

Cultural Heritage Assessment of the Founders Lodge Development and Expansions, Lapalala Wilderness Reserve, Waterberg, Lephalale Local Municipality, Waterberg District Municipality, Limpopo Province

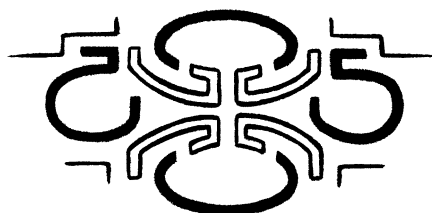


For

Project Applicant Lapalala Wilderness	Environmental Consultant NuLeaf Planning and Environmental (Pty) Ltd 8A Trevor Street Murrayfield Pretoria 0102 Tel: 012 7535792 peter@nuleaf.co.za
---	---

By

Francois P Coetzee
Prof Jan CA Boeyens
Department of Anthropology & Archaeology
University of South Africa
PO Box 392
Pretoria
0003
Tel: (012) 429 6297
Fax: (012) 429 6091
coetzfp@unisa.ac.za



Date:	May 2016
Revised & Updated	October 2018

Executive Summary

This report contains a comprehensive heritage impact assessment investigation in accordance with the provisions of Sections 38(1) and 38(3) of the *National Heritage Resources Act* (Act No. 25 of 1999) and focuses on the survey results from a cultural heritage survey as requested by Nuleaf Planning and Environmental (Pty) Ltd. This report comprises two interwoven subsections. Section one entails the survey and results that formed part of a 24G application as stipulated by the National Environmental Management Act (NEMA) (Act No. 107 of 1998) and NEMA Regulations during the construction of the lodge. Section two forms part of a subsequent Basic Assessment process provided for in Regulation 19 read with Appendix 1 of GN R326 of 4 December 2014 of the 2014 EIA Regulations, as a result of proposed expansions to Founders Lodge.

Archaeological remains

Site No	Site Type	Statement of Significance	Impact	Proposed Mitigation
1	Smelting Site	Generally protected B: Medium significance	None	<ul style="list-style-type: none"> Clearly demarcated, fenced off Further construction should be managed to prevent any impact
2	Historical house	Generally Protected C: Low significance	None	<ul style="list-style-type: none"> Clearly demarcated, fenced off Further construction should be managed to prevent any impact
3	Late Iron Age stone-walled site	Generally protected B: Medium significance	Partly destroyed	<ul style="list-style-type: none"> Clearly demarcated, fenced off Further construction should be managed to prevent any impact

Please note that no Stone Age settlements, structures, features, assemblages or artefacts were recorded during the surveys. Also, no graveyards or individual graves were recorded.

However, due to the reactive nature of the report for the 24G Application and to prevent any future impact on other heritage sites, please note the following:

- Site 1 should be fenced off to prevent any further impact on the site. Erosion should also be addressed as the site is currently being eroded.
- Site 2 should be fenced and clearly demarcated to prevent any damage as it is located adjacent to new and existing roads providing access to the lodge.
- Site 3 is situated on a steep slope and should therefore be stabilised to prevent any future erosion. The site should be clearly demarcated to prevent any further damage.

Based on the initial assessment, from a heritage perspective, care should be taken not to cause any further impact on cultural heritage remains.

During the second survey of the areas earmarked for the proposed expansions to the lodge no archaeological or historical structures or sites were recorded, as a result it is recommended that these may proceed.

Also please note:

Archaeological deposits usually occur below ground level. Should archaeological artefacts or skeletal material be revealed in the area during development activities, such activities should be halted, and a university or museum notified in order for an investigation and evaluation of the find(s) to take place (*cf.* **NHRA (Act No. 25 of 1999)**, Section 36 (6)).

Definitions and abbreviations

Midden:	Refuse that accumulates in a concentrated heap.
Stone Age:	An archaeological term used to define a period of stone tool use and manufacture
Iron Age:	An archaeological term used to define a period associated with domesticated livestock and grains, metal working and ceramic manufacture
NHRA:	National Heritage Resources Act (Act No. 25 of 1999)
SAHRA:	South African Heritage Resources Agency
SAHRIS:	South African Heritage Resources Information System
PHRA-G:	Provincial Heritage Resources Authority - Gauteng
GDARD:	Gauteng Department of Agriculture and Rural Development
HIA:	Heritage Impact Assessment
DMR:	Department of Mineral Resources

I, Francois Coetzee, hereby confirm my independence as a cultural heritage specialist and declare that I do not have any interest, be it business, financial, personal or other, in any proposed activity, application or appeal in respect of the listed environmental processes, other than fair remuneration for work performed on this project.



Francois P Coetzee
Cultural Heritage Consultant
Accredited Archaeologist for the SADC Region
Professional Member of ASAPA (CRM Section) Reg no: 28

Contents

1. Introduction.....	7
2. Objectives.....	7
3. Study Area.....	7
4. Proposed Project Activities.....	14
5. Legal Framework.....	16
6. Study Approach/Methods	20
6.1 Review of existing information/data.....	21
6.2 Site visits.....	22
6.3 Impact assessment.....	22
6.4 Assumptions, restrictions and gaps in knowledge.....	22
7. Description and Evaluation of Cultural Heritage Sites.....	22
8. Locations and Evaluation of Sites.....	24
9. Recommendations and Conclusions	25
10. References.....	25
Addendum 1: Archaeological and Historical Sequence	27
Addendum 2: Description of Recorded Sites	28
Addendum 3: Surveyor General Farm Diagram	34

Figures

Figure 1: Local context of the survey area (indicated by the red area).....	8
Figure 2: Location of the Lapalala Wilderness Reserve	8
Figure 3: The survey area as indicated on Google Earth (2016).....	9
Figure 4: Survey area as indicated on the 1:50 000 topographic map 2328CD	9
Figure 5: Survey area (with new expansion) as indicated on the 1:50 000 topographic map 2328CD (1983).....	10
Figure 6: Survey area as indicated on the 1:50 000 topographic map 2328CD (1970).....	10
Figure 7: Survey area as indicated on the 1:250 000 topographic map 2328.....	11
Figure 8: General view of the two four-bed chalets.....	11
Figure 9: The solar panel unit near the lodge.....	12
Figure 10: General view of the front of the main lodge structure.....	12
Figure 11: General view of a two-bed chalet	12
Figure 12: The workshop and generator building.....	13
Figure 13: Walkways providing access to the chalets.....	13
Figure 14: Access roads along the various buildings	13
Figure 15: General view of the footprint of the proposed expansions	14
Figure 16: General view of the footprint of the proposed expansions	14
Figure 17: General view of the footprint of the proposed expansions	14
Figure 18: Location of the various components of Founders Lodge.....	15
Figure 19: Layout of Founders Lodge and associated infrastructure (Google Earth 2016).....	15
Figure 20: Layout and extent of the access roads (Google Earth 2016).....	16
Figure 21: Recorded survey tracks for the project (first survey)	20
Figure 22: Jeppe's Map dating to 1899 clearly indicates the boundaries of Landman's Lust	22
Figure 23: The location of the recorded cultural heritage sites, relative to the developments	23
Figure 24: Upper and lower grindstones at the lodge site.....	23

<i>Figure 25: Lower grinding stone recorded within the footprint of the proposed expansions.</i>	24
<i>Figure 26: Surface finds also include undecorated pottery and upper grinding stones</i>	24
<i>Figure 27: Pieces of slag and iron ore at the smelting area</i>	29
<i>Figure 28: The foundation of the historical farm complex and ashy midden to the rear of the yard</i>	31
<i>Figure 29: Lower grinding stone and clay from the walls of houses</i>	32
<i>Figure 30: The access road through the site; terrace stone walling</i>	33
<i>Figure 31: Surveyor General's map of the Landmans Lust 595LR which was surveyed in 1911, also note that the Title Deed was first granted in 1888.....</i>	34

Tables

<i>Table 1: Physical Environment.....</i>	8
<i>Table 2: Zoning and evaluation of impact.....</i>	11
<i>Table 3: Activities that trigger Section 38 of the NHRA.....</i>	18
<i>Table 4: Field rating system to determine site significance</i>	18
<i>Table 5: Listed activities.....</i>	19
<i>Table 6: Recorded survey tracks for the project (second survey)</i>	21

1. Introduction

Nuleaf Planning and Environmental (Pty) Ltd was originally appointed by Lapalala Wilderness to conduct a 24G application processes for the construction of Founders Lodge and the associated infrastructure and access roads. Section 24G(1) of the NEMA (Act No. 107 of 1998) makes provision for an application for an individual who has commenced with a listed or specified activity without an environmental authorisation in contravention of Section 24F(1). However, subsequently to this process they have proposed additional expansions to the lodge. As a result this report comprises two interwoven subsections. Section one entails the survey and results that formed part of a 24G application as stipulated by the National Environmental Management Act (NEMA) (Act No. 107 of 1998) and NEMA Regulations during the construction of the lodge. Section two forms part of a subsequent Basic Assessment process provided for in Regulation 19 read with Appendix 1 of GN R326 of 4 December 2014 of the 2014 EIA Regulations, as a result of proposed expansions to Founders Lodge. Lapalala Wilderness is a nature reserve in the Waterberg Biosphere in the Limpopo Province.

2. Objectives

The first survey is therefore a retro-active investigation of the area affected by the development and aims to investigate, evaluate and assess the impact on the cultural heritage remains. The second survey which, forms part of the Basic Assessment, aims to determine whether any additional sites occur in the footprint of the proposed expansions to the existing lodge. More specifically the general objective of the cultural heritage survey is to record and document cultural heritage remains consisting of both tangible and intangible archaeological and historical artefacts, structures (including graves), settlements and oral traditions of cultural significance.

As such the terms of reference of this survey are as follows:

- Identify and provide a detailed description of all artefacts, assemblages, settlements and structures of an archaeological or historical nature (cultural heritage sites) located on the study area,
- Estimate the level of significance/importance of these remains in terms of their archaeological, historical, scientific, social, religious, aesthetic and tourism value,
- Assess any impact on the archaeological and historical remains within the area emanating from the development activities, and
- Propose possible mitigation measures which will limit or prevent any further impact.

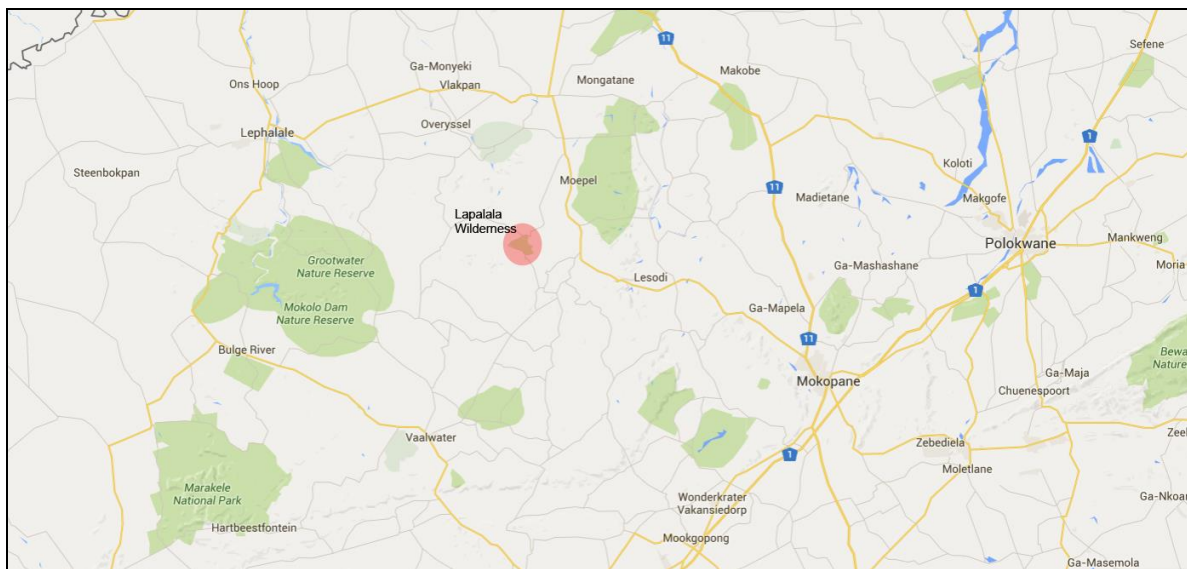
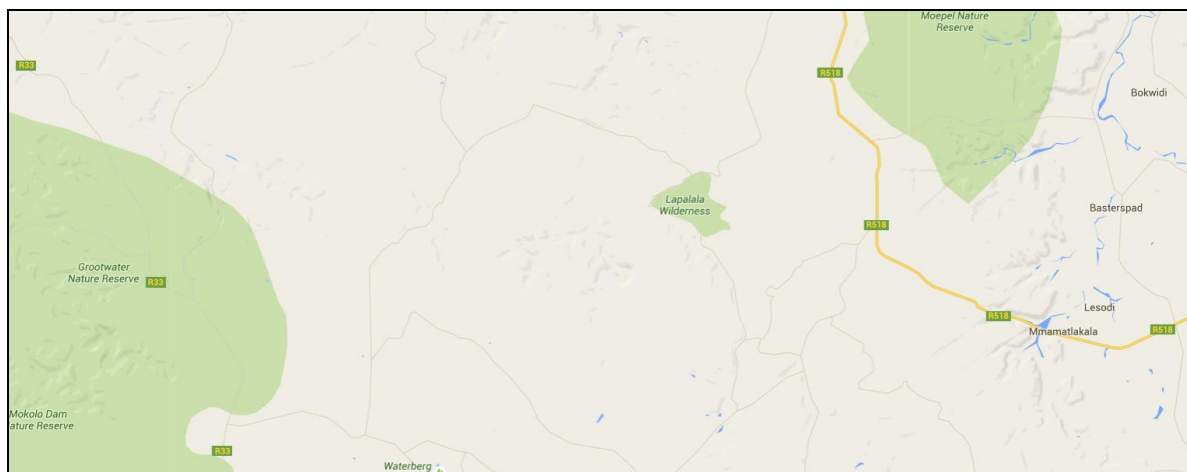
3. Study Area

The heritage survey focussed on the Founders Lodge infrastructure (total footprint), several access roads and the footprint of the proposed expansions. The site is situated on Portion 10 of the farm Lapalala 1020 LR, situated within the Lapalala Wilderness Reserve in the Lephalale Local Municipality, Waterberg District Municipality, Limpopo Province. The Lapalala Wilderness, a nature reserve on the Waterberg Mountain Plateau, is located is located roughly 50 km north of Vaalwater, approximately 60 km south east of Lephalale and 100 km west of Polokwane.

Farm Name(s) and Portions	The following portions and farms: <ul style="list-style-type: none"> Portion 10 of the farm Lapalala 1020 LR (Originally Landmans Lust 595LR)
Size of Survey Area	5 Hectares
Magisterial District	Lephalale Local Municipality Waterberg District Municipality
1:50 000 Map Sheet	2328CD
1:250 000 Map Sheet	2328
Central Coordinates of the Development	28.279260°E 23.860140°S

Table 1: Physical Environment

The survey area falls within the Savanna Biome, particularly the Central Bushveld Bioregion and specifically the Waterberg Mountain Bushveld (poorly protected) (Mucina & Rutherford 2006). In general the area is characterised by undulating hills with the Lephalala River towards the north and the Blokland Stream running to the west of the survey area. An existing gravel road is located to the north-east of the site. Also note that the footprint of the lodge is situated on an old agricultural field.

**Figure 1: Local context of the survey area (indicated by the red area)****Figure 2: Location of the Lapalala Wilderness Reserve**

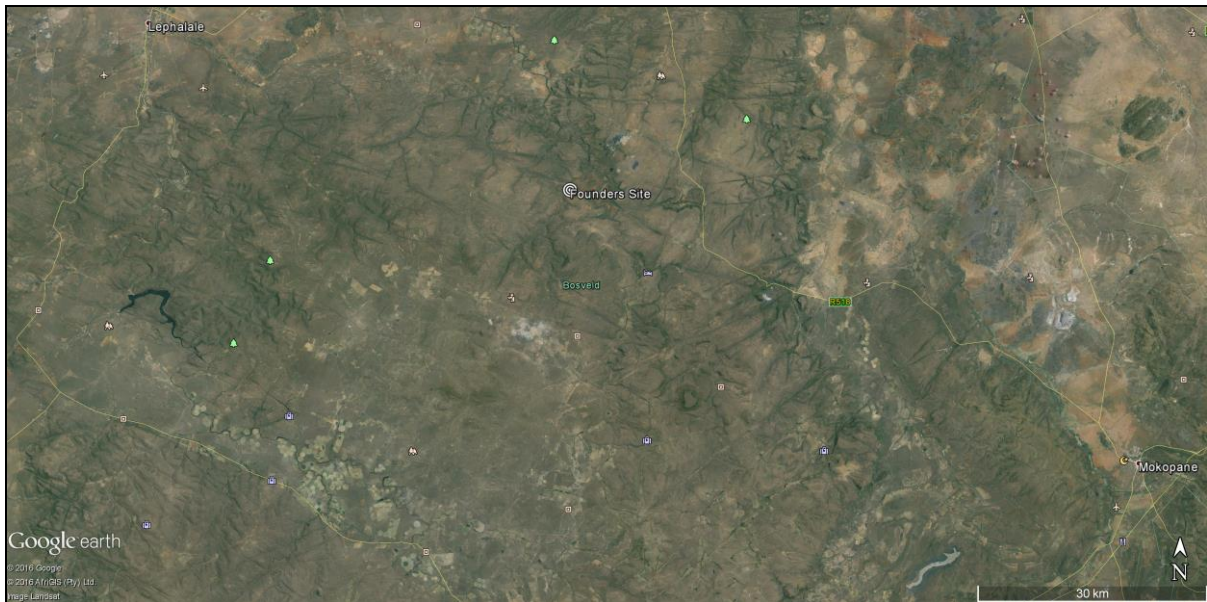


Figure 3: The survey area as indicated on Google Earth (2016)

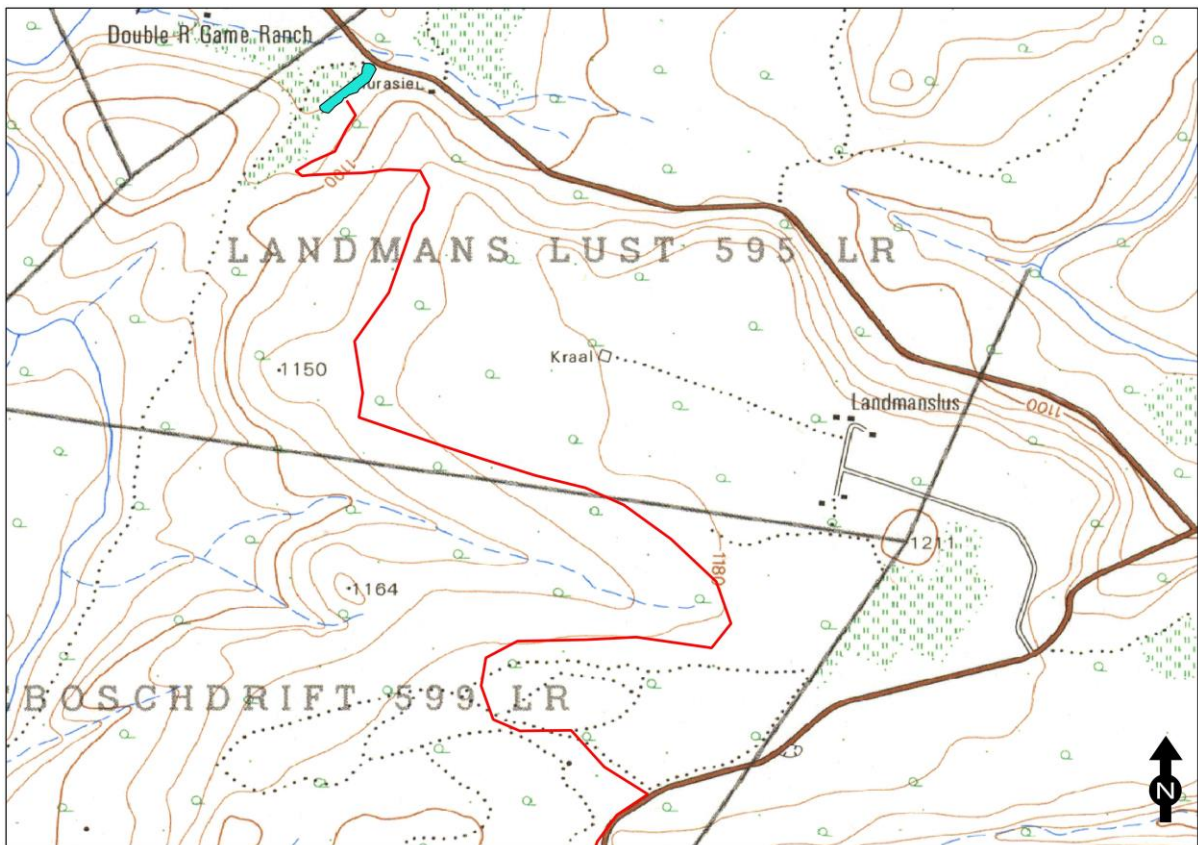


Figure 4: Survey area as indicated on the 1:50 000 topographic map 2328CD

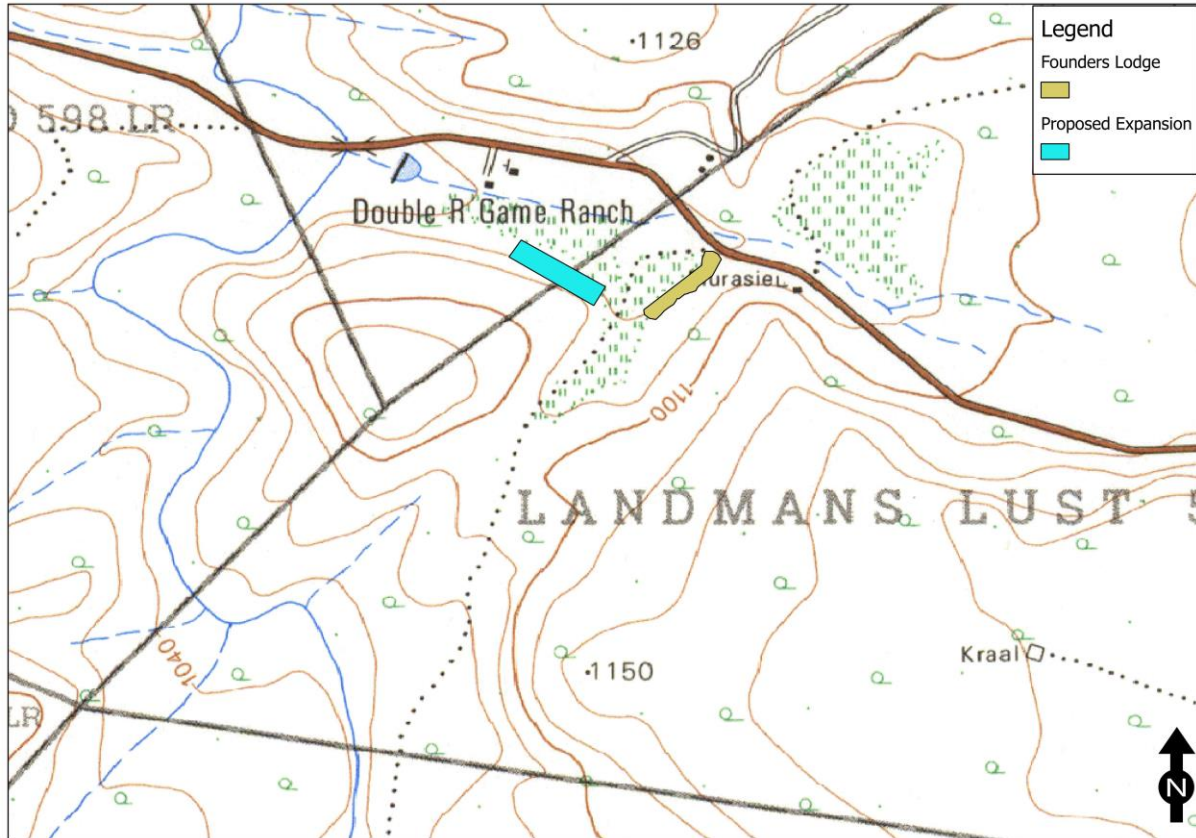


Figure 5: Survey area (with new expansion) as indicated on the 1:50 000 topographic map 2328CD (1983)

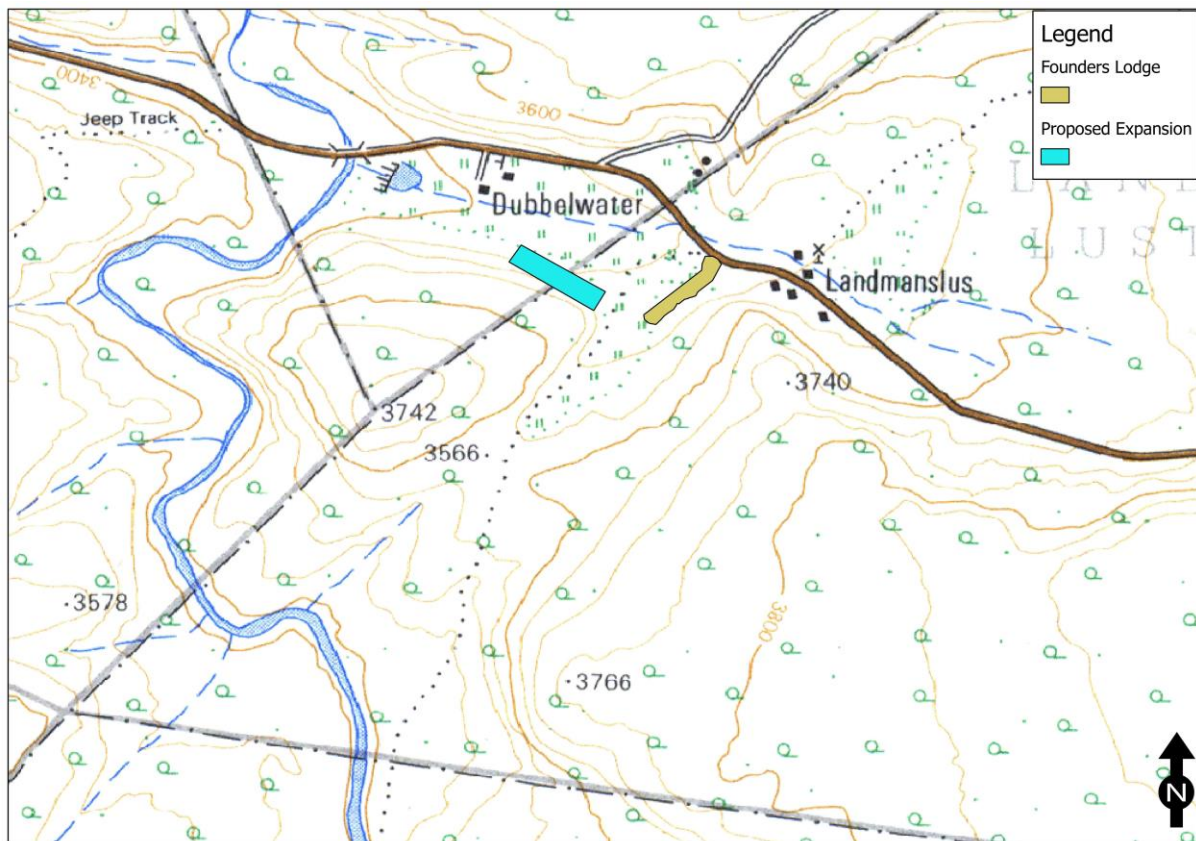


Figure 6: Survey area as indicated on the 1:50 000 topographic map 2328CD (1970)



Figure 7: Survey area as indicated on the 1:250 000 topographic map 2328

Current Zoning	Nature reserve (Game farming)
Economic activities	Tourism and game farming
Evaluation of Impact	An evaluation of the impact of the development on heritage resources relative to the sustainable social and economic benefits NHRA (Act No. 25 of 1999, Section 38(3d)): Positive

Table 2: Zoning and evaluation of impact



Figure 8: General view of the two four-bed chalets



Figure 9: The solar panel unit near the lodge



Figure 10: General view of the front of the main lodge structure



Figure 11: General view of a two-bed chalet



Figure 12: The workshop and generator building



Figure 13: Walkways providing access to the chalets



Figure 14: Access roads along the various buildings



Figure 15: General view of the footprint of the proposed expansions



Figure 16: General view of the footprint of the proposed expansions



Figure 17: General view of the footprint of the proposed expansions

4. Proposed Project Activities

The main Founders Lodge consists of the following aspects:

- Main lodge building with deck and swimming pool

- Existing four chalets (another four are planned)
- Staff buildings (four buildings)
- Workshop and laundry structures
- Managers chalet
- Solar panels
- Access roads and other infrastructure (e.g. water tanks)

Note that some of the structures are resting on wooden poles to minimise the impact.

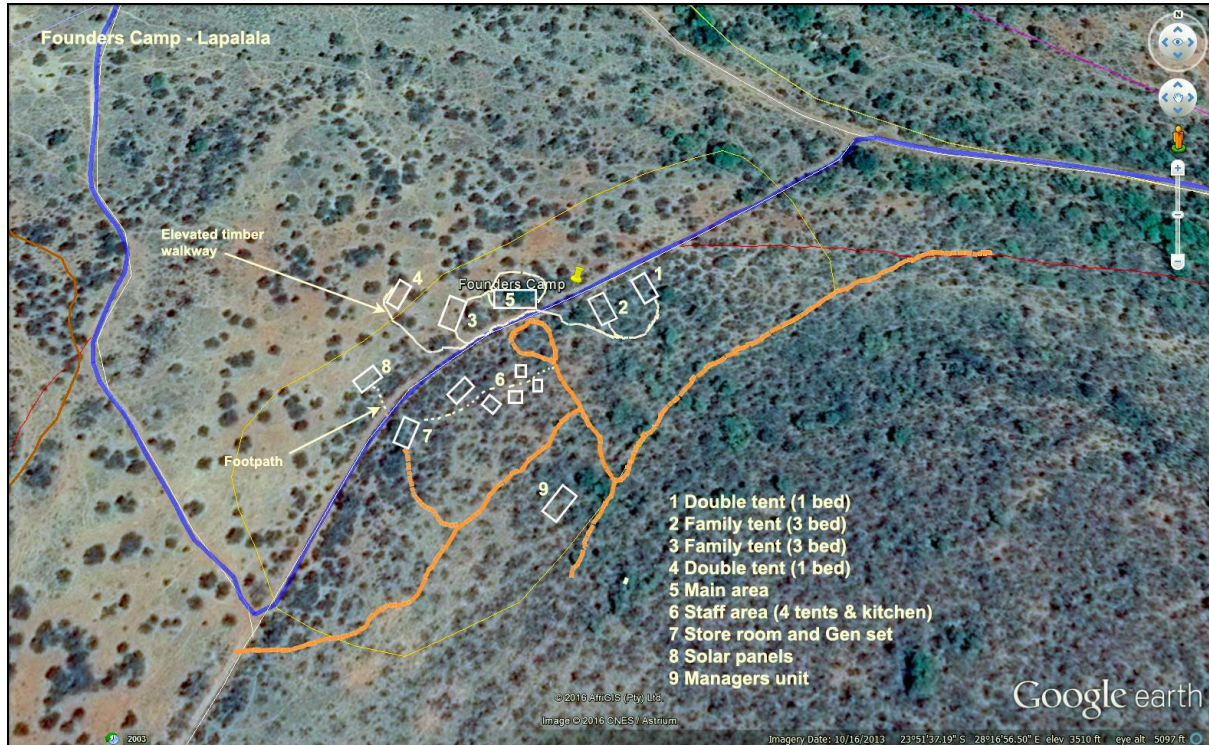


Figure 18: Location of the various components of Founders Lodge

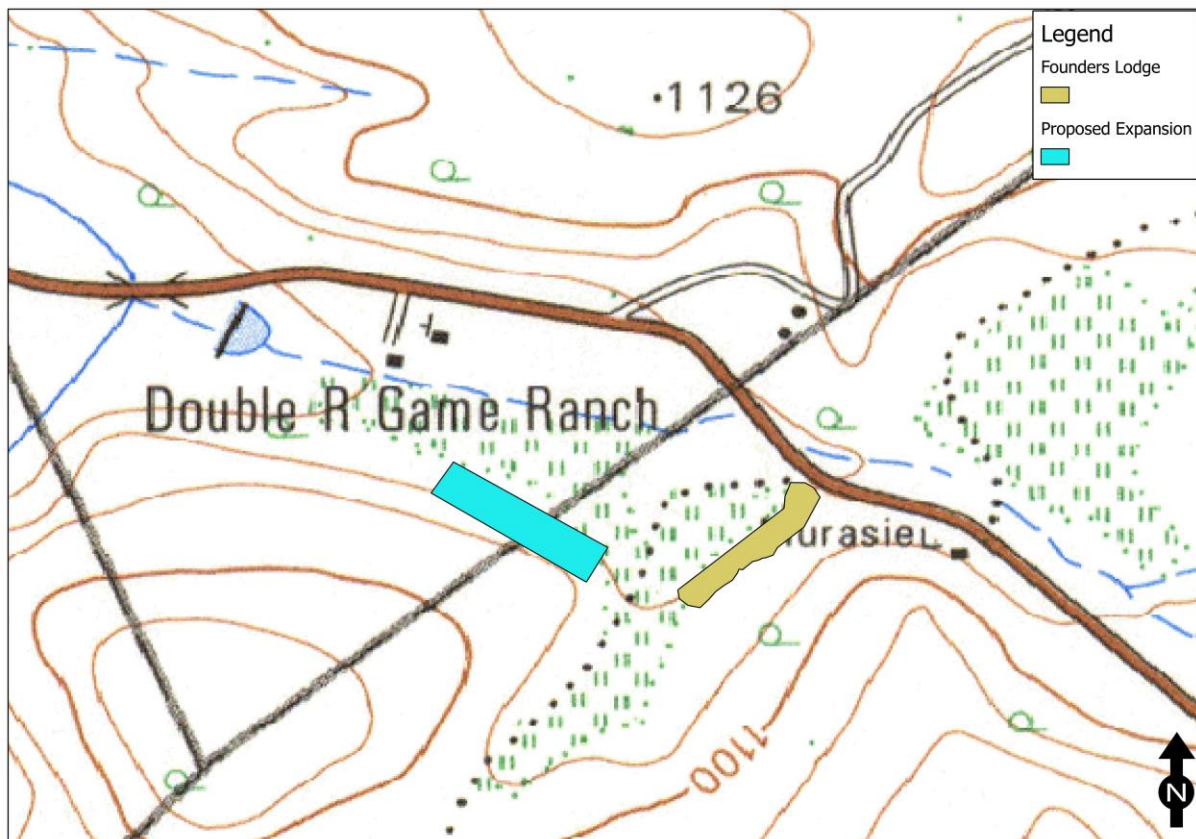


Figure 19: Layout of Founders Lodge and associated infrastructure (Google Earth 2016)



Figure 20: Layout and extent of the access roads (Google Earth 2016)

The proposed expansion of Founders Lodge will entail the construction of an additional six treehouses with the inclusion of a communal dining and lounge area, as well as, a Manor House comprising of six rooms, lounge and dining areas, kitchen, swimming pool. Electricity will be via solar panels. All associated civil infrastructure (water and waste treatment) will be included.



5. Legal Framework

- Section 38 of the NHRA (Act No. 25 of 1999) stipulates that the following activities trigger a heritage survey:
 - the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;
 - the construction of a bridge or similar structure exceeding 50 m in length;
 - any development or other activity which will change the character of a site—
 - (i) exceeding 5 000 m² in extent; or
 - (ii) involving three or more existing erven or subdivisions thereof; or
 - (iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or
 - (iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;
 - the re-zoning of a site exceeding 10 000 m² in extent; or
 - any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority,
- Archaeological remains can be defined as human-made objects, which reflect past ways of life, deposited on or in the ground.
- Heritage resources have lasting value in their own right and provide evidence of the origins of South African society and they are valuable, finite, non-renewable and irreplaceable.
- All archaeological remains, features, structures and artefacts older than 100 years and historic structures older than 60 years are protected by the relevant legislation, in this case the National Heritage Resources Act (NHRA) (Act No. 25 of 1999, Section 34 & 35). The Act makes an archaeological impact assessment as part of an EIA and EMPR mandatory (see Section 38). No archaeological artefact, assemblage or settlement (site) may be moved or destroyed without the necessary approval from the South African Heritage Resources Agency (SAHRA). Full cognisance is taken of this Act in making recommendations in this report.
- Cognisance will also be taken of the Mineral and Petroleum Resources Development Act (Act No 28 of 2002) and the National Environmental Management Act (Act No 107 of 1998) when making any recommendations.
- Human remains older than 60 years are protected by the NHRA, with reference to Section 36. Human remains that are less than 60 years old are protected by the Regulations Relating to the Management of Human Remains (GNR 363 of 22 May 2013) made in terms of the National Health Act No. 61 of 2003 as well as local Ordinances and regulations.
- Mitigation guidelines (The significance of the site):

Rating the significance of the impact on a historical or archaeological site is linked to the significance of the site itself. If the significance of the site is rated high, the

significance of the impact will also result in a high rating. The same rule applies if the significance rating of the site is low.

- Section 38 of the NHRA (Act No. 25 of 1999) stipulates that the following activities trigger a heritage survey:

Development criteria in terms of Section 38(1a-e) of the NHRA (Act No. 25 of 1999)	Yes/No
Construction of road, wall, powerline, pipeline, canal or other linear form of development or barrier exceeding 300m in length	Yes
Construction of bridge or similar structure exceeding 50m in length	No
Development exceeding 5000 m ² in extent	Yes
Development involving three or more existing erven or subdivisions	No
Development involving three or more erven or divisions that have been consolidated within past five years	No
Rezoning of site exceeding 10 000 m ²	
Any other development category, public open space, squares, parks, recreation grounds	Yes

Table 3: Activities that trigger Section 38 of the NHRA

- Field rating system as recommended by SAHRA:

Field Rating	Grade	Significance	Recommended Mitigation
National Significance	Grade I	High significance	Conservation by SAHRA, national site nomination, mention any relevant international ranking. No alteration whatsoever without permit from SAHRA.
Provincial Significance	Grade II	High significance	Conservation by provincial heritage authority, provincial site nomination. No alteration whatsoever without permit from provincial heritage authority.
Local Significance	Grade III-A	High significance	Conservation by local authority, no alteration whatsoever without permit from provincial heritage authority. Mitigation as part of development process not advised.
Local Significance	Grade III-B	High significance	Conservation by local authority, no external alteration without permit from provincial heritage authority. Could be mitigated and (part) retained as heritage register site.
Generally Protected A	Grade IV-A	High/medium significance	Conservation by local authority. Site should be mitigated before destruction. Destruction permit required from provincial heritage authority.
Generally Protected B	Grade IV-B	Medium significance	Conservation by local authority. Site should be recorded before destruction. Destruction permit required from provincial heritage authority.
Generally Protected C	Grade IV-C	Low significance	Conservation by local authority. Site has been sufficiently recorded in the Phase 1 HIA. It requires no further recording before destruction. Destruction permit required from provincial heritage authority.

Table 4: Field rating system to determine site significance

- With reference to the evaluation of sites, the certainty of prediction is definite, unless stated otherwise.
- The guidelines as provided by the NHRA (Act No. 25 of 1999) in Section 3, with special reference to subsection 3, and the Australian ICOMOS (International Council on Monuments and Sites) Charter (also known as the Burra Charter) are used when determining the cultural significance or other special value of archaeological or historical sites.

- It should be kept in mind that archaeological deposits usually occur below ground level. Should archaeological artefacts or skeletal material be revealed in the area during development activities, such activities should be halted, and a university or museum notified in order for an investigation and evaluation of the find(s) to take place (*cf.* NHRA (Act No. 25 of 1999), Section 36 (6)).
- A copy of this report will be lodged with the SAHRA as stipulated by the National Heritage Resources Act (NHRA) (Act No. 25 of 1999), Section 38 (especially subsection 4) and the relevant Provincial Heritage Resources Authority (PHRA).
- Note that the final decision for the approval of permits, or the removal or destruction of sites, structures and artefacts identified in this report, rests with the SAHRA (or relevant PHRA).

NuLeaf Planning and Environmental (Pty) Ltd has been appointed by Applicant to conduct the Basic Assessment process for the proposed expansion of Founders Lodge. The 2014 EIA Regulations, as amended in April 2017 and its associated Listing Notices [Listing Notice 1 (GN R327) and Listing Notice 3 (GN R324)] specify the activities that require a Basic Assessment. The activities triggered by the proposed development include the following listed activities:

Number and date of the relevant Listing Notice:	Activity Number (s) (in terms of the relevant Listing Notice):	Description of each listed activity as per the detailed project description
GN R.327 (Listing Notice 1)	27	The clearance of an area of 1 hectare or more, but less than 20 hectares of indigenous vegetation.
GN R. 324 (Listing Notice 3)	12 (e) (ii) (iii)	The clearance of an area of 300 square meters or more of indigenous vegetation in (e) Limpopo (ii) critical biodiversity areas (iii) on land zoned open space, conservation or had an equivalent zoning. The total cleared footprint will be greater than 300 square meters. The site is located in a critical biodiversity area as identified in the Limpopo Conservation Plan and the Waterberg Bioregional Plan.
	17 (e) (i) (ee)	The expansion of a resorts, lodges, hotels, tourism or hospitality facilities where the development footprint will be expanded and the expanded facility can accommodate an additional 15 people or more in (e) Limpopo (i) outside urban areas in (ee) critical biodiversity areas. The site is located in a critical biodiversity area as identified in the Limpopo Conservation Plan and the Waterberg Bioregional Plan.
	18 (e) (i) (ee)	The widening of a road by more than 4 meters or the lengthening of a road by more than 1 Km in (e) Limpopo (i) outside urban areas in (ee) critical biodiversity areas.

Table 5: Listed activities

6. Study Approach/Methods

Regional maps and other geographical information (ESRI shapefiles) were supplied by Nuleaf. Additional maps of the lodge layout were provided by Anton Walker, the general manager of Lapalala Wilderness. The most up-to-date Google Earth images and topographic maps were used to indicate the survey area. The survey area is localised on the 1:50 000 topographic map 2328CD. Please note that all maps are orientated with north facing upwards (unless stated otherwise).

The strategy during this survey was to survey all the areas associated with the development in detail. A pedestrian survey was therefore conducted at the lodge site. The access roads were surveyed by vehicle and selected areas were investigated on foot.

Please note that the initial survey for the 24G Application was conducted 2015 and the subsequent survey for the proposed expansions in late 2018.

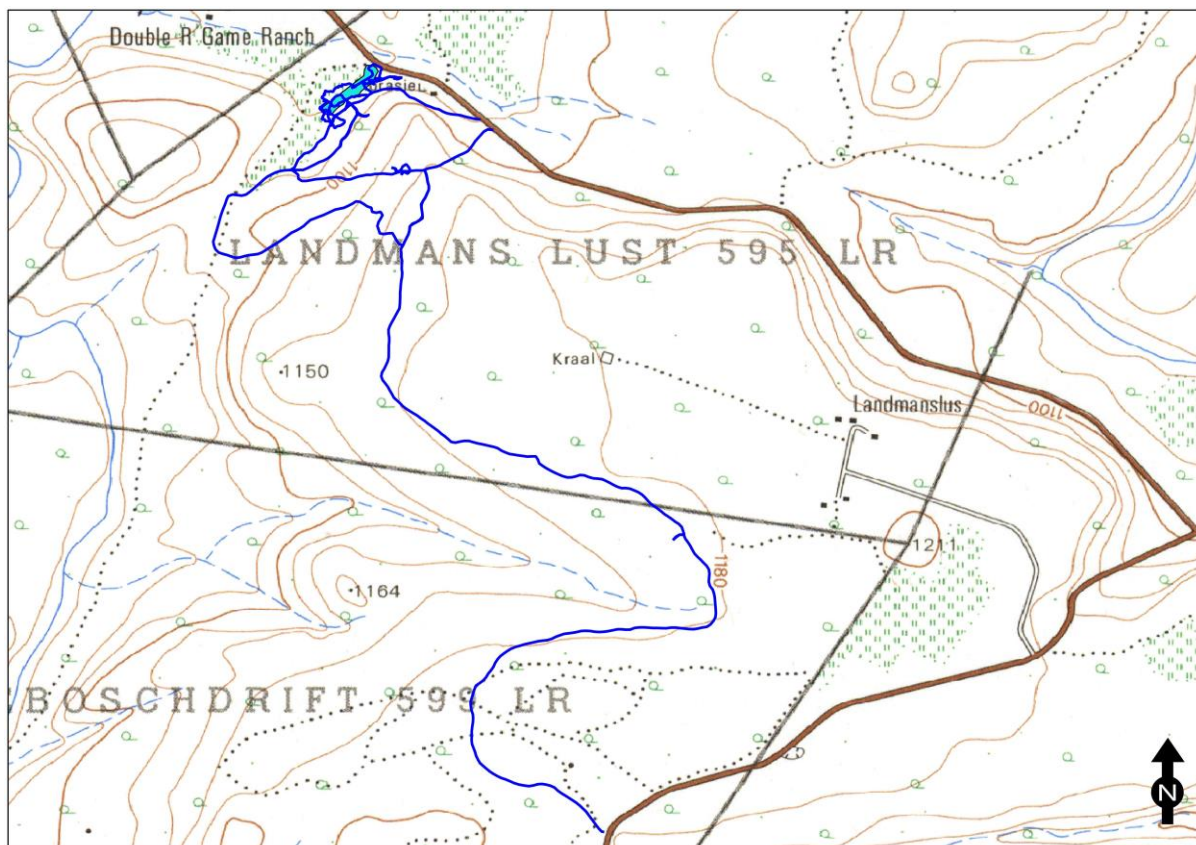


Figure 21: Recorded survey tracks for the project (first survey)

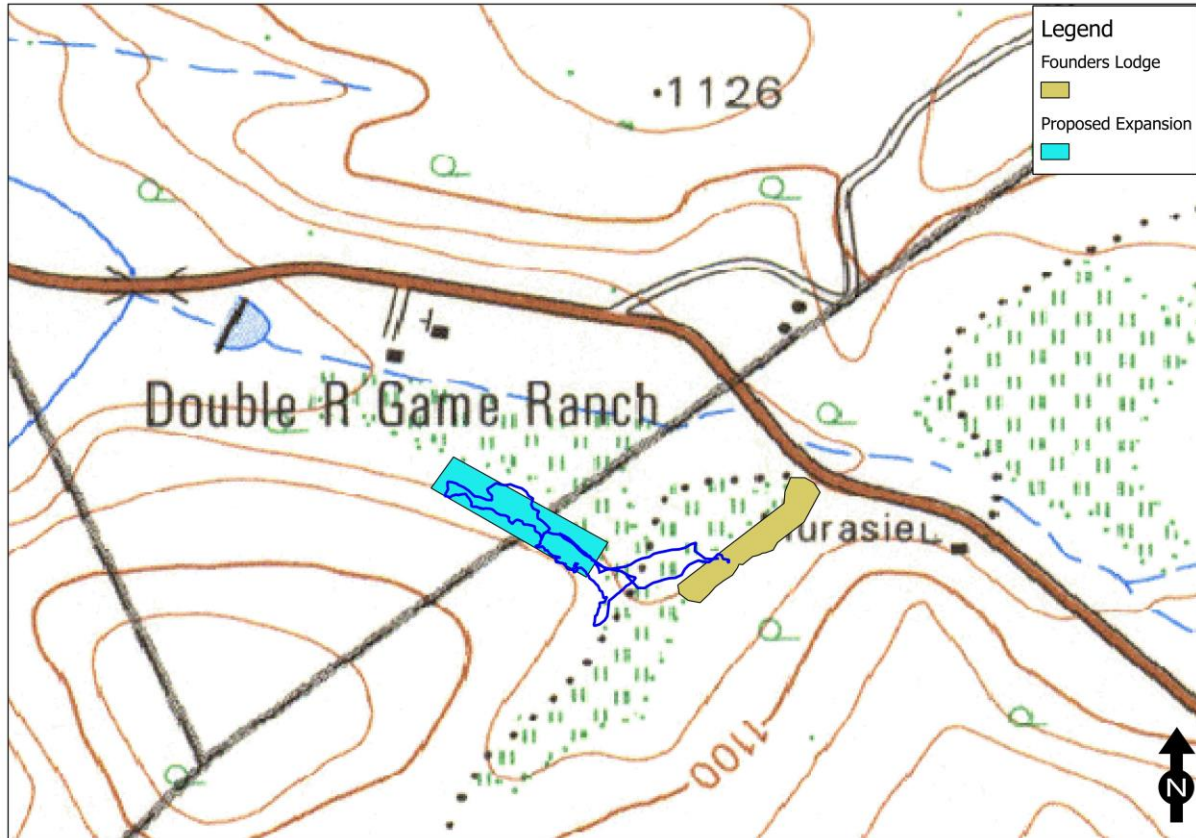


Table 6: Recorded survey tracks for the project (second survey)

6.1 Review of existing information/data

Additional information on the cultural heritage of the area was sourced from the following records:

- National Mapping Project by SAHRA (which lists heritage impact assessment reports submitted for South Africa);
- Online SAHRIS database;
- Maps and information documents supplied by the client; and
- Published and unpublished material on the area (Boeyens et al 2009, Huffman 1990)

An archaeological survey in the Waterberg region was initiated by Jan Aukema in the early 1980s. His initial focus was along the Motlhabatse River and was later expanded to include the basin of the Lephhalala River (Huffman 1990:117). The well-known Late Iron Age Melora Hill and Melora Saddle Sites were identified during Aukema's research project. Extensive archaeological surveying and excavations have since been completed at these sites by archaeologists at UNISA (Boeyens et al 2009; Coetzee et al 2005; Mouton 2014). Melora Hill is situated approximately 3 km east of the Lodge site. Over 100 archaeological sites were recorded in the region ranging from Stone Age sites, rock art shelters and Iron Age early farming settlements.

According to the Surveyor General's database the farm Landmans Lust 595LR was first surveyed in 1911; however the first Title Deed was granted in 1888 (see Addendum 3).

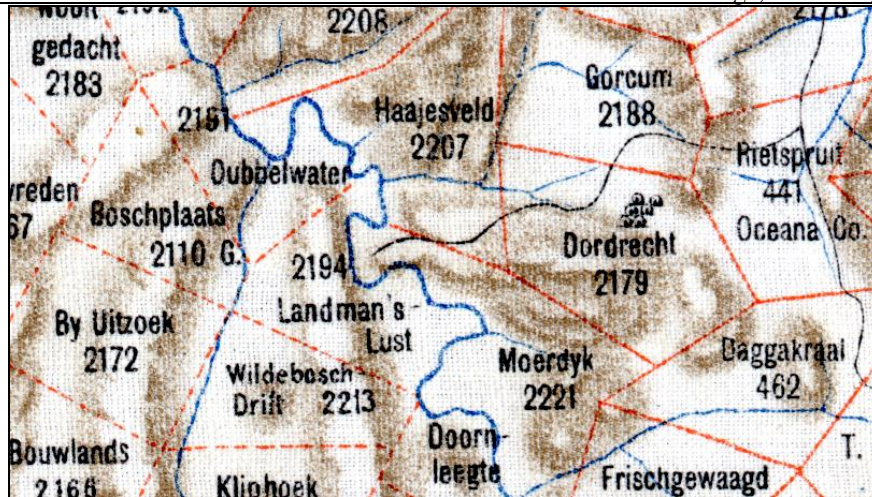


Figure 22: Jeppe's Map dating to 1899 clearly indicates the boundaries of Landman's Lust

During the early 1980s Clive Walker and Dale Parker purchased the first farm in the area from renowned hunter Eric Rundgren. After 20 years during which time they added another 17 farms, totalling 36 000 ha, Lapalala Wilderness became a reality in 2001 (www.lapalala.com).

6.2 Site visits

Please note that the initial surveys for the 24G Application was conducted on 17 November 2015 and 26 February 2016 and the subsequent survey for the proposed expansions on 3 August 2018.

6.3 Impact assessment

The criteria used to describe heritage resources and to provide a significance rating of recorded sites are listed in the NHRA (Act No. 25 of 1999) specifically Section 7(7) and Section 38. SAHRA also published various regulations including: Minimum standards: Archaeological and palaeontological components of impact assessment reports in 2006 and updated requirements in 2012.

6.4 Assumptions, restrictions and gaps in knowledge

No severe physical restrictions were encountered as gravel roads provided access to the survey area.

7. Description and Evaluation of Cultural Heritage Sites

Archaeological excavations at Melora Saddle site has yielded over 50 house bases in association with Moloko ceramics which are decorated with comb-stamped bands interspersed with graphite and ochre burnishing (Boeyens et al 2009:216). The ceramics are provisionally classified as part of the Waterberg facies, which is derived from the Rooiberg facies, which in turn is an outcome of a merger between Ntsuanatsatsi/Uitkomst and Madikwe pottery. The Waterberg facies is associated with various Northern Ndebele and North Sotho people (Huffman 2007:174). The site probably dates to the early 19th century AD.

On the other hand the Melora Hilltop site pre-dates the Saddle site and is a stone-walled settlement which is probably associated with Northern Ndebele speakers (Boeyens et al 2009). Also note that several Stone Age rock art sites are known in the Lapalala Reserve.

A total of three sites were recorded during the first survey which focussed on the Founders Lodge footprint. Site 1 is probably the remains of a Late Iron Age iron smelting site. Site 2 mainly consists of the foundations of a historical farmhouse complex (older than 60 years). Site 3 is a small Late Iron Age site (probably an outpost with house foundations and stone-walled enclosures); however the site was damaged during the construction of the access road (see Addendum 2).

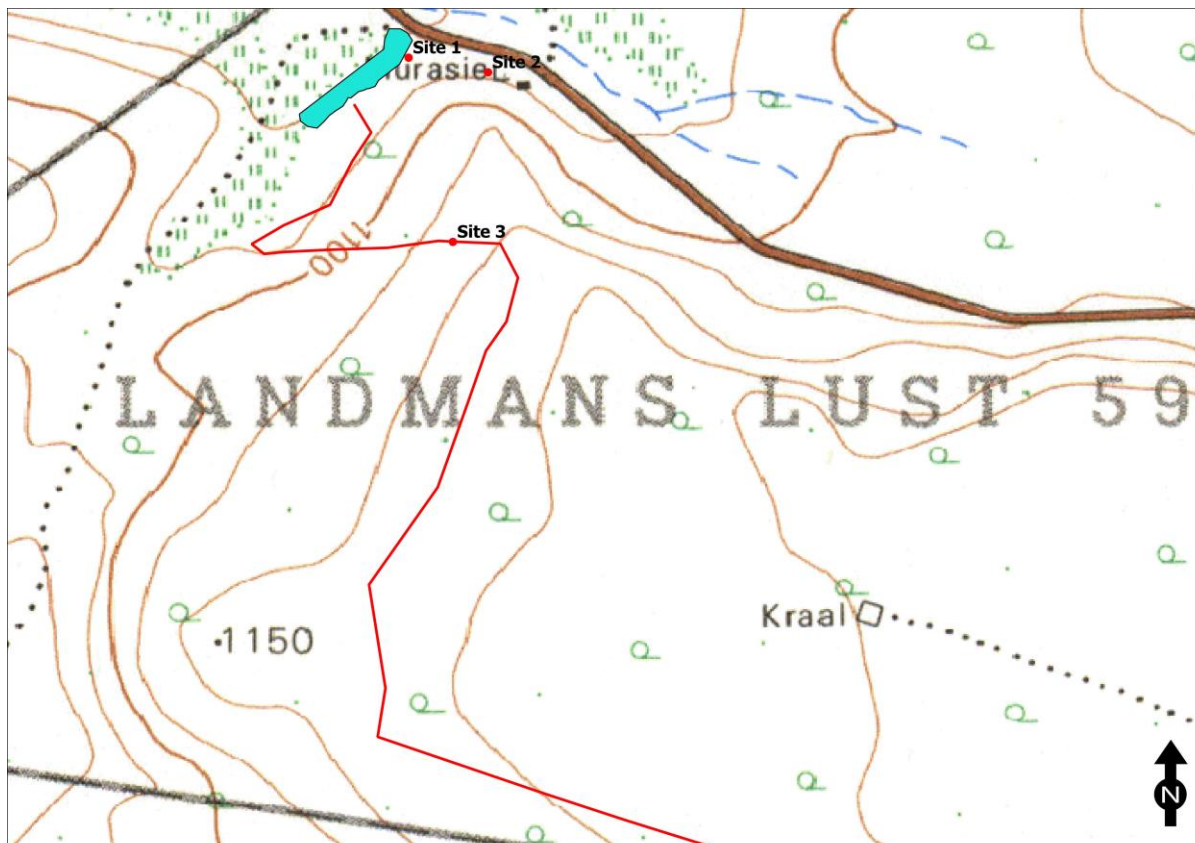


Figure 23: The location of the recorded cultural heritage sites, relative to the developments

Also note that several lower and upper grinding stones and undecorated pottery were noted throughout the survey area (low density).



Figure 24: Upper and lower grindstones at the lodge site



Figure 25: Lower grinding stone recorded within the footprint of the proposed expansions



Figure 26: Surface finds also include undecorated pottery and upper grinding stones

8. Locations and Evaluation of Sites

Site No	Coordinates	Site Type	Statement of Significance	Impact	Proposed Mitigation
1	23.859395°S 28.283485°E	Smelting Site	Generally protected B: Medium significance	None	<ul style="list-style-type: none"> Clearly demarcated, fenced off Further construction should be managed to prevent any impact
2	23.859742°S 28.285369°E	Historical house	Generally Protected C: Low significance	None	<ul style="list-style-type: none"> Clearly demarcated, fenced off Further construction should be managed to prevent any impact
3	23.863762°S 28.284536°E	Late Iron Age stone-walled site	Generally protected B: Medium significance	Partly destroyed	<ul style="list-style-type: none"> Clearly demarcated, fenced off Further construction should be managed to prevent any impact

Table 2: Description and evaluation of the recorded site

9. Recommendations and Conclusions

Please note that no Stone Age settlements, structures, features, assemblages or artefacts were recorded during the survey. Also, no graveyards or individual graves were recorded.

However, due to the reactive nature of the report and to prevent any future impact on other heritage sites, please note the following:

- Site 1 should be fenced off to prevent any further impact on the site. Erosion should also be addressed as the site is currently being eroded.
- Site 2 should be fenced and clearly demarcated to prevent any damage as it is located adjacent to new and existing roads providing access to the lodge.
- Site 3 is situated on a steep slope and should therefore be stabilised to prevent any future erosion. The site should be clearly demarcated to prevent any further damage.

Based on the initial assessment, from a heritage perspective, care should be taken not to cause any further impact on cultural heritage remains.

During the second survey of the areas earmarked for the proposed expansions to the lodge no archaeological or historical structures or sites were recorded, as a result it is recommended that these may proceed.

Also please note:

Archaeological deposits usually occur below ground level. Should archaeological artefacts or skeletal material be revealed in the area during development activities, such activities should be halted, and a university or museum notified in order for an investigation and evaluation of the find(s) to take place (*cf.* NHRA (Act No. 25 of 1999), Section 36 (6)).

10. References

Boeyens, J., Van der Ryst, M., Coetzee, F., Steyn, M. & Loots, M. 2009. From uterus to jar: the significance of an infant pot burial from Melora Saddle, an early nineteenth-century African farmer site on the Waterberg Plateau. *Southern African Humanities*. Vol. 21. pp 213-238.

Coetzee, F.P., Boeyens, J.C.A., Van der Ryst, M.M., Parsons, I., Lombard, M. 2005. Cultural Heritage Management Plan for Melora Hilltop and Saddle Sites, Lapalala Wilderness, Limpopo Province. UNISA: Archaeology Division.

Department of Environmental Affairs. 24 July 2015. Regulations relating to the procedure to be followed and criteria to be considered when determining an appropriate fine in terms of Section 24G.

Office of the President. 27 November 1998. National Environmental Management Act (Act No. 107 of 1998). Government Gazette Vol 401 (19519). Pretoria: Government Printer.

Huffman, T.N. 1990. Obituary: The Waterberg Research of Jan Aukema. *South African Archaeological Bulletin*. Vol 45. pp. 117-119.

Huffman, T. N. 2007. Handbook to the Iron Age: the Archaeology of Pre-Colonial Farming Societies in Southern Africa. University of KZN Press: Pietermaritzburg.

Jeppe, F. 1899. Jeppe's Map of the Transvaal. London: Edward Stanford.

Mucina, L. & Rutherford, M.C. 2010. The Vegetation of South Africa, Lesotho and Swaziland. *Strelitzia 19*. Pretoria: South African National Biodiversity Institute.

Mouton, B. 2014. From the Ashes: Faunal Analysis of Excavation M1.1B on Melora Hilltop, a Late Iron Age Site on the Waterberg Plateau. BA Hons dissertation, UNISA.

National Heritage Resources Act. Act No. 25 of 1999. Government Printer: Pretoria.

SAHRA, 2005. Minimum Standards for the Archaeological and the Palaeontological Components of Impact Assessment Reports, Draft version 1.4.

South African Heritage Resources Agency (SAHRA). Report Mapping Project. Version 1.0, 2009.

Internet Sources

<http://www.lapalala.com> (Accessed: April 2016).

Addendum 1: Archaeological and Historical Sequence


The table provides a general overview of the chronological sequence of the archaeological periods in South Africa.

PERIOD	APPROXIMATE DATE
Earlier Stone Age	More than c. 2 million years ago - c. 250 000 years ago
Middle Stone Age	c. 250 000 years ago – c. 25 000 years ago
Later Stone Age (Includes San Rock Art)	c. 25 000 years ago - c. AD 200 (up to historic times in certain areas)
Early Iron Age	c. AD 200 - c. AD 900
Middle Iron Age	c. AD 900 – c. AD 1300
Late Iron Age (Stonewalled sites)	c. AD 1300 - c. AD 1840 (c. AD 1640 - c. AD 1840)

Addendum 2: Description of Recorded Sites

Site 1

A. GENERAL SITE DESCRIPTION			
The site comprises the remains of a Late Iron Age iron smelting site. Although no clear furnace could be discerned a possible smelting area was identified. Several pieces of slag that were washed downhill, were noted on the surface. Small granules of iron ore and potsherds were also noted. Several secluding taboos are upheld during smelting and as a result these sites are usually not associated with settlements.			
B. SITE EVALUATION			
B1. HERITAGE VALUE	Yes	No	
Historic Value			
It has importance to the community or pattern of South Africa's history or precolonial history.		√	
It has strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa.		√	
It has significance relating to the history of slavery in South Africa.		√	
Aesthetic Value			
It has importance in exhibiting particular aesthetic characteristics valued by a particular community or cultural group.		√	
Scientific Value			
It has potential to yield information that will contribute to an understanding of South Africa's natural and cultural heritage.	√		
It has importance in demonstrating a high degree of creative or technical achievement at a particular period.	√		
It has importance to the wider understanding of the temporal change of cultural landscapes, settlement patterns and human occupation.	√		
Social Value			
It has strong or special association with a particular community or cultural group for social, cultural or spiritual reasons (sense of place).		√	
Tourism Value			
It has significance through its contribution towards the promotion of a local sociocultural identity and can be developed as tourist destination.		√	
Rarity Value			
It possesses unique, uncommon, rare or endangered aspects of South Africa's natural or cultural heritage.		√	
Representative Value			
It is importance in demonstrating the principle characteristics of a particular class of South Africa's natural or cultural places or objects.		√	
B2. REGIONAL CONTEXT			
Other similar sites in the regional landscape.	√		
B3. CONDITION OF SITE			
Integrity of deposits/structures.	Unstable, erosion		
C. SPHERE OF SIGNIFICANCE	High	Medium	Low
International			√
National			√
Provincial		√	
Local		√	
Specific community		√	
D. FIELD REGISTER RATING			
National/Grade 1 [should be registered, retained]			
Provincial/Grade 2 [should be registered, retained]			
Local/Grade 3A [should be registered, mitigation not advised]			
Local/Grade 3B [High significance; mitigation, partly retained]			
Generally Protected A [High/Medium significance, mitigation]			

Generally protected B [Medium significance, to be recorded]	√
Generally Protected C [Low significance, no further action]	
E. GENERAL STATEMENT OF SITE SIGNIFICANCE	
Low	
Medium	√
High	
F. RATING OF POTENTIAL IMPACT OF DEVELOPMENT	
None	√
Peripheral	
Destruction	
Uncertain	
G. RECOMMENDED MITIGATION	
<ul style="list-style-type: none"> • Demarcate the site, should be fenced off • Further construction should be managed to prevent any impact 	
H. APPLICABLE LEGISLATION AND LEGAL REQUIREMENTS	
<ul style="list-style-type: none"> • National Heritage Resources Act (Act No. 25 of 1999) 	
I. PHOTOGRAPHS	
	
<p>Figure 27: Pieces of slag and iron ore at the smelting area</p>	

Site 2

A. GENERAL SITE DESCRIPTION		
<p>The site comprises the dilapidated remains of a historical farm house complex (6x6 metres) with a surrounding wall. Most of the stone blocks were dressed and built with some sort of plaster of early quick lime cement. Most of the walls have collapsed and in most places only the foundations remain. Pieces of glass and ceramics were noted on the surface. Note that a domestic midden (predominately ash and cinder) was noted at the back of the house. Several partial foundations of outbuildings were noted to the east of the main house.</p>		
B. SITE EVALUATION		
B1. HERITAGE VALUE	Yes	No
Historic Value		
It has importance to the community or pattern of South Africa's history or precolonial history.		√
It has strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa.		√
It has significance relating to the history of slavery in South Africa.		√

Aesthetic Value			
It has importance in exhibiting particular aesthetic characteristics valued by a particular community or cultural group.			√
Scientific Value			
It has potential to yield information that will contribute to an understanding of South Africa's natural and cultural heritage.	√		
It has importance in demonstrating a high degree of creative or technical achievement at a particular period.			√
It has importance to the wider understanding of the temporal change of cultural landscapes, settlement patterns and human occupation.	√		
Social Value			
It has strong or special association with a particular community or cultural group for social, cultural or spiritual reasons (sense of place).			√
Tourism Value			
It has significance through its contribution towards the promotion of a local sociocultural identity and can be developed as tourist destination.			√
Rarity Value			
It possesses unique, uncommon, rare or endangered aspects of South Africa's natural or cultural heritage.			√
Representative Value			
It is importance in demonstrating the principle characteristics of a particular class of South Africa's natural or cultural places or objects.			√
B2. REGIONAL CONTEXT			
Other similar sites in the regional landscape.		√	
B3. CONDITION OF SITE			
Integrity of deposits/structures.	Unstable		
C. SPHERE OF SIGNIFICANCE	High	Medium	Low
International			√
National			√
Provincial			√
Local			√
Specific community			√
D. FIELD REGISTER RATING			
National/Grade 1 [should be registered, retained]			
Provincial/Grade 2 [should be registered, retained]			
Local/Grade 3A [should be registered, mitigation not advised]			
Local/Grade 3B [High significance; mitigation, partly retained]			
Generally Protected A [High/Medium significance, mitigation]			
Generally protected B [Medium significance, to be recorded]			
Generally Protected C [Low significance, no further action]	√		
E. GENERAL STATEMENT OF SITE SIGNIFICANCE			
Low	√		
Medium			
High			
F. RATING OF POTENTIAL IMPACT OF DEVELOPMENT			
None	√		
Peripheral			
Destruction			
Uncertain			
G. RECOMMENDED MITIGATION			
<ul style="list-style-type: none"> Demarcate the site, should be fenced off Further construction should be managed to prevent any impact 			
H. APPLICABLE LEGISLATION AND LEGAL REQUIREMENTS			
<ul style="list-style-type: none"> National Heritage Resources Act (Act No. 25 of 1999) 			
II. PHOTOGRAPHS			



Figure 28: The foundation of the historical farm complex and ashy midden to the rear of the yard

Site 3

A. GENERAL SITE DESCRIPTION

The site comprises a Late Iron Age outpost. The site is roughly 50 x50 metres in extent and is situated on a level area on a steep slope located south of the lodge site. During construction of the lodge access road the site was extensively damaged. The road passes right through the middle of the site and several houses and sections of foundation walling were destroyed. Several remaining house foundations were recorded (and pieces of clay from the plastered walls), a number of smaller stone-walled enclosures and several retaining (terrace) walls were also noted. Although several pieces of potsherds were noted no decorated pieces were found. The site is small and probably served as a lookout point or outpost for looking after cattle.

B. SITE EVALUATION

B1. HERITAGE VALUE

Historic Value

	Yes	No
It has importance to the community or pattern of South Africa's history or precolonial history.		√
It has strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa.		√
It has significance relating to the history of slavery in South Africa.		√

Aesthetic Value

It has importance in exhibiting particular aesthetic characteristics valued by a particular community or cultural group.		√
--	--	---

Scientific Value

It has potential to yield information that will contribute to an understanding of South Africa's natural and cultural heritage.	√	
It has importance in demonstrating a high degree of creative or technical achievement at a particular period.		√
It has importance to the wider understanding of the temporal change of cultural landscapes, settlement patterns and human occupation.	√	

Social Value

It has strong or special association with a particular community or cultural group for social, cultural or spiritual reasons (sense of place).		√
--	--	---

Tourism Value


It has significance through its contribution towards the promotion of a local sociocultural identity and can be developed as tourist destination.			√
Rarity Value			
It possesses unique, uncommon, rare or endangered aspects of South Africa's natural or cultural heritage.			√
Representative Value			
It is importance in demonstrating the principle characteristics of a particular class of South Africa's natural or cultural places or objects.			√
B2. REGIONAL CONTEXT			
Other similar sites in the regional landscape.		√	
B3. CONDITION OF SITE			
Integrity of deposits/structures.		Unstable	
C. SPHERE OF SIGNIFICANCE	High	Medium	Low
International			√
National			√
Provincial			√
Local		√	
Specific community		√	
D. FIELD REGISTER RATING			
National/Grade 1 [should be registered, retained]			
Provincial/Grade 2 [should be registered, retained]			
Local/Grade 3A [should be registered, mitigation not advised]			
Local/Grade 3B [High significance; mitigation, partly retained]			
Generally Protected A [High/Medium significance, mitigation]			
Generally protected B [Medium significance, to be recorded]		√	
Generally Protected C [Low significance, no further action]			
E. GENERAL STATEMENT OF SITE SIGNIFICANCE			
Low			
Medium			
High			
F. RATING OF POTENTIAL IMPACT OF DEVELOPMENT			
None			
Peripheral		√ Partly damaged	
Destruction			
Uncertain			
G. RECOMMENDED MITIGATION			
<ul style="list-style-type: none"> • Demarcate the site, should be fenced off • Further construction should be managed to prevent any further impact 			
H. APPLICABLE LEGISLATION AND LEGAL REQUIREMENTS			
<ul style="list-style-type: none"> • National Heritage Resources Act (Act No. 25 of 1999) 			
III. PHOTOGRAPHS			
			

Figure 29: Lower grinding stone and clay from the walls of houses



Figure 30: The access road through the site; terrace stone walling

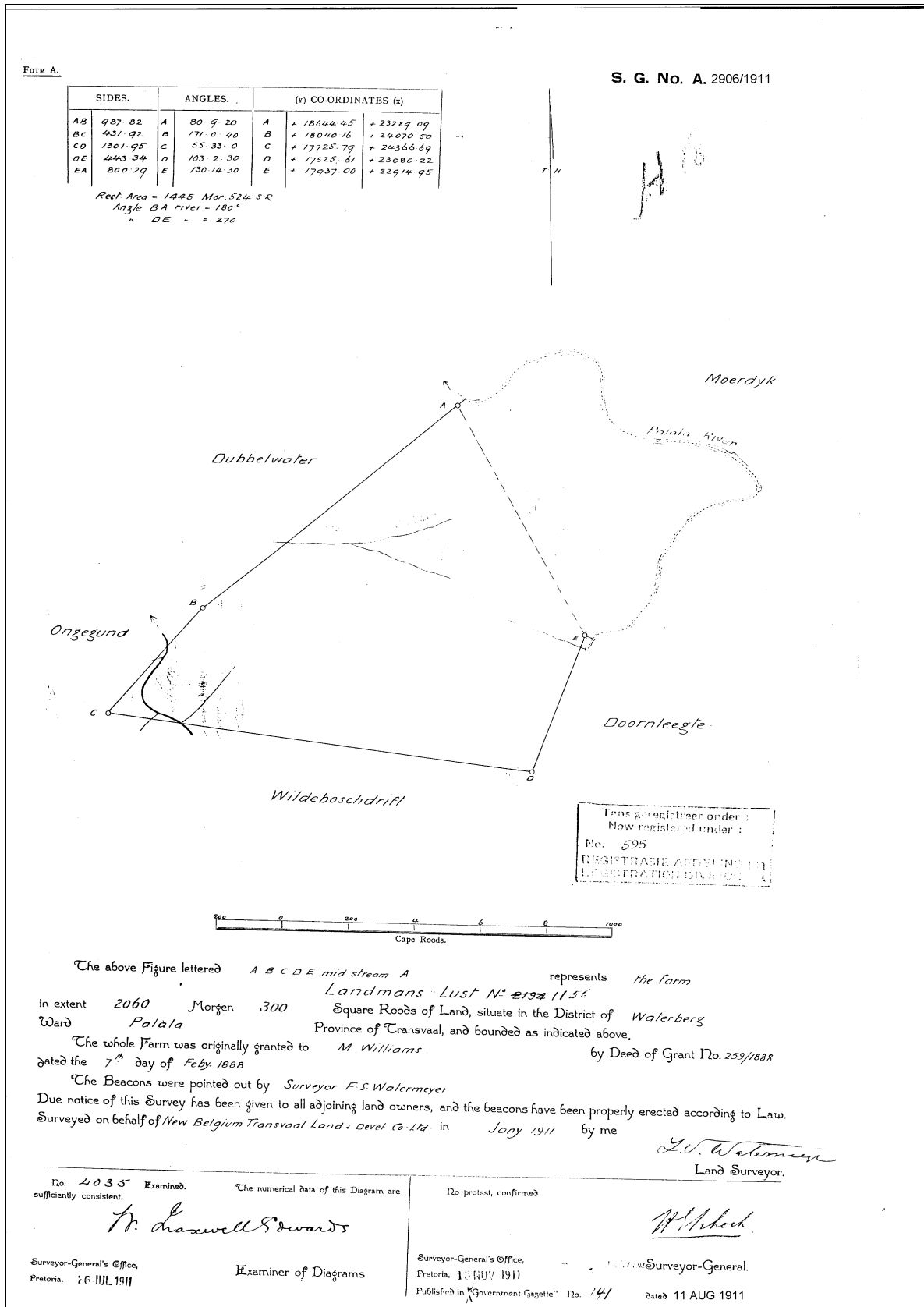
Addendum 3: Surveyor General Farm Diagram

Figure 31: Surveyor General's map of the Landmans Lust 595LR which was surveyed in 1911, also note that the Title Deed was first granted in 1888