

KwaNobamba

Basic Assessment Report For construction of Royal Residence



DEA: *Ref. No. to be allocated*

Prepared by

**Brousse-James & Associates
Ecological and Environmental Services**

June 2014

This Basic Assessment Report for the KwaNobamba Royal Residence in the eMakhosini-Opathe Heritage Park, was completed in June 2014 and was produced by:

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DRAFT



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

(For official use only)

File Reference Number:

Application Number:

Date Received:

Basic assessment report in terms of the Environmental Impact Assessment Regulations, 2010, promulgated in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended.

Kindly note that:

1. This **basic assessment report** is a standard report that may be required by a competent authority in terms of the EIA Regulations, 2010 and is meant to streamline applications. Please make sure that it is the report used by the particular competent authority for the activity that is being applied for.
2. This report format is current as of **1 September 2012**. It is the responsibility of the applicant to ascertain whether subsequent versions of the form have been published or produced by the competent authority
3. The report must be typed within the spaces provided in the form. The size of the spaces provided is not necessarily indicative of the amount of information to be provided. The report is in the form of a table that can extend itself as each space is filled with typing.
4. Where applicable **tick** the boxes that are applicable in the report.
5. An incomplete report may be returned to the applicant for revision.
6. The use of "not applicable" in the report must be done with circumspection because if it is used in respect of material information that is required by the competent authority for assessing the application, it may result in the rejection of the application as provided for in the regulations.
7. This report must be handed in at offices of the relevant competent authority as determined by each authority.
8. No faxed or e-mailed reports will be accepted.
9. The signature of the EAP on the report must be an original signature.
10. The report must be compiled by an independent environmental assessment practitioner.
11. Unless protected by law, all information in the report will become public information on receipt by the competent authority. Any interested and affected party should be provided with the information contained in this report on request, during any stage of the application process.
12. A competent authority may require that for specified types of activities in defined situations only parts of this report need to be completed.
13. Should a specialist report or report on a specialised process be submitted at any stage for any part of this application, the terms of reference for such report must also be submitted.

14. Two (2) colour hard copies and one (1) electronic copy of the report must be submitted to the competent authority.
15. Shape files (.shp) for maps must be included on the electronic copy of the report submitted to the competent authority.

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SECTION A: ACTIVITY INFORMATION

Has a specialist been consulted to assist with the completion of this section?

YES	NO
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If YES, please complete the form entitled "Details of specialist and declaration of interest" for the specialist appointed and attach in Appendix I.

1 PROJECT DESCRIPTION

a) Describe the project associated with the listed activities applied for

Brousse-James & Associates have been contracted by the Zulu Royal Family to conduct a Basic Assessment for the building of the KwaNobamba Royal Residence in the eMakhosini-Ophathe Heritage Park, approximately 27 km from Ulundi and 85 km from Eshowe.

His Royal Highness, King Goodwill Zwelithini kaBekuzulu, the reigning King of the Zulu Nation, wishes to re-establish a Royal Residence in the eMakhosini Valley, where the founder of the Zulu Nation, King Shaka kaSenzangakhona, was born. This residence will be built along the lines of a traditional homestead (*umuzi/Isigodlo*), with the same circular layout.

The significance of the name, kwaNobamba, is that it was the name of the ancestral home of King Jama kaNdaba, who was King Shaka kaSenzangakhona's grandfather, and it was King Shaka's birthplace. When King Dingaan ascended to the throne, he moved back to the eMakhosini Valley, from kwaDukuza near Stanger, and temporarily located his capital at kwaNobamba, whilst building Mgungundlovu. In 1840, after his defeat at the hands of the Boers, who were assisted by his brother, Prince Mpande, Mgungundlovu was razed to the ground. King Mpande then moved the Royal Residence to kwaNodwengu (which is near the present-day Holiday Inn in Ulundi). King Dingaan was therefore the last Zulu king to have a homestead within the eMakhosini Valley.

The building of a Royal Residence within the eMakhosini Valley, with the same layout as a traditional *umuzi/Isigodlo* (as described in Section 4.1 below), will have tremendous cultural and spiritual significance to the Zulu Royal Family which, in a sense, will be "coming home".

The Royal Residence will cover an area of 20 hectares and will consist of the following:

1. Nine traditional thatched "beehive huts" (rondavels), arranged in a circle, with a central cattle enclosure (*isibaya*) within the arrangement of "huts". These will be constructed with a steel framework, as opposed to the traditional wooden latticework structure, as they will be much bigger than the traditional huts.
 - a. The main residence (*indlunkulu*), opposite the entrance (Unit A), will cover an area of 241.0 m², with a courtyard of 397.7 m² adjacent to it on the outer perimeter.
 - b. On each side of the main residence, going around the circle, will be two units "B" (four in total). One of them (B2 - *iqadi*) will cover an area of 310.5 m². Three of them (Unit B1) will cover an area of 189 m² each, to give a total "Unit B1" area of 568.8 m². Each will have an outer courtyard, covering 251 m², giving a total "Unit B" courtyard area of 1,004.8 m².
 - c. On each side of the entrance will be two units "C" (four in total). Each will cover an area of 104.5 m², to give a total area of 418.0 m².
2. One prayer unit, covering 70.2 m², outside the main circle and between Unit A and one Unit B (the *iqadi*).
3. Two guard houses, covering 13.5 m² each, to give a total area of 27.0 m²
4. On each side of the entrance will be an ablution block, with the male ablution on the right hand side, and the female ablution on the left hand side, as one enters the circle. Each ablution block will cover an area of 44.0 m², to give a total area of 88.0 m². Adjacent to the ablution facilities will be service rooms (kitchen, scullery and domestic laundry facility), covering an area of 21.7 m².

5. There will be covered parking bays and a garage to the left of the entrance and the garage will cover an area of 38.5 m².
6. On each side of the main dwelling, outside the circle, will be two ancillary accommodation units, covering an area of 477.3 m² each, to give a total area of 954.6 m². Each of these units will have a courtyard, covering an area of 302.4 m², to give a total area of 604.8 m².
7. The total area covered by buildings will therefore be 2,739.3 m², and that covered by courtyards will be 2,007.9 m², to give a total development area of 4,747.1 m², spread out within an area of 6.1 ha, which will have a perimeter fence and gates.
8. In addition to the main dwelling area, there will be a guest accommodation facility, covering an area of 5.3 ha, set apart from the main dwelling.
9. A fenced area of natural veld, covering an area of 8.6 ha, will act as a grazing site for Royal cattle.
10. Therefore, the total overall site size, including the residence, guest facility and grazing area, will cover an area of 20 ha.
11. The 3 km access road, from the gate to the Royal Residence, will be upgraded from a track to a gravel road, of the standard of a district road (Class R4 rural local road), with a speed limit of 60 km/h and the road reserve not exceeding 20 m.
12. The architectural drawings display three small dams; the details of these dams has not yet been established, but this will be clarified before submission of the final BAR.

In terms of provision of bulk services, the following will apply:

1. **Electricity:** Initially the system will be designed to work entirely on solar power, with generator backup. At a later stage, an Eskom connection may be considered, but at this stage, the existing Eskom network does not allow for a cost-effective connection to the proposed residence.
2. **Water:** Will be obtained from a borehole and, for this purpose, a Water Use License will need to be applied for. Rainwater harvesting measures will be implemented, wherever possible.
3. **Sewerage:** Will be processed by means of a package plant - Either the Scarab™ or Lilliput® sewage treatment system.

The construction of the Royal Residence will be funded out of private Zulu Royal Family funds and the proposed development has the support of Amafa aKwaZulu-Natali, as it has significance in terms of living heritage and has potential tourism significance as well.

b) Provide a detailed description of the listed activities associated with the project as applied for

Listed activity as described in GN R.544, 545 and 546	Description of project activity
<p>GN R.544 Item 11: The construction of: (iv) <u>dams</u>;</p> <p>where such construction occurs within a watercourse or within 32 metres of a watercourse, measured from the edge of a watercourse, excluding where such construction will occur behind the development setback line.</p>	<p>Construction of three (3) small dams on the stream below the Royal Residence.</p>
<p>GN R.544 Item 23: The transformation of <u>undeveloped</u>, 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. (ii) <u>residential</u>, retail, commercial, recreational, industrial or institutional use, <u>outside an urban area, and where the total area to be transformed is bigger than 1 hectare but less than 20 hectares.</u></p> <p>Except where such transformation takes place for linear activities.</p>	<p>Building of a Royal Residence covering an area of 6.1 ha, and a guest accommodation facility covering an area of 5.3 ha, to give a total transformed area of 11.4ha.</p>
<p>GN R.544 Item 24: The <u>transformation of land bigger than 1000 square metres in size, to residential, retail, commercial, industrial or institutional use, where, at the time of coming into effect of this schedule, such land was zoned open space, conservation or had equivalent zoning.</u></p>	<p>Building of a Royal Residence covering an area of 6.1 ha, and a guest accommodation facility covering an area of 5.3 ha, to give a total transformed area of 11.4 ha within the eMakhosini-Ophathe Heritage Park.</p>
<p>GN R.546 Item 13: The <u>clearance of an area of 1 hectare or more of vegetation where 75 % or more of the vegetative cover constitutes indigenous vegetation</u>, except where such removal of vegetation is required for:</p> <ol style="list-style-type: none"> 1) the undertaking of a process or activity included in the list of waste management activities published in terms of section 19 of the National Environmental Waste Act, 2008 (Act No. 59 of 2008), in which case the activity is regarded to be excluded from this list. 2) the undertaking of a linear activity falling 	<p>Clearing of 4,747.1 m² of indigenous vegetation within the 11.4 ha development footprint and within the unproclaimed section of the eMakhosini-Ophathe Heritage Park, but within 5 km of the proclaimed section of the Park.</p>

<p>below the thresholds mentioned in Listing Notice 1 in terms of GN No.544 of 2010.</p> <p>(a) Critical biodiversity areas and ecological support areas as identified in systematic biodiversity plans adopted by the competent authority.</p> <p>(b) National Protected Area Expansion Strategy Focus areas.</p> <p>(c) In the Eastern Cape, Free State, <u>KwaZulu-Natal</u>, Limpopo, Mpumalanga, Northern Cape and Western Cape.</p> <p>i. In an estuary;</p> <p>ii. Outside urban areas, the following:</p> <p>(aa) A <u>protected area</u> identified in terms of NEMPAA, excluding conservancies;</p> <p>(ff) <u>Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected areas</u> identified in terms of NEMPAA or from the core area of a biosphere reserve;</p> <p>(gg) Areas seawards of the development setback line or within 1 kilometre from the high-water mark of the sea if no such development setback line is determined.</p>	
<p>GN R.546 Item 19: The <u>widening of a road by more than 4 metres</u>, or the lengthening of a road by more than 1 kilometre.</p> <p>(a) In Eastern Cape, Free State, KwaZulu-Natal, Limpopo, Mpumalanga and Northern Cape provinces:</p> <p>i. In an estuary;</p> <p>ii. <u>Outside urban areas, in:</u></p> <p>(aa) <u>A protected area</u> identified in terms of NEMPAA, excluding conservancies;</p> <p>(bb) National Protected Area Expansion Strategy Focus areas;</p> <p>(cc) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority;</p> <p>(dd) Sites or areas identified in terms of an International Convention;</p> <p>(ee) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;</p> <p>(ff) Core areas in biosphere reserves;</p>	<p>The 3 km access road to the proposed development is a farm road, which would need to be upgraded and widened.</p>

<p><u>Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve;</u></p>	
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2 FEASIBLE AND REASONABLE ALTERNATIVES

“**alternatives**”, in relation to a proposed activity, means different means of meeting the general purpose and requirements of the activity, which may include alternatives to—

- (a) the property on which or location where it is proposed to undertake the activity;
- (b) the type of activity to be undertaken;
- (c) the design or layout of the activity;
- (d) the technology to be used in the activity;
- (e) the operational aspects of the activity; and
- (f) the option of not implementing the activity.

Describe alternatives that are considered in this application as required by Regulation 22(2)(h) of GN R.543. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity (NOT PROJECT) could be accomplished in the specific instance taking account of the interest of the applicant in the activity. The no-go alternative must in all cases be included in the assessment phase as the baseline against which the impacts of the other alternatives are assessed.

The determination of whether site or activity (including different processes, etc.) or both is appropriate needs to be informed by the specific circumstances of the activity and its environment. After receipt of this report the, competent authority may also request the applicant to assess additional alternatives that could possibly accomplish the purpose and need of the proposed activity if it is clear that realistic alternatives have not been considered to a reasonable extent.

The identification of alternatives should be in line with the Integrated Environmental Assessment Guideline Series 11, published by the DEA in 2004. Should the alternatives include different locations and lay-outs, the co-ordinates of the different alternatives must be provided. The co-ordinates should be in degrees, minutes and seconds. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

a) Site alternatives

The eMakhosini Valley has specifically been chosen because of the historical and cultural significance to the Zulu nation and the Zulu Royal Family. The specific site within that valley has been chosen so as not to interfere with gravesites of previous Zulu kings or to impact on existing historical and cultural monuments.

Alternative 1 (preferred alternative)		
Description	Lat (DDMMSS)	Long (DDMMSS)
Site carefully chosen to avoid conflict with heritage sites	28° 24' 21.17"	31° 15' 49.97"
Alternative 2 (No alternatives)		
Description	Lat (DDMMSS)	Long (DDMMSS)
Alternative 3		

Description	Lat (DDMMSS)	Long (DDMMSS)

In the case of linear activities:

It is only the existing access road to be upgraded that applies in this instance.

Alternative:

Latitude (S):

Longitude (E):

Alternative S1 (preferred)

- Starting point of the activity
- Middle/Additional point of the activity
- End point of the activity

28° 23' 33.17"	31° 15' 10.23"
28° 24' 26.03"	31° 14' 50.81"
28° 24' 34.96"	31° 15' 47.06"

Alternative S2 (if any) - Using an existing road, therefore no alternative

- Starting point of the activity
- Middle/Additional point of the activity
- End point of the activity

Alternative S3 (if any)

- Starting point of the activity
- Middle/Additional point of the activity
- End point of the activity

For route alternatives that are longer than 500m, please provide an addendum with co-ordinates taken every 250 meters along the route for each alternative alignment.

In the case of an area being under application, please provide the co-ordinates of the corners of the site as indicated on the lay-out map provided in Appendix A.

b) Lay-out alternatives

Alternative 1 (preferred alternative)		
Description	Lat (DDMMSS)	Long (DDMMSS)
Site carefully chosen to avoid conflict with heritage sites. The circular layout has specifically been chosen to resemble a traditional <i>umuzi/Isigodla</i>	28° 24' 21.17"	31° 15' 49.97"
Alternative 2 (No alternatives)		
Description	Lat (DDMMSS)	Long (DDMMSS)
Alternative 3		
Description	Lat (DDMMSS)	Long (DDMMSS)

c) Technology alternatives

Alternative 1 (preferred alternative)
The design of the Royal Residence specifically resembles a traditional Zulu <i>umuzi/Isigodlo</i> with circular, beehive huts, which were traditionally made of bent saplings, covered with thatch. The units will be far larger than the traditional beehive huts and so a steel superstructure will be needed to support the roof.
Alternative 2
Instead of steel as the superstructure, wood could be used, but one could never find long enough saplings to support the size structures that are envisaged. It could be possible to join multiple pieces

of wood to create the structure, but this would require careful design and considerable carpentry skill and would end up costing far more than a steel structure.

Alternative 3

d) Other alternatives (e.g. scheduling, demand, input, scale and design alternatives)

Alternative 1 (preferred alternative)

The only alternative is to follow the design of a historical Zulu homestead (*umuzi/Isigodlo*) with beehive huts arranged in a circle around a central cattle kraal. This is the primary purpose of the proposed development and therefore no alternatives are possible.

Alternative 2

Alternative 3

e) No-go alternative

Should the development not proceed, the site will remain natural veld and will be a natural part of the Greater eMakhosini-Ophathe Heritage Park. There will therefore be no loss of indigenous plant communities or animal habitat and none of the other possible impacts. However, the Zulu Royal Family would also not realise their dream of returning to the birthplace of their nation and establishing a Royal Residence there.

Paragraphs 3 – 13 below should be completed for each alternative.

3 PHYSICAL SIZE OF THE ACTIVITY

a) Indicate the physical size of the preferred activity/technology as well as alternative activities/technologies (footprints):

Alternative:

Alternative A1¹ (preferred activity alternative) Actual transformed area
 Alternative A2 (if any) No alternative
 Alternative A3 (if any)

Size of the activity:

4,747.1 m ²
0 m ²
m ²

or, for linear activities:

Alternative:

Alternative A1 (preferred activity alternative) Existing access road upgrade
 Alternative A2 (if any) No alternative
 Alternative A3 (if any)

Length of the activity:

3,000 m
0 m
m

b) Indicate the size of the alternative sites or servitudes (within which the above footprints will occur):

Alternative:

Alternative A1 (preferred activity alternative) Development area

Size of the site/servitude:

110,400 m ²

¹ "Alternative A.." refer to activity, process, technology or other alternatives.

Alternative A2 (if any)	m ²
Alternative A3 (if any)	m ²

4 SITE ACCESS

Does ready access to the site exist?	YES	NO
If NO, what is the distance over which a new access road will be built	m	

Describe the type of access road planned:

There is an existing 3 km long gravel farm road within the Park that runs past the site. This road will need to be upgraded to handle more regular traffic, but will not be blacktopped.

Include the position of the access road on the site plan and required map, as well as an indication of the road in relation to the site.

5 LOCALITY MAP

An A3 locality map must be attached to the back of this document, as Appendix A. The scale of the locality map must be relevant to the size of the development (at least 1:50 000. For linear activities of more than 25 kilometres, a smaller scale e.g. 1:250 000 can be used. The scale must be indicated on the map.). The map must indicate the following:

- an accurate indication of the project site position as well as the positions of the alternative sites, if any;
- indication of all the alternatives identified;
- closest town(s);
- road access from all major roads in the area;
- road names or numbers of all major roads as well as the roads that provide access to the site(s);
- all roads within a 1km radius of the site or alternative sites; and
- a north arrow;
- a legend; and
- locality GPS co-ordinates (Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in degrees and decimal minutes. The minutes should have at least three decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection).

6 LAYOUT/ROUTE PLAN

A detailed site or route plan(s) must be prepared for each alternative site or alternative activity. It must be attached as Appendix A to this document.

The site or route plans must indicate the following:

- the property boundaries and numbers of all the properties within 50 metres of the site;
- the current land use as well as the land use zoning of the site;
- the current land use as well as the land use zoning each of the properties adjoining the site or sites;

- the exact position of each listed activity applied for (including alternatives);
- servitude(s) indicating the purpose of the servitude;
- a legend; and
- a north arrow.

7 SENSITIVITY MAP

The layout/route plan as indicated above must be overlain with a sensitivity map that indicates all the sensitive areas associated with the site, including, but not limited to:

- watercourses;
- the 1:100 year flood line (where available or where it is required by DWA);
- ridges;
- cultural and historical features;
- areas with indigenous vegetation (even if it is degraded or infested with alien species); and
- critical biodiversity areas.

The sensitivity map must also cover areas within 100m of the site and must be attached in Appendix A.

8 SITE PHOTOGRAPHS

Colour photographs from the centre of the site must be taken in at least the eight major compass directions with a description of each photograph. Photographs must be attached under Appendix B to this report. It must be supplemented with additional photographs of relevant features on the site, if applicable.

9 FACILITY ILLUSTRATION

A detailed illustration of the activity must be provided at a scale of at least 1:200 as Appendix C for activities that include structures. The illustrations must be to scale and must represent a realistic image of the planned activity. The illustration must give a representative view of the activity.

10 ACTIVITY MOTIVATION

Motivate and explain the need and desirability of the activity (including demand for the activity):

1. Is the activity permitted in terms of the property's existing land use rights?	YES	NO	Please explain
The property is both a nature reserve and a heritage park and is under the jurisdiction of Amafa aKwaZulu-Natali. The proposed development has the approval of the Amafa Council.			
2. Will the activity be in line with the following?			
(a) Provincial Spatial Development Framework (PSDF)	YES	NO	Please explain
See (d) below.			
(b) Urban edge / Edge of Built environment for the area	YES	NO	Please explain
(c) Integrated Development Plan (IDP) and Spatial Development Framework (SDF) of the Local Municipality (e.g. would the approval of this application compromise the integrity of the existing approved and credible municipal IDP and SDF?).	YES	NO	Please explain
Essentially, by bringing the Zulu Royal Family back into the eMakhosini Valley, it is introducing an aspect of living heritage into the birthplace of the Zulu Nation.			
(d) Approved Structure Plan of the Municipality	YES	NO	Please explain
Tourism has been identified as potentially the biggest generator of jobs and foreign exchange in South Africa. The eMakhosini Valley has been identified as ideally placed to develop a large and vibrant tourist industry, largely because of the rich cultural and historical significance of the area and because of the presence of both the eMakhosini-Opathe Heritage Park and the nearby Hluhluwe-Imfolozi park. "By developing the eMakhosini Valley, it can provide economic upliftment to the people of Zululand, whilst at the same time ensuring the respect and reverence due to those who lived, loved, fought, died and lie buried there" (from Amafa eMakhosini Brochure). The Zululand District Municipality is a partner in the development of the eMakhosini Valley.			
(e) An Environmental Management Framework (EMF) adopted by the Department (e.g. Would the approval of this application compromise the integrity of the existing environmental management priorities for the area and if so, can it be justified in terms of sustainability considerations?)	YES	NO	Please explain
In addition to having the support of Amafa aKwaZulu-Natali, the project has the support of Ezemvelo KZN Wildlife.			
(f) Any other Plans (e.g. Guide Plan)	YES	NO	Please explain
3. Is the land use (associated with the activity being applied for) considered within the timeframe intended by the existing approved SDF agreed to by the relevant environmental authority (i.e. is the proposed development in line with the projects and programmes identified as priorities within the credible IDP)?	YES	NO	Please explain

<p>4. Does the community/area need the activity and the associated land use concerned (is it a societal priority)? (This refers to the strategic as well as local level (e.g. development is a national priority, but within a specific local context it could be inappropriate.)</p>	YES	NO	Please explain
<p>It is not a social priority for the area. It will have neither direct positive or negative benefits to the community. However, the living heritage associated with having the Zulu Royal Family living back within their ancestral home may contribute to the tourist value of the area, as outlined in (d) above.</p>			
<p>5. Are the necessary services with adequate capacity currently available (at the time of application), or must additional capacity be created to cater for the development? (Confirmation by the relevant Municipality in this regard must be attached to the final Basic Assessment Report as Appendix I.)</p>	YES	NO	Please explain
<p>The Royal Residence will not make direct use of any existing Municipal Services, except that waste emanating from the residence will most probably be disposed of at the Ulundi landfill site.</p>			
<p>6. Is this development provided for in the infrastructure planning of the municipality, and if not what will the implication be on the infrastructure planning of the municipality (priority and placement of services and opportunity costs)? (Comment by the relevant Municipality in this regard must be attached to the final Basic Assessment Report as Appendix I.)</p>	YES	NO	Please explain
<p>The proposed Royal Residence will have no bearing on or influence on the infrastructure planning of the Municipality. It will use existing roads and will not influence placement of water pipelines, electricity networks or any other infrastructure.</p>			
<p>7. Is this project part of a national programme to address an issue of national concern or importance?</p>	YES	NO	Please explain
<p>8. Do location factors favour this land use (associated with the activity applied for) at this place? (This relates to the contextualisation of the proposed land use on this site within its broader context.)</p>	YES	NO	Please explain
<p>The site of the proposed Royal Residence has specifically been chosen because of its strong historical connection to the progenitors of the Zulu Nation.</p>			
<p>9. Is the development the best practicable environmental option for this land/site?</p>	YES	NO	Please explain
<p>The best practicable option for this site would obviously be to leave it as natural veld; however, the development will not result in an unacceptable environmental cost.</p>			
<p>10. Will the benefits of the proposed land use/development outweigh the negative impacts of it?</p>	YES	NO	Please explain
<p>The benefits that will accrue are largely of a heritage nature, as there are strong historical and sentimental reasons why the Zulu Royal Family wish to establish a Royal Residence (<i>Isigodlo</i>) in the eMakhosini Valley (Valley of the Zulu Kings).</p>			

11. Will the proposed land use/development set a precedent for similar activities in the area (local municipality)?	YES	NO	Please explain
There will only be a possibility of one Royal Residence within the local area.			
12. Will any person's rights be negatively affected by the proposed activity/ies?	YES	NO	Please explain
The site is located within an area set aside for conservation and cultural heritage reasons and no people will be evicted or have their rights compromised in any way.			
13. Will the proposed activity/ies compromise the "urban edge" as defined by the local municipality?	YES	NO	Please explain
This is not strictly an urban development, but rather an extended private homestead.			
14. Will the proposed activity/ies contribute to any of the 17 Strategic Integrated Projects (SIPS)?	YES	NO	Please explain
15. What will the benefits be to society in general and to the local communities?	Please explain		
The benefits to local people, mainly the Zulu people, will be associated with issues of national pride and identity, rather than any practical and tangible benefits.			
16. Any other need and desirability considerations related to the proposed activity?	Please explain		
No.			
17. How does the project fit into the National Development Plan for 2030?	Please explain		
It does not have any direct bearing on the National Development Plan.			
18. Please describe how the general objectives of Integrated Environmental Management as set out in section 23 of NEMA have been taken into account.			
The decisions taken have been made with the best intentions in terms of integrated environmental management, and adequate and appropriate opportunities have been given to the public, custodians of the land and local community to comment on the proposed activity.			
19. Please describe how the principles of environmental management as set out in section 2 of NEMA have been taken into account.			
It is consistent with the requirement to place people and their needs at the forefront of its concern and to serve their physical, psychological, developmental, cultural and social interests equitably, in that it primarily caters to issues of historical and national pride for the Zulu Nation.			

11 APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES

List all legislation, policies and/or guidelines of any sphere of government that are applicable to the application as contemplated in the EIA regulations, if applicable:

Title of legislation, policy or guideline	Applicability to the project	Administering authority	Date
1. Constitution of SA (Act No. 108 of 1997).	Supports citizens' rights to an environment that is not harmful to their health and well-being.	• National Government	1997
2. NEMA – Regulations in terms of Chapter 5.	Environmental Impact Assessment Regulations triggered by this application.	• Department of Environmental Affairs	2010
3. National Environmental Management – Biodiversity Act (NEMBA).	Overriding Act with regard to Protected Area.	• SA National Biodiversity Institute	1984
4. Heritage Resources Act (Act No. 25 of 1999).	The eMakhosini Valley has tremendous historical and cultural value to the Zulu people, and the people of South Africa as a whole.	• Amafa aKwaZulu-Natali	2004
5. KwaZulu-Natal Heritage Management Act (Act No. 10 of 1997).	The eMakhosini Valley has tremendous historical and cultural value to the Zulu people, and the people of South Africa as a whole.	• Amafa aKwaZulu-Natali	1974
6. National Forest Act (Act No. 84 of 1998).	Trees within the eMakhosini-Ophathe Heritage Park	• Dept. of Agriculture, Forestry & Fisheries	1998
7. National Water Act (Act No. 36 of 1998).	Small dams will be constructed in a natural watercourse and water will be obtained from a borehole.	• Department of Water Affairs	1998

12 WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

a) Solid waste management

Will the activity produce solid construction waste during the construction/initiation phase?

YES	NO
1 m ³	

If YES, what estimated quantity will be produced per month?

How will the construction solid waste be disposed of (describe)?

Removed from site.

Where will the construction solid waste be disposed of (describe)?

Construction waste will be taken to an approved solid waste disposal facility outside the Park.

Will the activity produce solid waste during its operational phase?

YES	NO
-----	----

If YES, what estimated quantity will be produced per month?

1 m³

How will the solid waste be disposed of (describe)?

Waste will be separated at source into recyclable and non-recyclable waste.

If the solid waste will be disposed of into a municipal waste stream, indicate which registered landfill site will be used.

Recyclable material will be sorted at the Royal Residence and then sent to an appropriate recycling facility and the balance will be disposed of in the Ulundi landfill site.

Where will the solid waste be disposed of if it does not feed into a municipal waste stream (describe)?

N/A

If the solid waste (construction or operational phases) will not be disposed of in a registered landfill site or be taken up in a municipal waste stream, then the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

Can any part of the solid waste be classified as hazardous in terms of the NEM:WA?

YES NO

If YES, inform the competent authority and request a change to an application for scoping and EIA. An application for a waste permit in terms of the NEM:WA must also be submitted with this application.

Is the activity that is being applied for a solid waste handling or treatment facility?

YES NO

If YES, then the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA. An application for a waste permit in terms of the NEM:WA must also be submitted with this application.

b) Liquid effluent

Will the activity produce effluent, other than normal sewage, that will be disposed of in a municipal sewage system?

YES NO

If YES, what estimated quantity will be produced per month?

m³

Will the activity produce any effluent that will be treated and/or disposed of on site?

YES NO

If YES, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

Will the activity produce effluent that will be treated and/or disposed of at another facility?

YES NO

If YES, provide the particulars of the facility:

Facility name:	N/A	
Contact person:		
Postal address:		
Postal code:		
Telephone:	Cell:	
E-mail:	Fax:	

Describe the measures that will be taken to ensure the optimal reuse or recycling of waste water, if any:

N/A

c) Emissions into the atmosphere

Will the activity release emissions into the atmosphere other than exhaust emissions and dust associated with construction phase activities?

YES	NO
-----	----

If YES, is it controlled by any legislation of any sphere of government?

YES	NO
-----	----

If YES, the applicant must consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

If NO, describe the emissions in terms of type and concentration:

Private homestead, so only emissions would be braai fires.

d) Waste permit

Will any aspect of the activity produce waste that will require a waste permit in terms of the NEM:WA?

YES	NO
-----	----

If YES, please submit evidence that an application for a waste permit has been submitted to the competent authority

e) Generation of noise

Will the activity generate noise?

YES	NO
-----	----

If YES, is it controlled by any legislation of any sphere of government?

YES	NO
-----	----

If YES, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

If NO, describe the noise in terms of type and level:

--

13 WATER USE

Please indicate the source(s) of water that will be used for the activity by ticking the appropriate box(es):

Municipal	Water board	Groundwater	River, stream, dam or lake	Other	
-----------	-------------	-------------	----------------------------	-------	--

If water is to be extracted from groundwater, river, stream, dam, lake or any other natural feature, please indicate the volume that will be extracted per month:

250 k/litres	
YES	NO

Does the activity require a water use authorisation (general authorisation or water use license) from the Department of Water Affairs?

If YES, please provide proof that the application has been submitted to the Department of Water Affairs.

A Water Use Licence will be applied for on receipt of Environmental Authorisation for this project.

14 ENERGY EFFICIENCY

Describe the design measures, if any, that have been taken to ensure that the activity is energy efficient:

The structure of the buildings will have the traditional Zulu beehive design that consists of an entire covering of thatch. This is very efficient in terms of insulation against both heat and cold.

Describe how alternative energy sources have been taken into account or been built into the design of the activity, if any:

The entire development will be supplied by electricity from solar panels. This includes lighting and plug points. Gas will be used for fridges, stoves and geysers.

DRAFT

SECTION B: SITE/AREA/PROPERTY DESCRIPTION

Important notes:

- For linear activities (pipelines, etc) as well as activities that cover very large sites, it may be necessary to complete this section for each part of the site that has a significantly different environment. In such cases please complete copies of Section B and indicate the area, which is covered by each copy No. on the Site Plan.

Section B Copy No. (e.g. A):

- Paragraphs 1 - 6 below must be completed for each alternative.

- Has a specialist been consulted to assist with the completion of this section?

YES	NO
-----	----

If YES, please complete the form entitled "Details of specialist and declaration of interest" for each specialist thus appointed and attach it in Appendix I. All specialist reports must be contained in Appendix D.

Property description/physical address:

Province	KwaZulu-Natal
District Municipality	Zululand District Municipality (DC26)
Local Municipality	Ulundi Local Municipality (KZN266)
Ward Number(s)	16
Farm name and number	Welgekozen 191
Portion number	N/A
SG Code	NOGU00000000019100000

O F T C

Where a large number of properties are involved (e.g. linear activities), please attach a full list to this application including the same information as indicated above.

Current land-use zoning as per local municipality IDP/records:

Protected Area / Heritage Park

In instances where there is more than one current land-use zoning, please attach a list of current land use zonings that also indicate which portions each use pertains to, to this application.

Is a change of land-use or a consent use application required?

YES	NO
-----	----

1 GRADIENT OF THE SITE

Indicate the general gradient of the site.

Alternative S1:

Flat	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5
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Alternative S2 (if any): No Alternatives

Flat	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5
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Alternative S3 (if any):

Flat	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5
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2 LOCATION IN LANDSCAPE

Indicate the landform(s) that best describes the site:

2.1 Ridgeline	<input type="checkbox"/>	2.4 Closed valley	<input type="checkbox"/>	2.7 Undulating plain / low hills	<input type="checkbox"/>
2.2 Plateau	<input type="checkbox"/>	2.5 Open valley	<input checked="" type="checkbox"/>	2.8 Dune	<input type="checkbox"/>
2.3 Side slope of hill/mountain	<input checked="" type="checkbox"/>	2.6 Plain	<input type="checkbox"/>	2.9 Seafront	<input type="checkbox"/>

3 GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

Is the site(s) located on any of the following?

	Alternative S1:		Alternative S2 (if any):		Alternative S3 (if any):	
	YES	NO	YES	NO	YES	NO
Shallow water table (less than 1.5m deep)	YES	NO	YES	NO	YES	NO
Dolomite, sinkhole or doline areas	YES	NO	YES	NO	YES	NO
Seasonally wet soils (often close to water bodies)	YES	NO	YES	NO	YES	NO
Unstable rocky slopes or steep slopes with loose soil	YES	NO	YES	NO	YES	NO
Dispersive soils (soils that dissolve in water)	YES	NO	YES	NO	YES	NO
Soils with high clay content (clay fraction more than 40%)	YES	NO	YES	NO	YES	NO
Any other unstable soil or geological feature	YES	NO	YES	NO	YES	NO
An area sensitive to erosion	YES	NO	YES	NO	YES	NO

If you are unsure about any of the above or if you are concerned that any of the above aspects may be an issue of concern in the application, an appropriate specialist should be appointed to assist in the completion of this section. Information in respect of the above will often be available as part of the project information or at the planning sections of local authorities. Where it exists, the 1:50 000 scale Regional Geotechnical Maps prepared by the Council for GeoScience may also be consulted.

4 GROUNDCOVER

Indicate the types of groundcover present on the site. The location of all identified rare or endangered species or other elements should be accurately indicated on the site plan(s).

Natural veld - good condition ^E	Natural veld with scattered aliens ^E	Natural veld with heavy alien infestation ^E	Veld dominated by alien species ^E	Gardens
Sport field	Cultivated land	Paved surface	Building or other structure	Bare soil

If any of the boxes marked with an "E" is ticked, please consult an appropriate specialist to assist in the completion of this section if the environmental assessment practitioner doesn't have the necessary expertise.

5 SURFACE WATER

Indicate the surface water present on and or adjacent to the site and alternative sites?

Perennial River	YES	NO	UNSURE
Non-Perennial River (small stream below site)	YES	NO	UNSURE
Permanent Wetland	YES	NO	UNSURE
Seasonal Wetland	YES	NO	UNSURE
Artificial Wetland	YES	NO	UNSURE
Estuarine / Lagoonal wetland	YES	NO	UNSURE

If any of the boxes marked YES or UNSURE is ticked, please provide a description of the relevant watercourse.

There is a small stream below the site which was running when the May site inspection took place. However, it probably dries up during the winter months.

6 LAND USE CHARACTER OF SURROUNDING AREA

Indicate land uses and/or prominent features that currently occur within a 500m radius of the site and give description of how this influences the application or may be impacted upon by the application:

Natural area	Dam or reservoir	Polo fields
Low density residential	Hospital/medical centre	Filling station ^H
Medium density residential (Presbury)	School	Landfill or waste treatment site
High density residential	Tertiary education facility	Plantation
Informal residential ^A	Church	Agriculture (grazing land)

Retail commercial & warehousing	Old age home	River, stream or wetland
Light industrial	Sewage treatment plant ^A	Nature conservation area
Medium industrial ^{AN}	Train station or shunting yard ^N	Mountain, koppie or ridge
Heavy industrial ^{AN}	Railway line ^N	Museum
Power station	Major road (4 lanes or more) ^N	Historical building
Office/consulting room	Airport ^N	Protected Area
Military or police base/station/compound	Harbour	Graveyard
Spoil heap or slimes dam ^A	Sport facilities	Archaeological site
Quarry, sand or borrow pit	Golf course	Other land uses (describe)

If any of the boxes marked with an "N" are ticked, how will this impact / be impacted upon by the proposed activity?

N/A

If any of the boxes marked with an "An" are ticked, how will this impact / be impacted upon by the proposed activity? Specify and explain:

N/A

If any of the boxes marked with an "H" are ticked, how will this impact / be impacted upon by the proposed activity? Specify and explain:

N/A

Does the proposed site (including any alternative sites) fall within any of the following:

Critical Biodiversity Area (as per provincial conservation plan)	YES	NO
Core area of a protected area?	YES	NO
Buffer area of a protected area?	YES	NO
Planned expansion area of an existing protected area?	YES	NO
Existing offset area associated with a previous Environmental Authorisation?	YES	NO
Buffer area of the SKA?	YES	NO

If the answer to any of these questions was YES, a map indicating the affected area must be included in Appendix A.

7 CULTURAL/HISTORICAL FEATURES

Are there any signs of culturally or historically significant elements, as defined in section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999), including Archaeological or paleontological sites, on or close (within 20m) to the site? If YES, explain:

YES

NO

Uncertain

See Heritage Impact Assessment in Appendix D3.

If uncertain, conduct a specialist investigation by a recognised specialist in the field (archaeology or palaeontology) to establish whether there is such a feature(s) present on or close to the site. Briefly explain the findings of the specialist:

The Heritage Impact Assessment concluded that the proposed construction of the Royal Residence at KwaNobamba may proceed in terms of heritage values as no sites are in any danger of being destroyed or altered. All the known heritage sites within the eMakhosini Valley are situated more than 1 km from the proposed development and will not be threatened, altered or destroyed. However, it should also be pointed out that the KwaZulu-Natal Heritage Act requires that operations exposing any archaeological and historical residues should cease immediately, pending an evaluation by the heritage authorities.

Will any building or structure older than 60 years be affected in any way?

YES	NO
YES	NO

Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?

If YES, please provide proof that this permit application has been submitted to SAHRA or the relevant provincial authority.

8 SOCIO-ECONOMIC CHARACTER

a) Local Municipality

Please provide details on the socio-economic character of the local municipality in which the proposed site(s) are situated.

Level of unemployment:

The 2011 census revealed that the unemployment rates for the past three census' were 54.9 % in 1996, 60.8 % in 2001 and 41.1 % in 2011. For KwaZulu-Natal, the figures were 39.4 % in 1996, 49.0 % in 2001 and 33.0 % in 2011. Therefore, the Zululand District Municipality has the second highest unemployment rate in the Province, with Umkhanyakude being the highest out of 11 District Municipalities.

Economic profile of local municipality:

The average annual household income in 2001 was R24,745, and more than doubled by 2011 to R53,400, compared to R38,905 and R83,050 for KwaZulu-Natal. This is the fourth lowest annual household income out of 11 District Municipalities in the Province of KwaZulu-Natal. The majority of people in Zululand therefore earn less than R400 per month, with a small percentage earning up to R1600.

According to Census 2011, the population growth rate for Zululand District Municipality, from 2001 to 2011, is only 0.3 %. This may either be contributed to the negative influence that illnesses, such as HIV/AIDS, have, or it may be the result of migration, where younger persons are leaving rural homes and living on their own in cities where they study or in more urbanised areas away from their rural homes where job opportunities are more readily available. The migration factor can be seen in the STATSSAs statistical release document, where a strong tendency exists specifically towards migrating from KwaZulu-Natal to Gauteng:

Most of the employment opportunities in the District come from agriculture.

Level of education:

The 2011 Census revealed that the Zululand District Municipality had the following education levels for the population over 20 years (the levels for the whole of KwaZulu-Natal are in brackets):			
No schooling	-	19.2 %	(10.8 %)
Grade 12 (Std 10)	-	27.6 %	(31.2 %)
Higher	-	5.3 %	(9.1 %)

b) Socio-economic value of the activity

What is the expected capital value of the activity on completion?	R34 Million	
What is the expected yearly income that will be generated by or as a result of the activity?	R0	
Will the activity contribute to service infrastructure?	YES	NO
Is the activity a public amenity?	YES	NO
How many new employment opportunities will be created in the development and construction phase of the activity/ies?	None	
What is the expected value of the employment opportunities during the development and construction phase?	R125,000 PA	
What percentage of this will accrue to previously disadvantaged individuals?	100 %	
How many permanent new employment opportunities will be created during the operational phase of the activity?	15	
What is the expected current value of the employment opportunities during the first 10 years?	R2 Million	
What percentage of this will accrue to previously disadvantaged individuals?	100 %	

9 BIODIVERSITY

Please note: The Department may request specialist input/studies depending on the nature of the biodiversity occurring on the site and potential impact(s) of the proposed activity/ies. To assist with the identification of the biodiversity occurring on site and the ecosystem status consult <http://bgis.sanbi.org> or BGIShelp@sanbi.org. Information is also available on compact disc (cd) from the Biodiversity-GIS Unit, Ph (021) 799 8698. This information may be updated from time to time and it is the applicant/EAP's responsibility to ensure that the latest version is used. A map of the relevant biodiversity information (including an indication of the habitat conditions as per (b) below) and must be provided as an overlay map to the property/site plan as Appendix D to this report.

a) Indicate the applicable biodiversity planning categories of all areas on site and indicate the reason(s) provided in the biodiversity plan for the selection of the specific area as part of the specific category)

Systematic Biodiversity Planning Category				If CBA or ESA, indicate the reason(s) for its selection in biodiversity plan
Critical Biodiversity Area (CBA)	Ecological Support Area (ESA)	Other Natural Area (ONA)	No Natural Area Remaining (NNR)	Site is in Zululand Lowveld, which is classified as Vulnerable. Access road is in Northern Zululand Sourveld, also classified as Vulnerable.

b) Indicate and describe the habitat condition on site

Habitat Condition	Percentage of habitat condition class (adding up to 100%)	Description and additional Comments and Observations (including additional insight into condition, e.g. poor land management practises, presence of quarries, grazing, harvesting regimes etc).
Natural	100 %	Veld in good condition, with low alien plant infestation.
Near Natural (includes areas with low to moderate levels of alien invasive plants)	%	
Degraded (includes areas heavily invaded by alien plants)	%	
Transformed (includes cultivation, dams, urban, plantation, roads, etc)	%	

- c) **Complete the table to indicate:**
- the type of vegetation, including its ecosystem status, present on the site; and
 - whether an aquatic ecosystem is present on site.

Terrestrial Ecosystems		Aquatic Ecosystems							
Ecosystem threat status as per the National Environmental Management: Biodiversity Act (Act No. 10 of 2004)	Critical	Wetland (including rivers, depressions, channelled and unchannelled wetlands, flats, seeps pans, and artificial wetlands)	Estuary			Coastline			
	Endangered								
	Vulnerable								
	Least Threatened								
		YES	NO	UNSURE	YES	NO	YES	NO	

- d) **Please provide a description of the vegetation type and/or aquatic ecosystem present on site, including any important biodiversity features/information identified on site (e.g. threatened species and special habitats)**

The access road goes through Northern Zululand Sourveld (SVI22 KZN 42), which is on western edge of the proposed development, whilst the actual development will be within Zululand Lowveld (SVI 23 KZN 53).

The dominant structural vegetation type in Northern Zululand Sourveld is wooded grassland, in places pure sour grasslands and rarely also dense bushveld thickets (Mucina & Rutherford, 2006). As observed on site, in places the dominant trees are *Senegalia (Acacia) sieberiana*, *S. (Acacia) tortilis* subsp. *heteracantha* and *Vachellia (Acacia) nilotica*. The conservation status of Northern Zululand Sourveld is Vulnerable and only 4 % of this vegetation type is statutorily conserved. Some 22 % is already transformed, mainly by cultivation and plantations. Therefore, the eMakhosini-Opathe Heritage Park has an important part to play in the conservation of this vegetation type.

Zululand Lowveld is found in extensive flat or slightly undulating landscapes, supporting a complex of various bushveld units, ranging from dense thickets of *Dichrostachys cinerea* and *Acacia* (now *Senegalia* or *Vachellia*) species, through park-like savanna with flat-topped *Senegalia (Acacia) tortilis*, to tree-dominated woodland, with broad-leaved open bushveld, with species such as *Sclerocarya birrea* subsp. *caffra* and *Senegalia (Acacia) nigrescens*. Tall grassveld types, with sparsely scattered, solitary trees, form a mosaic, with the typical savanna thornveld, bushveld and thicket patches. Tall trees include species such as *Senegalia (Acacia) burkei*, *S. (Acacia) nigrescens* and *Sclerocarya birrea* subsp. *caffra*. The conservation status of Zululand Lowveld is Vulnerable and some 11 % is statutorily conserved. About 26 % has been transformed, mostly by cultivation (Mucina & Rutherford, 2006).

SECTION C: PUBLIC PARTICIPATION

1 ADVERTISEMENT AND NOTICE

Publication name	(1) The Mercury; (2) Isolezwe; (3) Zululand Observer	
Date published	26 May 2014 (all three on same date)	
Site notice position	Latitude	Longitude
	28° 25' 43.99"	31° 16' 01.67"
Date placed	English and Zulu notices were posted to Mrs Zanele Mbatha at KwaZulu Cultural Museum, Ondini, on 28 May 2014, to be displayed at the Mgungundlovu Multi Media Centre and at the entrance to the property where the proposed development is to take place.	

Include proof of the placement of the relevant advertisements and notices in Appendix E1.

2 DETERMINATION OF APPROPRIATE MEASURES

Provide details of the measures taken to include all potential I&APs as required by Regulation 54(2)(e) and 54(7) of GN R.543.

The following efforts were made to notify and inform the public and Interested and Affected Parties (I&APs) of the proposed development of the KwaNobamba Royal Residence:

1. An advertisement was placed in The Zululand Observer, The Mercury and the Isolezwe newspapers on 26 May 2014 (Appendix E1).
2. Notices to be placed at strategic locations – at the Mgungundlovu Multi Media Centre and at the entrance to property where the proposed development will take place (Appendix E1).
3. E-mail notification of the EIA process (Appendix E2) and copies of the Background Information Document (BID) (Appendix E1) were sent out to targeted Interested and Affected Parties on 6 June 2014. I&APs were told that the Draft BAR was available, on request, and a 40 day comment period was given to 18 July 2014.
4. Notification of the EIA process and copies of the Background Information Document (BID) (Appendix E1) were posted by registered mail (Appendix E4) to targeted Interested and Affected Parties on 7 June 2014. I&APs were told that the Draft BAR was available on request and a 40 day comment period was given to 18 July 2014.

Key stakeholders (other than organs of state) identified in terms of Regulation 54(2)(b) of GN R.543:

Title, Name and Surname	Affiliation/ key stakeholder status	Contact details (tel number or e-mail address)
Mr Abie Wentzel	KZN Tourism Authority	abie@zulu.org.za Ph: 031-3667500; Fx: 031-3056693
Dr Christina Curry	Botanical Society	botsockzninland@gmail.com
Mr L & Mrs J Harrison	Botanical Society Secretary	flharrison@telkomsa.net Cell: 0829213118
Ms Isabel Johnson	CREW	JohnsonI@botanicalsociety.org.za
Mr David Styles	PlantChat	davidstyles@vodamail.co.za
Mr Martin Taylor	Birdlife South Africa	taita@birdlife.org.za Ph: 011-3723600

Include proof that the key stakeholder received written notification of the proposed activities as Appendix E2. This proof may include any of the following:

- e-mail delivery reports;
- registered mail receipts;
- courier waybills;
- signed acknowledgements of receipt; and/or
- or any other proof as agreed upon by the competent authority.

3 ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

Summary of main issues raised by I&APs	Summary of response from EAP
No issues raised yet (09/06/2013).	

4 COMMENTS AND RESPONSE REPORT

The practitioner must record all comments received from I&APs and respond to each comment before the Draft BAR is submitted. The comments and responses must be captured in a comments and response report as prescribed in the EIA regulations and be attached to the Final BAR as Appendix E3.

Comments and Responses are contained in separate pdf, “KwaNobamba - App E - Public Participation.pdf”

5 AUTHORITY PARTICIPATION

Authorities and organs of state identified as key stakeholders:

Authority/Organ of State	Contact person (Title, Name and Surname)	Tel No	Fax No	e-mail	Postal address
KZN Department of Agriculture and Environmental Affairs - North Region	Ms Zama Mbanjwa	035 7806700	035 7890662	zama.mbanjwa@kzndae.gov.za	P/Bag X1048, Richards Bay, 3900
Water Quality Management Department of Water Affairs	Scientific Manager: Water Quality Management	031-3362750	031-3059915	ButheleziS2@dwa.gov.za	PO Box 1018, Durban, 4000
Department of Agriculture, Forestry and Fisheries: Land use and Soil management	Head of Office	033-3453515	033 3946161	LeilanieL@nda.agric.za (secretary)	PO Box 345 Pietermaritzburg, 3200
Deputy Director: Regulation & Oversight Department of Agriculture, Forestry and Fisheries	Mr Wiseman Rozani	033-3927761	033-3558097	wisemanr@daff.gov.za	P/Bag X9029 Pietermaritzburg, 3200
Municipal Manager Zululand District Municipality	Mr Johan de Klerk			info@zululand.org.za	P/Bag X76, Ulundi, 3838
Municipal Manager Ulundi Local Municipality	Princess Buthelezi			info@ulundi.co.za	P/Bag X17, Ulundi, 3638
KZN Department of Transport	Mr Roy Ryan	033-3550570	033-3558097	roy.ryan@kzntransport.gov.za	P/Bag X9043, Pietermaritzburg, 3200
Amafa aKwaZulu-Natali	Ms Lindi Msomi Ms Bernadet Pawandiwa	033-3946543		lindim@amafapmb.co.za bernadetp@amafapmb.co.za	PO Box 2685, Pietermaritzburg, 3200
Head: Integrated Environmental Management, Ezemvelo KZN Wildlife	Mr Andrew Blackmore/ Ms Irene Hatton	033-8451452	033-451499	ihatton@kznwildlife.com	PO Box 13053, Cascades, 3202

Include proof that the Authorities and Organs of State received written notification of the proposed activities as appendix E4.

Proof of notification of Organs of State is contained in separate pdf, “KwaNobamba - App E - Public Participation.pdf”

In the case of renewable energy projects, Eskom and the SKA Project Office must be included in the list of Organs of State.

6 CONSULTATION WITH OTHER STAKEHOLDERS

Note that, for any activities (linear or other) where deviation from the public participation requirements may be appropriate, the person conducting the public participation process may deviate from the requirements of that sub-regulation to the extent and in the manner as may be agreed to by the competent authority.

Proof of any such agreement must be provided, where applicable. Application for any deviation from the regulations relating to the public participation process must be submitted prior to the commencement of the public participation process.

A list of registered I&APs must be included as appendix E5.

Copies of any correspondence and minutes of any meetings held must be included in Appendix E6.

A list of registered I&APs and copies of correspondence are contained in separate pdf, “KwaNobamba - App E - Public Participation.pdf”

IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2010, and should take applicable official guidelines into account. The issues raised by interested and affected parties should also be addressed in the assessment of impacts.

7 IMPACTS THAT MAY RESULT FROM THE PLANNING AND DESIGN, CONSTRUCTION, OPERATIONAL, DECOMMISSIONING AND CLOSURE PHASES AS WELL AS PROPOSED MANAGEMENT OF IDENTIFIED IMPACTS AND PROPOSED MITIGATION MEASURES

Provide a summary and anticipated significance of the potential direct, indirect and cumulative impacts that are likely to occur as a result of the planning and design phase, construction phase, operational phase, decommissioning and closure phase, including impacts relating to the choice of site/activity/technology alternatives as well as the mitigation measures that may eliminate or reduce the potential impacts listed. This impact assessment must be applied to all the identified alternatives to the activities identified in Section A(2) of this report.

See Appendix F: Impact Table, which gives more detail on Nature, Extent, Duration, Intensity, Frequency, Probability, Reversibility, Irreplaceable Loss of Resources, Significance, Confidence and Mitigation (electronic copy, see separate pdf, “KwaNobamba - App F -Impact Assessment”).

Activity	Impact summary	Significance	Proposed mitigation
Alternative 1 (preferred alternative)			
	<p>Direct impacts:</p> <ul style="list-style-type: none"> Disturbance to surrounding vegetation and removal of trees. Within the footprint of each building, some trees may have to be removed. Possible pollution of groundwater from spillage of fuel or chemicals used in construction. 	<ul style="list-style-type: none"> Low Low 	<ul style="list-style-type: none"> Control over movement of machinery to pre-defined areas and control over movement and activities of staff. Care to avoid removing more trees than necessary, or damaging trees that are not to be removed. Re-plant disturbed areas with appropriate species. Plant and machinery to be refuelled at a designated re-fuelling area, or the closest fuel outlet. If not reasonably practical, then surface under the temporary refuelling area must be protected against pollution by use of a drip tray, to the reasonable satisfaction of the ECO, prior to any refuelling activities. If a temporary fuel storage tank is needed, it should have a bund wall sufficient to capture the contents of the tank in case of leakage.

Activity	Impact summary	Significance	Proposed mitigation
	<ul style="list-style-type: none"> • Possible contamination of soil and groundwater from incorrect design or installation of sewage package plant or septic tanks. • Short-term impacts associated with construction will include noise and increase in dust. • Risk of illegal activities by construction staff. Construction staff may be inclined to kill snakes, other reptiles and other animals on encountering them or they may be tempted to take plants or plant parts for muthi or other purposes. 	<ul style="list-style-type: none"> • Low • Low • Low 	<ul style="list-style-type: none"> • Adequately designed and installed package plant and/or septic tank to be used. If any septic tanks are used, soil percolation tests will be needed. • Working to only take place during the week and during normal working hours. • Staff to be educated not to remove plant material or hunt, snare or kill any animal. Penalties for non-compliance could include criminal charges being laid, but any staff found not complying to be banned from further work on site. Contractor to be fined if staff do not comply.
	<p>Indirect impacts:</p> <ul style="list-style-type: none"> • Poor management of waste, particularly food waste from workers, may cause problem animal situations to develop. • Lack of appropriate toilet facilities for construction staff or lack of control over staff using the bush instead of toilets could result in faecal contamination of the site. • Lack of control over staff movements and littering could result in wind-blown paper, plastic and other waste around the site. • Possibility that construction staff may be tempted to set snares and/or collect muthi plants. 	<ul style="list-style-type: none"> • Low • Low • Low • Low 	<ul style="list-style-type: none"> • Animal proof bins to be provided and emptied on a regular basis. Staff to be instructed to use the bins and not to feed animals. • Chemical toilets to be provided and serviced on a regular basis. Staff to be directed that they may not defecate in the veld. • Environmental education to be given to all construction staff and penalties for non-compliance to be levied against contractors of their staff do not comply. • Along with environmental education, staff to be warned that criminal charges will be laid in the event removal of muthi plants or snaring of animals.
	<p>Cumulative impacts:</p> <ul style="list-style-type: none"> • Poor management of soil during the construction process could result in rapid soil loss if a severe storm were to be experienced during that process and could alter the hydrology in the immediate vicinity. 	<ul style="list-style-type: none"> • Low 	<ul style="list-style-type: none"> • Topsoil removed to be used for rehabilitation work. Reshaping of soil profile and rehabilitation to be ongoing, even during construction. Efforts made to manage and dissipate energy of stormwater. • Every effort will be made to ensure sufficient vegetation cover around the newly constructed buildings and

Activity	Impact summary	Significance	Proposed mitigation
			infrastructure. Where short grass is to be maintained, <i>Cynodon dactylon</i> , <i>Stenotaphrum secundatum</i> , <i>Dactyloctenium australe</i> , or other similar indigenous creeping grasses found near the site, will be planted as soon as possible. In the short term, it can be irrigated to speed up establishment and decrease the risk of erosion
Alternative 2 (No Alternatives)			
	Direct impacts: •		•
	Indirect impacts: •	•	
	Cumulative impacts: •		•
Alternative 3			
	Direct impacts:		
	Indirect impacts:		
	Cumulative impacts:		
No-go option			
	Direct impacts: • The veld on the site will remain in an undisturbed state and there will be no impacts as a result of construction.	N/A	No mitigation required as no activities will be undertaken.
	Indirect impacts: • No indirect impacts.	N/A	No mitigation required as no activities will be undertaken.
	Cumulative impacts: • Improved ongoing protection of Vulnerable vegetation types.	N/A	No mitigation required as no activities will be undertaken.

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A complete impact assessment in terms of Regulation 22(2)(i) of GN R.543 must be included as Appendix F.

(Electronic version of Impact Assessment table saved as a separate pdf entitled, “KwaNobamba - App F - Impact Assessment.pdf”)

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8 ENVIRONMENTAL IMPACT STATEMENT

Taking the assessment of potential impacts into account, please provide an environmental impact statement that summarises the impact that the proposed activity and its alternatives may have on the environment after the management and mitigation of impacts have been taken into account, with specific reference to types of impact, duration of impacts, likelihood of potential impacts actually occurring and the significance of impacts.

Alternative A (preferred alternative)

In terms of weighing up benefits against impacts associated with the building of the KwaNobamba Royal Residence, the impacts will be of relatively limited extent, most of which can be mitigated. The major impact is essentially the loss of a small proportion of Vulnerable Zululand Lowveld (where residence will be located) and slight disturbance to the Vulnerable Northern Zululand Sourveld (through which the existing access road is located).

Uncertainties and gaps in knowledge

There are no uncertainties or gaps in knowledge in this instance, except that the actual size and extent of the proposed dams needs clarification (this will be finalised in the final BAR).

Overall Environmental Significance

The impacts will be of low significance and duration and, particularly the construction impacts, can be relatively easily mitigated through proper management of the construction phase, as well as the operational phase.

Alternative B

No Alternative B

Alternative C

No Alternative C

No-go alternative (compulsory)

If the KwaNobamba Royal Residence does not go ahead, it will mean that there is a largely undisturbed and untransformed area of the eMakhosini Valley available for conservation. However, there will also be a lost opportunity for the Zulu Royal Family to return to the birthplace of the Zulu Nation and to create a living heritage within that area.

SECTION D: RECOMMENDATION OF PRACTITIONER

Is the information contained in this report and the documentation attached hereto sufficient to make a decision in respect of the activity applied for (in the view of the environmental assessment practitioner)?

YES	NO
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If "NO", indicate the aspects that should be assessed further as part of a Scoping and EIA process before a decision can be made (list the aspects that require further assessment).

N/A

If "YES", please list any recommended conditions, including mitigation measures that should be considered for inclusion in any authorisation that may be granted by the competent authority in respect of the application.

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Is an EMPr attached?

YES	NO
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The EMPr must be attached as Appendix G.

[EMPr attached as separate pdf - "KwaNobamba - App G - EMPr.pdf"](#)

The details of the EAP who compiled the BAR and the expertise of the EAP to perform the Basic Assessment process must be included as Appendix H.

If any specialist reports were used during the compilation of this BAR, please attach the declaration of interest for each specialist in Appendix I.

Any other information relevant to this application and not previously included must be attached in Appendix J.

[Mr Barry Mark James](#)

NAME OF EAP

BJames

SIGNATURE OF EAP

DATE 9 June 2014 (Draft)

SECTION E: APPENDIXES

The following appendixes must be attached:

APPENDIX A: MAPS

APPENDIX B: PHOTOGRAPHS

APPENDIX C: FACILITY ILLUSTRATION(S)

APPENDIX D: SPECIALIST REPORTS (INCLUDING TERMS OF REFERENCE)

APPENDIX E: PUBLIC PARTICIPATION

APPENDIX F: IMPACT ASSESSMENT

APPENDIX G: ENVIRONMENTAL MANAGEMENT PROGRAMME (EMPR)

APPENDIX H: DETAILS OF EAP AND EXPERTISE

APPENDIX I: SPECIALIST'S DECLARATION OF INTEREST

APPENDIX J: ADDITIONAL INFORMATION

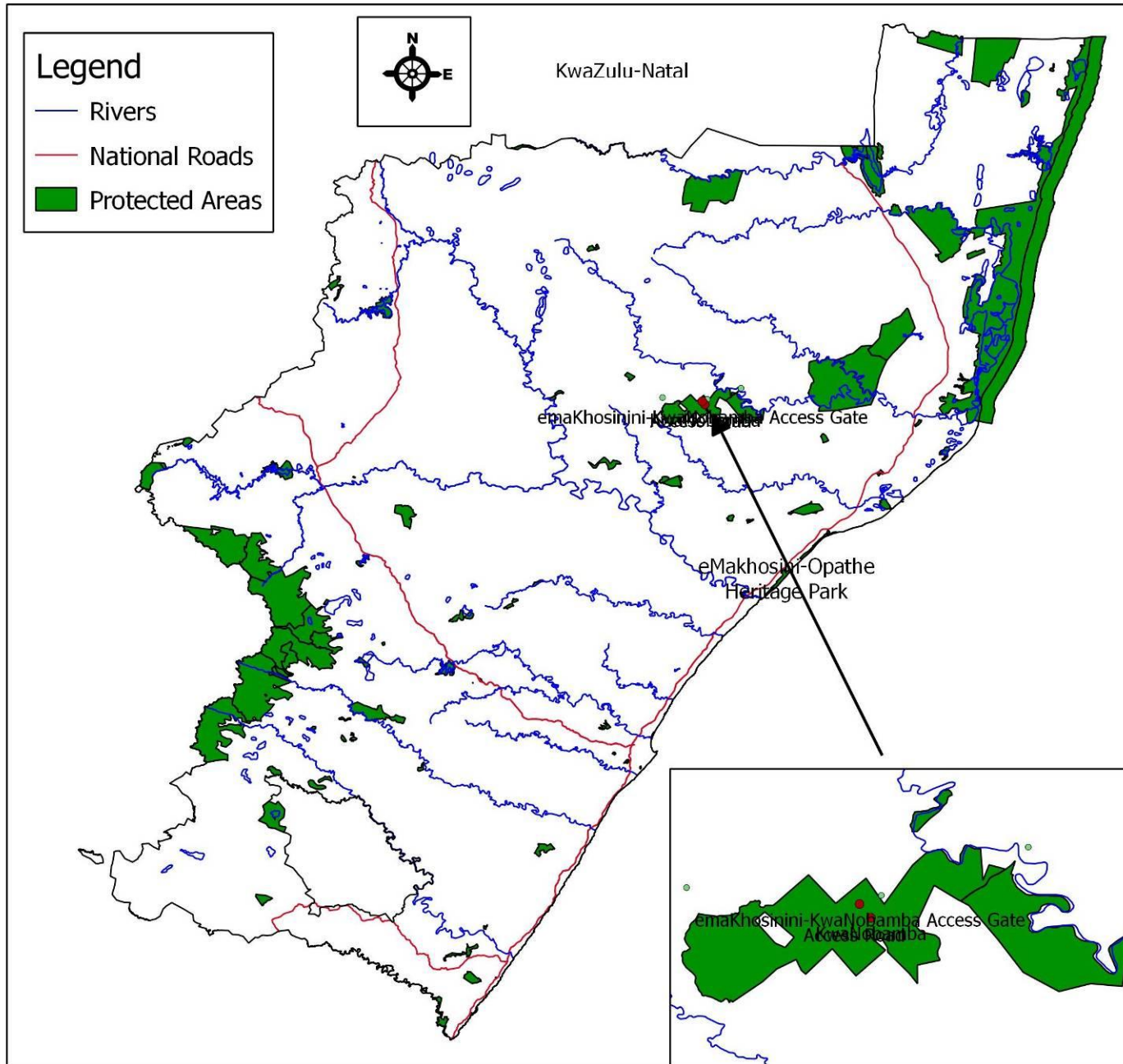
Appendix A: Maps

Map 1: Location of KwaNobamba within KwaZulu-Natal.

Map 2: Location of KwaNobamba within eMakhosini-Opathe Heritage Park.

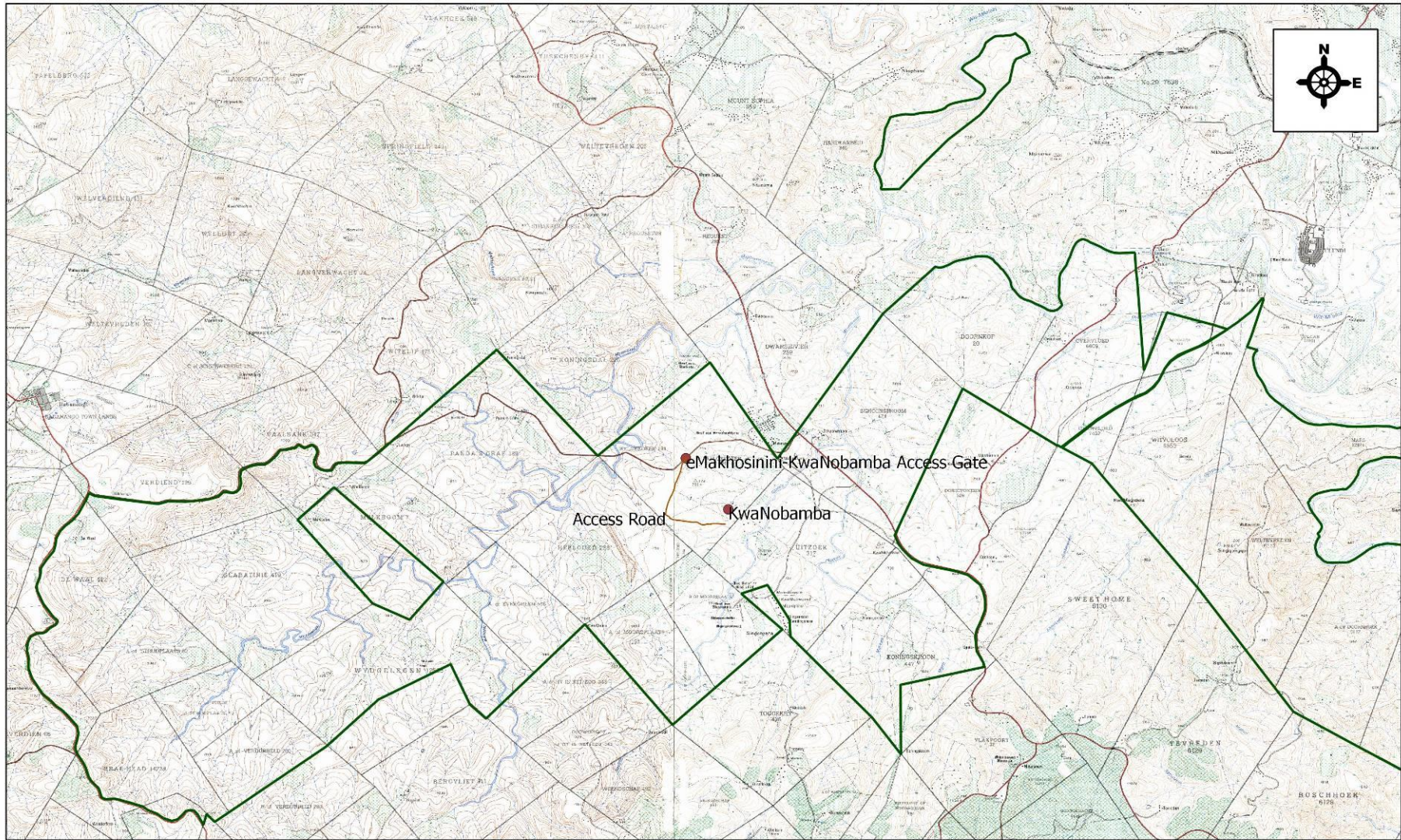
Map 3: KwaNobamba Vegetation Communities

Location of KwaNobamba Royal Residence in KwaZulu-Natal



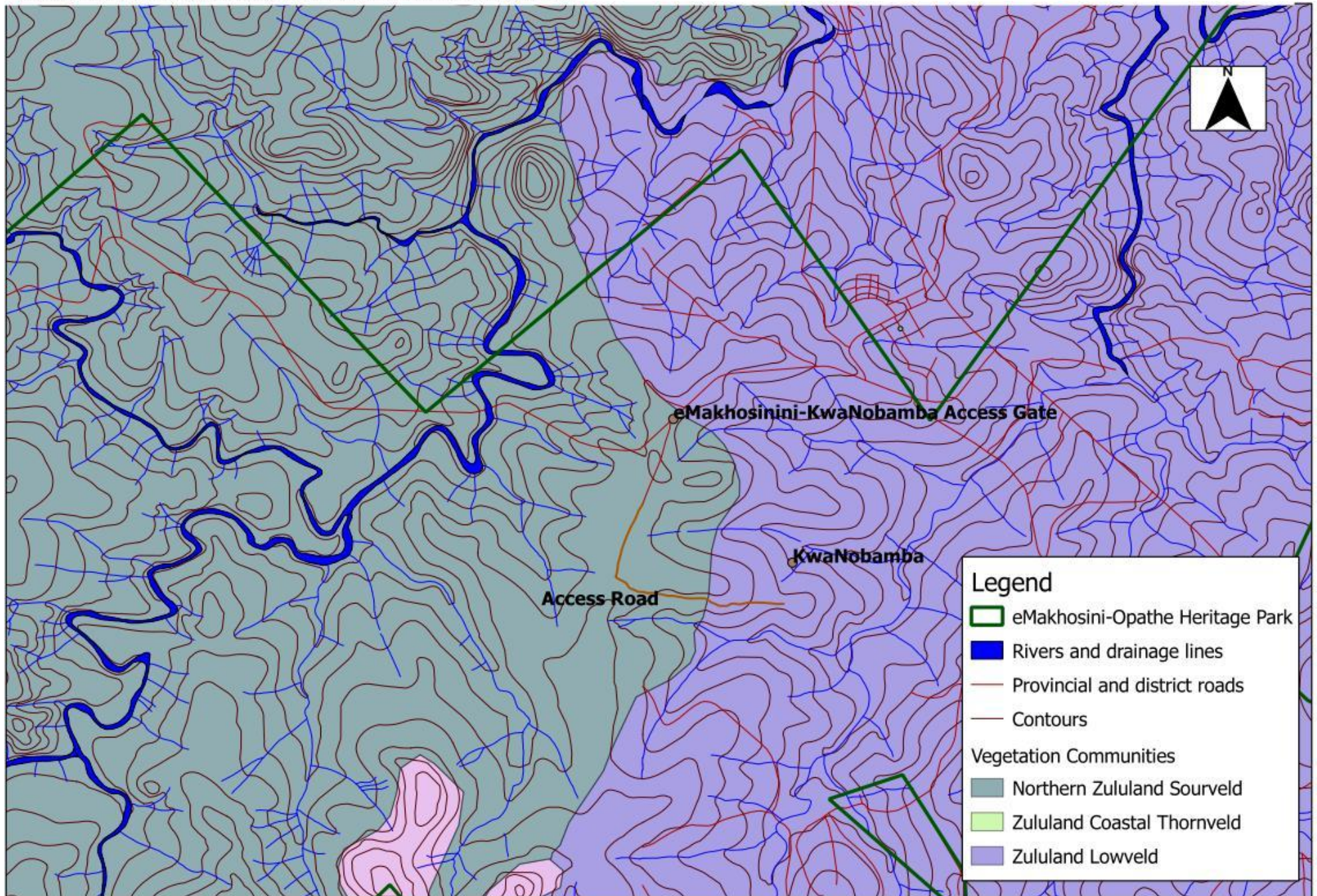
Map 1: Location of KwaNobamba Royal Residence within KwaZulu-Natal

Location of proposed KwaNobamba Royal Residence within the eMakhosini-Opathe Heritage Park



Map 2: Location of KwaNobamba Royal Residence within the eMakhosini-Opathe Heritage Park

Vegetation communities associated with proposed KwaNobamba Royal Residence



Map 3: KwaNobamba Vegetation Communities

**Appendix B:
Photographs**

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Photo 1: Veld structure around proposed KwaNobamba Royal Residence development site.



Photo 2: Site of proposed KwaNobamba Royal Residence. Residence will be sited in clearing between larger trees.

**Appendix C:
Facility illustration(s)**

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Figure 1: Proposed KwaNobamba Royal Residence layout

Appendix D: Specialist reports

- 1 Terms of Reference for BAR.**
- 2 Geology and Soils – Council for Geoscience.**
- 3 Biophysical Report (including Avifauna) – Brousse-James & Associates.**
- 4 Heritage Impact Assessment – Active Heritage cc.**

Terms of Reference for Specialists

1. Biophysical Report – Brousse-James & Associates.

Brousse-James & Associates are the Environmental Assessment Practitioners who were contracted by the Zulu Royal Family to conduct the Basic Assessment Process. Since Mr Barry James is a registered professional ecologist and environmental assessment practitioner, he is qualified to conduct both the BAR and the baseline biophysical report. In the initial quote, he undertook to write the baseline biophysical report, with the help of ornithologist, Dr David Johnson. The biophysical report is to cover the following:

- A discussion on the vegetation communities present in and around the area and a report, following a field visit, on the state of the vegetation in the vicinity of the proposed activity.
- A desktop study of animals likely to occur in the area.
- An assessment of the likely impacts on soils, vegetation communities and animals and mitigation measures that can be implemented to avoid or reduce these impacts.

2. Avifauna (bird) Report – Dr David Johnson.

The specific focus of the avifauna report was to:

- Discuss the various bird habitats that are present in the area around the proposed KwaNobamba Royal Residence.
- List bird species that would be likely to occur in the vicinity, with specific focus on important species for conservation.
- Give an assessment of the likely impacts on habitats and bird species and mitigation measures that can be implemented to avoid or reduce these impacts.

3. Geology, Soils and Groundwater - Council for Geoscience.

The Council for Geoscience was contracted to conduct a preliminary geotechnical investigation of the site, which was to include the following:

- A description of the geology of the site.
- Soil landtype conditions.
- The groundwater environment.

4. Heritage Impact Assessment – Active Heritage.

Mr Frans Prins of Active Heritage cc was contracted to conduct a cultural heritage assessment of the site of the proposed KwaNobamba Royal Residence, to determine whether or not there would be any archaeological reason why development may not proceed as planned. The terms of reference included:

- A background description of the archaeological history of the area.
- On-site investigation to look for any evidence of historic buildings, graves, or other heritage sites on the proposed footprint.
- Give recommendations related to heritage aspects of the project.

Geology and Soils Report saved as a separate pdf:
“KwaNobamba - App D1 - Geology_Soils Report.pdf”

Biophysical Report saved as a separate pdf:
“KwaNobamba – App D2 - Biophysical Report.pdf”

Heritage Impact Assessment Report saved as a separate pdf:
“KwaNobamba – App D3 - Heritage Assessment.pdf”

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Appendix E: Public Participation

- E1: Copies of advertisements, site notices and Background Information Document (BID).
- E2: Proof of notification of key stakeholders.
- E3: Summary of Comments and Responses (Table 1).
- E4: Proof of notification of organs of State.
- E5: Interested and Affected Party Distribution Register (Table 2).
- E6: Copies of Correspondence with I&AP's

Appendix E: Public Participation saved as a separate pdf:
“KwaNobamba - App E - Public Participation”

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Appendix F: Impact Assessment

Table 1: Magnitude of potential impacts.
Table 2: Impact magnitude conventions.

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Impact Assessment table saved as a separate pdf:
“KwaNobamba – App F – Impact Assessment.pdf”

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**Appendix G:
Environmental Management
Programme (EMPr)**

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EMP saved as a separate pdf:

“KwaNobamba – App G - EMPr.pdf”

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**Appendix H:
Details of EAP and expertise**

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Details of Environmental Assessment Practitioner

GNR 543 of the National Environmental Management Act, No. 107 of 1998, and EIA Regulations (2010) includes a number of provisions regarding the content of EMPs.

Section 33 states - "A draft environmental management programme must include:

- a) Details of -
 - i) The person who prepared the environmental management programme; and
 - ii) The expertise of that person to prepare an environmental management programme; "

The name and details of the EAP are thus provided below:

This EMP was prepared by Brousse-James & Associates. Brousse-James & Associates is a Close Corporation, registered in 1997 (CK97/57246/23), and jointly owned by Mr Barry Mark James and Mrs Danielle Brousse James. All professional work taken on by Brousse-James & Associates has been conducted by Barry James, with Danielle James providing assistance with administration, editing of documents and field work. When required, other specialist sub-consultants are subcontracted. Since 1997, Brousse-James & Associates has been involved in a variety of projects, ranging from wildlife management plans, environmental journalism, specialised computer programming for biological and conservation applications, environmental impact assessments, specialist biodiversity assessments, writing of rehabilitation plans and environmental management programmes, and Barry James has also acted as environmental control officer for a number of projects.

Expertise to undertake Environmental Assessment Process

Qualifications and memberships:

- **PhD (Da Vinci Institute)** Currently registered for a PhD, looking at sustainable utilisation of indigenous Southern African wood.
- **MSc** (Natal University - 1998); Project Title - Succession and soil properties following the removal of pine plantations on the Eastern Shores of Lake St Lucia, South Africa.
- **BSc (Hons)** (Potchefstroom University - 1995); Stress Physiology (Distinction); Soil Degradation (Distinction) Plant Ecology and Management; Analytical Procedures in Ecology; Reclamation Ecology; Soil Classification; Taxonomy; Modern Systematics; Statistics (Distinction). Project Title - Numerical analysis of the vegetation, its distribution and relation to major environmental gradients in the south-western portion of Umfolozi Game Reserve.
- **BSc** (UNISA - 1994); Majors: Zoology and Botany. Distinctions in Plant Ecology and Animal Physiology.
- **Pr.Sci.Nat.** - Registered with the South African Council for Natural Scientific Professions in the field of Ecological Science (Registration No. 400263/06).
- **MSAIE&ES** - Professional member of the Southern African Institute of Ecologists and Environmental Scientists.
- **EAPSA** - Certified Environmental Assessment Practitioner with Interim Certification Board.
- **Numerous Natal Parks Board In-Service Courses**
- **Short Courses of relevance to the EIA Process:**
 - Geographic Information Systems (GIS) - (Natal University, 1998)
 - Integrated Environmental Management (IEM) - (Natal University, 1998)
 - Crash course in Environmental Auditing - (Eagle Environmental, 1999)

- Soil Classification and Land Capability - (Cedara, 1999)
- Environmental Impact Assessment - (Rhodes University, 2006)

Applicable Experience:

A comprehensive list of projects undertaken by Brousse-James & Associates is available as required.

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**Appendix I:
Specialist Declaration
of Interest**

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Specialist declarations saved as separate pdfs:

KwaNobamba – Specialist Declaration – G Botha.pdf”

“KwaNobamba – Specialist Declaration – B James.pdf”

“KwaNobamba – Specialist Declaration – D Johnson.pdf”

“KwaNobamba – Specialist Declaration – F Prins.pdf”

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**Appendix J:
Additional Information**

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