



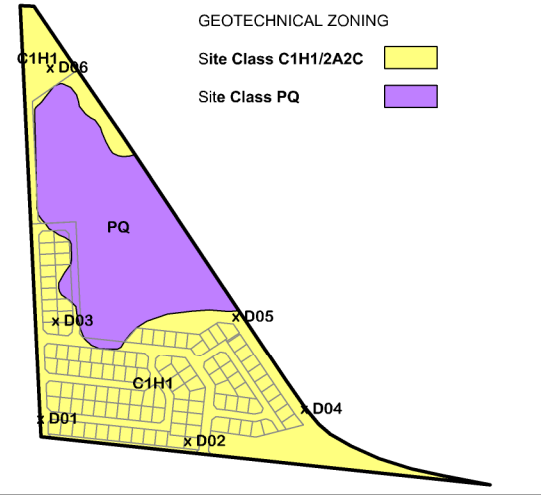
GEOTECHNICAL REPORT
 Compiled by : GEOSSET cc
 Consulting Environmental and Engineering Geologists
 David S.van der Merwe : Cel: (082) 925 4075
 Date : April 2020

Engineering Geolical Zonation
 Modified Normal to Special Development:

Site Class C1H1/2A2C: A medium collapsible and compressible soil, with low to marginally medium expansive properties, with a thickness up to 0,75m, and an expected range of up to 15mm of total soil movement measured at surface, underlain by a competent ferruginized pebble marker or hard rock ferruginized shale or quartzite from mthis zone. Foundations will therefore require modified normal to special foundation techniques such as stiffened strip footings, stiffened or cellular rafts, lightly reinforced strip footings or reinforced boxed steel in slightly widened strip foundations, the use of split construction techniques or articulation joints at all internal and external doors and openings with light reinforcement (brickforce) in masonry, or soil replacement by an engineered fill soil raft by removing all or part of the expansive horizon to 1,0m beyond the perimeter of the structure and replacing with inert backfill, compacted to 93%MOD AASHTO density at or near optimum moisture content, where after normal strip footing foundations can be used. Site drainage, a concrete apron of 1,0m around all structures and plumbing and service precautions are advised. It is classified as C1H1 in terms of the NHBCR guidelines (1995) or the SAICE Code of practice (1995) and 2A2C as per the classification for urban development (Partridge, Wood & Brink).

Site Class PQ: A large quarry where construction material was mined is now used as dumping site and development should be restricted to outside this area and it must be fenced off to prevent entrance of unauthorized persons and children. The rehabilitation of this area with material of G5 quality or better is advised before it can be used as development site, but this may prove to be uneconomic.

--- Inferred zone boundary
C1H1 Site Zone Class designation
x D06 Test pit point and number



Proposed Town Scale 1 : 100 000

Use Zones	Number of Erven	Erf Numbers	Area in Ha	% of Area
Residential 3	112	1317-1339; 1341-1429	3.5237ha	28.53%
Authority	1	1316	0.7122ha	5.77%
Institutional (Creche)	1	1340	0.0452ha	0.37%
Public Open Space	4	1430-1433	6.4640ha	52.33%
Transport			1.6065ha	13.00%
TOTAL	118	1316-1433	12.3516ha	100%

Reserve Width	Length in metre	% of Street Length
13metre	340m	22.52%
10metre	1170m	77.48%
TOTAL	1510m	100%

NOTES:
 The figure A-B-C-D-E-F-G-H-J-K-L-M-N-O-P-Q-R-A represents the proposed town Derby Extension 4. 16m Building Restricting along the line(s) lettered B-C-D-E-F-G-H-J-K-L-M-N-O-P as indicated on the layout plan.
 9m Building Restricting applicable along the line(s) lettered a-b and c-d (centre line of powerline) as indicated on the layout plan.
 No ingress to or egress from Road D1616 along the line(s) lettered B-C-D-E-F-G-H-J-K-L-M-N-O-P as indicated on the layout plan.

STREETS: Residential Erven :
 Maximum slope 1 : 35
 Minimum slope 1 : 96
 Average stand sizes - 315m²

DESIGN OF TOWN LAYOUT
 MAXIM PLANNING SOLUTIONS (PTY) LTD
 K. RAUBENHEIMER Pr. Ptn A924/1996
 TEL. (018) 468 6366

CONTOURS
 It is hereby certified in terms of the provisions of Section 144 of the National Water Act, 1998 (Act No. 36 of 1998) that the township is not affected by a public stream.
 The contour survey is in accordance with the standards laid down by the Regulations relating to Township Establishment and Land Use.
 Digital Orthophoto by:
 TMK Professional Land Surveyors
 PO Box 1785
 Vryburg
 8506
 Tel: 0825783167
 Date of photography : May 2020
 System : Hartebeesthoek 84
 Central meridian : LO 27

PROPOSED TOWN DERBY EXTENSION 4

50m 25m 12.5m 0m 75m
 1cm = 25m SCALE 1 : 2 500

THE PROPOSED TOWN IS SITUATED ON A PORTION OF THE REMAINING EXTENT OF PORTION 25 (A PORTION OF PORTION 23) OF THE FARM RIETVONTEIN No.372-JQ

KGTELENGRIVIER LOCAL MUNICIPALITY NORTH WEST PROVINCE

Drawing Compiled by : A. Rossouw
 Drawings Nr. : 8/11/3/K/T
 Date : 2021-08-18
 Revision : 0

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MAXIM
 planning solutions

Caddie file : USER\1\Maxim\3-PROJECTS\8-11-3-K-T\Derby Extension 4\Mapa\CAD

Re/Ptn 16 Rietfontein No. 372-JQ

Ptn 57 Rietfontein No. 372-JQ