

SCHULDEN PROPERTIES (PTY) LTD

**PROPOSED TOWNSHIP DEVELOPMENT ON
PORTION 232 (A PORTION OF PORTION 224)
OF THE FARM HOUTKOP 594-IQ
(UNITAS PARK EXTENSION 18)**

ELECTRICAL SERVICES SCHEME REPORT

Our ref.: VE 1605

Revision 0

16 November 2018

Compiled by: C. de Beer (Pr Tech Eng)



LYO EMFULENI ENGINEERS (PTY) LTD
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Vanderbijlpark
1900
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SCHEME REPORT

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1. Introduction and Terms of Reference

Lyo Emfuleni Engineers (Pty) Ltd were requested by Schulden Properties (Pty) Ltd as Consulting Electrical Engineers and Project Managers to prepare the Electrical Services Scheme Report for the proposed development of Portion 232 (a portion of Portion 224) of the farm Houtkop 594-IQ namely Unitas Park Extension 18.

2. Development

The development is earmarked for special use as tabled below and as indicated in Annexure A.

ZONING	NUMBER OF STANDS/UNITS
Special : Filling Station	1 stand
Special : Builder's Yard	1 stand
TOTAL NUMBER OF STANDS	2 stands

Table 1: Development

3. Supply authority

The development falls within Emfuleni Local Municipality area of jurisdiction and Emfuleni Local Municipality holds the license to supply electricity in the area.

4. Bulk Supply Infrastructure

Currently Emfuleni Local Municipality has electrical services in the area. However it should be noted that the existing electrical network in the area consists of an overhead line designed for small holdings.

The following correspondence from Emfuleni has reference:

- Letter dated 08 October 2014 regarding the bulk supply.
- Memorandum dated 02 June 2016 regarding the application for township establishment.
- Letter dated 6 December 2016 regarding the temporary 180 kVA connection.
- Letter dated 13 July 2018 regarding the Phase 1 Bulk supply connection.

It is envisaged that the electrical connection for this proposed development will be obtained from the Sonlandpark Substation and the full capacity required will only be available once the upgrade of Sonlandpark Substation is completed.

Unitas Park Extension 18 is a portion of a larger project consisting of Extension 18, 19, 20 and 21. The complete development will obtain an electrical connection from Sonlandpark Substation at 11 kV.

It is envisaged that a new switching station with the relevant metalclad switchgear will be established at the proposed development to supply electrical power to the complete development. To ensure firm power to the area, two parallel cables will be installed from the Sonlandpark Substation. It is also envisaged that two new switchgear panels must be installed at Sonlandpark Substation in order to make provision for this connection.

However Emfuleni Local Municipality can provide a temporary electrical connection for the Extension 18 from the overhead line running past the development until the main electrical connection for the complete development is established. It is important to note that the temporary connection will only be for a period of six months, after which the owner/developer must apply for an extension for the temporary connection.

5. Projected Demand

Considering the size of the stands it is anticipated that the network demand for Extension 18 will be 180 kVA.

The projected load allocation for the facilities is done by using the following principals and assumptions:

Estimated Allocated Load = Size (m²) × FAR × Load Density

The projected demand for the development can be summarised as follows:

DESCRIPTION	LOAD IN kVA
Erf 5150	140
Erf 5151	40
Total	180

Table 2: Projected Demand for Development

6. Network Capacity and Point of Supply

As per the correspondence from Emfuleni stipulated In Clause 4 hereof, it is envisaged that the electrical connection for this proposed development will be obtained from the Sonlandpark Substation and the full capacity required will only be available once the upgrade of Sonlandpark Substation is completed.

Emfuleni confirmed that Eskom is currently in process to upgrade the Sonlandpark Substation and Eskom currently anticipate that the upgrade of Sonlandpark Substation will be completed by end February 2019.

7. Design Criteria

7.1. Design Norm

- i) Office space : 70 VA per m² of useable floor area.
- ii) Storage space : 25 VA per m² of useable floor area.
- iii) Manufacturing space : 150 VA per m² of useable floor area.
- iv) Bulk Supply for Extension 18 : 180 kVA
- v) Total Bulk Supply Required : 6 320 kVA
- vi) Nominal Voltage MV Network : 11 000 V
- vii) MV Voltage Regulation : 5 %
- viii) Nominal Voltage LV Network : 420 V
- ix) Permissible LV Voltage Drop : 5 %

7.2. MV Network

The MV network of the development will consist of an 11 kV Switching Station with metalclad switchgear and miniature substations.

The internal MV network will consist of 95 mm² to 300 mm², Aluminium conductor, PILC, SWA underground cables.

From the development switching station the MV cable will be routed along the stand boundaries interconnecting the miniature substations.

7.2.1. Miniature Substations

- i) Size : 500 kVA
- ii) Type : Oil type in accordance with SANS 780 & SANS 1029
- iii) MV Protection : SF6 Ring Main Unit in accordance with SANS 1874
- iv) Voltage : 11 000/420/240 V, 50 Hz
- v) Vector group : Dyn 11
- vi) Colour : Avocado green

7.2.2. MV Conductor

- i) System voltage : 11 000 V
- ii) Conductor type : Underground 3 core PILC SWA (SANS 97)
- iii) Cross section area : up to 300 mm²
- iv) Conductor material : Aluminium

7.3. LV Network

The internal LV network will consist of 16 mm² to 70 mm², PVC SWA, 600/1 000 V underground cables.

It is envisaged that each erven will be fed directly from the minisub which will be equipped with a dedicated energy meter to each erven to ease electricity consumption readings. It is envisaged that the relevant property owner must submit an application to the Council for an electrical connection at his own cost.

7.3.1. LV Conductor

- i) System voltage : 420/240 V
- ii) Cable type : Underground 4 core PVC SWA (SANS 1507-3)
- iii) Cable material : Copper or Aluminium Conductor
- iv) Cross section area : Up to a 70 mm²
- v) Breaker Cascading : No cascading
- vi) Connections : Obtained directly from miniature substation.

7.3.2. Metering

Energy consumption will be measured by means of a three phase energy meter installed in metering panel as specified by Emfuleni Local Municipality.

8. **Street Lighting**

The streetlight network will consist of 16 mm² to 25 mm², PVC SWA, 600/1 000 V underground cables. A streetlight control panel shall be installed in the minisubs and cables will be routed to the streetlights.

8.1 Street Lighting

- i) System voltage : 420/240 V
- ii) Cable type : Underground 4 core PVC SWA (SANS 1507-3)
- iii) Cable material : Copper or aluminium Conductor
- iv) Cross section area : Up to a 25 mm²
- v) Street Lights : 125 W, MV Bekalane Mercury Vapour with a mounting height of 6,9 m.

9. **Telkom Network**

The Telkom network will consist of 110 mm PVC sleeves and manholes. The stands will be serviced with 50 mm sleeves from the nearest manhole.

10. **Cost Estimates**

The service report provides cost to a confidence level of 65%, but actual cost may still vary, including cost factors such as availability of long-lead-time materials, cable prices and contractor's tender price escalations. It is to be noted that this cost estimate encompassed the complete development including all phases.

The cost estimate for the electrical network for Extension 18 is as follows:

Description	Quant	Unit cost	Total
Internal Electrical Network : Extension 18			R 972,500.00
500 kVA Minisub	1	R 400 000.00	R 400 000.00
70 mm ² Alu PILC Table 17	270	R 475.00	R 128 250.00
Trenching	270	R 150.00	R 40 500.00
Cable terminations	1	R 8 000.00	R 8 000.00
Kite Bracket	1	R 15 000.00	R 15 000.00
Cable joints	5	R 8 900.00	R 44 500.00
Street Lights	0	R 5 000.00	R -
Street Light cable	0	R 150.00	R -
Street Light cable terminations	0	R 150.00	R -
Directional Drilling	25	R 550.00	R 13 750.00
SUBTOTAL WORKS			R 650 000.00
Allowance for Escalation		5%	R 32 500.00
Contingencies		10%	R 65 000.00
Prelim & General		12%	R 78 000.00

SUBTOTAL A			R 825 500.00
Bulk Service Contribution:			
Capital Contribution	180	R 2 938.23	R 528 881.76
Estimate contribution cost reduction			R -
SUBTOTAL NETWORK EXPANSION			R 528 881.76
Engineering cost & Reimbursements			R 160 489.32
Survey cost			R 30 000.00
SUBTOTAL B			R 190 489.32
Total estimated cost (excl. VAT) - Subtotal A + B			R 1 544 871.08
Plus 15% VAT			R 231 730.66
Budget quote rounded up			R 1 780 000.00

Table 3: Extension 18 Cost Estimate – Temporary Connection

11. Bulk Supply Contributions Charges

Bulk contribution charges consist of a network strengthening charge and a link services charge.

The network strengthening charge is defined as the cost incurred by the council for the strengthening of the electrical network upstream from the point of connection. This charge is based on Emfuleni Local Municipality's promulgated bulk contribution rate which is revised yearly in July.

The link services charge is defined as the cost incurred by the council to provide a connection point at the boundary of the development from the nearest available electrical network. The cost might be waived if the developer installs the infrastructure required from the nearest available network to the development.

12. Alternative Power Sources and Energy Saving Devices

As an effort to minimize the electrical load of the development on the power grid, the developer may consider promoting or presenting policy to prospective buyers to make use of solar heated geysers, gas stoves and energy sufficient lighting. Policy for energy sufficient lighting should include the following:

- The use of low energy lamps for exterior lighting with timer switches or photocell switches and to make use of natural lighting where possible.
- Solar geysers with back-up electrical element.
- Ceiling insulation.
- Geyser insulation (Geyser blanket) as well as pipe insulation.
- Owner to be advised to install LP gas stoves for further energy conservation.

13. Ownership and Responsibility for Maintenance

It is envisaged that Emfuleni Local Municipality will take over the electrical infrastructure. The electrical network shall comply with the standards and specifications of Emfuleni Local Municipality

14. Execution of Works

It is envisaged that the Developer will execute all works for the proposed development. The cost of both the internal MV network and the internal LV network will be for the account of the Developers including the establishment of the new switching station required for the development.

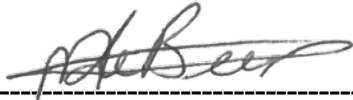
15. Conclusion

It is to be noted that the bulk electrical connection can only be made available once the upgrading of the 88/11 kV Sonlandpark Substation is completed. Emfuleni Local Municipality will make a 180 kVA temporary connection available for Extension 18 from the existing overhead line near the proposed development.

The developer will be responsible for all cost of the electrical network and well as the applicable fees to Emfuleni Local Municipality.

Yours faithfully

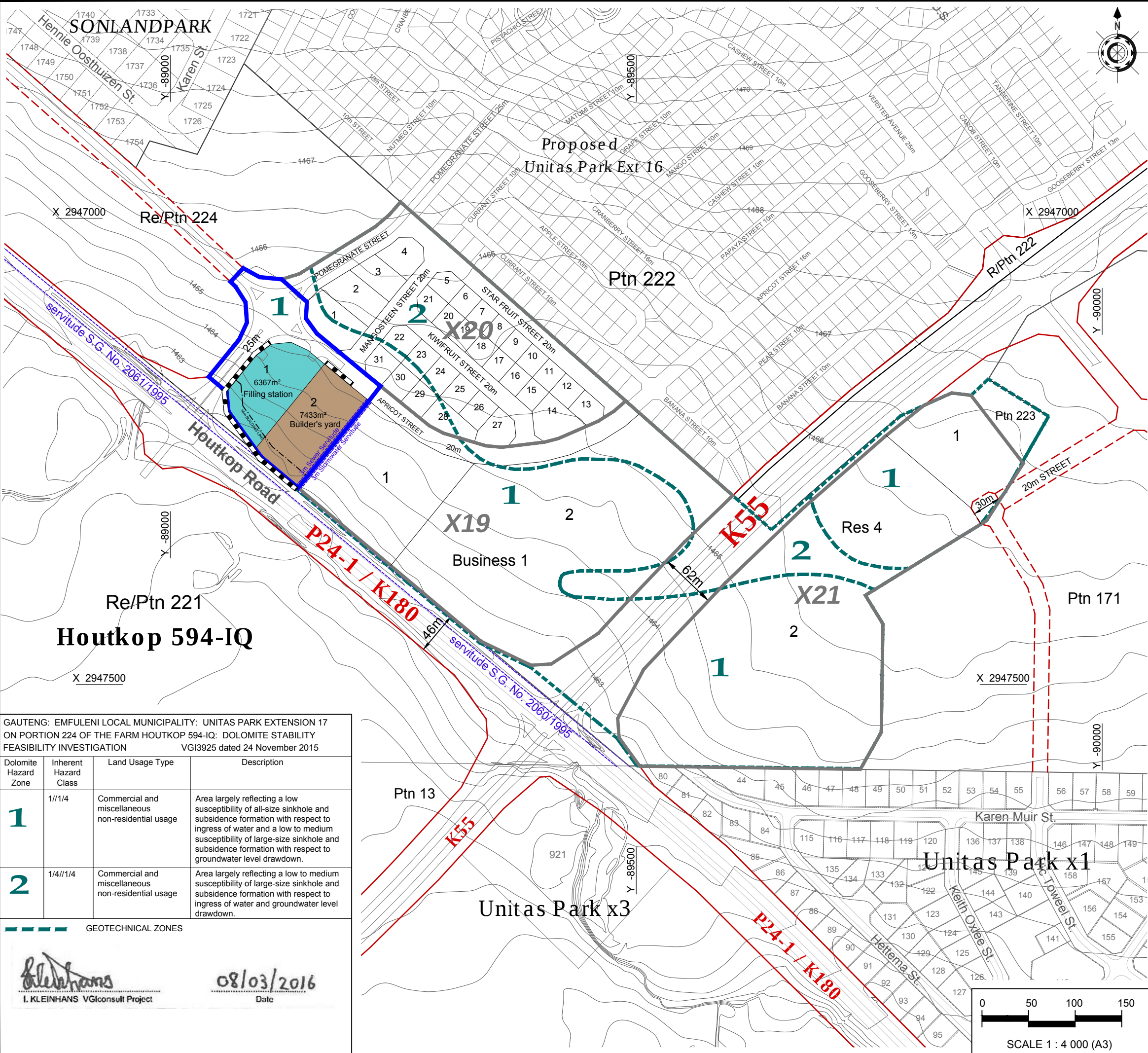
LYON AND PARTNERS (PTY) LTD



C DE BEER Pr Tech Eng

ANNEXURE A

Proposed Development



PROPOSED DIVISION

UNITAS PARK EXT. 18

Situated on Part of Portion 224
of the farm HOUTKOP 594-IQ

USES	ERF NO.	No. of Erven	AREA (ha)	%
Special for Filling Station	1	1	0,6367	29.07
Special for Builder's Yard	2	1	0,7433	33.94
Existing public roads			0,8101	36.99
TOTAL		2	2,1901	100.00

NOTES:
1.) The line ——— denotes the township boundary.
2.) All measurements are approximate.
3.) Line of No Access
4.) Unitas Park Extension 17 is divided into Extensions 18 to 21

LOCALITY

SCALE 1 : 50 000

FLOODWATER

IT IS HEREBY CERTIFIED THAT UNITAS PARK EXTENSION 18 ON PORTION 224 OF THE FARM HOUTKOP 594-IQ SHOWN ON THIS DRAWING IS NOT AFFECTED BY FLOODWATER UP TO THE 100 YEAR RECURRENCE INTERVAL EVENT, DETERMINED IN ACCORDANCE WITH SECTION 144 OF THE NATIONAL WATER ACT, 1998 (ACT 36 OF 1998)

Signed

P. ALBERTYN Pr Tech Eng

201670142

25/05/2017

Date

LOCAL COUNCIL: EMFULENI LOCAL MUNICIPALITY

Sonja Meissner-Roloff

Town & Environmental Planning

P.O. Box 7194

Centurion

0046

Tel: (012) 665-2330

Fax: (012) 665-2333

Highveld Office Park

Charles de Gaulle Crescent

Highveld

Centurion

Cell: 082 451 9585

E-mail: smeissner@icon.co.za

PLAN NUMBER: SMR416/p1

DATE: MAY 2017

GAUTENG: EMFULENI LOCAL MUNICIPALITY: UNITAS PARK EXTENSION 17 ON PORTION 224 OF THE FARM HOUTKOP 594-IQ: DOLOMITE STABILITY FEASIBILITY INVESTIGATION VGI3925 dated 24 November 2015

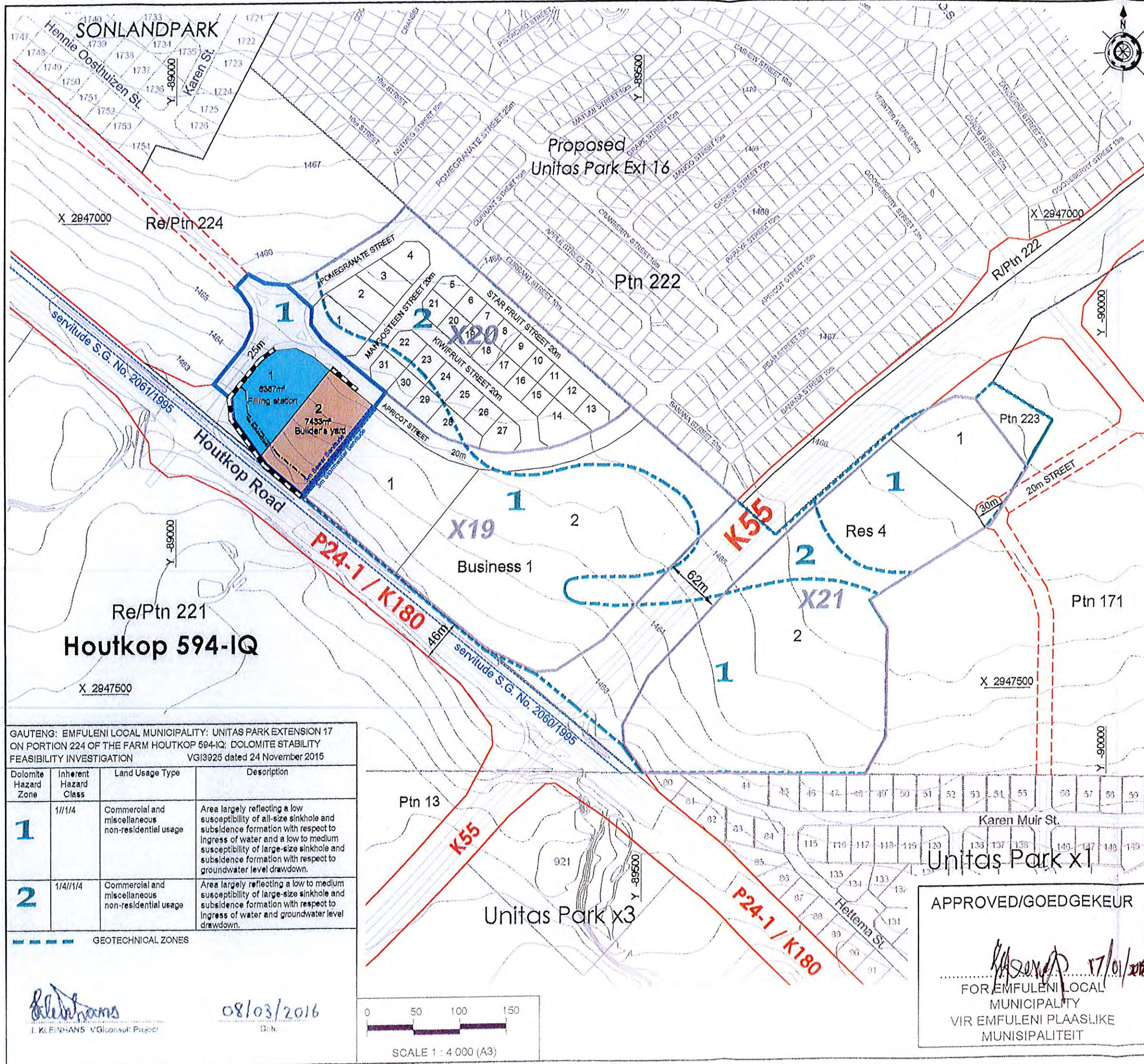
Dolomite Hazard Zone	Inherent Hazard Class	Land Usage Type	Description
1	1//1/4	Commercial and miscellaneous non-residential usage	Area largely reflecting a low susceptibility of all-size sinkhole and subsidence formation with respect to ingress of water and a low to medium susceptibility of large-size sinkhole and subsidence formation with respect to groundwater level drawdown.
2	1/4//1/4	Commercial and miscellaneous non-residential usage	Area largely reflecting a low to medium susceptibility of large-size sinkhole and subsidence formation with respect to ingress of water and groundwater level drawdown.

08/03/2016

Date

GEOTECHNICAL ZONES

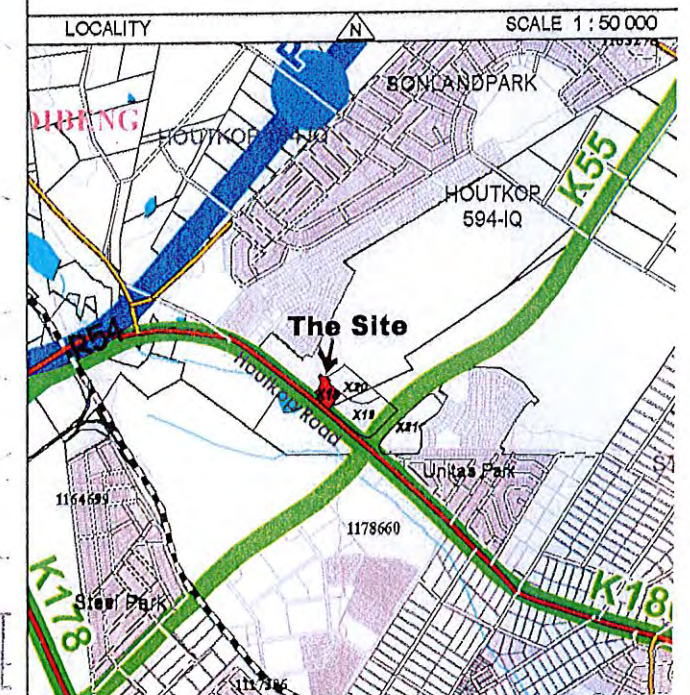
SCALE 1 : 4 000 (A3)



PROPOSED DIVISION
UNITAS PARK EXT. 18
Situating on Part of Portion 224
of the farm HOUTKOP 594-IQ

USES	ERF NO.	No. of Erven	AREA (ha)	%
Special for Filling Station	1	1	0,6367	29,07
Special for Builder's Yard	2	1	0,7433	33,94
Existing public roads			0,8101	36,99
TOTAL		2	2,1901	100,00

- NOTES:
- 1.) The line  denotes the township boundary.
 - 2.) All measurements are approximate.
 - 3.)  Line of No Access
 - 4.) Unitas Park Extension 17 is divided into Extensions 18 to 21



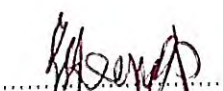
GAUTENG: EMFULENI LOCAL MUNICIPALITY: UNITAS PARK EXTENSION 17
ON PORTION 224 OF THE FARM HOUTKOP 594-IQ: DOLOMITE STABILITY
FEASIBILITY INVESTIGATION VGI3925 dated 24 November 2015

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--- GEOTECHNICAL ZONES

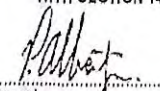
 08/03/2016
J. KLEINHANS VGI/consult Project

APPROVED/GOEDGEKEUR

 17/01/2018

FOR EMFULENI LOCAL MUNICIPALITY
VIR EMFULENI PLAASLIKE MUNISIPALITEIT

IT IS HEREBY CERTIFIED THAT UNITAS PARK EXTENSION 18 ON PORTION 224 OF THE FARM HOUTKOP 594-IQ SHOWN ON THIS DRAWING IS NOT AFFECTED BY FLOODWATER UP TO THE 100 YEAR RECURRENCE INTERVAL EVENT, DETERMINED IN ACCORDANCE WITH SECTION 144 OF THE NATIONAL WATER ACT, 1996 (ACT 36 OF 1996)

Signed  25/05/2017
P. ALBERTYN Pr Tech Eng 201670142 Date

LOCAL COUNCIL: EMFULENI LOCAL MUNICIPALITY

 25/05/2017
Sonja Melssner-Rodoff
Town & Environmental Planning

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Centurion 0048
Tel: (012) 885-2330
Fax: (012) 885-2333

Highveld Office Park
Charles de Gaulle Crescent
Highveld Centurion
Tel: 082 451 9585
E-mail: smelssner@icon.co.za

PLAN NUMBER: SMR416/p1 DATE: MAY 2017

ANNEXURE B

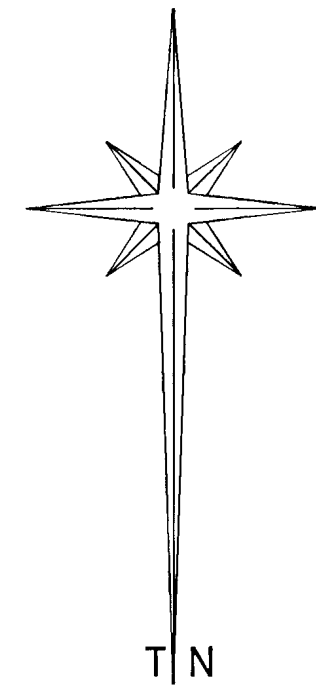
SG Diagrams

DATA BLOCK			CO-ORDINATES			AREAS	
			System : WG 27°			ERF No.	SQUARE METRES
			Y Metres X			5150	6365
			Constants ± 0.00 ± 0.00			5151	7436
			MAIN FIGURE			LPI TO IQ413	
SIDES	ANGLES OF DIRECTION						
Metres							
A B	51.64	218:13:10	A	- 89 041.17	+2 947 070.17		
B C	19.96	204:45:00	B	- 89 073.82	+2 947 030.16		
C D	21.91	176:09:00	C	- 89 082.18	+2 947 012.03		
D E	20.00	147:33:00	D	- 89 080.71	+2 946 956.17		
E F	7.39	133:04:30	E	- 89 069.98	+2 946 973.29		
F G	20.00	223:04:30	F	- 89 054.38	+2 946 968.25		
G H	20.00	295:35:30	G	- 89 070.24	+2 946 955.84		
H J	23.82	275:37:30	H	- 89 059.80	+2 946 963.21		
J K	36.47	311:52:30	J	- 89 119.51	+2 946 965.54		
K L	17.54	3:56:30	K	- 89 146.69	+2 946 959.89		
L M	20.48	324:11:40	L	- 89 145.46	+2 947 007.36		
M N	88.24	309:27:40	M	- 89 157.43	+2 947 023.89		
N P	20.01	37:51:50	N	- 89 225.58	+2 947 080.08		
P Q	120.35	38:13:10	P	- 89 213.28	+2 947 058.87		
Q R	51.49	129:47:50	Q	- 89 137.19	+2 947 159.12		
R S	60.28	194:10:10	R	- 89 097.62	+2 947 176.16		
S T	21.21	174:43:00	S	- 89 062.38	+2 947 107.27		
T A	25.00	129:43:00	T	- 89 090.40	+2 947 086.74		
			REFERENCE MARKS				
			RM1	- 89 223.57	+2 947 080.27		
			RM2	- 89 078.31	+2 946 955.84		
			TRIGONOMETRICAL BEACONS				
VER 88	△ TR523	89 684.11			+2 947 367.58		
VER 135	△ TR524	89 427.04			+89 751.71		
			BLOCK CORNERS				
100			- 89 092.35		+2 947 047.00		
101			- 89 108.47		+2 947 035.16		
102			- 89 120.49		+2 947 033.13		
103			- 89 147.20		+2 947 041.47		

BEACON DESCRIPTION:

REFERENCE MARKS:

SERVITUDE NOTE:



GENERAL PLAN

UNITAS PARK EXTENSION 18

SITUATED ON PORTION 232 OF THE FARM No. 594-IQ

VIDE DIAGRAM S.G.No. 1894/2018

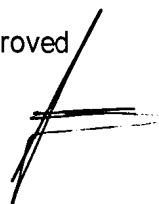
DEED OF TRANSFER

PROVINCE OF GAUTENG

SCALE 1:400

S.G. No. 1891/2018
Approved: 
for SURVEYOR-GENERAL
date: 2018-07-19
Surveyed in September 2008, April and May 2018 by me 
E.G. SMART (PLS 998) Professional Land Surveyor

SUBDIVISIONAL DIAGRAM

SIDES Metres		ANGLES OF DIRECTION	CO-ORDINATES Y System: WG 27° X		S.G. No.
		Constants:	± 0,00	± 0,00	1894/2018
AB	51,64	219 13 10	A -89 041,17	+2 947 070,17	 Approved for SURVEYOR- GENERAL 2018-07-19
BC	19,96	204 45 00	B -89 073,82	+2 947 030,16	
CD	21,91	176 09 00	C -89 082,18	+2 947 012,03	
DE	20,00	147 33 00	D -89 080,71	+2 946 990,17	
EF	7,39	133 04 30	E -89 069,98	+2 946 973,29	
FG	20,00	223 04 20	F -89 064,58	+2 946 968,25	
GH	20,00	298 35 50	G -89 078,24	+2 946 953,64	
HJ	23,82	275 37 30	H -89 095,80	+2 946 963,21	
JK	36,47	311 52 50	J -89 119,51	+2 946 965,54	
KL	17,54	3 56 50	K -89 146,66	+2 946 989,89	
LM	20,48	324 11 40	L -89 145,45	+2 947 007,38	
MN	88,24	309 27 40	M -89 157,43	+2 947 023,99	
NP	20,01	37 51 50	N -89 225,56	+2 947 080,08	
PQ	120,35	39 13 10	P -89 213,28	+2 947 095,87	
QR	51,49	129 47 50	Q -89 137,18	+2 947 189,12	
RS	60,28	144 11 50	R -89 097,62	+2 947 156,16	
ST	21,21	174 43 00	S -89 062,36	+2 947 107,27	
TA	25,00	129 43 20	T -89 060,40	+2 947 086,14	
VER 98		(523) Δ	-89 684,11	+2 947 367,56	ORD.No.20/1986 Sect. 2(1)(g)
VER 135		(524) Δ	-89 427,04	+2 949 757,71	

Description of Beacons

A,B,C,D,E,F,G,H,J,K,L,M,N,P,Q,R,S,T : 12mm Iron Peg

Sheet 1 of 2 Sheets

The figure

A B C D E F G H J K L M N P Q R S T A

represents

2,1903 hectares

of land being

PORTION 232 (A PORTION OF PORTION 224)

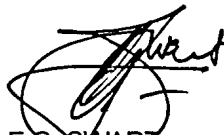
OF THE FARM No.594-IQ

Province of Gauteng

Surveyed in September 2008, April and May 2018 by me

SMALL SCALE DIAGRAM OF UNITAS PARK EXTENSION 18

VIDE GENERAL PLAN S.G.No. 1891/2018



E.G. SWART

Professional Land Surveyor

Registration Number PLS0998

This diagram is annexed to

The original diagram is

File : -/96

No.

S.G. No. : 7425/2008

S.R. : 1044/2018

d.d. :

Transfer No. T2701/2009

Comp. : IQ6D - 3B,

i.f.o.

Registrar of Deeds
PRETORIA

**PORTION 232 (A PORTION OF PORTION 224)
OF THE FARM No.594-IQ**

S.G. No.

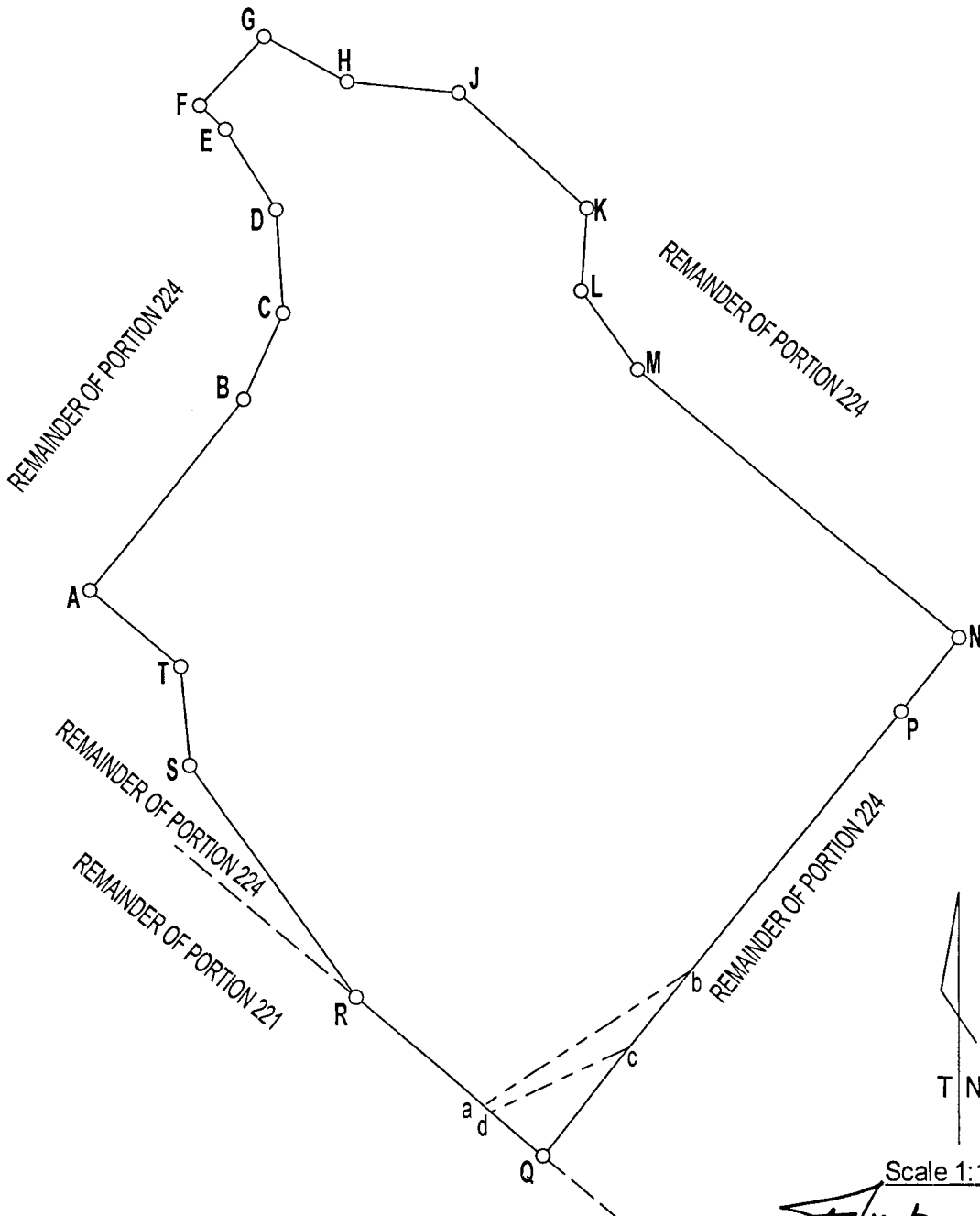
1894/2018

Approved

for
SURVEYOR-
GENERAL

2018-07-19

Sheet 2 of 2 Sheets



Scale 1:1 500

[Signature]

E.G. SWART
Professional Land Surveyor
Registration Number PLS0998

Surveyed in September 2008, April and May 2018 by me

ANNEXURE C

Emfuleni Local Municipality Correspondence



Vaal River City, the Cradle of Human Rights

Electricity Department

Tel: +27 16 440-7611
Fax: 016 455-4522
fanuss@emfuleni.gov.za

P.O. Box 3

Vanderbijlpark, 1900

Web: www.emfuleni.gov.za

File Nr: 143840

Ref: Unitas Park Ext 17

Refer to: F Strydom

Electrical Bulk supply

8 October 2014

Mr. Hans van Heerden
PO Box 983
Irene,
0062

Tel 082 881 9360
hans@ardemus.co.za

Sir

UNITAS PARK EXT 17 - 3MVA ELECTRICITY BULK SUPPLY

Your letter dated 2 September 2014 regarding the above refers.

No provision has been made for the extension to the electrical network to supply the area.

The township developer must appoint an electrical consulting engineer for the design of all services.

The township developer will be responsible for the installation of bulk electrical services.

The township developer will be responsible for the installation of all internal electrical services.

The township developer will be responsible for the arrangement of a service agreement between the developer and the municipality.

After the signing of the service agreement your application for 3MVA connection to Unitas Park ext 17 can be considered if the connection is done in stages due to the fact that the supply substation namely Sonlandpark requires upgrading, although the negotiations and planning of the process is already at an advanced stage

Your initial request for 500kVA in March 2015 can only be considered if the service agreement is signed and in place and negotiations with the Electricity Department is in order.

The charge for capital contributions for expansion to the electricity network depends on at what voltage the electrical connection will be taken, which is currently as follows:

- At 11kV downstream of an 88/11kV station
- At low voltage

R 1648.00 per kVA
R 2463.00 per kVA

These amounts exclude VAT and are revised annually on 1 July. The developer/owner will also be responsible for any cost related to the extension of the electricity network which might be necessitated for the sole purpose of this development. These cost and network extensions can only be determined upon receipt of an official application for the electricity connection and a service agreement is in place.

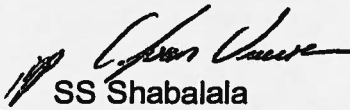
The availability of any additional loading will however be subject to the spare capacity on the electricity network at the time of development and the applicant is therefore advised to contact the Electricity Department before any final plans are made. Failure to do so could lead to a situation that electricity might not be available or that long lead times might be encountered in the provision of the required electricity connection.

Only one electrical connection per stand will be allowed after the approval of the application.

With an agreement the developer can contribute to the increase in the substation capacity whereby the network contribution charges can be reduced but not beyond extinction.

Should you require any further information, please do not hesitate to contact the Electricity Department'

Yours faithfully

A handwritten signature in black ink, appearing to read 'SS Shabalala', is written over a horizontal line.

SS Shabalala
MUNICIPAL MANAGER



Vaal River City, the Cradle of Human Rights

ELECTRICITY DEPARTMENT

Tel: 016 440 7624

Fax: 016 455 4522

E-mail: Lapanet@emfuleni.gov.za

MEMORANDUM

Att	C de Beer and Dina Louw	File Nr	147641
Date:	2 June 2016	Ref:	
Subject:	APPLICATION FOR TOWNSHIP ESTABLISHMENT IN TERMS OF SECTION 96 OF THE TOWN PLANNING AND TOWNSHIPS ORDINANCE, 1986 (ORD 15 OF 1986) READ WITH SECTION 2 (2) OF THE SPATIAL PLANNING AND LAND USE MANAGEMENT ACT OF 2013 TO BE SITUATED ON PART OF PORTION 224 OF THE FARM HOUTKOP 594-IQ (UNITAS PARK EXTENSION 17)		

Your memo dated 24 May 2016 regarding the above.

This Department has no objection to the above-mentioned request. The following conditions must be taken into consideration:

1. The township developer must appoint an electrical consulting engineer for the design of all services, including the installation of all internal electrical services. It will be the responsibility of the township developer for arranging the service agreement with the municipality. When the service agreement is signed and negotiations with the Electricity Department are in order the 500kVA can be provided at the mean time Municipality is in process of upgrading Sonlandpark substation. The remaining 2.5MVA will only be available when Sonlandpark substation is upgraded.
2. Portions 224 of the farm Houtkop 594-IQ (Unitas Park Extension 17) has no electricity connection and no design load which is not to be altered at this stage. If the connection is to be changed in future a capital contribution will be payable to the Municipality for any additional capacity that might be required at the rate that is set out below. The rate differs for the various voltages at which a connection can be made available and will only be valid for a period of three months from the date of this letter. The actual amount payable will be determined in accordance with the ruling rates at the time of receiving an official application, the approval and the payment thereof, whichever is the latest. The current rates for capital contribution are:
 - At an 88kV intake station R 43.00 per kVA
 - At 11kV at an 88/11kV station R 947.00 per kVA
 - At 11kV downstream of an 88/11kV station R 1685.00 per kVA
 - At low voltage R 2532.00 per kVA

These amounts exclude VAT and are revised annually on 1 July. The developer/owner will also be responsible for any cost related to the extension of the electricity network which might be necessitated for the sole purpose of this development.

3. The availability of any additional loading will however be subject to the spare capacity on the electricity network at the time of development and the applicant is therefore advised to contact the Electricity Department before any final plans are made. Failure to do so could lead to a situation that electricity might not be available or that long lead times might be encountered in the provision of the required electricity connection.
4. Only one electrical connection per stand will be allowed after the approval of the application. The actual connection cost can only be determined upon receipt of an official application for each connection.
5. The developer must consult with the Electricity Department before building plans are submitted for approval to enable us to make arrangements for the additional load and extensions on the electrical network.

J Lehoko
ACTING MANAGER ELECTRICITY



Vaal River City, the Cradle of Human Rights

Electricity Department

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Vanderbijlpark, 1900

Web: www.emfuleni.gov.za

File Nr: 148433

Ref: 224 Houtkop Farm (Unitaspark Ext 17)

Refer to: N G Müller

Phase one

Letter Two

06 December 2016

Mr. M Lyon
P.O Box 1901
VANDERBIJLPARK
1900

Sir

APPLICATION FOR A THREE PHASE 260 AMPERE (180KVA) TEMPORARY ELECTRICAL CONNECTION: ERF 224 HOUTKOP FARM PHASE ONE (UNITASPARK EXT 17)

Your application dated 16 August 2016 regarding the above refers.

The three-phase 180 kVA temporary electrical connection for the above-mentioned is approved **for a period of six months at a time, whereupon the owner must reapply for extension of time.** The owner will be responsible for the supply and installation of the necessary equipment as set out in the attached document.

Erf 224 Houtkop Farm (Unitaspark Ext 17) phase one has no design load, therefore a capital contribution for electricity network expansions for the additional load of 180kVA is payable at the amount of R 2 671.12 per kVA.

Provision must be made for the installation of a load control relay for all geysers of 2 kW or more in the distribution board inside each dwelling. The developer/electrical contractor must notify this Department of the number of geysers to be installed on this project.

Proof of payment of the consumer deposit of R 176 404.07 as well as network strengthening cost which is mentioned in the paragraph below must be handed in at the Electricity Department at Duncanville, Vereeniging, with the new account number, to enable the Municipality to make the necessary arrangement for the registration and programming of the Enermax Plus meter, before the electrical connection can be made alive.

A total amount of R 557 231.07 is payable at the Finance Department and is made up as follows:

Capital contribution for electricity network expansion	R 480 801.60
Registration of meter	R 7 997.58
Sub Total	R 488 799.18
14% VAT	R 68 431.89
Total Amount Payable	R 557 231.07

- The above estimated cost is valid for a period of three months after which it will be revised.

The total amount must be paid in before any work will be done.

- *Documentation for the payment must be obtained from the Planning Division, Electricity Department in General Smuts Avenue, Duncanville, Vereeniging.*
- The connection will only be energized after a Certificate of Compliance, issued by your electrical contractor is submitted to the Inspectors Division.
- **A 200 kVA pole transformer needs to be installed by the Electricity Department. This can only be done after payment made to the Municipality.**
- *Attached please find the Municipality's minimum requirements for electrical connections for your attention.*

Attached please find the Municipality's minimum requirements for electrical connections for your attention.

Should you require any further information, please do not hesitate to contact the Electricity Department.

Yours faithfully



Y Chamda
MUNICIPAL MANAGER



Vaal River City, the Cradle of Human Rights

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File Nr: 148114

Ref: 224 Houtkop Farm (Unitaspark Ext 17)

Refer to: N G Müller

Phase one

13 July 2017

Mr. M Lyon
P.O Box 1901
VANDERBIJLPARK
1900

Sir

APPLICATION FOR A THREE PHASE 5578.03 AMPERE (3860KVA) ELECTRICAL CONNECTION: ERF 224 HOUTKOP FARM PHASE ONE (UNITASPARK EXT 17)

Your application dated 12 July 2017 regarding the above refers.

The three-phase 3860kVA electrical connection for the above-mentioned subject to that Eskom is busy upgrade their 88kV incoming supply to Sonlandpark main substation.

After Eskom finish the upgrade on their side then it is possible for the 3860kVA electrical connection for the above-mentioned is approved subject thereto that you will be responsible for the supply and installation of the necessary equipment as set out in the attached document.

Erf 224 Houtkop Farm (Unitaspark Ext 17) phase one has no design load, therefore a capital contribution for electricity network expansions for the additional load of 3860kVA is payable at the amount of R 1 820.86 per kVA (excluding VAT which is the rate applicable to connections taken from 11kV substation).

Provision must be made for the installation of a load control relay for all geysers of 2 kW or more in the distribution board inside each dwelling. The developer/electrical contractor must notify this Department of the number of geysers to be installed on this project.

Proof of payment of the consumer deposit of R 2 765 953.15 as well as network strengthening cost which is mentioned in the paragraph below must be handed in at the Electricity Department at Duncanville, Vereeniging, with the new account number, to enable the Municipality to make the necessary arrangement for the registration and programming of the Enermax Plus meter, before the electrical connection can be made alive.

A total amount of R 8 022 603.96 is payable at the Finance Department and is made up as follows:

Capital contribution for electricity network expansion	R 7 028 519.60
Registration of meter	R 8 852.33
Sub Total	R 7 037 371.90
14% VAT	R 985 232.06
Total Amount Payable	R 8 022 603.96

The above cost is valid for a period of three months after which it will be revised. The total amount must be paid in before any work will be done.

The capital contribution for electricity network expansions can be reduced, but not beyond extinction on proof of the submission of a valid specified quotation to the Electricity Department, on the 11kV equipment which can be utilized by the Municipality to provide electricity to other consumers.

Documentation for the payment must be obtained from the Planning Division, Electricity Department in General Smuts Avenue, Duncanville, Vereeniging.

The owner/developer shall be responsible for the total cost to supply and install external medium voltage electrical cables, 11kV switchgear, a substation building and necessary equipment as well as an 11kV consumer substation to accommodate 11kV consumer switchgear and transformer. Only one electrical connection will be allowed on the stand.

After the completion of the project, the Municipality will take over, operate and maintain the municipal section of the substation, as well as the metering system, which will be the Municipality's point of supply. The substation building will not be taken over and will be maintained by the owner/consumer.

The electrical supply to the proposed development will be metered on 11kV in bulk, according to the applicable tariff at the meter point in the 11kV Municipal switch room. Electricity tariffs can be discussed with Mr. J Lehoko the Customer Service division at (016) 440 7632.

The owner/developer shall be responsible for the supply and installation of the internal electricity network as well as the low voltage connections to all customers.

In order to execute the above-mentioned work, the developer must submit a letter of appointment regarding the electrical consulting engineer for the design of the electrical network and an electrical contractor for the construction of the works. The electrical consulting engineer must discuss the position of the proposed mini substation with the Electricity Department. All equipment to be installed by the developer must be approved by the Manager Electricity before the order can be completed.

No refurbished equipment shall be used, or accepted by the Municipality on the electricity network.

After completion of the work As Built drawings must be submitted to the Electricity Department, showing the layout of the underground cable and the position of the new substation as well as the cable joints. The Municipality will take over, operate and maintain the substation.

The connection will only be energized after a Certificate of Compliance, relevant Test Certificates, and operation manuals as well as built plans has been submitted to the Electricity Department.

Attached please find the Municipality's minimum requirements for electrical connections for your attention.

Should you require any further information, please do not hesitate to contact the Electricity Department.

Yours faithfully



C Kekana
ACTING MUNICIPAL MANAGER