# BASIC ENVIRONMENTAL IMPACT ASSESSMENT FOR

# THE PROPOSED RESIDENTIAL DEVELOPMENT ON THE REMAINING EXTENT OF PORTION 145 OF THE FARM WATERKLOOF 305 JQ, RUSTENBURG, NORTH WEST PROVINCE

REF: NWP/EIA/46/2014

## **BACKGROUND INFORMATION DOCUMENT (BID)**

### Prepared by



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# **LIST OF ABBREVIATIONS**

BA	Basic Assessment
BAR	Basic Assessment Report
BID	Background Information Document
CBD	Central Business District
DAFF	Department of Agriculture, Forestry & Fisheries
DWA	Department of Water Affairs
EAP	Environmental Assessment Practitioner
EIA	Environmental Impact Assessment
EMF	Environmental Management Framework
EMP	Environmental Management Programme
GDP	Gross Domestic Product
GNR	Government Notice Regulation
GPS	Global Positioning System
I&AP	Interested and Affected Party
NEMA	National Environmental Management Act, 1998
	(Act 107 of 1998) as amended
NW READ	North West Department of Rural, Environmental and
	Agricultural Development
PPP	Public Participation Process
RLM	Rustenburg Local Municipality
SDF	Spatial Development Framework
SEA	Strategic Environmental Assessment
SAHRA	South African National Heritage Resources Act,
	1999 (Act 25 of 1999)

#### 1. INTRODUCTION

HydroScience cc, an independent Environmental Assessment Practitioner (EAP), has been appointed by Double D&G Building Contractors, to undertake a Basic Assessment (BA) process and to submit a Basic Assessment Report (BAR) to the relevant authority to apply for environmental authorisation for the proposed residential development on remaining extent of Portion 145 of the farm Waterkloof 305 JQ, Rustenburg, in the North West Province.

As part of the Environmental Impact Assessment (EIA) BA process (Figure 1), an application, in terms of the National Environmental Management Act (NEMA), 1998 (Act 107 of 1998), as amended, and associated Regulations of 2010, has been submitted to the North West Department of Rural, Environmental and Agricultural Development (NW READ).

#### 2. PURPOSE OF THIS DOCUMENT

The purpose of this document is to provide background information (in addition to the notices on the site and published in the newspaper) in terms of Government Notice Regulation (GNR) 543 (Sections 54 through 57) of NEMA to all Interested and Affected Parties (I&APs) regarding the intention of the proposed project as described above.

In addition, this document will provide a platform from which to obtain comments and contributions from stakeholders with regard to the potential environmental impacts of the proposed project as part of the Public Participation Process (PPP). The aim of the PPP is not only to adhere to the required legislation, but also to give as many stakeholders and I&APs as possible an opportunity to be actively involved in this process.

The PPP will be carried out in accordance with Chapter 6 of NEMA as amended and in support of the Environmental Impact Assessment Regulations, 2010 and associated guidelines.

#### 3. ROLE OF I&APs

You are invited to register as an I&AP (see contact details and registration form attached) and to assist us in:

- Identifying issues of concern that need to be investigated as well as possible impacts of the proposed project on the environment; and
- Suggesting alternatives to mitigate possible negative impacts and enhance positive impacts.

Your input is considered valuable as it contributes to:

- The decision-making process;
- Information on public needs, values and expectations; and
- Local and traditional knowledge.

The following authorities will also be notified and requested to provide comments:

- Department of Water Affairs (DWA) in terms of the National Water Act (NWA), 1998 (Act 36 of 1998).
- The South African Heritage Resources Agency in terms of the South African National Heritage Resources Act (SAHRA), 1999 (Act 25 of 1999).
- The Department of Agriculture, Forestry and Fisheries (DAFF) as the property is currently zoned for agricultural use.
- The Rustenburg Local Municipality (RLM), who is the local authority under whose jurisdiction it falls and who needs to ensure that the development fits in with their Spatial

Development Framework (SDF), Strategic Environmental Assessment (SEA) and Environmental Management Framework (EMF).

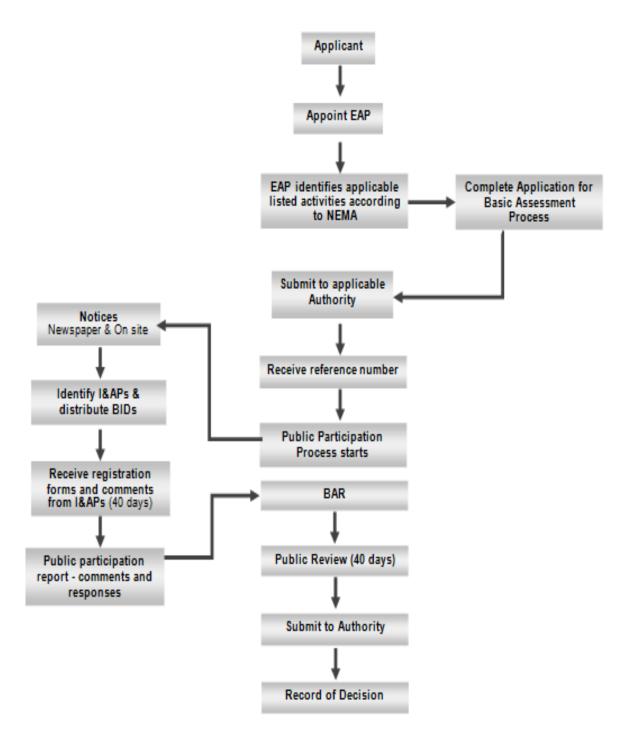


Figure 1: Simplified diagram presenting the Basic Assessment process

#### 4. PROPOSED PROJECT

#### 4.1. Project motivation

According to the Rustenburg Spatial Development Framework (SDF, 2010), the total population of Rustenburg have increased from 395 000 in 2001 to nearly 450 000 in 2007. This represents an increase of 13.6% over this period and thus implies an annual growth rate of approximately 2.3%. A notable feature is that the growth in the number of households (25.6%) was nearly double that of the population figures, translating into a household growth rate of 4.3% per annum. Approximately 84% of the Rustenburg Municipal Area population can be classified as urbanized, residing in either urban or rural settlements. Only 10% of the total population lives on farms. Furthermore, the agricultural sector only accounts for 3.4% of the employed population in 2007, this slightly decreased from 4.1% in 2001. A low percentage of the male population (2.6%) is involved in the agricultural sector.

The Rustenburg Housing Sector Plan analysed the total overall municipal housing need, as well as the spatial disaggregation housing need per settlement cluster. According to these figures, the total backlog (which comprises of informal structures in informal settlements, informal structures in backyards, traditional houses constructed of traditional materials and other informal categories), is estimated to be approximately 58 600 units. This backlog is mostly concentrated in the Boitekong/Kanana Cluster (±14 000), the Thekwane-Mfidikoe-Photsaneng Cluster (±12 000) and the Rustenburg/Thlabane cluster (±6 000) (SDF, 2010).

The potential future growth of the municipality, resulting from both natural growth, as well as immigration to the area due to its high economic growth rate, will result in an additional demand for housing up to 2015. The total additional demand over this period is estimated to be approximately 57 000 units. This figure includes both affordable housing units to be provided through the public sector, as well as bonded houses to be provided through the private sector (SDF, 2010).

#### 4.2. Project objective

The main objective of the project is to establish a residential development that will contribute to the development and growth of Rustenburg, consequently adding to the Gross Domestic Product (GDP) of the city as a whole.

#### 4.3. Project locality

The proposed residential development will be established on the remaining extent of Portion 145 of the farm Waterkloof 305 JQ, Rustenburg, North West Province. The proposed portion of land is located approximately 8 km south east from the Rustenburg Central Business District (CBD). This farm portion can be accessed via Arnoldistad Road on the north western boundary of the site. Global Positioning System (GPS) coordinates are 25° 43' 11.44" South; 27° 17' 44.28" East (please refer to the topographical map – Figure 2 and the Locality map – Figure 3). The farm portion is bordered by agricultural land (Figure 4) (north, east and south), residential developments (east) and industry (north-west).

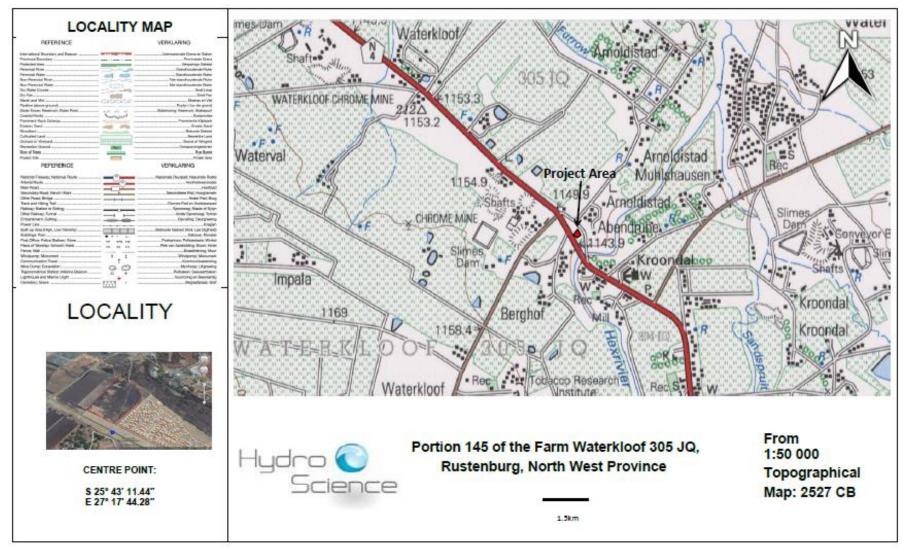


Figure 2: Topographical map indicating the proposed project area, Rustenburg, North West Province

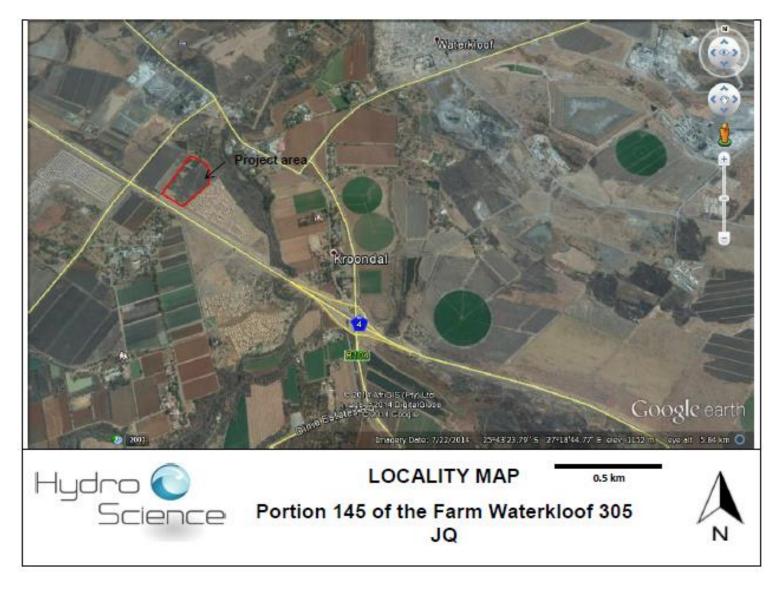


Figure 3: Google<sup>™</sup> locality map of project area on remaining extent of portion 145 on the farm Waterkloof 305 JQ

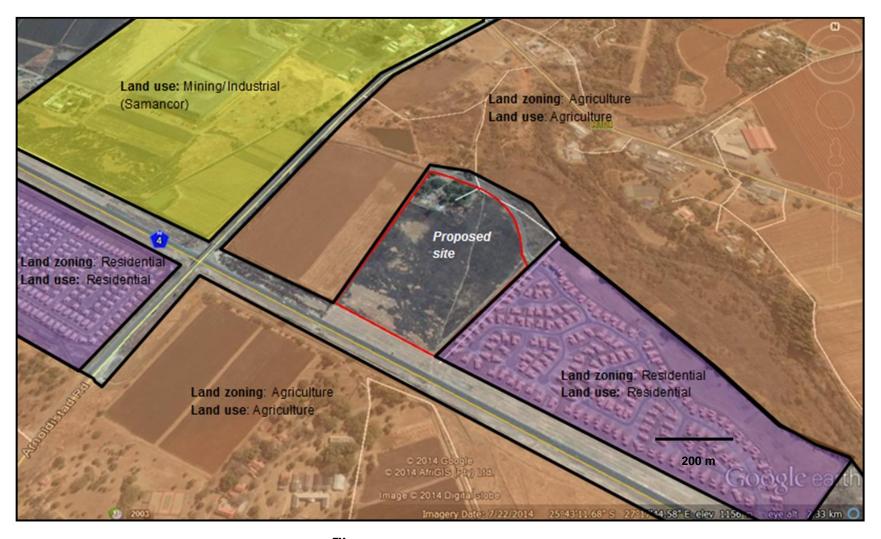


Figure 4: Google™ image showing current surrounding land use

#### 4.4. Project description

The site has a size of 15ha and is currently largely undeveloped but disturbed due to historic agricultural activities. In the process of developing the site into a residential township, the following main activities will take place:

- Vegetation will be cleared during earth works and the construction phase;
- Bulk municipal services (sewage, electricity, water supply and roads) will be established and linked; and
- Infrastructure (residential units) will be built during the construction phase.

The planned infrastructure will include:

- Residential units;
- Access and internal roads; and
- Infrastructure for bulk services (water supply and sewage).

#### 4.5. Project schedule

The projected leading time on completion is five (5) years once environmental authorisation has been obtained. The environmental authorisation process will take approximately 6 months.

#### 4.6. Additional Work

The following additional work will be conducted:

- A <u>geotechnical study</u> will be conducted to establish soil conditions and stipulate building and foundation requirements.
- A fauna and flora study will be conducted to assess the biodiversity in the project area.
- An application in terms of the Township Ordinance will be submitted by the Town Planner to the RLM in terms of <u>Town Planning</u> requirements.
- An <u>archaeological study</u> to assess the cultural heritage of the project area.
- A <u>traffic study</u> to determine the impact of constructing a residential development on the project area.
- A civil engineering service report or service agreements to address the provision of solid waste removal services, water and electricity supply and sewage management.

#### 5. POTENTIAL IMPACTS

Preliminary predictions of possible impacts that may occur and need to be managed as part of the Environmental Management Programme (EMP) include:

- Dust generation due to vegetation removal and site clearance (soils are exposed) as well as earth works and construction (construction vehicle movement etc.);
- Removal of a large quantity of vegetation due to site clearance and associated loss of fauna habitat;
- Erosion potential due to vegetation removal and site clearance (soils are exposed);
- Noise generation during the construction phase (workers, vehicles, machinery, equipment) and operational phase (people, vehicles, pets, traffic);
- Change of land use and characteristic of area;
- Improper waste and wastewater management during the construction phase; and
- Increased traffic during the construction and operational phase of the project.

#### 6. APPLICABLE LEGISLATION

An application for environmental authorisation, in terms of the NEMA, as amended, has been submitted to the NW READ (Reference number NWP/EIA/46/2014). Notification, in the form of site notices and an advertisement placed in the Rustenburg Herald (2 October 2014), was given to all I&APs, as prescribed in Chapter 6 of NEMA, informing them that a BA process will be followed and a BAR will be submitted to the relevant authority to obtain environmental authorisation for the proposed development as set out in Section 4 of this document.

The following listed activity which requires environmental authorisation was identified in terms of the relevant legislation:

**NEMA**: GNR 544 (18 June 2010):

- 23 The transformation of undeveloped, vacant or derelict land to-
  - (i) 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. The proposed residential project site is located within an urban area and approximately 15 ha of vacant land will be transformed for residential use, therefore making the above listed activity applicable for this project.

#### 7. PROCESS AND WAY FORWARD

- An application for environmental authorisation has been submitted to NW READ. The
  reference number: NWP/EIA/46/2014 has been assigned and the application will be
  handled by Mr Sammy Mabula in the NW READ offices at 114 Chris Hani Street
  Potchefstroom, reachable on 018 299 6710.
- Notices have been placed in the Rustenburg Herald (2 October 2014) and on the site (2 October 2014).
- Further notification and Background Information Documents (BID) are to be delivered by hand, fax, registered mail or email to other identified I&APs, including neighbours, authorities and other stakeholders in the area throughout the process.
- Comments/registration forms from I&APs should be received on or before 11<sup>th</sup> November 2014.
- A draft BAR will become available for public review during January 2015.
- A final BAR will be submitted to the NW READ for their review and a decision in 2015.

#### 8. CONTACT DETAILS

Please complete the attached form or contact the person below should you wish to be registered as an I&AP or make any comments regarding this project.

#### HydroScience cc

Person: Nandipha Mabuza Tel: 082 667 5056

Fax: 086 692 8820 / 086 588 1770 E-mail: nandipha@hydroscience.co.za Postal address: P.O. Box 1322, Ruimsig, 1732

#### **COMPLETE & FAX OR E-MAIL TO:**

HYDROSCIENCE 086 692 8820 / 086 588 1770 / nandipha@hydroscience.co.za

ENVIRONMENTAL IMPACT ASSESSMENT – BASIC ASSESSMENT FOR THE PROPOSED RESIDENTIAL DEVELOPMENT ON THE REMAINING EXTENT OF PORTION 145 OF THE FARM WATERKLOOF 305 JQ, RUSTENBURG, NORTH WEST PROVINCE REFERENCE: NWP/EIA/46/2014

#### INTERESTED AND AFFECTED PARTY REGISTRATION AND COMMENT SHEET

Title:	Mı	1r Mrs			3	Ms			Dr	
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		Personal:		YES	NO				Email:	
Details of interest:										
Name of other I&AP to be contacted:										
Contact de		ils:								
Comments: (please use separate sheets if you wish/require)										

Thank you for your comments, participation and time. Your contribution is appreciated and will form part of the final submission to the authority for decision-making.