

ENVIRONMENTAL IMPACT ASSESSMENT (EIA)

**PROPOSED RESIDENTIAL DEVELOPMENT ON PORTIONS 98, 99, 179, 236,
284 AND 364 OF THE FARM WATERKLOOF 305 JQ, RUSTENBURG, NORTH
WEST PROVINCE.**

REF: NWP/EIA/94/2013

BACKGROUND INFORMATION DOCUMENT (BID)

Prepared by



Address: P.O. Box 1322, Ruimsig, 1732

Tel: 082 850 5482

Fax: 086 692 8820 / 086 588 1770

paulette@hydroscience.co.za

April 2014

LIST OF ABBREVIATIONS

BID	Background Information Document
CBD	Central Business District
CARA	Conservation of Agricultural Resources Act, 1983 (Act 43 of 1983)
DAFF	Department of Agriculture, Forestry & Fisheries
DPWRT	Department of Public Works, Roads & Transport
DWA	Department of Water Affairs
EAP	Environmental Assessment Practitioner
EIA	Environmental Impact Assessment
EIR	Environmental Impact Report
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
MPE	Magaliesberg Protected Environment
NEMA	National Environmental Management Act, 1998 (Act 107 of 1998) as amended
NHRA	National Heritage Resources Act, 1999 (Act 25 of 1999)
NWA	National Water Act, 1998 (Act 36 of 1998)
NW DEDECT	North West Department of Economic Development, Environment, Conservation and Tourism
PPP	Public Participation Process
RLM	Rustenburg Local Municipality
SDF	Spatial Development Framework
SEA	Strategic Environmental Assessment
SAHRA	South African National Heritage Resources Agency

1. INTRODUCTION

HydroScience cc, an independent Environmental Assessment Practitioner (EAP), has been appointed by Double D&G Building Contractors, to undertake a full Environmental Impact Assessment (EIA) and submit a Scoping and Environmental Impact Report (EIR) to the relevant authority to apply for environmental authorisation for the proposed residential development on Portions 98, 99, 179, 236, 284 and 364 of the farm Waterkloof 305 JQ, Rustenburg, in the North West Province, also known as the Waterkloof Phase 2 project.

As part of the EIA 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 Economic Development, Environment, Conservation and Tourism (NW DEDECT).

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 (EIA) 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 (SAHRA) in terms of the National Heritage Resources Act (NHRA), 1999 (Act 25 of 1999).
- The Department of Agriculture, Forestry and Fisheries (DAFF) in terms of the Conservation of Agricultural Resources Act (CARA), 1983 (Act 43 of 1983) 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 its Spatial Development Framework (SDF), Strategic Environmental Assessment (SEA) and Environmental Management Framework (EMF).

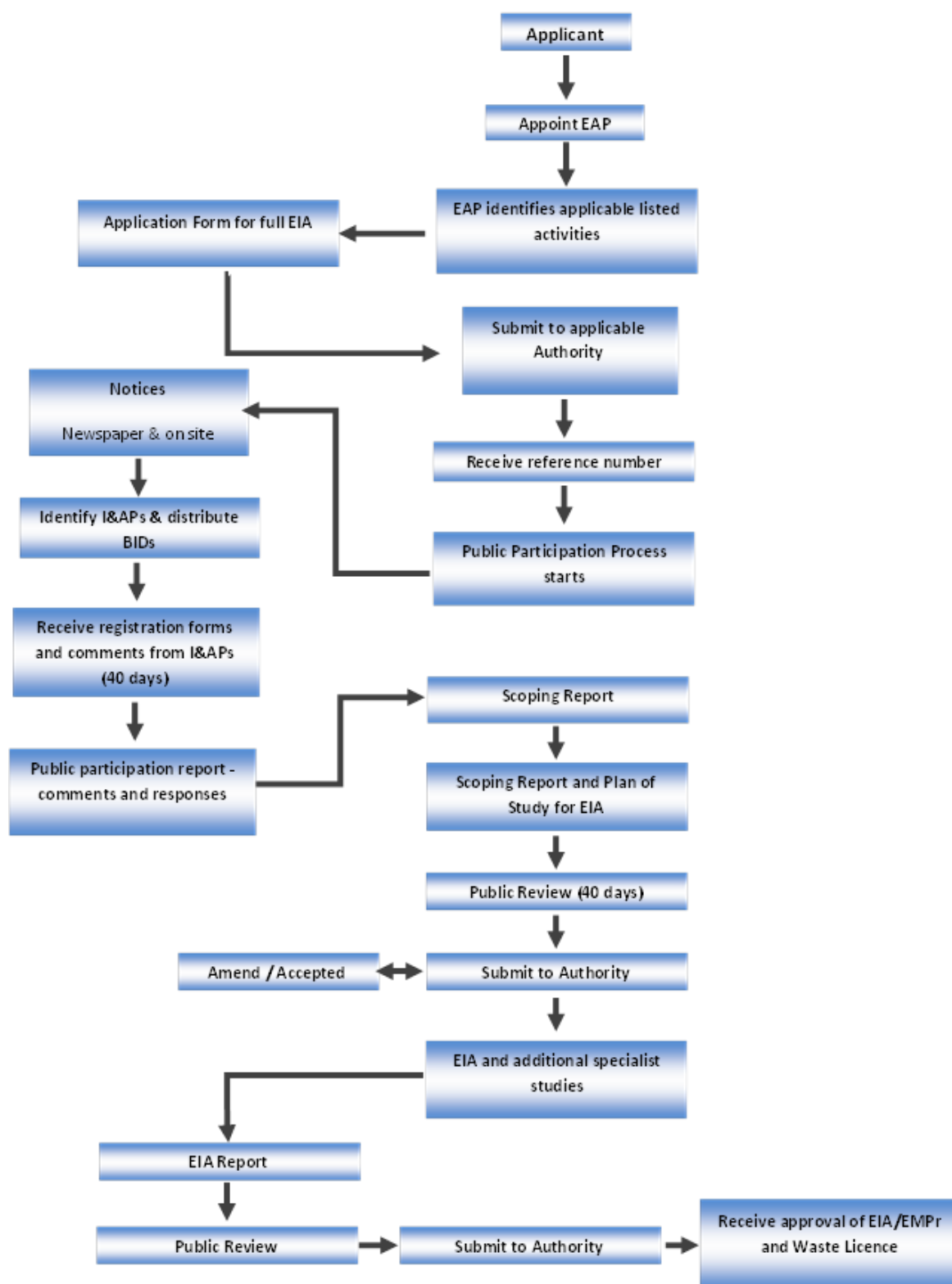


Figure 1: Simplified diagram presenting the EIA process

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 accounted 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 ($\pm 14\ 000$), the Thekwane-Mfidikoe-Photsaneng Cluster ($\pm 12\ 000$) and the Rustenburg/Thlabane cluster ($\pm 6\ 000$) (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 Portions 98, 99, 179, 236, 284 and 364 of the farm Waterkloof 305 JQ, Rustenburg, North West Province. The proposed portion of land is located approximately 6 km south east from the Rustenburg Central Business District (CBD). This farm portion can be accessed via the D1641 on the southern boundary of the site or via gravel roads from the R24 (P16-1), west of the proposed project area. Global Positioning System (GPS) coordinates are 25° 43' 24" South; 27° 16' 37" East (please refer to the topographical map – Figure 2 and the Locality map – Figure 3). The farm portion is bordered by open previously cultivated land, homesteads, guesthouses and small businesses (Figure 3).

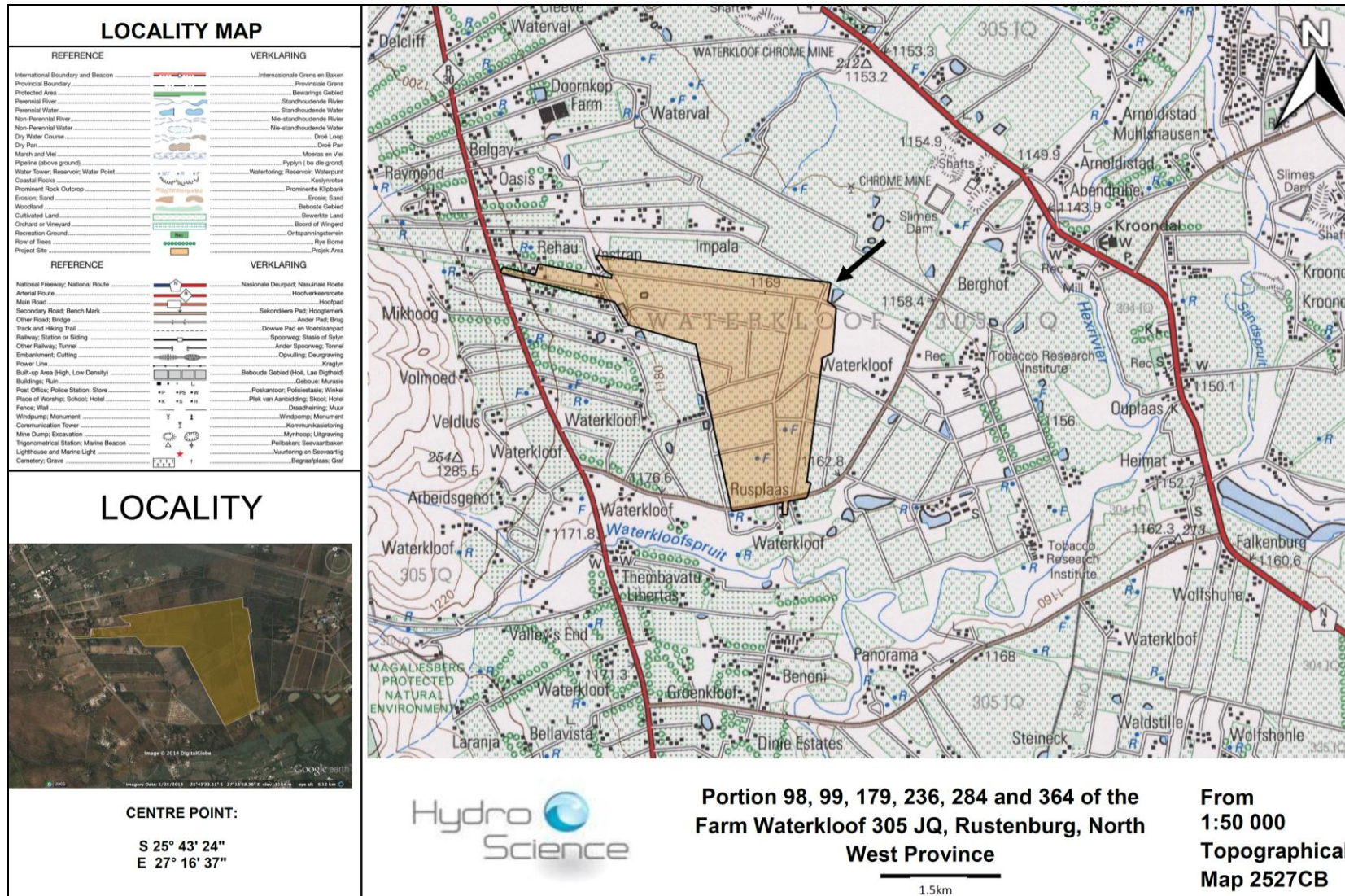


Figure 2: Topographical map indicating the proposed project area in Rustenburg, North West Province

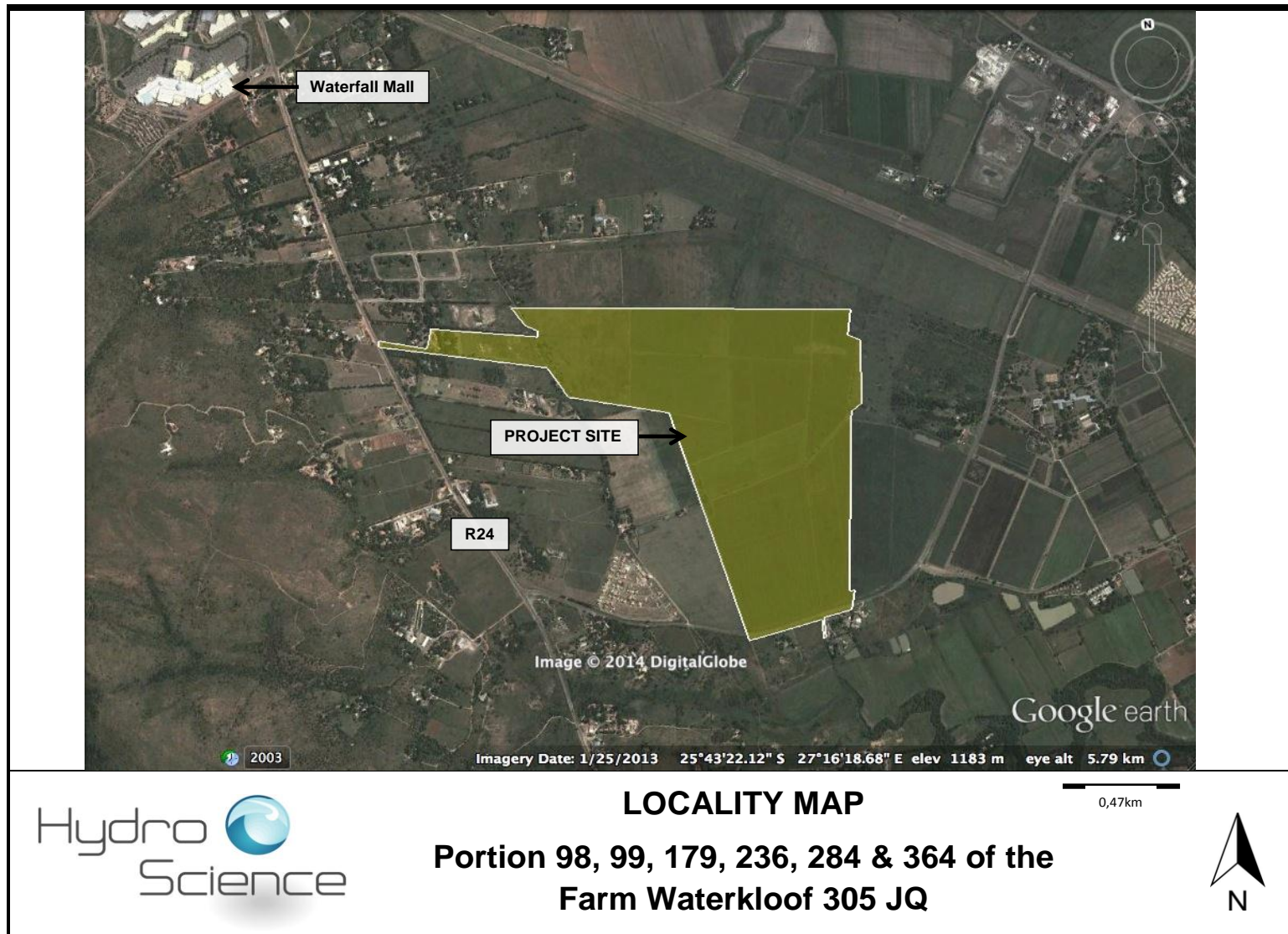


Figure 3: Google™ locality map of Waterkloof Phase 2 on the farm Waterkloof 305 JQ, Rustenburg

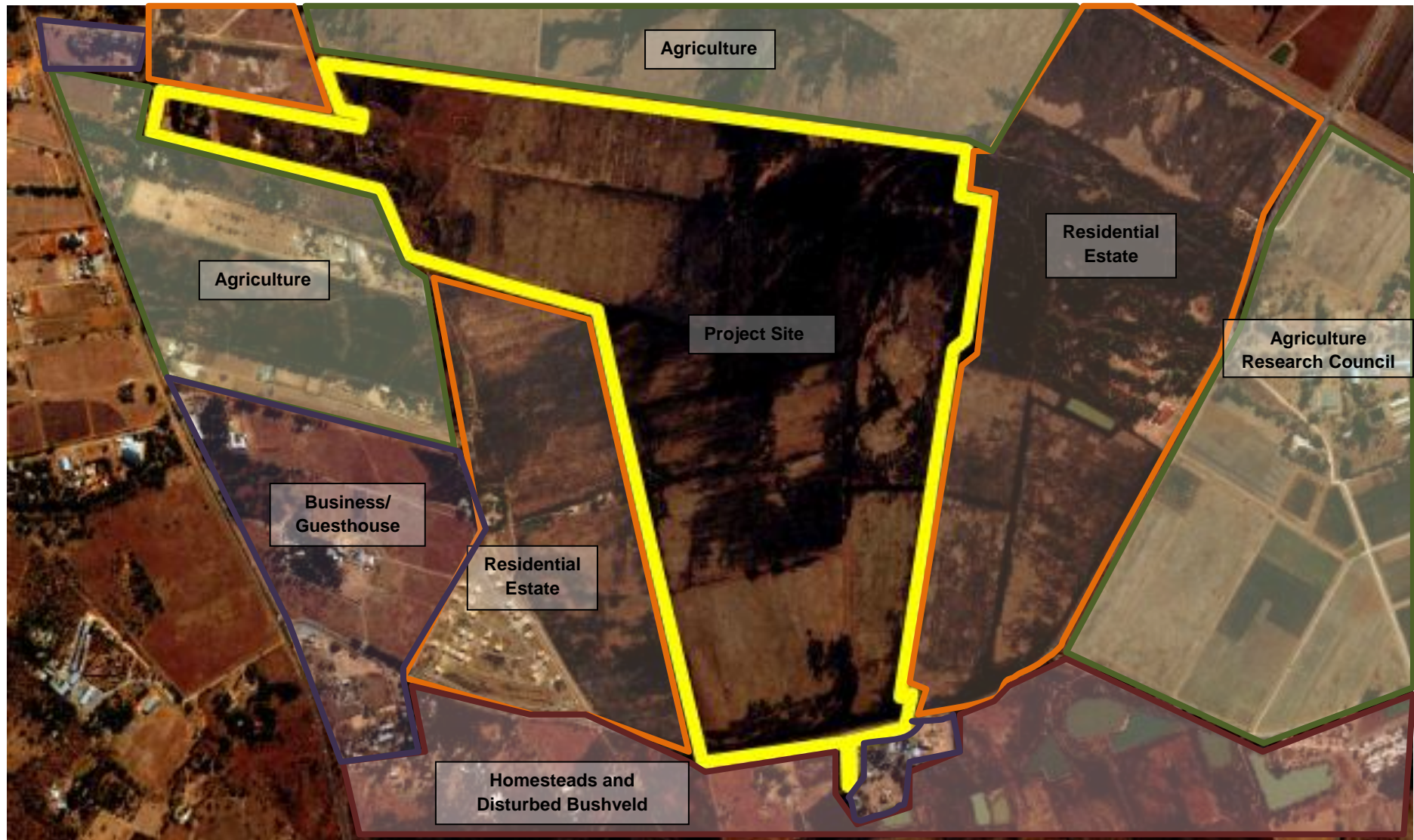


Figure 3: Google™ image showing current surrounding land use

4.4. Project description

The project area size is approximately 143 ha 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 and structures (residential dwellings) will be built during the construction phase.

The planned infrastructure/structures will include:

- Residential units;
- Access and internal roads;
- Substation; 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 eighteen (18) months.

4.6. Additional Work

The historical specialist studies conducted for the previous authorisation of the golf estate will be used where still applicable. Additional studies to be conducted include:

- A wetland specialist study due to the fact that the site is within 500m of the Waterkloofspruit.
- A review of fauna and flora aspects, due to the amount of vegetation to be cleared.
- A review of archaeological aspects, to ensure heritage sites of importance will not be impacted upon.
- An application in terms of the Township Ordinance will be submitted by the Town Planner to the RLM in terms of Town Planning requirements.
- Service agreements will be entered into with the RLM after township establishment in terms of the provision of solid waste removal services, water and electricity supply and sewage management. Storm water from the site will also flow into the municipal storm water management infrastructure along roads.

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, music, traffic);
- Change of land use and characteristics of area;
- Improper waste and wastewater management during the construction phase;

- Increased pressure on municipal service provision; and
- Increased traffic during the construction and operational phase of the project.

If the scoping phase indicates that specific specialist studies are required, these will be pursued.

6. APPLICABLE LEGISLATION

An application for environmental authorisation, in terms of the NEMA, as amended, has been submitted to the NW DEDECT (Reference number NWP/EIA/94/2013).

Notification, in the form of site notices and an advertisement placed in the Rustenburg Herald (3/4 April 2014), was given to all I&APs, as prescribed in Chapter 6 of NEMA, informing them that a full EIA process (Scoping and EIA) will be followed and an EIR 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 activities which require environmental authorisation were identified in terms of the NEMA:

GNR 544 (18 June 2010):

Activity 9 - The construction of facilities or infrastructure exceeding 1000 metres in length for the bulk transportation of water, sewage or storm water -

- (i) with an internal diameter of 0,36 metres or more; or
- (ii) with a peak throughput of 120 litres per second or more, excluding where:
 - a. such facilities or infrastructure are for bulk transportation of water, sewage or storm water or storm water drainage inside a road reserve; or
 - b. where such construction will occur within urban areas but further than 32 metres from a watercourse, measured from the edge of the watercourse.

Due to the large extent of the development, service infrastructure (for water, storm water & sewage) will be developed that will exceed 1000 metres in length and it may not be limited to a road servitude and with a diameter of more than 0.36 metres.

GNR 545 (18 June 2010):

Activity 1 - The construction of facilities or infrastructure for the generation of electricity where the electricity output is 20 megawatts or more. **The proposed development will include the construction of a 33/11kV substation with a possible rated output of 20MVA or higher. (This activity is under delegation from DEA to NW DEDECT)**

Activity 15 - Physical alteration of undeveloped, vacant or derelict land for residential, retail, commercial, recreational, industrial or institutional use, where the total area to be transformed is 20 hectares or more. **Portions 98, 99, 179, 236, 284 and 364 of the farm Waterkloof 305 JQ is currently undeveloped land still zoned for agricultural use. The overall size of the properties is approximately 143 hectares and it will be developed for residential purposes. The properties previously received environmental authorisation for a residential development as part of a golf estate development.**

GNR 546 (18 June 2010):

Activity 4 - The construction of a road wider than 4 metres with a reserve less than 13.5 metres

- c) North West Province
- ii) In urban areas:

- aa) Areas zoned for use as public open space;
- bb) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority or zoned for a conservation purpose;
- cc) Natural heritage sites

A small section of the project area (north western corner), falls within the Magaliesberg Protected Environment (MPE) buffer zone and will most likely include the construction of roads wider than 4 metres.

Activity 13 - The clearance of an area of 1 hectare or more of vegetation where 75% or more of the vegetative cover constitutes indigenous vegetation;

a) Critical biodiversity areas and ecological support areas as identified in systematic biodiversity plans adopted by the competent authority.

b) National Protected Area Expansion Strategy Focus areas.

e) In North West

ii) in urban areas:

aa) Areas zoned for use as public open space;

bb) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority or zoned for a conservation purpose;

cc) Natural heritage sites

A small section of the project area (north western corner), falls within the Magaliesberg Protected Environment (MPE) buffer zone from which more than 1 hectare vegetation will be removed. The composition of the vegetation to be removed is unknown at this point.

7. PROCESS AND WAY FORWARD

- An application for environmental authorisation has been submitted to NW DEDECT. The reference number: NWP/EIA/94/2013 has been assigned and the application will be handled by Mr Robert Nemanashi in the NW DEDECT offices at 80 Church Street Rustenburg, reachable on 014 597 3597.
- Notices have been placed in the Rustenburg Herald (3/4 April 2014) and on the site (3 April 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 residents, neighbours, authorities and other stakeholders in the area 3/4 April 2014).
- Comments/registration forms from I&APs should be received on or before 13 May 2014.
- A draft Scoping Report will become available for public review during May/June 2014.
- A final EIR will be submitted to the NW DEDECT for their review and a decision in 2014.

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: Paulette Jacobs
Tel: 082 850 5482
Fax: 086 692 8820 / 086 588 1770
E-mail: info@hydroscience.co.za
Postal address: P.O. Box 1322, Ruimsig, 1732

**COMPLETE & FAX OR E-MAIL TO:
HYDROSCIENCE 086 692 8820 / 086 588 1770 / paulette@hydroscience.co.za**

**ENVIRONMENTAL IMPACT ASSESSMENT FOR THE PROPOSED DEVELOPMENT ON
PORTIONS 98, 99, 179, 236, 284 AND 364 OF THE FARM WATERKLOOF 305 JQ,
RUSTENBURG, NORTH WEST PROVINCE
REFERENCE: NWP/EIA/94/2013**

INTERESTED AND AFFECTED PARTY REGISTRATION AND COMMENT SHEET

Title:	Mr		Mrs		Ms		Dr	
Surname:				First name & initials:				
Organisation / Company:								
Postal / physical address:				Postal code:				
Tel:				Fax:				
Email:				Cell:				
Interest in approval or refusal:	Business:	YES	NO	Preferred method of notification / communication	Post/mail:			
	Financial:	YES	NO		Fax:			
	Personal:	YES	NO		Email:			
Details of interest:								
Name of other I&AP to be contacted:								
Contact details:								

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.