

## **PROPOSED LOW COST HOUSING DEVELOPMENT, RIETFontein, NORTHERN CAPE**

**DEA Ref No.: NC/BA/SIY/MIE/RIET/2012**



## **DRAFT BASIC ASSESSMENT REPORT**

**January 2013**

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DEVELOPMENT, RIETFONTEIN,  
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# EXECUTIVE SUMMARY

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## Proposed Activity

It is proposed that Remainder of Farm No. 585, Gordonia Rd, Rietfontein, be rezoned and subdivided for the development of serviced low cost housing, including associated infrastructure in Rietfontein.

The property (Remainder of Farm No. 585, Gordonia Rd) 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 development is located over two sites:

The Northern site is located in the northern parts of Rietfontein, to the west of Eland Street. The site coordinates as follows: S 26° 44.200', E 20° 01.674'.

The Southern site is located to the south of Rietfontein, west of the existing neighbourhood. The site coordinates as follows: S 26° 45.076', E 20° 01.144'.

The proposed development will be over 8.5ha portion of the property is involved in this development proposal. One hundred and twenty (120) individual land units are proposed, 109 of which are single residential erven, in response to the growing housing need in the municipality.

## 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 R544 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

- (i) 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 R546 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

The proposed sites are situated within the Nama Karoo Biome (Northern Bushmanland). All of these properties are used mainly for livestock grazing and or game farming. No intensive farming has been observed (lack of irrigation water). It is expected that natural fauna and avi-fauna may still be present, although limited or impacted as a result of the urban activities of the nearby town. Very little game is expected to be encountered (none was observed).

There are no formal rivers on the proposed site, but the site is a traversed by some drainage lines and small streams.

### 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 120 new development stands in Rietfontein, 109 of which are single residential erven, in response to the growing housing need in the municipality.

### Conclusion

According to the Archaeological Assessment the site of the proposed Rietfontein residential development has archaeological remains spanning the Earlier Stone Age (ESA), Middle Stone Age (MSA) and the Later Stone Age (LSA). It is very rare to find all three stone tool

technologies on one site. Five possible burials were also located on the property. It is unclear if these are recent or historical burials, and they bare further investigation.

Seven ESA lithics were found, representing the Acheulian Technological period. All Achaean pieces were made on sandstone. The MSA contributed the bulk of the findings. 77 flakes and various descriptions and 38 cores were photographed during the foot survey. Material included: sandstone, quartz, quartzite, jasper and chert. The LSA was not very well represented: only one flake (sandstone) and one core (quartzite) were found.

The burials are all located to the west of the gravel road traversing the property.

The impacts are therefore considered highly likely and permanent.

According to the Biodiversity Assessment, no threatened or endangered species were recorded during the site visit. However, it must be noted that the vegetation type is considered "Least Threatened".

Both sites still support natural vegetation (shrubland) which, according to the draft Siyanda EMF is considered to be of high conservation value. In addition the southern site might be located within a proposed future conservation area. However, the impact will be localised, no special habitats were encountered, no protected species were encountered, it will not lead to significant loss of ecological processes, biodiversity or ecosystem connectivity and is not expected to have any significant impact on wildlife or avi-fauna.

Taking the above into account the direct impact on the environment is rated as low-medium.

The following is some mitigation which will minimise the impact of the solar plant location and operation.

- Although most of these drainage lines are basically storm water channels with little riparian vegetation they should still be seen as significant biodiversity features, which should be protected by adequate river corridors or suitably incorporated within the storm water planning for these town additions.
- Permits must be obtained for the removal of any protected species which might be encountered.
- 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.
- Only existing access roads should be used for access to the terrain. Access roads must be clearly demarcated and access must be tightly controlled (deviations may not be allowed).
- Indiscriminate clearing of areas must be avoided (all remaining areas to remain as natural as possible).
- All topsoil (at all excavation sites) must be removed and stored separately for re-use for rehabilitation purposes. The topsoil and vegetation should be replaced over the disturbed soil to provide a source of seed and a seed bed to encourage re-growth of the species removed during construction.
- Once the construction is completed all further movement must be confined to the access tracks to allow the vegetation to re-establish over the excavated areas.
- Rehabilitation must be done after construction.

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.