Transvaal) Registration Act, 1919 prohibits the use of a holding for the purposes of a township area.

- *“D. By endorsement dated 6 July 1962 appearing on Certificate of Registered Title T 14067/1962, the property hereby transferred is ENTITLED to a servitude of aqueduct 1,89 metres wide along the whole northern boundary of Holding 3, held under Deed of Transfer T 14069/1962”.*

Due to the extent of urbanization that has taken place in this specific area and the level and location of engineering services provided, this entitlement is no longer required to service the Remainder of Holding 12 and will subsequently not be transferred to the erven in the proposed township area.

- “E. The property hereby transferred is entitled to a servitude of waterleading in favour of the Republic of South Africa by virtue of Deed of Cession K1140/1977”.

This entitlement will not be transferred to the erven in the proposed township area.

The conditions of Title as contained in Deed of Transfer T23110/2000 were also addressed in detail in the Surveyor-Certificate attached to the application for township establishment as **Annexure M**.

CHAPTER 3: PHYSICAL ASPECTS

3.1 TOPOGRAPHY

As part of the pre-planning studies that were conducted in respect of the development area, a topographical survey of a portion of the Remainder of Holding 12, Vyfhoek Agricultural Holdings-IQ was conducted by Moedi Consulting Engineers (Pty) Ltd.

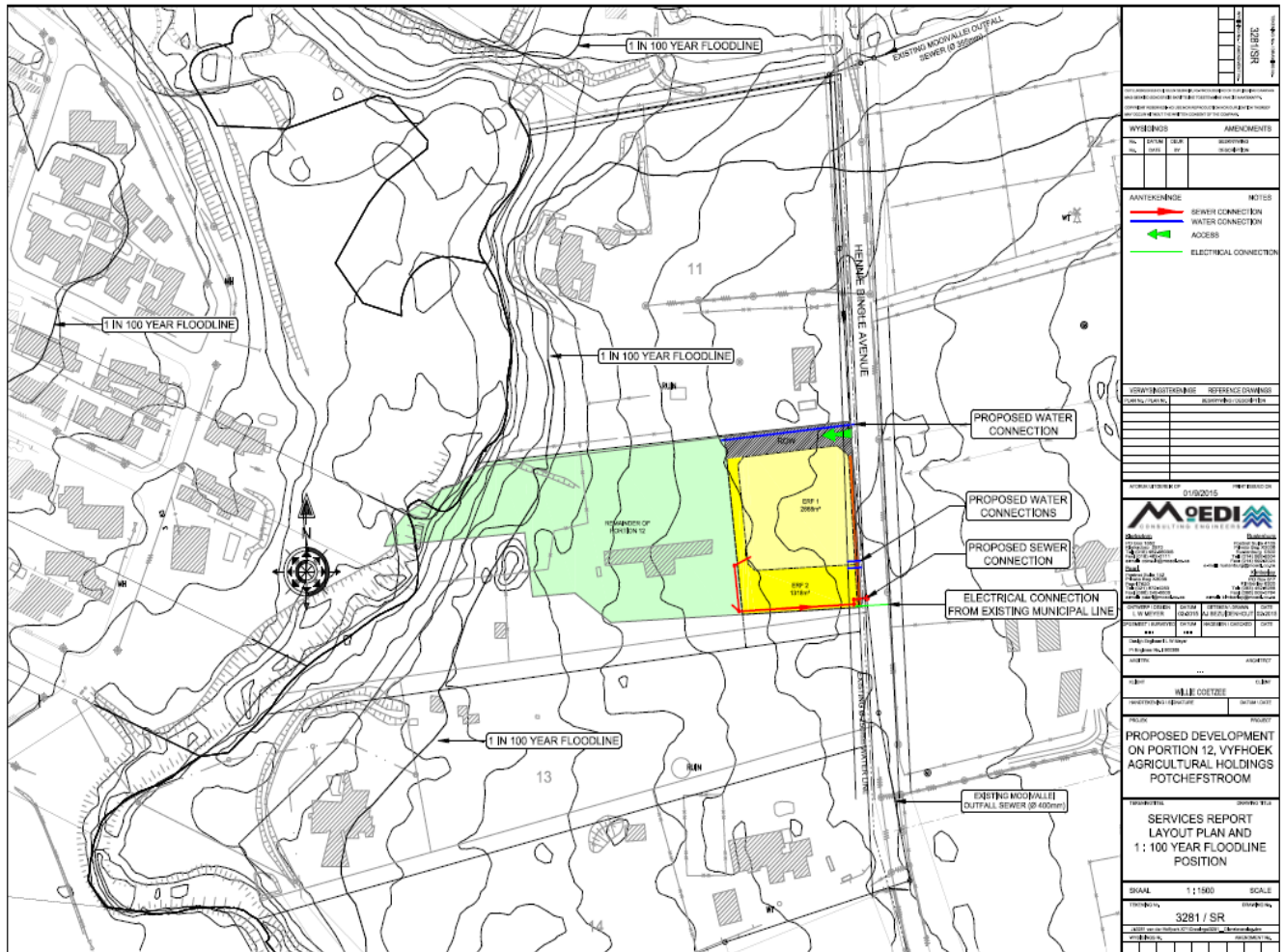


Figure 3.1 Contour data and position of 1:100 year floodline (Extract from Engineering Services report compiled by Moedi Consulting Engineers)

The site is relatively flat with a gentle western slope towards the Mooi River. It is situated between 1307 and 1309 metres above sea level. The contour lines indicate that the general drainage is towards the Mooi River in a westerly direction.

Plate flow is the dominant drainage pattern on site, and no drainage channel intersects the site, with water flowing as sheet wash in a western direction into the Mooi River.

3.2 CLIMATE

The site is located within the summer rainfall area, with an expected rainfall figure in the order of 625mm per annum (at Weather office, Potchefstroom, Weather bureau), mainly between October and May. Weinert's N-value is calculated in the order of 5 (4, 7) and chemical decomposition is the predominant form of the weathering process of crystalline rocks such as dolerite (Weinert, 1980).

3.3 WETLANDS AND PANS

The 1:100 year floodline applicable to the Mooi River is reflected on Figure 3.1 above. From the fore-mentioned map it is evident that the proposed township area of Van der Hoffpark Extension 71 is not affected by the 1:100 year floodline applicable to the Mooi River. The proposed development area is not affected by any wetland or pan.

3.4 VEGETATION (Extract of the Report on the Engineering Geological Investigation conducted on a portion of the Remainder of Holding 12, Vyfhoek Agricultural Holdings-IQ, Potchefstroom compiled by Geoset CC, attached as Annexure I to the application for township establishment)

According to the Report on the engineering geological investigation conducted on a portion of the Remainder of Holding 12, Vyfhoek Agricultural Holdings-IQ, conducted by Geoset CC, the area around Potchefstroom is typically characterised by pure grassveld types of the *Cymbopogon-Themeda* pure grassveld veld type (Acocks, 1988). The site itself is covered mainly by a dense poplar tree bush.



Plate 4: View of vegetation on site

3.5 GROUNDWATER CONDITIONS (Extract of the Report on the Engineering Geological Investigation conducted on a portion of the Remainder of Holding 12, Vyfhoek Agricultural Holdings-IQ, Potchefstroom compiled by Geoset CC, attached as Annexure I to the application for township establishment)

A ferruginised profile indicates that some perennial water level fluctuations occur. Some problems are foreseen as water seepage on top of the residual dolerite may occur. Normal water tightening techniques such as damp course on foundation levels are required due to the presence of the ferruginised or clayey profile.

3.6 GEOLOGY (Extract of the Report on the Engineering Geological Investigation conducted on a portion of the Remainder of Holding 12, Vyfhoek Agricultural Holdings-IQ, Potchefstroom compiled by Geoset CC, attached as Annexure I to the application for township establishment)

The site is regionally underlain by a dolerite sill intrusive to shale and interbedded quartzite, hornfels and limestone of the Silverton formation, Pretoria Group of the Transvaal Supergroup.

Deposits of quaternary age include colluvium or hillwash. Pedogenic material includes the forming of ferricrete where fluctuation of the water table occurred.

The majority of the site itself is underlain by dolerite.

3.7 SITE ZONATION (Extract of the Report on the Engineering Geological Investigation conducted on a portion of the Remainder of Holding 12, Vyfhoek Agricultural Holdings-IQ, Potchefstroom compiled by Geoset CC, attached as Annexure I to the application for township establishment)

In terms of the geotechnical investigation that was conducted in respect of the development area, the site was classified as site class H3R which is described as follows:

Special Development

Site Class H3R:

The site is represented by a **medium to highly** expansive and compressible soil (estimated total heave in excess of 30mm), and it is classified as **H3R** in terms of the NHBRC (1995) or SAICE (1995) Code of practice, where the R designation indicates the presence of shallow dolerite rock or large to very large core stones less than 1,5m deep, with uneven differential movement or settlement of foundations and floor slabs expected. This will increase development cost, and a competent TLB or excavator may be required

during the placing of services, especially during the dry season. Foundations will require special foundation techniques with foundation solutions including soil replacement with a soil raft, where all or part of the expansive horizon is removed and replaced with inert backfill to engineer's specification, followed by normal construction with lightly reinforced strip footings and light reinforcement (brickforce) in masonry, or stiffened or cellular rafts with articulation joints at all internal and external doors and openings with light reinforcement or brick force in masonry, or even piled construction with suspended floor slabs with or without ground beams. Standard drainage precautions must be implemented. The dry to slightly moist soil profile is expected to change dramatically if the dense poplar tree bush is removed prior to construction, and this could influence the drainage conditions changing to a wet soil profile with an expected perched water table.

The geotechnical problems encountered will require specialized foundation techniques, and special construction techniques to enable proper development.

3.8 FOUNDATION DESIGN AND BUILDING PROCEDURES (Extract of the Report on the Engineering Geological Investigation conducted on a portion of the Remainder of Holding 12, Vyfhoek Agricultural Holdings-IQ, Potchefstroom compiled by Geoset CC, attached as Annexure I to the application for township establishment)

The geotechnical investigation that was conducted in respect of the development area by made the following recommendations regarding appropriate foundations design and building procedures that will address the geotechnical constraints of the development area:

Expansive soil

Site Class H (Estimated total heave of less than 7.5mm):

Soil tested as **medium** expansive with a clay layer thickness of up to 0,3m from surface

Normal construction:

Minor heave requires normal construction (strip footing and slab on the ground) with site drainage and service/plumbing precautions recommended.

Site Class H1 (Estimated total heave of between 7.5 and 15mm):

Tested as **medium** expansive with a clay layer thickness of between 0,45 to 0,85m from surface, or a highly expansive clay layer of between 0,3 and 0,4m in thickness from surface or a clay layer with a very high expansive potential of up to 0.3m.

Modified normal:

Lightly reinforced strip footings.

Articulation joints at all internal/external doors and openings

Light reinforcement in masonry. Site drainage and plumbing/service precautions.

Or soil raft:

Remove all or part of expansive horizon to 1,0m beyond the perimeter of the construction and replace with inert backfill compacted to 93% MOD AASHTO density at -1% to 2% of optimum moisture content. Normal construction with lightly reinforced strip footings and masonry. Site drainage and plumbing/service precautions.

Site Class H2 (Estimated total heave of between 15 and 30mm):

Tested as **medium** expansive with a clay layer thickness of between 0,85 to 2,0m, or highly expansive of between 0,4 and 0,85m in thickness measured from surface, or a clay layer with a very high expansive potential of between 0.3 and 0.4m.

Soil raft:

See H1.

Stiffened or cellular raft:

Articulation joints or solid lightly reinforced masonry.
Site drainage and plumbing/service precautions.

Piled construction:

Piled foundation with suspended floor slabs with or without ground beams.
Site drainage and plumbing/service precautions.

Split construction:

Combination of reinforced brickwork/blockwork and full movement joints.
Suspended floors or fabric reinforced ground slabs.
Site drainage and plumbing/service precautions.

Site Class H3 (Estimated total heave of more than 30mm):

Soil tested as **medium** expansive with a clay layer thickness of more than 2,0m (>2,0m thick), or highly expansive of more than 0,85m (0,85m or more in thickness), or a clay layer with a very high expansive potential of more than 0.4m in thickness.
Foundations require special design by structural engineer of the following:

Soil raft:

As for H1.

Stiffened or cellular raft:

As for H2.

Piled construction:

As for H2.

Construction Materials

Some material consisting of weathered dolerite gravel at depths exceeding 1,5m may be fit for use as road aggregate, but we expect that established commercial sources in Potchefstroom will provide the road building and construction materials.

All other road building and construction materials will be sourced from established commercial activities in and around Potchefstroom.

Due to the level of development almost surrounding the area, the likelihood for the development of borrow pits on site are low.

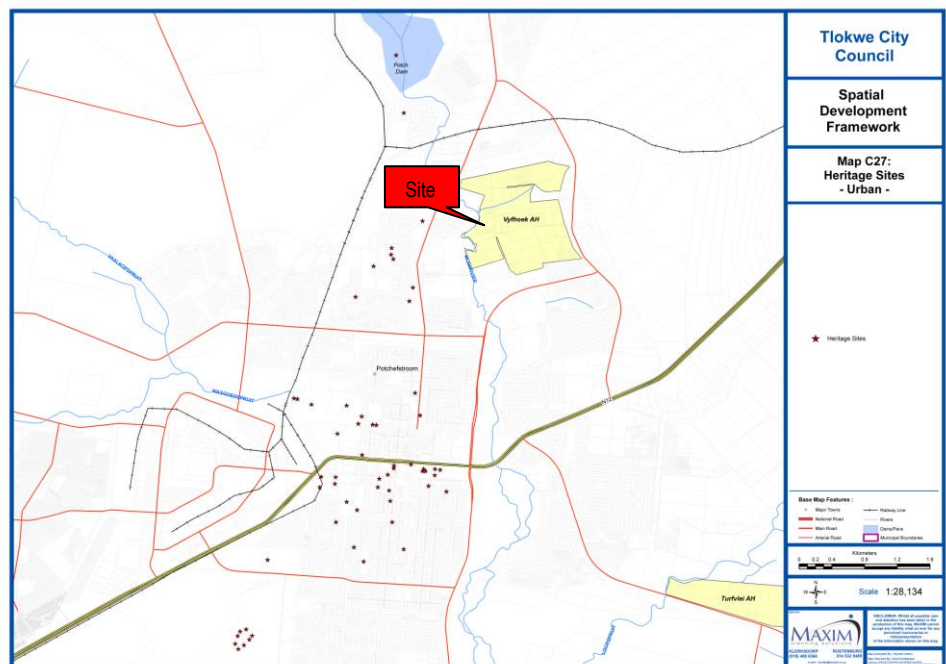
3.9 ENVIRONMENTAL ASSESSMENT

Due to the extent, nature and locality of the proposed development, same does not constitute an activity identified by the Minister of Environmental Affairs and Tourism in terms of section 24(2), 24(5), 24(D), 24(M) and 44 of the National Environmental Management Act, Act 107 of 1998 and as published in Government Gazette No 38282 dated 04 December 2014 and no Environmental Authorisation is required in respect of the proposed township area. This statement was confirmed by AB Enviro-Consult (refer Annexure J).

3.10 HERITAGE IMPACT

The proposed township establishment does not constitute an activity listed in terms of Section 38 of the National Heritage Resources Act, 1999 (Act 25 of 1999) and does not require approval by the South African Heritage Resources Agency. Notwithstanding the fore-mentioned, it is pertinent to note that the proposed development area is not located

in an area of cultural/ heritage significance as detailed on the following map depicting the existing heritage sites in the urban area of Potchefstroom, as contained in the approved Tlokwe Spatial Development Framework, 2014



Map 3: Cultural Heritage Sites in terms of Tlokwe SDF, 2014

CHAPTER 4: PROPOSED DEVELOPMENT

4.1 LAND USES

The intention of the applicant i.e Annemarie Coetzee (ID Number 500302 0023 080) is to utilize the eastern portion of the Remainder of Holding 12, Vyfhoek Agricultural Holdings-IQ for the establishment of the proposed township area of Van der Hoffpark Extension 71. The township area will comprise two (2) "Residential 1" erven (**refer attached layout plan**).

The purpose of the township area will be to establish two (2) individual residential erven with a right of way servitude for access purposes.

The erven in the township will comprise the following areas:

Erf number	Number of erven
Erf 1800, Van der Hoffpark Extension 71	2 668m ²
Erf 1801, van der Hoffpark Extension 71	1 318m ²

Development of the erven will be subject to the standard development parameters applicable to a "Residential 1" zoning in terms of the Potchefstroom Town Planning Scheme, 1980

4.2 FACTORS INFLUENCING THE LAYOUT PLANS

The layout plan of the proposed township area of Van der Hoffpark Extension 71 was influenced by the following factors:

- The layout plan of the township area coincides with the current location of the existing gallery on the development area and the demarcation of this area.
- Due to the nature of Hennie Bingle Avenue, access restrictions to this road exists and no direct access from this road will be provided to the erven in the township area.
- To allow for access to the proposed township area, the existing access road to the Remainder of Holding 12 will be employed to also provide access to the two (2) erven in the proposed township area. For this purpose it is proposed that a servitude of right of way be registered along the northern boundary of the Remainder of Holding 12 (as indicated on the layout plan).
- To allow for the future widening of the road reserve of Hennie Bingle Avenue, the layout plan incorporates a 1,98 metre street that will allow for same.

- The western boundary of the development area was dictated by the fact that sufficient space be available on the Remainder of Holding 12 to allow for vehicular movement along the eastern boundary thereof .
- The panhandle portion of the proposed Erf 1801 will be subject to a servitude for municipal purposes to allow for the installation of services within this portion. This is primarily required as the preliminary engineering design of the sewer network that will service the erven will be located adjacent to the western boundary of th proposed township area with a sewer connection to the proposed Erf 1800 traversing the panhandle portion of Erf 1801 in the township area. As the exact route of this servitude will only be determined in future, we propose that the entire panhandle portion of Erf 1801 be subject to a servitude for municipal purposes. This servitude will be addressed in the Conditions of Establishment.

4.3 ACCESS

The access arrangements to the proposed township area of Van der Hoffpark Extension 71 were discussed at length with the Town Planning Section of the Tlokwe Local Municipality. The following arrangements will apply in respect of access to the erven in the township area as well as the Remainder of Holding 12:

- (1) Main access to the proposed township area of Van der Hoffpark Extension 71 will be via Hennie Bingle Avenue bordering the site on the eastern side as indicated on the attached Plan.

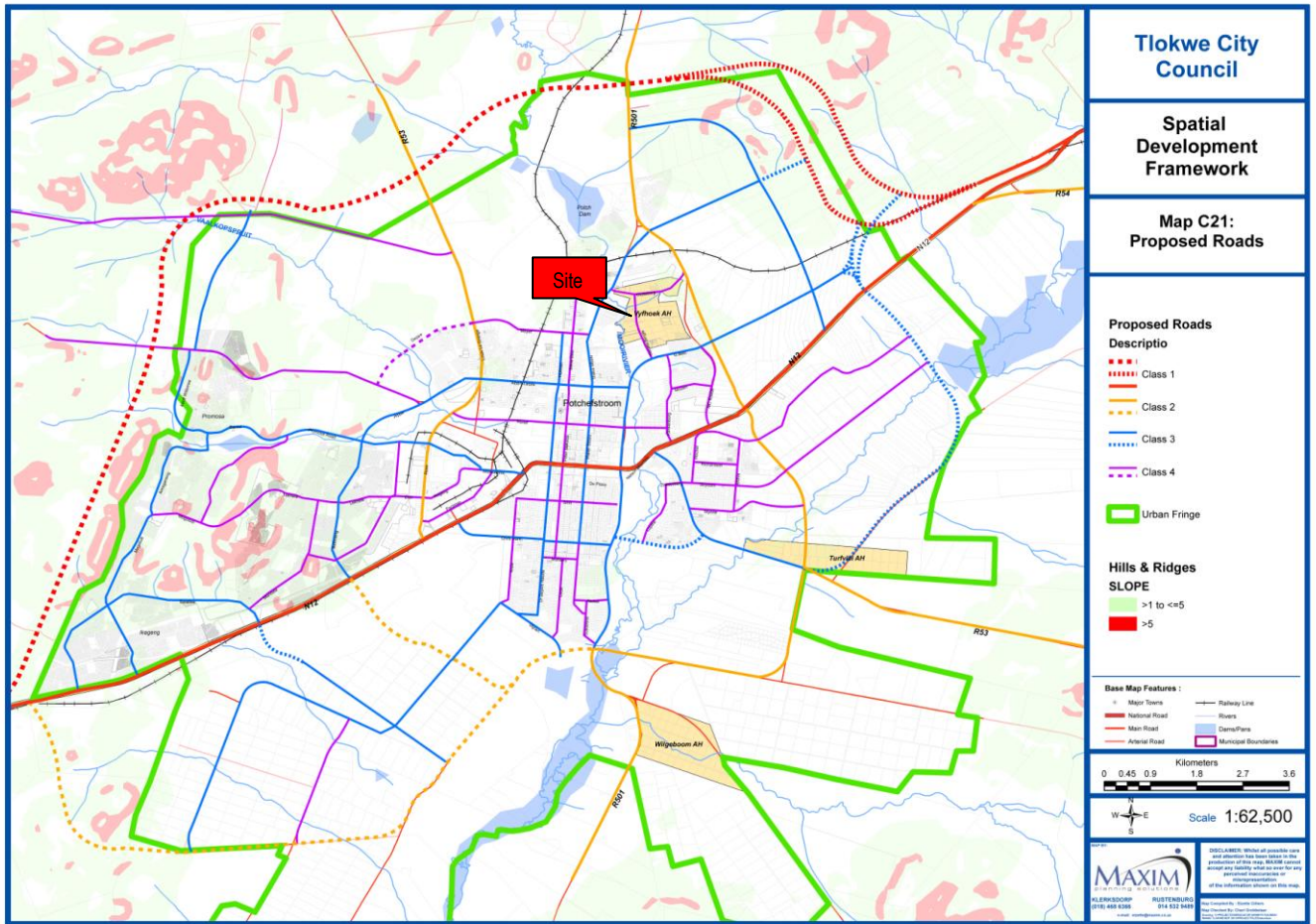


Plate 5: Hennie Bingle Avenue (north)



Plate 6: Hennie Bingle Avenue (south)

Hennie Bingle Avenue is classified as a Class 4 Road in terms of its current and proposed future function as reflected on the following Map extracted from the Tlokwe Spatial Development Framework, 2014.



Map 4: Proposed road classification in terms of the Tlokwe Spatial Development Framework, 2014

- (2) Access to the existing dwelling house on the Remainder of Holding 12 Vyhoek Agricultural Holdings-IQ is provided along the northern boundary of the subject property.

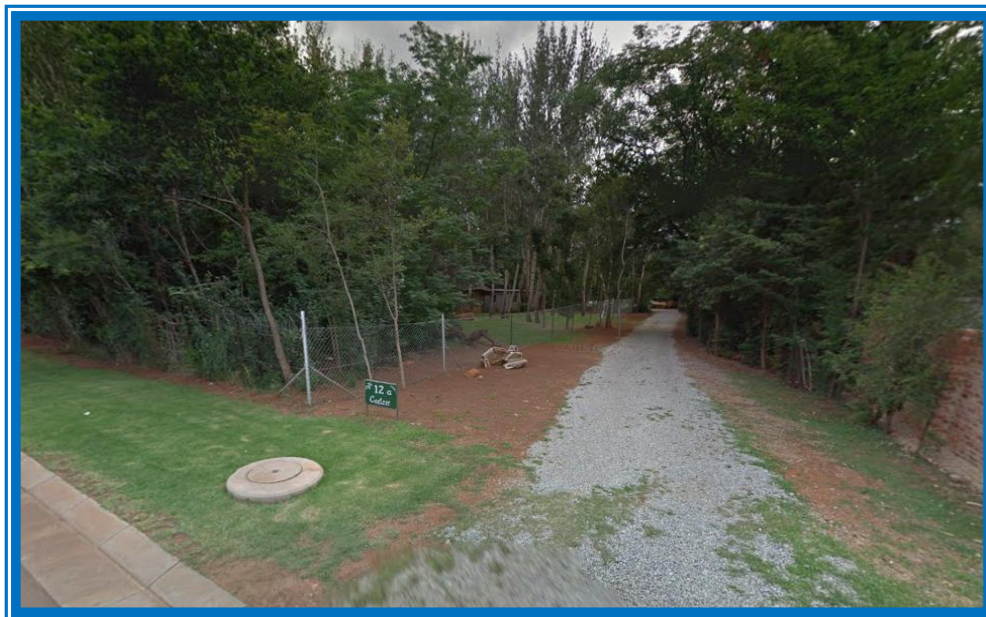


Plate 7: View of existing access to the Remainder of Holding 12

- (3) Access to the erven in the proposed township area will be provided from the existing access road detailed above through the registration of a servitude of right of way (10m wide) (as indicated on the layout plan). The registration of the servitude of right of way over the Remainder of Holding 12, Vyfhoek Agricultural Holdings will be addressed as integral part of the township establishment process.
- (4) Access to Erf 1800 in the proposed township Van der Hoffpark Extension 71 will be provided directly from the fore-mentioned servitude of right of way.
- (5) Access to Erf 1801 in the proposed township Van der Hoffpark Extension 71 will be provided from the proposed servitude of right of way detailed in sub-paragraph (3) above through a panhandle portion (5m wide) located along the western boundary of the township area linking onto the proposed servitude of right of way.
- (6) Access to the Remainder of Holding 12 will similarly be obtained along the existing access road located along the northern boundary of the subject property and will coincide with the servitude of right of way.

CHAPTER 5: PROVISION OF ENGINEERING SERVICES

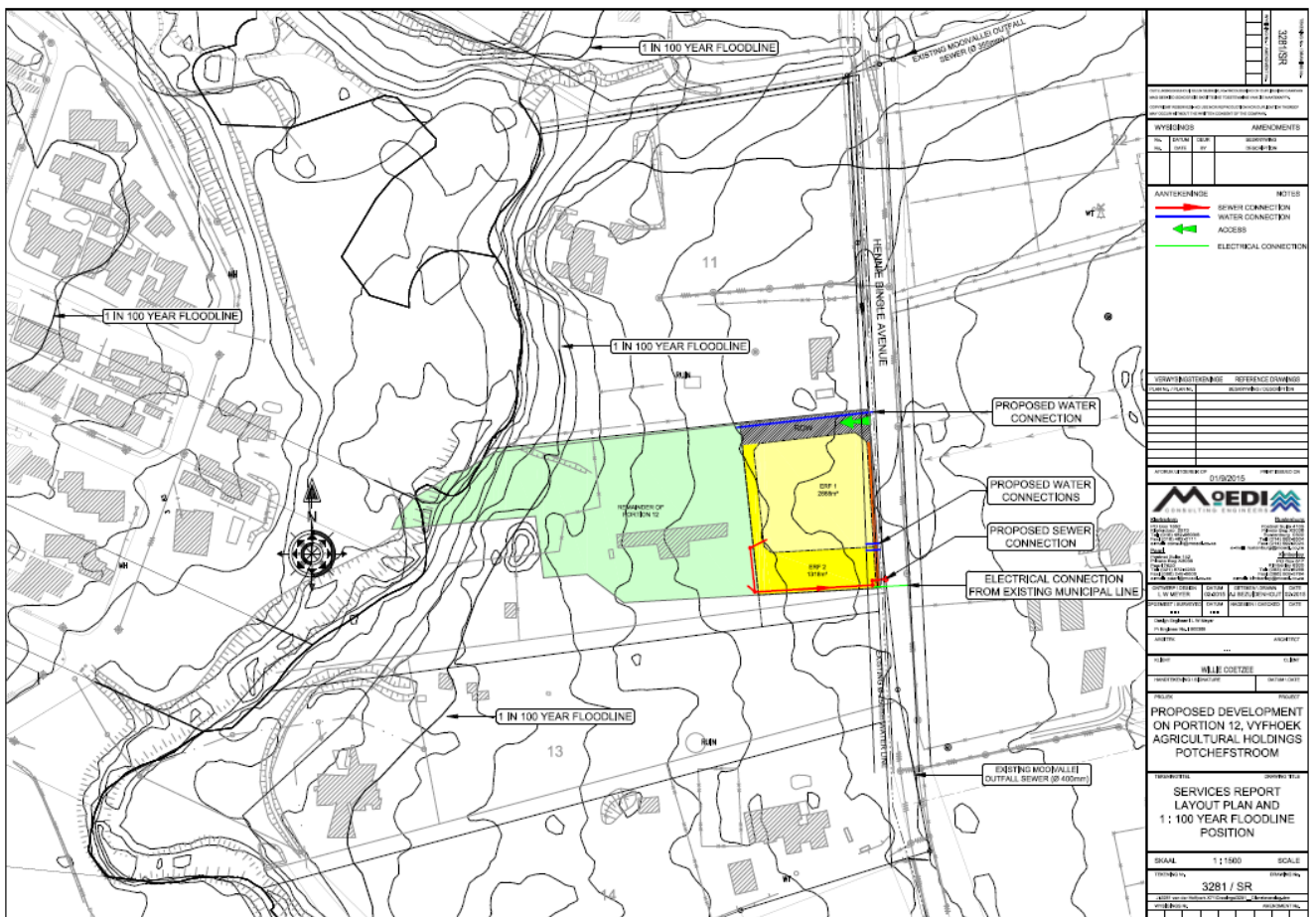
5.1 INTRODUCTION

Moedi Consulting Engineers (Pty) Ltd was appointed by th township applicant to investigate and report on the provision of civil and electrical services to the proposed township area (**Engineering Services Report attached to the application for township establishment as Annexure K**).

The provision of services to the proposed development areas will be addressed as follows:

- Section 5.2: Bulk and Link Services
- Section 5.3: Internal Services (Civil Engineering Services)
- Section 5.4: Operation & Maintenance of Services

For ease of reference, Plan 3281/SR referenced in the following sections, is indicated below.



Map 5: Engineering Services layout plan compiled by Moedi Consulting Engineers

5.2 **BULK AND LINK SERVICES**

5.2.1 **WATER**

Raw water for the urban areas of the Greater Potchefstroom/Tlokwe is abstracted from the Mooi River catchment and purified at the Lakeside Treatment Works completed in 1976 as well as at the “Old Works” that was built in 1924.

The Lakeside Treatment Works has a theoretical design capacity of 60Mℓ/day although the plant currently only delivers approximately 50Mℓ/day during peak demand periods. The Old Plant with a design treatment capacity of 13Mℓ/day currently delivers approximately 6Mℓ/day.

Treated water is pumped to various distribution Reservoirs from where it is fed to the supply areas of Potchefstroom. Water for the proposed development will be provided from the Vyfhoek Storage System consisting of two 3.4Mℓ and one 6.7Mℓ reservoirs. Sufficient bulk water supply capacity is therefore available.

A water connection for the development can be made to the new 250mm diameter water line which has recently been installed by the municipality along the western side of Hennie Bingle Avenue as indicated on the attached plan No 3281/SR (refer section 5.1). The said 250mm line forms part of a new scheme to upgrade water supply and distribution to the Mooivalleipark/Vyfhoek area. The scheme consists of a 250mm bulk line along Hennie Bingle Avenue that will be connected to the existing 400mm diameter AC bulk feeder line from the Vyfhoek reservoirs in MC Roode Drive. To the northern side, the new water main will be connected to the existing supply system of Mooivalleipark along Tarentaal Street to form a ring feed for sustained water supply at the required pressure. Construction of the aforementioned scheme is undertaken by the Tlokwe City Council (TCC) under the current project (Tender 24/2014) for which service providers have been appointed.

5.2.2 **SEWER**

The Tlokwe Waste Water Treatment Plant (WWTP) is a Class A facility with hydraulic capacity of close to 50Mℓ/day. The plant is currently treating an average of 33 – 34 Mℓ/day which implies that it has spare capacity of between 12 – 15 Mℓ/day.

The proposed development can be connected to the existing Mooivallei Outfall sewer line (400mm diameter), located on the western side of Hennie Bingle Avenue – refer Plan No. 3281/SR – Section 5.1. The anticipated additional hydraulic effluent load to be generated by the proposed development is marginal and the outfall sewer has sufficient capacity to handle the extra flow.

Sufficient link sewer infrastructure and bulk treatment capacity is therefore available to accommodate the development.

5.2.3 STORM WATER

The topography of the site has a natural fall towards the south-west. Storm water runoff from the property will drain into the Mooi River by means of open surface system/s across the remaining and neighbouring properties. The detail calculations and design of storm water attenuation for the planned development will be presented on the Site Development Plan (SDP) that will be submitted to the municipality for approval at a later stage as and when required.

Hennie Bingle Avenue that borders the development on the east, has recently been upgraded to a tarred surface with associated storm-water handling facilities. This new infrastructure acts as a cut-off and prevents storm water from the properties on the east to be discharged onto the proposed development in concentrated form.

5.2.4 REFUSE

Refuse from the proposed development will be spoiled at the existing municipal solid waste facility. The Municipal dumping site is operated and maintained by the Tlokwe City Council in accordance with the requirements of the Department of Water & Sanitation (DWS).

The additional refuse volumes from this development is minor in comparison to the existing refuse generated and can therefore be spoiled at the existing dumping site without difficulty.

5.2.5 ELECTRICITY

The residence and amenities on the existing property (Holding 12) are currently supplied with electricity by the Tlokwe Municipality via an overhead Medium Voltage (MV) line which also serves other neighbouring holdings in the area. Capacity of 5kVA does exist on the overhead line to feed the new development.

5.3 INTERNAL SERVICES

5.3.1 WATER

The internal water supply network will consist of PVC pipes of varying diameter according to designs of the Civil Engineer for the planned amenities and land

uses. The internal network will be designed to ensure ample capacity to comply with the fire flow demands for the new development.

Bulk water meters for purposes of water management will be provided to each of the developing erven and remaining portion. Water meters will be installed by the municipality upon receiving application for such from the developer or owner (consumer). The municipal connection/s to be effected by the Developer shall include all fittings up to the Loose Key Stop valve with end cap. The remaining fittings including the water meter shall be supplied by the Local Authority in accordance with the standard requirements of the Department Infrastructure upon payment of the connection fee and deposit.

Isolating valves, fire hydrants and air release valves will be provided to comply with the requirements and regulations of the local authority where applicable.

5.3.2 SEWER

An internal sewer network of 110mm diameter pipes with related Y-junction connections and inspection eyes will be installed to comply with the minimum specifications stipulated in the SANS 0400/89 Building Regulations. Manholes and rodding eyes will be constructed at necessary positions to allow for effective maintenance.

The internal sewer system will be connected to the main gravity outfall sewer as referred to in paragraph 5.2.2 above.

Based on the draft engineering services design, the proposed sewer line that will service the proposed Erf 1800 will traverse the panhandle portion of Erf 1801 and for this purpose, the panhandle portion of Erf 1801 will be subject to a servitude for municipal purposes (as indicated on the attached layout plan).

5.3.3 ROADS & STORM WATER

The internal layout will include roadways and parking areas for safe and convenient traffic flow. The design of the internal access roads will provide for an appropriate road surface.

The internal roads and paved areas will be designed to prevent concentration of storm water and damage to properties. Storm water will generally be handled as surface flow to follow the natural runoff patterns as far as possible.

5.3.4 REFUSE REMOVAL

Refuse removal is conducted by the Local Authority and their services will be extended to the proposed development – refer paragraph 5.2.4 above. A central refuse collection point will be provided at a convenient position from where refuse bags shall be removed by the Municipality on a regular basis as required.

5.3.5 ELECTRICAL SERVICES

New low voltage reticulation shall be installed from the existing point of supply. This will consist of new underground PVC/SWA/PVC low voltage cable (16mm²) with copper conductors from the existing metering point to a new distribution kiosk.

Single phase split pre-paid energy metering shall be implemented. The split pre-paid energy meters shall be obtained from the Tlokwe City Council. Connections from the split pre-paid energy meters to the future building will be via 16mm² Airdac cable with pilot wires.

The developer of the property will be responsible for his own connection from the LV Kiosk to his premises.

The supply and installation of the LV cables and LV Kiosks will be in accordance with the specifications and requirements of the Tlokwe City Council.

No street lights shall be installed due to the limited extent of the township area. The electrical network shall be maintained as follows:

The complete internal electrical network including the metering kiosks will remain the responsibility of the property owner.

Design parameters

- Low Voltage Reticulation : Main feeders – Cu PVC SWA PCC underground cable.
Connection – Airdac with pilot wires.
- Distribution Kiosks : As per drawings 1 way.
- Nominal voltage : 420 / 242V
- Earthing : Neutral / Earth
- Voltage regulation : ± 5%
- Metering / Control : Energy meters shall be mounted in metering kiosk as per City Council Specifications.
Metering will be split pre-paid.

5.4 OPERATION & MAINTENANCE OF SERVICES

The external water and sewer infrastructure shall be taken over by the municipality who will be responsible for the operation and maintenance thereof.

The internal water, sewer, roads and storm-water services will not be taken over by the municipality. The operation and maintenance of the said internal services will remain the responsibility of the owners.

CHAPTER 6: MOTIVATION

The motivation in support of the proposed development on a portion of the Remainder of Holding 12, Vyfhoek Agricultural Holdings-IQ will be addressed in terms of the following:

- 6.1. North-West Spatial Development Framework and Zoning Plan, 2004
- 6.2. North-West Provincial Spatial Development Framework, 2008
- 6.3. Spatial Planning and Land Use Management Act (SPLUMA), 2013
- 6.4. Tlokwe City Council Spatial Development Framework, 2014
- 6.5. Human Settlement Planning And Design (Volume I), 2000
- 6.6. Economic Viability
- 6.7. Planning Principles

6.1 NORTH-WEST SPATIAL DEVELOPMENT FRAMEWORK AND ZONING PLAN, 2004

- * In terms of the hierarchy of nodes as determined for Provincial Growth and Development Strategy (PGDS) as well as the National Spatial Development Perspective (NSDP), the The Tlokwe Municipal area is identified as Priority 1 investment area in the PSDF as well as a Priority 1 investment node (Map C.2).
- * The spatial structure of the North-West economy shows some signs of diversification and the five largest cities all exhibit distinct structures namely:
 - Mafikeng, the provincial capital, situated in the central region, is dominated by the civil service and agriculture (maize and sunflower farming and poultry).
 - Platinum mining, trade, tourism and financial services dominate Rustenburg, situated in the eastern region.
 - Potchefstroom, situated in the southern region, is dominated by community services, including national government department, provincial government departments as well as financial and other business services.
 - Klerksdorp, situated in the southern region, is dominated by gold mining and manufacturing (metal fabrication related).
 - Manufacturing, dimension stone mining and business services dominate Brits area, encompassing Madibeng Local Municipality and Moretele Municipality, situated in the eastern region.

- * The National Departments of Transport and Trade and Industry coined the term Spatial Development Initiative, or SDI, in 1996. The SDI programme is intended to create an environment for investors, thereby stimulating domestic and international development. It aims to unlock the inherent and under-utilised economic development potential of certain specific spatial locations in South Africa.

The Platinum SDI (N4) was the first to be identified in the North-West (1997 – 1998). In 2001 / 2002 two further SDI's were identified and scoped namely the Western Frontier SDI (N18) and Treasure Route (N12). The Treasure Route Corridor extends from Gauteng Province to the Northern Cape and encompasses the major gold mining regions along the southern border of the province. The major centres of economic activity in the corridor are in the Potchefstroom and Klerksdorp area where over half of the GGP of the Treasure Corridor is generated. Other major towns include Lekwa Teemane (Bloemhof), Maquassi Hills (Wolmaransstad) and Merafong City (Fochville). As with the Platinum SDI, the Treasure Route GGP is dominated by mining production, in this case gold. Mining accounts for over 40% of GGP in the corridor with trade a distant second at 12,5%.

In terms of the PSDF, provincial corridor development influences the Tlokwe Local Municipality in the following manner:

- Firstly, the N12 forms an inter-city development corridor deemed important for the concentration of relevant development initiatives between Johannesburg and Potchefstroom. Priority should be given to the improvement of the communication and transport networks that link Potchefstroom with the economic core of South Africa. Here the importance of the construction of a dual carriageway (between Potchefstroom and Johannesburg) could not be stressed enough.
- Secondly, the strengthening of centres such as Potchefstroom to develop as counter magnets or “equilibrium cores” as part of the development axis concept is essential.

6.2 NORTH-WEST SPATIAL DEVELOPMENT FRAMEWORK, 2008

- * In terms of the approved North-West Provincial Spatial Development Framework, 2008 Potchefstroom was again classified as a primary node and was also indicated as a Priority 1 investment area where social and economic returns on investment will be highest.

- * In terms of corridors and transport infrastructure, the treasure corridor is strengthening development from Johannesburg to Potchefstroom, Klerksdorp and further south along the N12 national road.
- * Core economic areas which indicate high levels of economic potential, high concentration of people, formal and informal economic activity, formal levels of infrastructure and a wide range of socio economic infrastructure are Rustenburg area, Mafikeng-Lichtenburg areas and Potchefstroom-Klerksdorp / Merafong areas.

6.3 SPATIAL PLANNING AND LAND USE MANAGEMENT ACT (SPLUMA), 2013 (ACT 16 of 2013)

In terms of chapter 2 of SPLUMA, 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 are redressed through improved access to and use of land;**

The first general principle of the Spatial Planning and Land Use Management Act (SPLUMA) calls for greater balance in land development processes in respect of urban and rural development. From the outset, it is hereby acknowledged that the proposed development presents densification (“inward development”) – development within the urban edge - which implies increased access to land within the urban edge.

- (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 characterised by widespread poverty and deprivation;**

This principle of the Spatial Planning and Land Use Management Act (SPLUMA) stresses the importance of including persons and areas in the decision making process. The statutory process of township establishment allows for members of the public to be informed of the proposed development and to actively participate in decisions taken in respect of such developments. This is achieved through the publication of notices in the local newspapers as well as in the North-West Provincial Gazette (as prescribed). Ample opportunity exists to allow for participation by possible affected and interested parties.

Through the application of this principle, a move towards more user-friendly, democratic and facilitative land development is proposed. By following an affected party consultation-based town planning process, the applicant commits itself to transparency, by providing as much information as possible to affected residents and land owners and to protect the fundamental rights of all involved. Furthermore, this memorandum will be available for scrutiny at the offices of the Tlokwe Local Municipality for public scrutiny for a specified time, as stipulated in the public notices. The public notices will provide clear guidance and information to those affected.

(iii) land development procedures must include provisions that accommodate access to secure tenure and the incremental upgrading of informal areas; and

Being of private sector-driven and commercial nature, the development of Van Der Hoffpark Extension 71 addresses the required security of tenure. The development entails the provision of two (2) residential erven that will be alienated on a full title basis. Without such security, it would be virtually impossible to interest potential investors and residents in investing in this development.

(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;

These principles call for well-managed entities where economic growth and social development are in balance with the carrying capacity of the natural systems on which they depend for their existence and result in sustainable development, wealth creation, poverty alleviation and equity. The statutory process of township establishment similarly involves and addresses the social, economic, institutional and physical aspects of the proposed development and from the information contained in the preceding sections, it is evident that the proposed development will not negatively affect the physical environment and can take place within the institutional and administrative capacity of the Tlokwe Local Municipality

In terms of this sub-principle it is the view of the applicant that the concerned public authorities have sufficient capacity and resources to accommodate this development. Sustainability is also achieved through the establishment of viable communities. To achieve this, land development and planning must ensure that communities are located close to work opportunities, social facilities and basic services.

(ii) uphold consistency of land use measures in accordance with environmental management instruments;

This sub-principle relates to the establishment and sustaining of a good relationship between development areas and the natural environment surrounding it. The proposed development is planned with levels of infrastructure which ensures that the effect that the development will have on the natural surroundings is minimal. The development has also been designed to integrate the natural and built environment in a sustainable manner, by e.g. maintaining most of the trees on site and; maintaining the existing house on the proposed Erf 1800 of the development. The width of the panhandle portion providing access to Erf 1801 was specifically widened from 3 metres to 5 metres to allow for the “weaving” of the access road to Erf 1801 along the panhandle portion to avoid existing mature trees.

(iii) consider all current and future costs to all parties for the provision of infrastructure and social services in land developments;

This sub-principle is aimed at affordability of the development and appropriate standards of services for the proposed residential properties. The proposed development allows for fully serviced affordable sites within the area.

Based on the assessment of the existing services networks, set out in section 5 above, it is evident that this development can take place without the need to augment any existing engineering services.

Due to the limited extent of this development, same will not impact negatively on existing social services offered to the area and required to service this area.

(iv) promote land development in locations that are sustainable and limit urban sprawl;

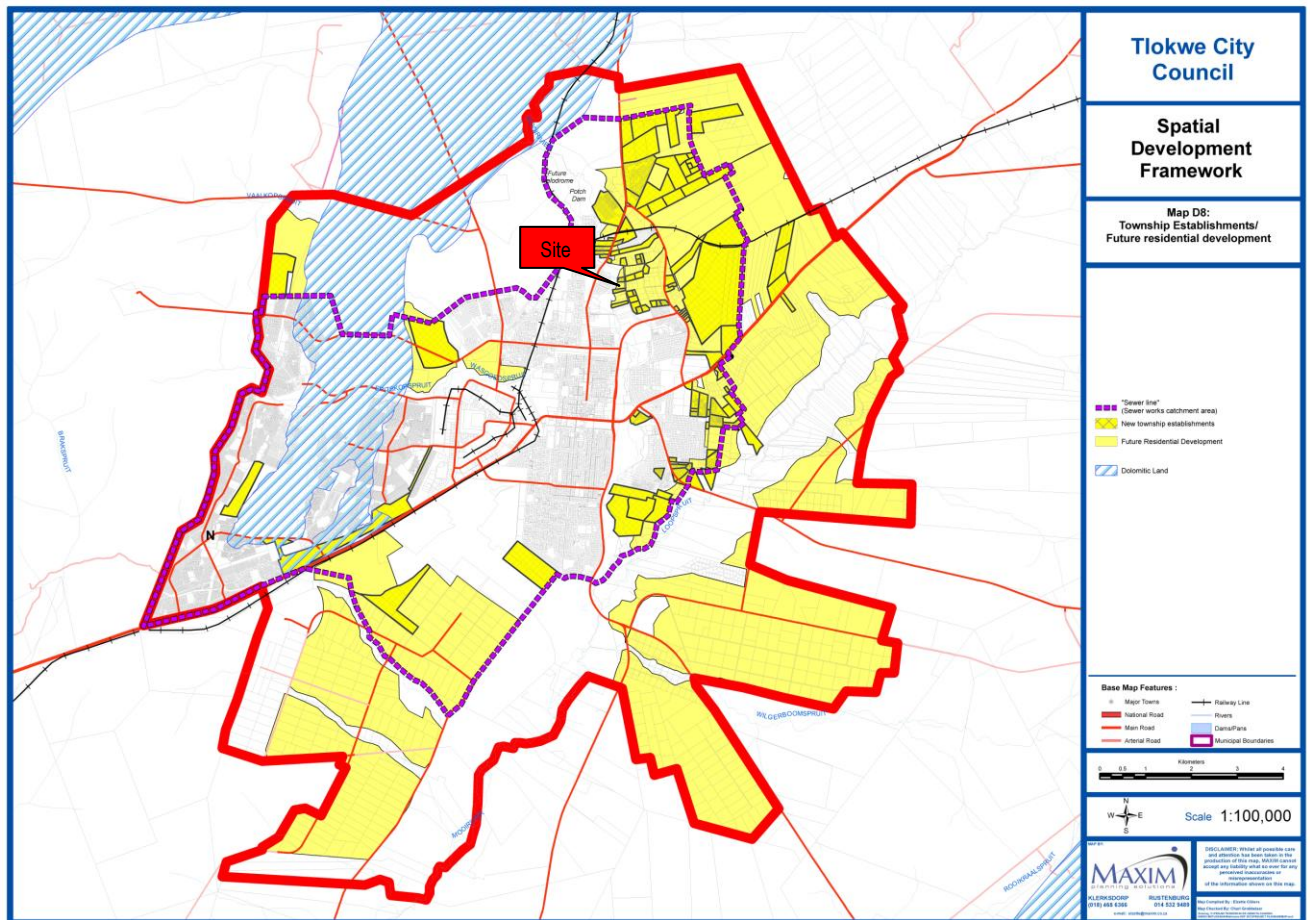
The proposed development of the township area of Van Der Hoffpark Extension 71 will take place within the urban edge as defined in terms of the approved Tlokwe Spatial Development Framework and does not entail urban sprawl outside the area envisaged by the Local Municipality of Tlokwe for urbanization purposes.

This proposed development implies that the original property (Remainder of Holding 12, Vyfhoek Agricultural Holdings-IQ) will be divided into three

properties (Erf 1800, Erf 1801 and the Remainder of Holding 12). This densification supports the limitation of urban sprawl.

6.4 TLOKWE SPATIAL DEVELOPMENT FRAMEWORK, 2014

- * In terms of the Spatial Proposals (Map D(1); TSDf, 2014:94) as contained within the Tlokwe Spatial Development Framework, 2014 the proposed development area is located within an area identified for ‘residential development’ as the properties are located within the urban edge.



Map 6: Future residential development in terms of the Tlokwe Spatial Development Framework, 2014

- * As far as future residential development is concerned, a more compact city structure integrating the different urban areas within the urban edge is proposed. In this regard it is pertinent to note that that the proposed development area is located within the demarcated urban edge as defined in terms of the Tlokwe City Council Spatial Development Framework (2014). This town will specifically address the requirement to establish more compact cities as it constitutes infill development.

6.5 HUMAN SETTLEMENT PLANNING AND DESIGN (VOLUME 1), 2000

In terms of spatial principles, the Human Settlement Planning and Design (Volume 1, Chapter 3), 2000 identifies three important principles for the making of any settlement, namely: *Scale*, *Flexibility* and *Intensity of Space-use*. These principles all strive to establish positive human settlements.

6.5.1 Scale

Scale refers to judgement about relationships such as size, distance and height. In settlement terms, reference is usually made to a “scale”, which is the scale that human beings feel comfortable with. Although a quality that can be difficult to define, it is one that should be striven for in modest, as well as bold, settlement-making processes.

In this proposed development the scale of development – namely residential – relates to the most commonly found use in the surrounding area. This implies the scale of development is maintained and compatible to the surrounding urban grain.

6.5.2 Flexibility

Positive environments reflect flexibility in their spatial structures. The principle of flexibility thus refers to the creation of spatial structures which can accommodate the unexpected demands made upon them over time.

A remaining portion of the concerned holding will be retained as agricultural land and will allow for flexibility in terms of future land use/ zoning change.

6.5.3 Intensity of Space-use

Land should be used as intensively as possible as this has positive spin-offs for settlement-making. These include:

- **the efficient use of infrastructure; and**
As set out in section 5 supra, the full spectrum of engineering services / infrastructure is available to this development without the need to augment same. This development therefore entails the efficient use of infrastructure within current capacity parameters

- **the achievement of better utilisation of the land, contributing to compact urban environments, reduced travelling and energy consumption, as well as a reduction in pollution.**

This development definitely addresses this principle as it entails the intensification of land use through the creation of erven for an additional two (2) dwelling houses whereas the property is currently only utilized for a single dwelling house. Furthermore, the development will promote sustainability in the sense that it contributes to the densification of the overall area through the introduction of an additional two (2) "Residential 1" erven. Through the intensification of land use, travelling time and costs for residents are reduced to reach places of employment and business and social facilities

Intensification does not imply a standardisation of living conditions, or uniform densities. In the context of the minimalist approach, a choice of living conditions, which is an important objective of settlement-making, is facilitated in a number of ways, such as:

- **by encouraging the development of areas of different character throughout the settlement;**

Diversity is encouraged through this development, as the existing zoning is "Agricultural" and the proposed zoning for two (2) erven will be "Residential 1" whereas the remainder of the concerned holding will remain "Agriculture". Whereas this development will comprise a lower density development it will be located in an area with a number of higher density residential developments already in existence in under development. This will allow for a variety of land uses in the area.

- **by the presence of contrasts within the structural system, with respect to space that is private and space that is public;**

As this is a private development, limited space will be allocated for public space. The nature of the development will entail that private space will be created on each of the proposed erven for recreational purposes of the inhabitants.

- **by the natural development or evolution of a range of urban densities; and**

In terms of urban densities, the development will incorporate the densification of urban space which will cause for a more compact environment. Whereas this development will comprise a lower density development it will be located in an area with a number of higher density residential developments already in existence in under development.

- **by an evolution of configurations of plot shapes and sizes, which result in the promotion of different housing types.**

As this is a private development, which will be conducted on small-scale, two unrelated erven will be proposed with a single dwelling unit on each of the proposed erven. The Remainder of Holding 12 is currently already utilized for residential purposes with a dwelling house erected thereon. The existing gallery on the proposed Erf 1800 will be converted into a residential dwelling house whereas a new dwelling house will be erected on the proposed Erf 1801. It is evident that this development will undoubtedly promote the provision of different housing types through the diversity of the housing structures on the development area.

6.6 ECONOMIC VIABILITY

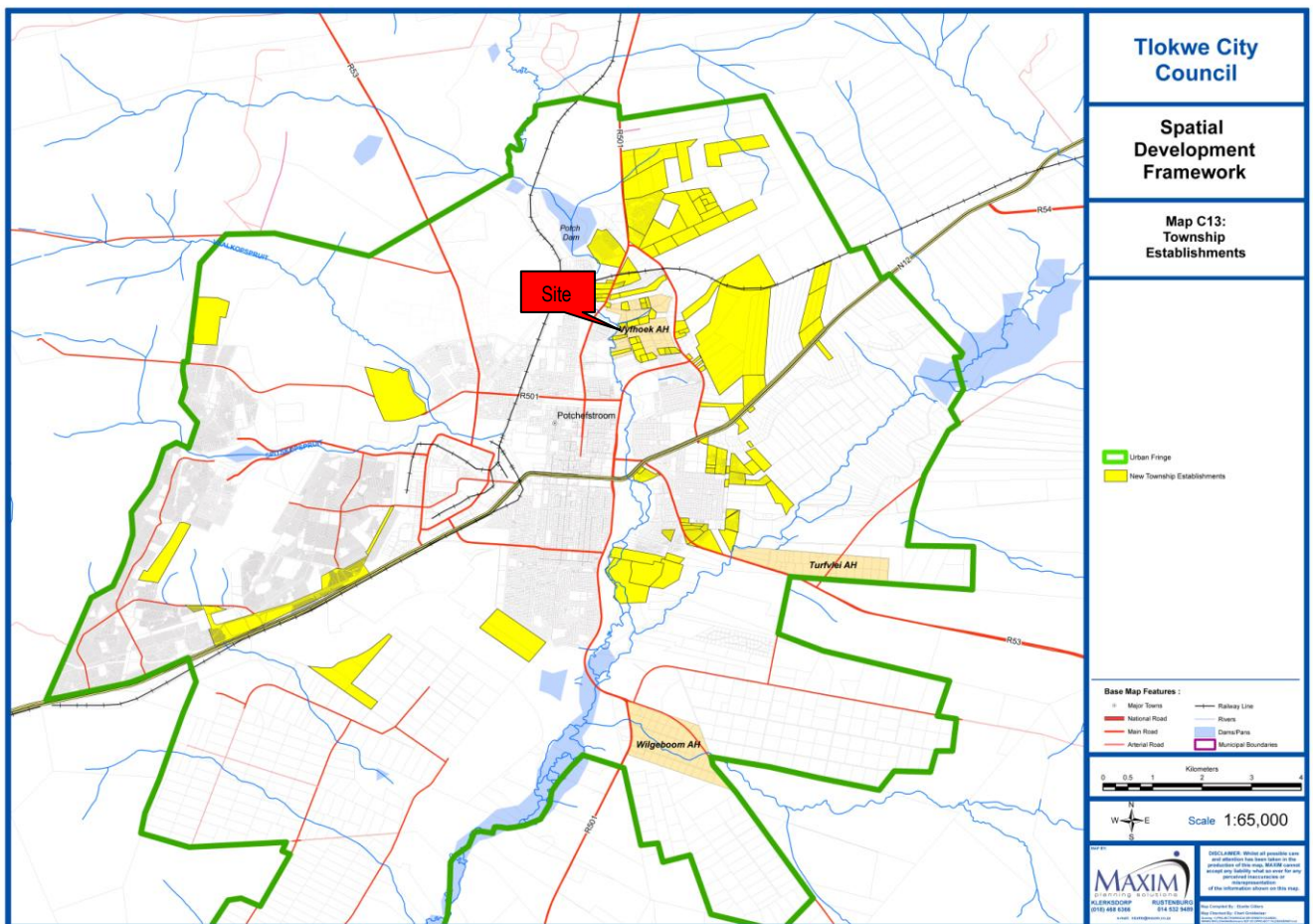
- * Ding *et al.* (2000:23) discusses the manner in which property values fluctuate with regard to the reshaping of urban landscapes in a modern life. In more usual cases, the value of property is determined by the structure of buildings as well as access and availability of social and economic facilities. Social and economic facilities refer to the proximity of employment opportunities and social amenities. Furthermore, the value of the property may be affected by the state of environmental pollution within an area. When all of the above mentioned factors have been determined, the new development (or redevelopment) of a property may influence surrounding properties in a respectively positive or negative manner in terms of land value. This positive or negative manner refers to an increase or decrease in land value.
- * When promoting integration of land uses within an area, the idea of compacting an urban environment needs to be understood. When this idea of compacting a city is taken in account, practices such as infill planning (*In Situ*- upgrading – the filling of urban environmental land in order to limit urban sprawl) may be considered. Carrión-Flores and Irwin (2004:890) explains the concept of urban sprawl in terms of its characteristics of low-density development. By integrating land uses and promoting a more compact development, urban sprawl can be limited.
- * In summary, the promotion of integration and compacting of an urban environment not only limit urban sprawl, but also enhance the potential of growth in property values.
- * With regards to this specific proposed township (Van Der Hoffpark Extension 71), land classified / zoned as “Agriculture” will be transformed into two (2) “Residential 1” erven. This change of zoning not only contribute to the integration of land uses – as a portion will remain zoned as “Agriculture” – but also provide for a more

compact urban development. This will cause the development to be economic viable in terms of property value, whilst being in close proximity to economic and social amenities.

6.7 PLANNING PRINCIPLES

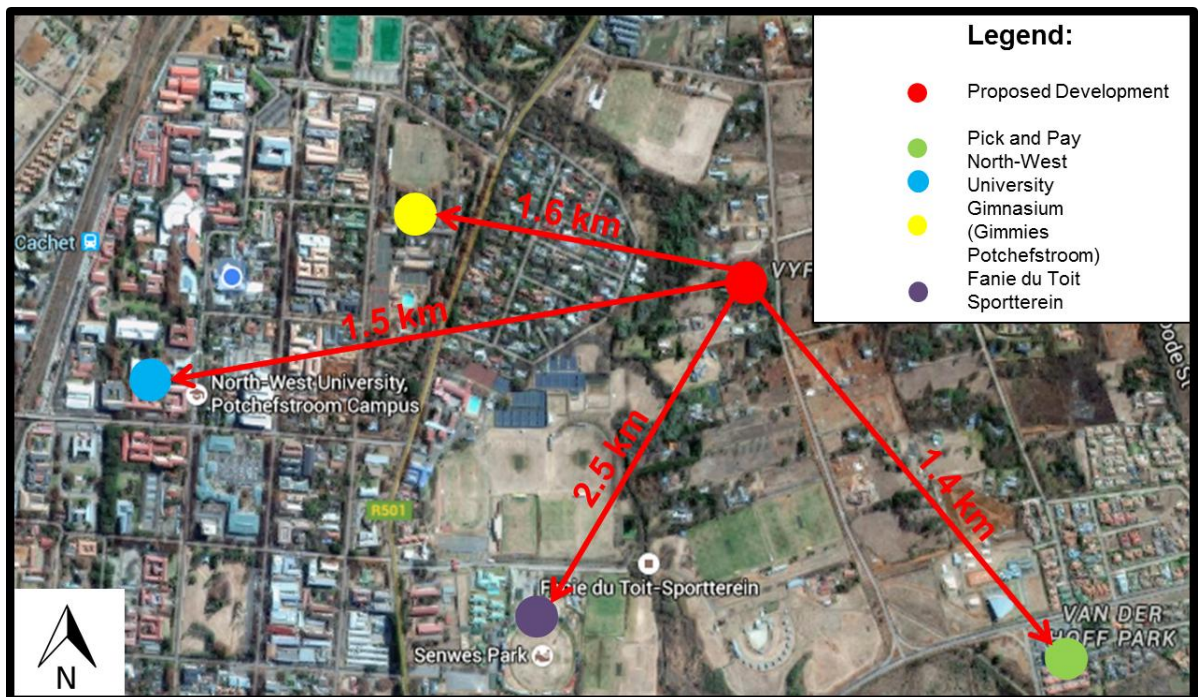
From a land use and town planning point of view the proposed development area is ideally suited for residential development purposes:

- * According to the Tlokwe City Council, Spatial Development Framework (2014 review), the Tlokwe urban area consists of 28 548 residential stands of which 26 407 stands are Residential 1 stands (single dwelling units) and 2 141 medium to higher residential stands.
- * The proposed development is located in an area earmarked for future residential development purposes in terms of the approved Spatial Development Framework of the Tlokwe City Council and is located in close proximity to existing or future residential development projects (refer to current developments in Van Der Hoffpark, Hennie Bingle Avenue) as reflected on the following map extracted from the approved Tlokwe Spatial Development Framework.



Map 7: Township establishments in terms of the Tlokwe SDF, 2014

- * The proposed township area enjoys excellent accessibility due to its location adjacent to Hennie Bingle Avenue that was identified as “Class 4” (a proposed road classification of the main road network) in terms of the Tlokwe City Council Spatial Development Framework. Hennie Bingle Avenue is furthermore part of the “Urban Edge Road Framework Plan” – as approved in 2007 – which entails the widening of this road (20m road reserve) in order to enhance accessibility. The proposed development area is further ideally located in respect of accessibility thereto from the majority of existing urban areas surrounding Potchefstroom due to the presence of the N12 Treasure Corridor that links these urban centres not only to Potchefstroom but also to the metropolitan area of Gauteng.
- * The use of the subject property for the purposes of a two (2) “Residential 1” erven as well as the registration of a Right of Way servitude, is also supported by the fact that the proposed development area is located in close proximity to various commercial facilities (Pick ‘n Pay centre) affording inhabitants the opportunity to conduct all their monthly shopping activities in close proximity to their place of residence.
- * The proposed development is further located in close proximity to educational facilities (North-West University and Potchefstroom Gimnasium – High School) (Refer to Map 8).



Map 8: Proximity of activities to the proposed township establishment

- * The proposed development of the subject properties further constitute infill development and will combat urban sprawl as it constitutes the development of

land that has been zoned as “Agriculture” for the past few decades. The development of the subject properties will not only contribute towards the economy of the North-West Province, but will also extend the income base of the Tlokwe Local Municipality.

- * In studying the results of the various pre-planning studies, all the studies concluded that there are no objections or restrictions that will disqualify the subject property from being developed as proposed in terms of this application. In order to avoid repetition we will not repeat the results of the various pre-planning studies again.

In view of the fore-mentioned we trust that this application will be considered favourably.

K. RAUBENHEIMER
Pr. PIn A/924/1996