

LEGEND

Proposed Zoning	Proposed Land use	Number of Erven	Erf Number	Area in Ha	% of Area
Residential zone IV	Residential house (low cost housing excluded) (Minimum 350m²)	663	20166-20212, 20214-20319, 20321-20437, 20469-40484, 40486-20814, 20816-20833	25.2324ha	57.0%
Business zone II	Shop	1	20485	0.1874ha	0.4%
Institutional zone I	Place of instruction (Creche)	1	20815	0.3614ha	0.8%
Institutional zone II	Public place of worship (Church)	1	20213	0.1602ha	0.4%
Open space zone I	Public open space	3	20834-20836	3.5206ha	8.0%
Open space zone II	Private open space (Cemetery)	1	20438	0.5293ha	1.2%
	Private open space (Sportsfield)	1	20320	3.3875ha	7.7%
Transport zone II	Public street	13	20837-20849	10.8562ha	24.5%
TOTAL		684	20166-20849	44.2350ha	100%

STREETS

Reserve Width	Length in Metre	% of Street Length
12m	5503m	68.9%
13m	857m	10.7%
20m	755m	9.5%
25m	869m	10.9%
TOTAL	7984m	100%

NOTES:

The figure A-B-C-D-E-F-G-H-J-K-L-M-A represents the proposed town Kathu Extension 9.
 No ingress to or egress from Govan Mbeki Avenue along the line(s) lettered a-b; c-B-C; d-e-f; g-h-j and k-l as indicated on the layout plan.
 No ingress to or egress from Raymond Mphahamisi Mhlaba Avenue along the line(s) lettered m-H-h; o-p-q; r-s and t-J as indicated on the layout plan.

EXISTING SERVICES:

- GLM Water network
- GLM Sewer network
- GLM Electricity network

Average Residential Erven Size : 380.6m²
 Erf sizes and dimensions subject to final survey.

1 : 100 YEAR FLOODLINE

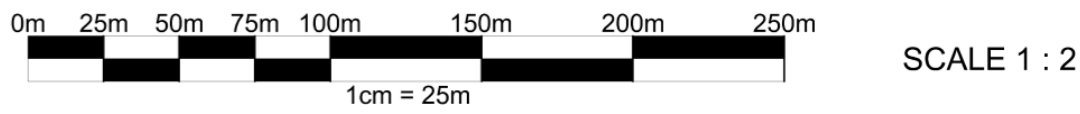
It is hereby certified in terms of the provisions of Section 144 of the National Water Act 1998 (Act No.36 of 1998) that the lines shown on this drawing indicate the maximum extent of inundation likely on an average every hundred years by the flood waters from the natural catchment (as determined using present topography).

CONTOURS
 The contour survey is in accordance with the standards laid down by the Regulations relating to Township Establishment and Land Use.

PR ENGINEER
 It is hereby certified that the town layout complies with the conditions and recommendations as stated in the Geological Report.

PR ENGINEER
 Digital Orthophoto by: *AZURA*
 Tel: (012) 8030346
 Date of Photography : December 2017
 System : WGS84 Central Meridian : Lo23

**DETAIL LAYOUT MAP
 PROPOSED TOWNSHIP
 KATHU EXTENSION 9**



THE PROPOSED TOWN IS SITUATED ON A PORTION OF PORTION 2 OF THE FARM KALAHARI GHOLF EN JAG LANDGOED No. 775, DIVISION KURUMAN.

GAMAGARA LOCAL MUNICIPALITY NORTHERN CAPE PROVINCE

Drawing Compiled by : A. Rossouw
 Drawings Nr. : 8/75/1
 Date : 2018/10/23
 Revision : 0

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GEOTECHNICAL REPORT
 Compiled by : GEOSSET cc
 Consulting Environmental and Engineering Geologists
 David S.van der Merwe : Cel: (082) 925 4075
 Date : November 2017

Engineering Geological Zonation

Special Development with Risk:
 Site Class CR to C1R/1A2F: This zone is characterized by very loose collapsible aeolian sand (C to C1) exhibiting an open texture, with thickness less than 0.75m, with less than 10mm movement measured at surface. The risk of hard pan calcrete, calcrete gravel and shallow rock and scattered rock calcrete boulders or rock outcrop (R) will restrict the placing of services. Pneumatic tools, a competent TLB or excavator or even blasting will be required during the placing of services. Foundations will require special foundation techniques with proper compaction and site specific drainage. It is classified as CR to C1R according to the NHBRC guidelines (1995) & SAICE Code of practice (1995) and 1A2F according to the classification for urban development (Partridge, Wood & Brink).

Development with expected problems or increased cost
 Site Class PQ: Quarried areas or borrow pits must be rehabilitated including backfilling with a controlled fill to engineer's specification before any development can take place.

Undevelopable:
 Site Class PD: Perennial drainage features where the 1:100 year flood line will determine or specify the allowable distance of development from rivers, usually 32m from the center of the river.

- Inferred Zone Boundary
- PQ Site Class Designation
- x K01 Test Position and Number

