



# DRAFT BASIC ASSESSMENT REPORT

### January 2013

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CK 97 46008/23

# PROPOSED LOW COST HOUSING DEVELOPMENT, GROOT MIER, NORTHERN CAPE DEA REF.: NC/BA/SIY/MIE/MIER/2012

### **PREPARED FOR:**

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# EXECUTIVE SUMMARY

### Proposed Activity

It is proposed that Erf 112, Groot Mier, be rezoned and subdivided for the development of serviced low cost housing, including associated infrastructure

The property (Erf 112, Groot Mier) is owned by the Mier Municipality (Applicant). No formal land use management system has been adopted by the Mier Municipality at this stage and the land use rights on the property may be described as being undetermined.

The site is located off the R31, in Groot Mier, approximately 37km east of Rietfontein (via the R31. The site coordinates are as follows: S  $26^{\circ}$  44.615', E  $20^{\circ}$  19.176'.

The proposed development will be over 22.5ha portion of the property is involved in this development proposal. One hundred and ninety eight (198) individual land units are proposed, 190 of which are single residential erven, in response to the growing housing need in the municipality. <u>Please note that the development footprint (area to be transformed)</u> is less than 20ha, as part of the development will be zoned "Undetermined" (please see below), which will remain as is, with no transformation or development taking place on these areas.

#### Environmental Requirements

The National Environmental Management Act (NEMA, Act 107 of 1998), as amended, makes provision for the identification and assessment of activities that are potentially detrimental to the environment and which require authorisation from the competent authority based on the findings of an Environmental Assessment. NEMA is a national act, which is enforced by the Department of Environmental Affairs (DEA). In the Northern Cape, these powers are delegated to the Department of Environmental & Nature Conservation (DE&NC). According to the regulations of Section 24(5) of NEMA, authorisation is required for the following:

Government Notice <u>R544</u> listed activities (Listing Notice 1):

- **11**: The construction of:
  - (i) Buildings exceeding 50 square meters in size; or
  - (ii) Infrastructure or structures covering 50 square meters or more;

Where such construction occurs within a watercourse or within 32 meters of a watercourse, measured from the edge of a watercourse, excluding where such construction will occur behind the development setback line.

**18:** The infilling or depositing of any material of more the 5 cubic meters into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock from

#### (i) a watercourse;

but excluding where such infilling, depositing, dredging, excavation, removal or moving

 is for maintenance purposes undertaken in accordance with a management plan agreed to by the relevant environmental authority; or occurs behind the development setback line.

- **22:** The construction of a road, outside urban areas,
  - (i) With a reserve wider than 13,5 meters or,
  - (ii) Where no reserve exists where the road is wider than 8 meters, or
  - (iii) For which an environmental authorization was obtained for the route determination in terms of activity 5 in Government Notice 387 of 2006 or activity 18 in Notice 545 of 2010.
- **23:** The transformation of undeveloped, vacant or derelict land to residential, retail, commercial, recreational, industrial or institutional use, inside an urban area, and where the total area to be transformed is 5 hectares or more, but less than 20 hectares

Government Notice <u>R546</u> listed activities (Listing Notice 3):

**13**: The clearance of an area of 1 hectare or more of vegetation where 75% or more of the vegetative cover constitutes indigenous vegetation.

#### Site Description

Natural vegetation forms a very sparse layer over some of the proposed site, but most of the proposed site has already been transformed as a result of urban creep and associated activities and now represents open areas used for playgrounds, informal roads, footpaths and grazing.

There are no formal rivers on the proposed site, but the site is a traversed by some drainage lines and small streams draining water from the slightly higher ground just west of Groot Mier onto the relative flat area in the general location of the Groot Mier settlement.

#### Need and Desirability

The Mier Local Municipality has not at this stage been party to the significant mining boom experienced in the province, but has also seen development, albeit on a smaller scale. This growth has been brought about through a focus on the tourism sector of the economy with attractions such as game farming, hospitality infrastructure and, of course, the Kgalagadi Transfrontier Park.

These mentioned aspects have not only had an economic impact, but has also contributed to population increases in the municipality, be it from immigration or natural growth. With this in mind, the Mier Municipality has felt the need to provide housing opportunity throughout its area of jurisdiction and identified the towns of Askham, Welkom, Groot Mier, Loubos and Rietfontein as areas of focus.

This application for 198 new development stands in Groot Mier, 190 of which are single residential erven, in response to the growing housing need in the municipality.

#### **Conclusion**

According to the Archaeological Assessment very little archaeological material was found on Groot Mier, Erf 112. Only five flakes and one core were located, all from the Middle Stone Age. Materials included shale, quartz, quartzite and chert.

The isolated nature and limited amount of stone tools found on the site mean that development will have no significant impact on the archaeological resources. No further mitigation is required

According to the Biodiversity Assessment, the vegetation on site conforms to a disturbed form of Gordonia Plains Shrubland. The expected grassy component of the vegetation is almost totally lost, most probably as a result of grazing pressure over a long period of time, combined with urban creep (trampling) and low rainfall. Although grasses are still present they do not dominate the vegetation composition as expected. As a result the vegetation resembles a disturbed sparse shrubland with small to medium trees occasionally found scattered therein. A number of small drainage lines were encountered to the south of the property, crossing the property from a westerly to a south easterly direction. Small seasonal streams (dry at the time of the visit) were encountered on the property. However, these streams also usually tapered out onto the plains towards the east of the proposed site.

Two listed protected species (namely *Acacia erioloba* and *Boscia albitrunca*) were encountered within the study area. These have been listed and mapped in the Biodiversity Assessment, as well as the Site Development Plans (**Appendix A1**)

It is likely that the proposed project will have an impact protected species. <u>The impact is</u> <u>thus rated as medium</u> (which can be reduced with mitigation).

- The proposed housing layout should take into account all mature indigenous tree species and should aim to minimise the impact on these. In addition it should also aim to minimise the impact on any other protected species that might be encountered on site. On-site micro- adjustment of the final lay-out must be done in order to minimise the impact on as many of the protected species as possible.
- As a pre-cautionary measure all viable herb-, bulbs- and succulent plant species encountered within the footprint should be removed and replanted through a dedicated search and rescue operation.
- Permits must be obtained for the removal of any protected species which cannot be avoided.

Considering all the information, it is not envisaged that this proposed development will have a significant negative impact on the environment. The expected positive socio-economic impacts, including temporary jobs created during the construction phase, should outweigh the negative impacts

It is therefore recommended that this application be authorised with the necessary conditions of approval as described throughout this BAR.