
**HERITAGE SURVEY OF THE PROPOSED QUMBU
WIND ENERGY PROJECT, EASTERN CAPE
FOR COASTAL ENVIRONMENTAL SERVICES**

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INTRODUCTION

“InnoWind (Pty) Limited is a South Africa-based renewable energy generator that develops, finances, builds, operates and maintains commercial wind powered generation facilities... InnoWind proposes the development of a wind energy facility in the Qumbu area, in the Eastern Cape. The proposed site is located in the OR Tambo District, close to Umtata.

The wind farm will host up to (30) turbines, with a potential power output of eighty (80) megawatts (MW). Other infrastructure associated with the proposed wind farm will be:

- Concrete foundations to support the wind towers,
- Approximately 3.5 meter wide internal access roads to each turbine
- Underground cables connecting each turbine to the other and to the substation,
- A small building to house the control instrumentation and interconnection elements, as well as a storeroom for maintenance equipment.

The ultimate size of the wind turbines will depend on further technical assessments but will typically consist of rotor turbines (3 x 50m blades) with rotor diameters of around 80 - 100 meters atop a 100 meter high steel or hybrid tower.

According to the project proponent, the motivation for the proposed project arose from the following potential benefits:

- Climate change: Due to concerns such as climate change, and the on-going exploitation of non-renewable resources, there is increasing international pressure on countries to increase their share of renewable energy generation. The South African government has recognized the country's high level of renewable energy potential and has placed targets of 10 000 GWh of renewable energy by 2013. In

order to kick-start the renewable energy sector in South Africa, a Feed-in Tariff for various renewable energy technologies was established. This Feed-in Tariff guarantees the price of electricity supply from the renewable energy installations.

- Social upliftment: With the expected wind resources in the area, the proposed project will contribute directly to the upliftment of the individuals and societies in which they live. InnoWind (Pty) Ltd intends to identify community development projects that will be implemented to the fundamental improvement of the Mhlonlto Local Municipality.
- Electricity supply: The establishment of the proposed Qumbu Energy Facility will contribute towards strengthening the existing electricity grid for the Qumbu area and will aid the government in achieving its goal of a 30% share of all new power generation being derived from Independent Power Producers (IPPs).” (CES BID for the project)

Umlando was contracted by Coastal & Environmental Services to undertake the heritage survey of a proposed wind energy project. The location of the project is shown in figures 1 – 3.

The location of the towers tends to be on high hills with steep slopes. These are areas that are not usually occupied by humans in the past. The survey located several modern heritage sites, in the form of human graves. One cemetery is a red flag for a turbine.

No cultural landscapes were identified during the survey, and none were noted by the community in public meetings.

FIG. 1 GENERAL LOCATION OF THE QUMBU WIND ENERGY PROJECT

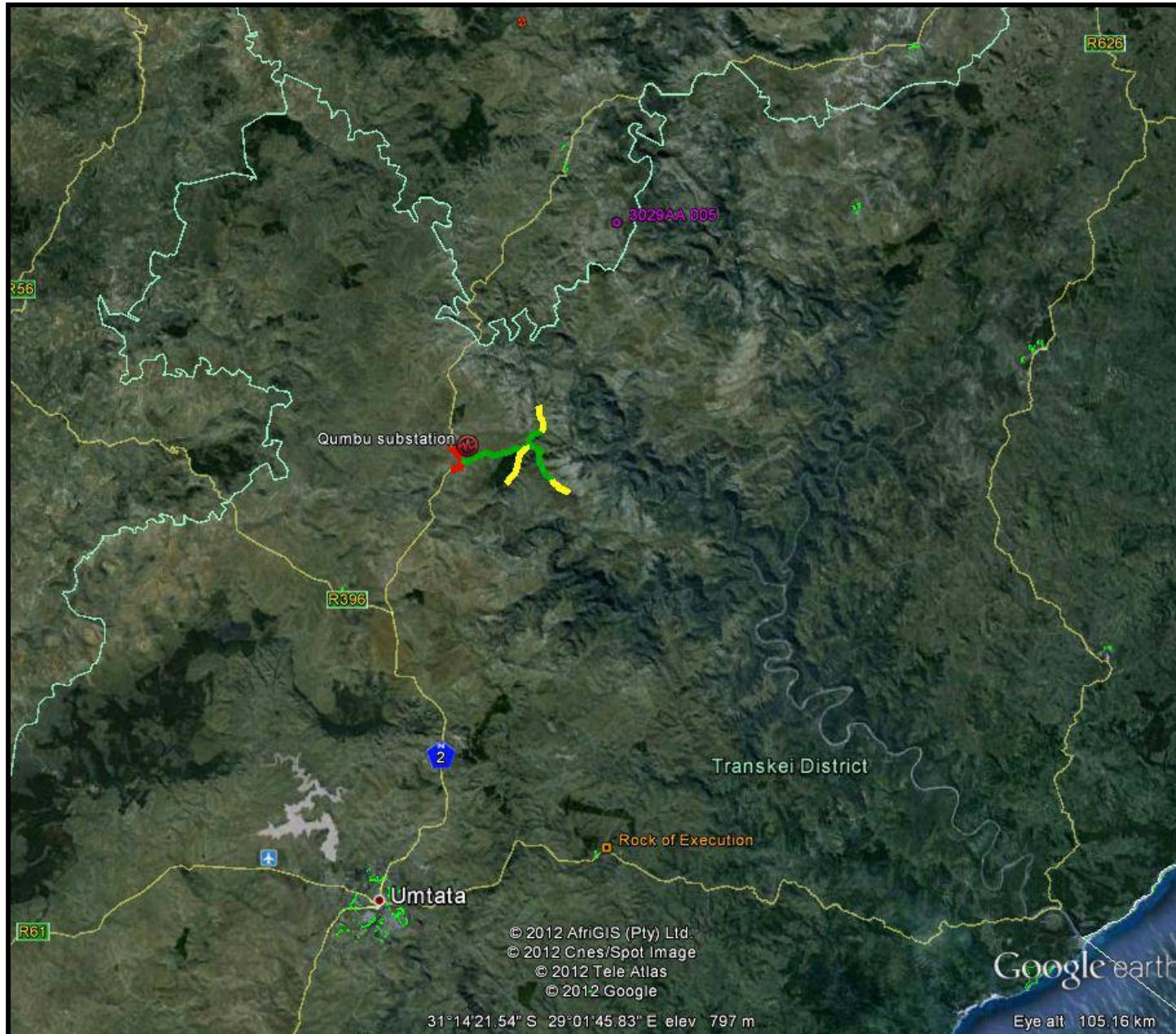


FIG. 2: AERIAL OVERVIEW OF THE QUMBU WIND ENERGY PROJECT

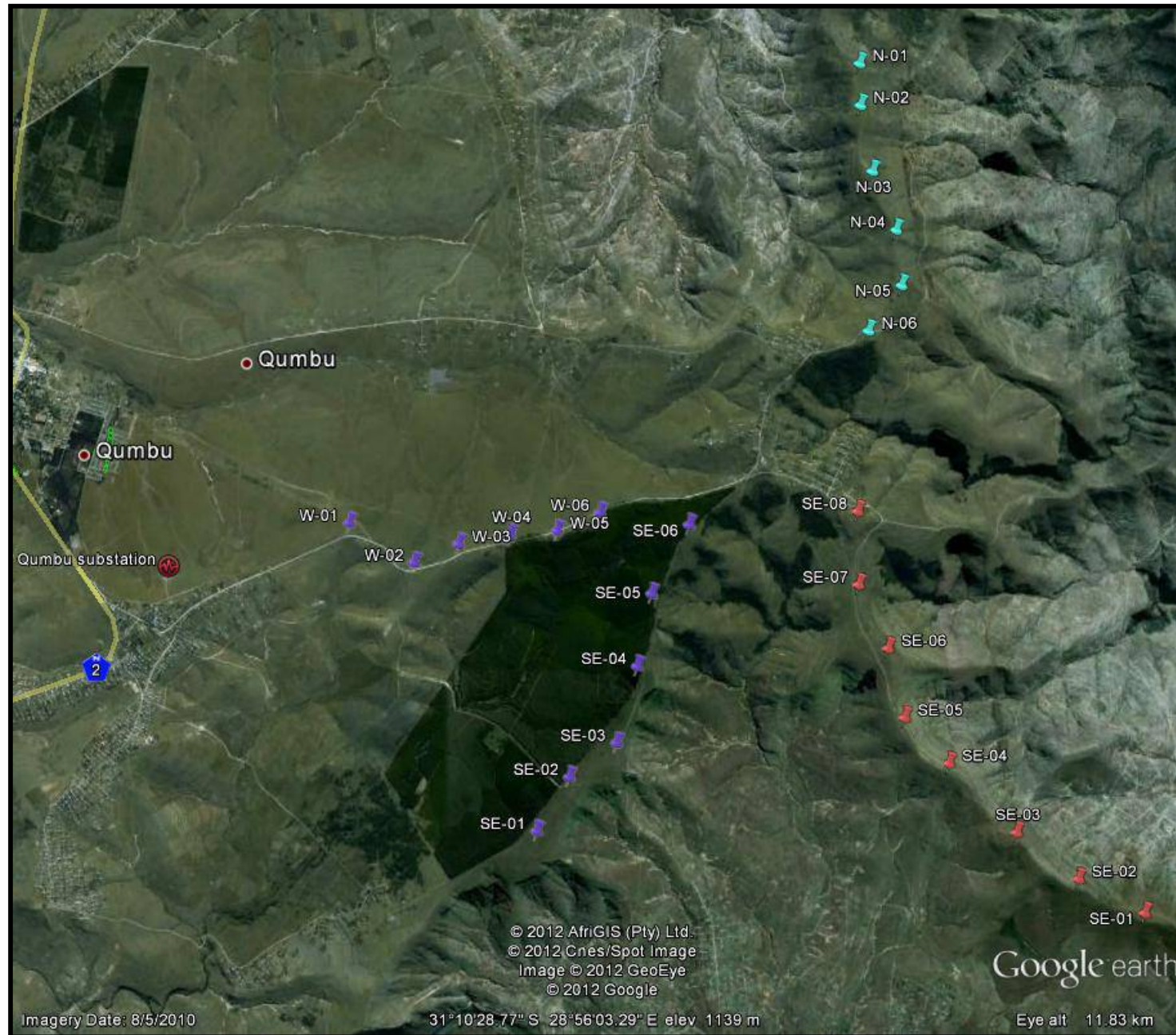
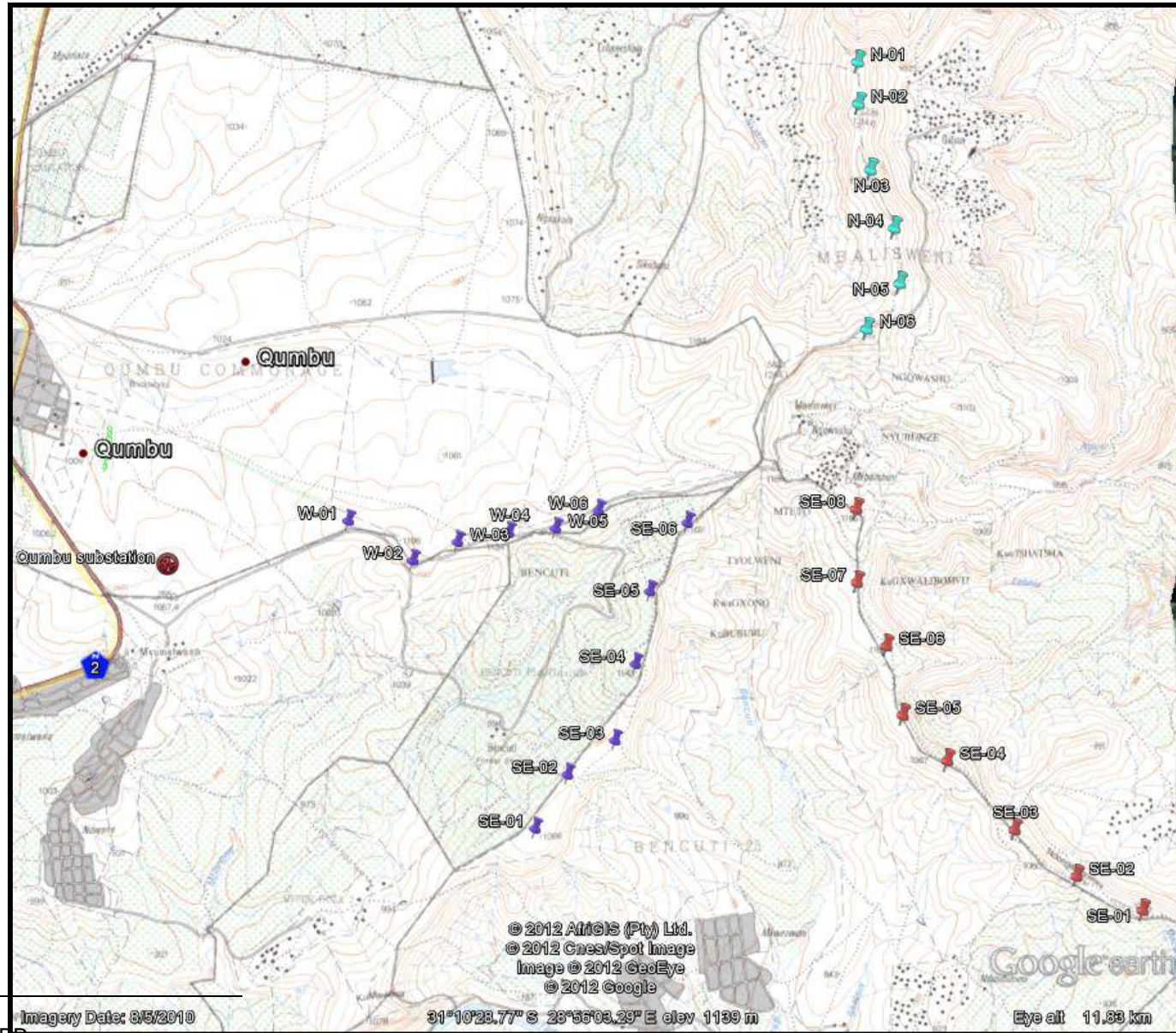


FIG. 3: TOPOGRAPHICAL MAP OF THE QUMBU WIND ENERGY PROJECT¹



¹ 31288BB

1982

NATIONAL HERITAGE RESOURCES ACT OF 1999

The National Heritage Resources Act of 1999 (pp 12-14) protects a variety of heritage resources. These resources are defined as follows:

1. "For the purposes of this Act, those heritage resources of South Africa which are of cultural significance or other special value for the present community and for future generations must be considered part of the national estate and fall within the sphere of operations of heritage resources authorities.
2. Without limiting the generality of subsection (1), the national estate may include—
 - 2.1. Places, buildings, structures and equipment of cultural significance;
 - 2.2. Places to which oral traditions are attached or which are associated with living heritage;
 - 2.3. Historical settlements and townscapes;
 - 2.4. Landscapes and natural features of cultural significance;
 - 2.5. Geological sites of scientific or cultural importance;
 - 2.6. Archaeological and palaeontological sites;
 - 2.7. Graves and burial grounds, including—
 - 2.7.1. Ancestral graves;
 - 2.7.2. Royal graves and graves of traditional leaders;
 - 2.7.3. Graves of victims of conflict;
 - 2.7.4. Graves of individuals designated by the Minister by notice in the Gazette;
 - 2.7.5. Historical graves and cemeteries; and
 - 2.7.6. Other human remains which are not covered in terms of the Human Tissue Act, 1983 (Act No. 65 of 1983);
3. Sites of significance relating to the history of slavery in South Africa;
 - 3.1. Movable objects, including—

4. Objects recovered from the soil or waters of South Africa, including archaeological and palaeontological objects and material, meteorites and rare geological specimens;
 - 4.1. Objects to which oral traditions are attached or which are associated with living heritage;
 - 4.2. Ethnographic art and objects;
 - 4.3. Military objects;
 - 4.4. objects of decorative or fine art;
 - 4.5. Objects of scientific or technological interest; and
 - 4.6. books, records, documents, photographic positives and negatives, graphic, film or video material or sound recordings, excluding those that are public records as defined in section 1(xiv) of the National Archives of South Africa Act, 1996 (Act No. 43 of 1996).
5. Without limiting the generality of subsections (1) and (2), a place or object is to be considered part of the national estate if it has cultural significance or other special value because of—
 - 5.1. Its importance in the community, or pattern of South Africa's history;
 - 5.2. Its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;
 - 5.3. Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;
 - 5.4. Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects;
 - 5.5. Its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;
 - 5.6. Its importance in demonstrating a high degree of creative or technical achievement at a particular period;
 - 5.7. Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;
 - 5.8. Its strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa; and

5.9. sites of significance relating to the history of slavery in South Africa”

METHOD

The method for Heritage assessment consists of several steps.

The first step forms part of the desktop assessment. Here we would consult the database that has been collated by Umlando. This databases contains archaeological site locations and basic information from several provinces (information from Umlando surveys and some colleagues), most of the national and provincial monuments and battlefields in Southern Africa (<http://www.vuvuzela.com/googleearth/monuments.html>) and cemeteries in southern Africa (information supplied by the Genealogical Society of Southern Africa). We use 1st and 2nd edition 1:50 000 topographical and 1937 aerial photographs where available, to assist in general location and dating of buildings and/or graves. The database is in Google Earth format and thus used as a quick reference when undertaking desktop studies. Where required we would consult with a local data recording centre, however these tend to be fragmented between different institutions and areas and thus difficult to access at times. We also consult with an historical architect, palaeontologist, and an historian where necessary.

The survey results will define the significance of each recorded site, as well as a management plan.

All sites are grouped according to low, medium, and high significance for the purpose of this report. Sites of low significance have no diagnostic artefacts or features. Sites of medium significance have diagnostic artefacts or features and these sites tend to be sampled. Sampling includes the collection of artefacts for future analysis. All diagnostic pottery, such as rims, lips, and decorated sherds are sampled, while bone, stone, and shell are mostly noted. Sampling usually

occurs on most sites. Sites of high significance are excavated and/or extensively sampled. Those sites that are extensively sampled have high research potential, yet poor preservation of features.

Defining significance

Heritage sites vary according to significance and several different criteria relate to each type of site. However, there are several criteria that allow for a general significance rating of archaeological sites.

These criteria are:

1. State of preservation of:

- 1.1. Organic remains:
 - 1.1.1. Faunal
 - 1.1.2. Botanical
- 1.2. Rock art
- 1.3. Walling
- 1.4. Presence of a cultural deposit
- 1.5. Features:
 - 1.5.1. Ash Features
 - 1.5.2. Graves
 - 1.5.3. Middens
 - 1.5.4. Cattle byres
 - 1.5.5. Bedding and ash complexes

2. Spatial arrangements:

- 2.1. Internal housing arrangements
- 2.2. Intra-site settlement patterns
- 2.3. Inter-site settlement patterns

3. Features of the site:

- 3.1. Are there any unusual, unique or rare artefacts or images at the site?

3.2. Is it a type site?

3.3. Does the site have a very good example of a specific time period, feature, or artefact?

4. Research:

4.1. Providing information on current research projects

4.2. Salvaging information for potential future research projects

5. Inter- and intra-site variability

5.1. Can this particular site yield information regarding intra-site variability, i.e. spatial relationships between various features and artefacts?

5.2. Can this particular site yield information about a community's social relationships within itself, or between other communities?

6. Archaeological Experience:

6.1. The personal experience and expertise of the CRM practitioner should not be ignored. Experience can indicate sites that have potentially significant aspects, but need to be tested prior to any conclusions.

7. Educational:

7.1. Does the site have the potential to be used as an educational instrument?

7.2. Does the site have the potential to become a tourist attraction?

7.3. The educational value of a site can only be fully determined after initial test-pit excavations and/or full excavations.

8. Other Heritage Significance:

8.1. Palaeontological sites

8.2. Historical buildings

8.3. Battlefields and general Anglo-Zulu and Anglo-Boer sites

8.4. Graves and/or community cemeteries

8.5. Living Heritage Sites

8.6. Cultural Landscapes, that includes old trees, hills, mountains, rivers, etc related to cultural or historical experiences.

The more a site can fulfill the above criteria, the more significant it becomes. Test-pit excavations are used to test the full potential of an archaeological deposit. This occurs in Phase 2. These test-pit excavations may require further excavations if the site is of significance (Phase 3). Sites may also be mapped and/or have artefacts sampled as a form of mitigation. Sampling normally occurs when the artefacts may be good examples of their type, but are not in a primary archaeological context. Mapping records the spatial relationship between features and artefacts.

TABLE 1: SAHRA GRADINGS FOR HERITAGE SITES

SITE SIGNIFICANCE	FIELD RATING	GRADE	RECOMMENDED MITIGATION
High Significance	National Significance	Grade 1	Site conservation / Site development
High Significance	Provincial Significance	Grade 2	Site conservation / Site development
High Significance	Local Significance	Grade 3A / 3B	
High / Medium Significance	Generally Protected A		Site conservation or mitigation prior to development / destruction
Medium Significance	Generally Protected B		Site conservation or mitigation / test excavation / systematic sampling / monitoring prior to or during development / destruction
Low Significance	Generally Protected C		On-site sampling monitoring or no archaeological mitigation required prior to or during development / destruction

RESULTS

DESKTOP STUDY

The desktop study consisted of analysing various maps for evidence of prior habitation in the study area, as well as for previous archaeological surveys. This allows me to note potential sensitive areas for general archaeological and specifically human remains. All of the older settlements would have buried the dead in a traditional manner, and thus near the kraal.

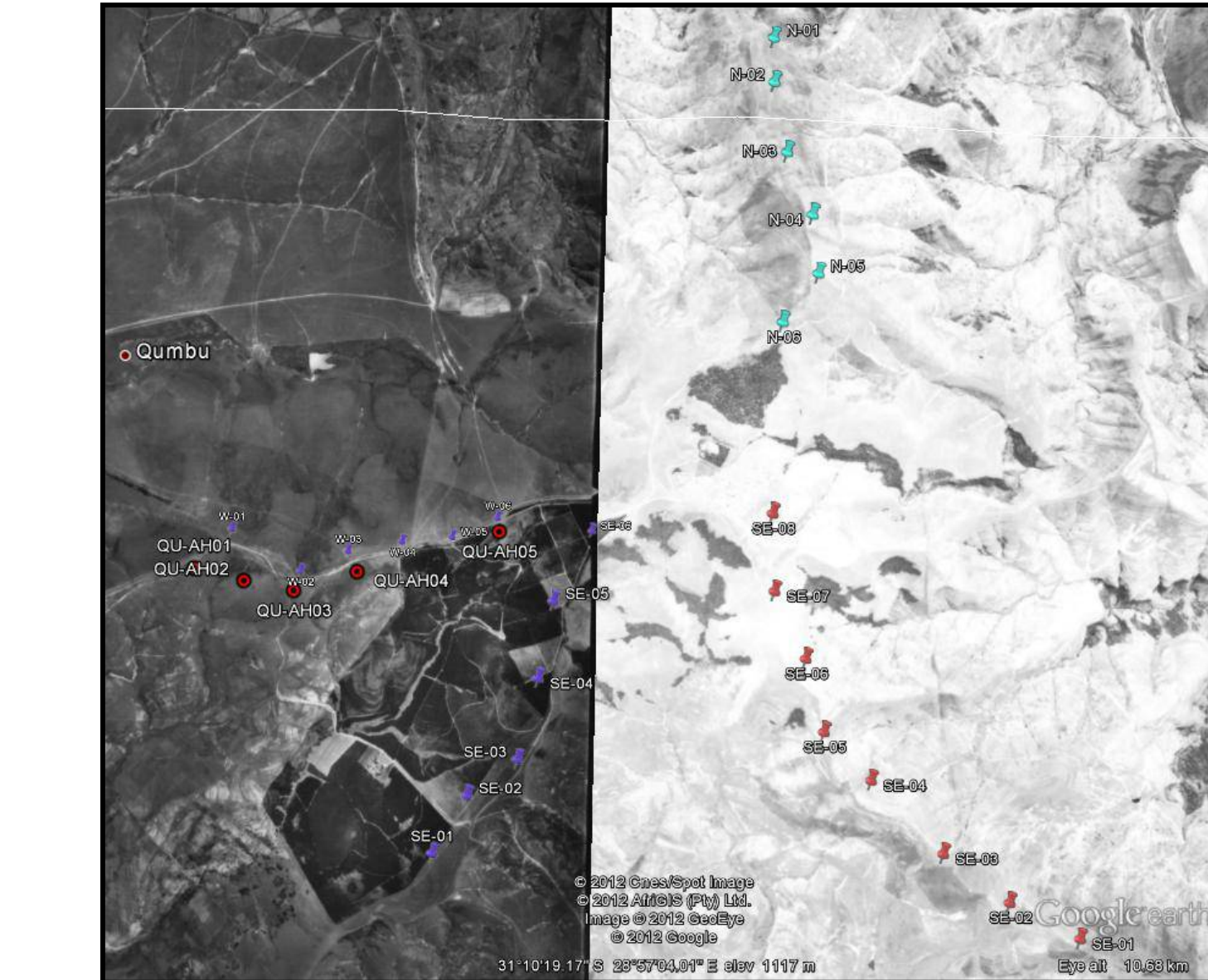
Table 2 and Figure 4 Show the sites noted on the 1937 aerial photographs. Unfortunately, the photograph for the main, or eastern, section is of poor quality and very little could be accurately observed. A total of five settlements were noted from the aerial photographs. All of these have rectangular byres and maize fields, with several houses.

TABLE 2: LOCATION OF SETTLEMENTS IN 1937 AT QUMBU WIND ENERGY PROJECT

NAME	LATITUDE	LONGITUDE	DESCRIPTION
QU-AH01	-31.1785777	28.9022002	Settlement
QU-AH02	-31.1796669	28.9074054	Settlement
QU-AH03	-31.1805187	28.9127171	Settlement
QU-AH04	-31.1788384	28.9193154	Settlement
QU-AH05	-31.1752597	28.9341344	Settlement

The 1st edition 1:50 000 map for this area is dated to 1982 (fig. 3). No heritage sites were noted on this map in the affected areas.

FIG. 4: LOCATION OF SETTLEMENTS ALONG THE QUMBU WIND ENERGY PROJECT IN 1937²



² Red circle = heritage site; coloured pin = location of proposed turbine

FIELD SURVEY

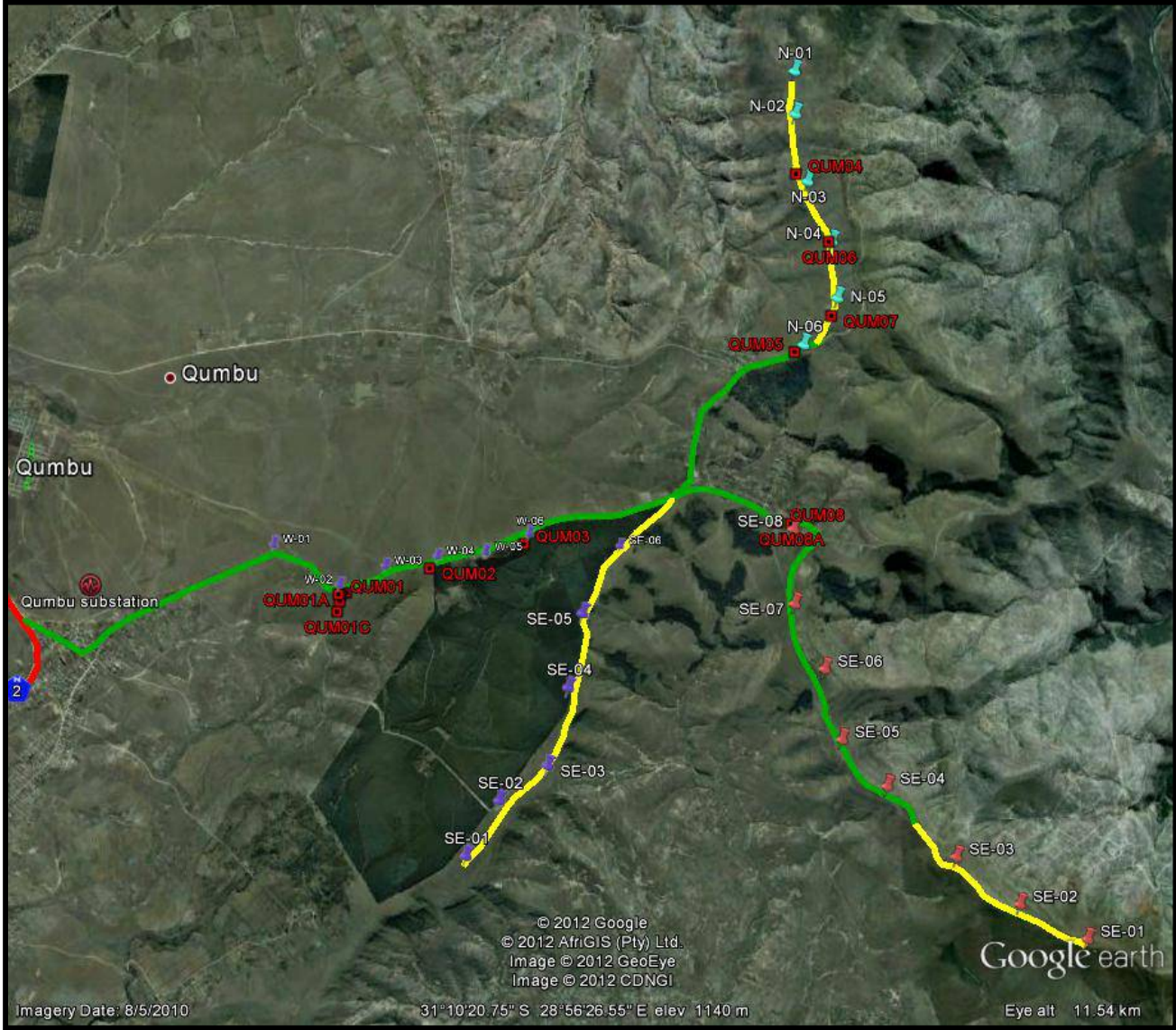
Table 3 lists the recorded sites, while Figure 5 shows the locations of the recorded heritage sites from the survey. A total of eight sites were observed during the survey, and some of these would require the turbines to be repositioned.

Many of the locations for proposed wind turbines occur on the top of mountains with very steep slopes. This would result in a very low occurrence of human settlements, in the past.

TABLE 3: LOCATIONS OF RECORDED HERITAGE SITES AT THE PROPOSED QUMBU WIND ENERGY PROJECT

Name	latitude	longitude	Description
QUM01	-31.1796120	28.9133020	Settlement
QUM01A	-31.1802650	28.9134300	Settlement
QUM01C	-31.1812290	28.9131250	Settlement
QUM01B	-31.1797530	28.9135170	Settlement
QUM01D	-31.1794860	28.9141650	Settlement
QUM02	-31.1772140	28.9231910	Settlement
QUM03 (SCRAPER)	-31.1411120	28.9625340	Isolated artefact
QUM04	-31.1749860	28.9333530	Settlement
QUM05	-31.1574320	28.9623420	Grave
QUM06	-31.1472930	28.9660630	Grave?
QUM07	-31.1540810	28.9663320	Settlement
QUM08	-31.1730240	28.9607390	Settlement
QUM08A	-31.1731230	28.9621190	Settlement

FIG. 5: LOCATION OF RECORDED SITES AT THE QUMBU WIND ENERGY PROJECT



QUM01

QUM01 is located near the road halfway up the gradual sloping hill. The site is in the same location as QU-AH03 that dates to 1937. The two sites are probably related. The site consists of two settlements with at least four house floors (fig. 6). Each settlement consists of the remains of house floors that are barely visible in the grass. The location of the kraal, and thus graves, could not be ascertained. However, given the age of the site human remains can be expected to occur here.

The turbine (W-02) will be placed near this site, and will probably permanently affect it.

Significance: The site is of low significance as very little can be observed. If human remains occur then these are of high significance. There are no records of the preservation of organic remains in this area, and thus one cannot estimate if human remains would still occur.

Mitigation: The house floors should be fully photographed and recorded, and an attempt to locate the cattle byre when the grass is shorter, i.e. winter, should be made. This sites may just predate the enforced government changes to rural lifestyles, and it is thus of vernacular significance. The area should be monitored for potential human remains during the construction phase.

SAHRA Rating: 3B

QUM02

QUM02 is located ~800m northeast of QUM01, along the same ridge. The site consists of 3 – 4 house floors in a poorly preserved state. The site is ~50m from a proposed turbine, W-04. Most of the site has been affected and damaged by afforestation.

Significance: The site is of low significance

Mitigation: No further mitigation is required.

SAHRA Rating: 3C

FIG. 6: HOUSE FLOOR REMAINS AT QUM01



QUM03

QUM03 is located near the road amongst the afforested area. The site consists of several ruined buildings that are rectangular or circular in shape (fig. 7). The buildings appear to be related to worker's living quarters and/or offices. Buildings occur in the 1937 aerial maps as QU-AH05, however, the current ruins appear to be more recent due to a more modern brick. The mud brick houses are all circular in shape. No other features were observed in the area. There is no salvageable material amongst the ruins nor any evidence of historical middens.

Significance: The site is of low significance

Mitigation: No further mitigation is required.

SAHRA Rating: 3C

FIG. 7: RUINS AT QUM03



QUM04

QUM04 is not a site *per se*, rather an isolated artefact that deserved recording. The single medium end-scraper (on dolerite) was located at the top of the hill, or mountain, at an altitude of 1202m (fig. 8). The scraper was in a secondary context. The scraper probably pre-dates 8000 years

Significance: The artefact is of low significance.

Mitigation: No further mitigation is required.

SAHRA Rating: 3C

FIG. 8: MEDIUM END SCRAPER AT QUM04



QUM05

QUM05 is located on the top of a hill, just below the rock outcrop on the top. The site consists of a single grave that is clearly marked (fig. 9). The grave has a capstone that has been whitewashed. The grave appears to be recent, i.e. last 20-30 years. The centre of the proposed tower will be ~55m east of the grave, and thus impact on the site in terms of visual and spatial impact.

Significance: The site is of high significance.

Mitigation: The grave is not strictly protected by the legislation, however, one can state that is an ancestral grave, and thus be protected. The turbine may not occur within 50m of the grave and its fencing. The living descendants should also be approached and consulted regarding the construction of a turbine near the grave.

SAHRA Rating: 3A

QUM06

QUM06 is located on the top of a hill, just south of QUM04. The site consists of a single stone cairn that is probably a grave (fig. 10). The grave appears to be relatively old, as the cairn has sunken substantially below the surface.

Significance: The site is of high significance.

Mitigation: The grave is not strictly protected by the legislation, however, one can state that is an ancestral grave, and thus be protected. The grave will need to be fenced off before construction. The tower may not occur within 50m of the grave and its fencing. The living descendants should also be approached and consulted regarding the construction of a turbine near the grave. The grave is in direct line of the other two turbines and may be affected by the access road. The grave will need to be demarcated, and the turbine N-04 may need to be moved south or to the north.

SAHRA Rating: 3A

FIG. 9: SINGLE GRAVE AT QUM05



FIG. 10: SINGLE GRAVE AT QUM06



QUM07

QUM07 is located near the top of the northern ridge. The site consists of a rectangular stone walled structure on the flat area (fig. 11). Three house foundations occur uphill of the kraal. One of these foundations has been affected by dump material, presumably from a water reticulation project that has recently occurred in the area. There is a small stone cairn to the northeast of the kraal that may or may not be a grave.

A turbine, N-05, is located ~80m north of the site; however the access road will pass over, or near the stone walling.

Significance: The site is of low significance, unless the cairn is that of a human grave.

Mitigation: The site, including the possible grave, needs to be clearly demarcated, by a heritage practitioner, before construction phase, and once the access road has been finalised. The site should be fully mapped and photographed in case it is inadvertently damaged during the construction phase.

SAHRA Rating: 3B - 3C

FIG.11: STONE WALLING AND HOUSE FOUNDATION AT QUM07



QUM08

QUM08 is located on a hill above the road southeast of the village of Ngqwashu. The site consists of a cemetery that appears to have been in use for several decades (fig. 12). The cemetery extends for at least 150m in width and 90m in length. That is it occurs over half of the hill. There is a small access road behind the cemetery along the southern side of the hill.

A turbine, SE-08, is proposed to occur 80m on the top of the hill to the southeast.

Significance: The site is of high significance and can be a red flag.

Mitigation: I would not recommend the turbine SE-08 is placed in this area, as it would be a visual and aural impact. However, since the graves probably post date the 60 year old buffer, the heritage legislation does not strictly apply (unless considered to be ancestral graves). The community at Ngqwashi should be consulted regarding this site, as they are probably the living descendants.

SAHRA Rating: 3A

FIG. 12: CEMETARY AT QUM08



MANAGEMENT PLAN

Several recent heritage sites were recorded, and some of these require mitigation. Table 4 summarises these sites and the mitigation required.

TABLE 4: SUMMARY OF SITES REQUIRING MITIGATION

NAME	LATITUDE	LONGITUDE	MITIGATION REQUIRED
QUM01	31°10'46.60"	28°54'47.89"	<ul style="list-style-type: none"> • Photograph and map • Monitor during construction • Public participation for descendants
QUM05	31° 9'26.76"	28°57'44.43"	Move wind turbine
QUM06	31° 8'50.25"	28°57'57.83"	<ul style="list-style-type: none"> • Demarcate with fencing • Public participation
QUM07	31° 9'14.69"	28°57'58.80"	<ul style="list-style-type: none"> • Demarcate with fencing • Photograph and map • Monitor during construction
QUM08	31°10'24.93"	28°57'39.93"	Move wind turbine

Two wind turbines will need to be moved as they are near human graves. While these graves are not necessarily protected by the NHRA, they can still be viewed as ancestral graves. The community should also be involved in deciding if the cemetery at QUM08 may be affected.

Two sites with graves will need to be demarcated with fencing before construction begins. The fencing, with an access gate, needs to be 5m from the edge of the grave, and no development may occur within 20m of the fence.

Two sites will need to be mapped and photographed before construction, and monitored during construction for possible human graves. If human remains are observed, then construction will need to stop until the graves have been exhumed. The community should also be involved with these two sites to determine if known people were buried at the site(s). It may be better to move the

turbines away from these areas, since the occurrence of human remains may cause a 6 month delay due to public participation process.

If any access road widening is to occur, then this will need to be analysed, primarily at a desktop level.

CONCLUSION

A heritage survey was undertaken for the proposed Qumbu Wind Energy Project, in the Eastern Cape. The project aims to install 26 wind turbines to provide natural energy for the general Qumbu area. The location of the turbines occurs on the top of the hills, and mostly in places that would not have been used for human occupation. The western hill has more gentle slopes and the historical settlements tend to occur in this area.

The heritage survey did not record any archaeological sites, although a single scraper, possibly predating the Holocene, was recorded along the northern ridge. The recorded sites consisted mainly of early to middle 20th century settlements and two isolated graves. The settlements may have human remains, however, these are unmarked, and these areas will require monitoring during construction.

Two towers will need to be moved, as the bases would impact on human graves. The rest of the towers would appear to have a low impact.

**APPENDIX A
SITE RECORD FOMS**

UMLANDO ARCHAEOLOGICAL SITE RECORD FORM

SITE CATEGORY: (X where applicable)

Stone Age:

Early Iron Age:

Late Iron Age

Historical Period: x

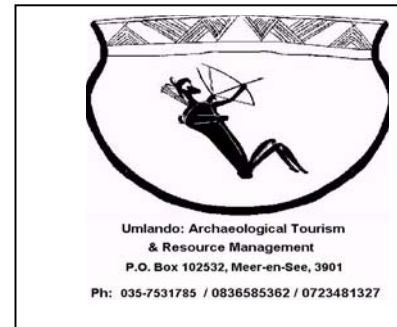
Recorder's Site No.: **QUM01**

Official Name: Qumbu Commanage

Local Name:

Map Sheet: 3128BB Qumbu

GPS reading: S31 10.777 E28 54.798 1099 m



DIRECTIONS TO SITE: SKETCH OR DESCRIPTION.

Follow the N2 South from Qumbu, for 2.2km, turn left. Turn right after 35m and then left after 217m. After 2.2km, turn right.

QUM01 is located near the road halfway up the gradual sloping hill, 868m from the right turn.

The site is in the same location as QU-AH03 that dates to 1937. The two sites are probably related.

SITE DESCRIPTION:

Type of Site: Settlement

Merits conservation: Yes

Threats: Yes

What threats: The Proposed Qumbu Windfarm

RECORDING:

Graphic record: Yes

Digital pictures: x

Tracings :

Re-drawings:

Recorder/Informant: Name: **Gavin Anderson**

Address: PO Box 102532, Meerensee, 3901

Date: 03/02/2012

Owner:

References:

Description of site and artefactual content.

The site consists of two settlements with at least four house floors. Each settlement consists of the remains of house floors that are barely visible in the grass. The location of the kraal, and thus graves, could not be ascertained. However, given the age of the site human remains can be expected to occur here.

The turbine (W-02) will be placed near this site, and will probably permanently affect it.

UMLANDO ARCHAEOLOGICAL SITE RECORD FORM

SITE CATEGORY: (X where applicable)

Stone Age:

Early Iron Age:

Late Iron Age

Historical Period: x

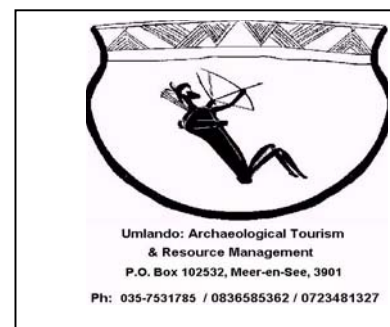
Recorder's Site No.: **QUM02**

Official Name: Qumbu Commanage

Local Name:

Map Sheet: 3128BB Qumbu

GPS reading: S31 10.633 E28 55.391



DIRECTIONS TO SITE: SKETCH OR DESCRIPTION.

Follow the N2 South from Qumbu, for 2.2km, turn left. Turn right after 35m and then left after 217m. Turn left after 2.8km.

QUM02 is located ~800m northeast of QUM01, along the same ridge.

SITE DESCRIPTION:

Type of Site: Settlement

Merits conservation: No

Threats: Yes

What threats: Proposed Qumbu Windfarm

RECORDING:

Graphic record: Yes

Digital pictures: x

Tracings :

Re-drawings:

Recorder/Informant: Name: **Gavin Anderson**

Address: PO Box 102532, Meerensee, 3901

Date: 03/02/2012

Owner:

References:

Description of site and artefactual content.

The site consists of 3 – 4 house floors in a poorly preserved state. The site is ~50m from a proposed turbine, W-04. Most of the site has been affected and damaged by afforestation.

UMLANDO ARCHAEOLOGICAL SITE RECORD FORM

SITE CATEGORY: (X where applicable)

Stone Age:

Early Iron Age:

Late Iron Age

Historical Period: x

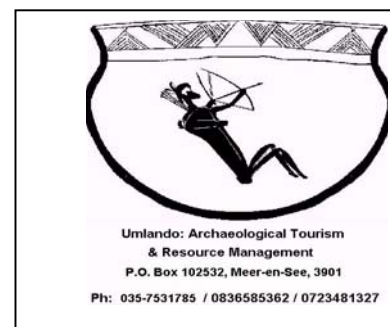
Recorder's Site No.: **QUM03**

Official Name: Bencuti Plantation

Local Name:

Map Sheet: 3128BB Qumbu

GPS reading: S31 10.499 E28 56.001 1133 m



DIRECTIONS TO SITE: SKETCH OR DESCRIPTION.

Follow the N2 South from Qumbu, for 2.2km, turn left. Turn right after 35m and then left after 217m. Turn left after 2.8km.

QUM03 is located near the road amongst the afforested area, 2.9km from the last turn-off.

SITE DESCRIPTION:

Type of Site: Settlement

Merits conservation: No

Threats: Yes

What threats: The proposed Qumbu windfarm

RECORDING:

Graphic record: Yes

Digital pictures: x

Tracings :

Re-drawings:

Recorder/Informant: Name: **Gavin Anderson**

Address: PO Box 102532, Meerensee, 3901

Date: 03/02/2012

Owner:

References:

Description of site and artefactual content.

The site consists of several ruined buildings that are rectangular or circular in shape. The buildings appear to be related to worker's living quarters and/or offices. Buildings occur in the 1937 aerial maps as QU-AH05, however, the current ruins appear to be more recent due to a more modern brick. The mud brick houses are all circular in shape. No other features were observed in the area. There is no salvageable material amongst the ruins nor any evidence of historical middens.

UMLANDO ARCHAEOLOGICAL SITE RECORD FORM

SITE CATEGORY: (X where applicable)

Stone Age: x LSA

Early Iron Age:

Late Iron Age

Historical Period:

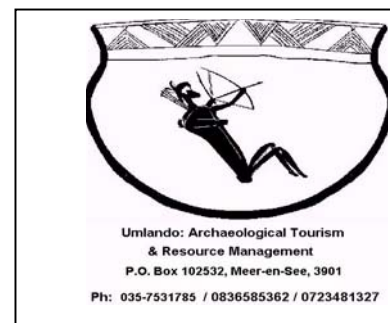
Recorder's Site No.: **QUM04**

Official Name: Mbalisweni

Local Name:

Map Sheet: 3128BB Qumbu

GPS reading: S31 08.467 E28 57.752 1213 m



DIRECTIONS TO SITE: SKETCH OR DESCRIPTION.

Follow the N2 South from Qumbu, for 2.2km, turn left. Turn right after 35m and then left after 217m. Turn left after 2.8km.

SITE DESCRIPTION:

Type of Site: Stonetool

Merits conservation: No

Threats: Yes

What threats: The Proposed Qumbu Windfarm

RECORDING:

Graphic record: Yes

Digital pictures: x

Tracings :

Re-drawings:

Recorder/Informant: Name: **Gavin Anderson**

Address: PO Box 102532, Meerensee, 3901

Date: 03/02,2012

Owner:

References:

Description of site and artefactual content.

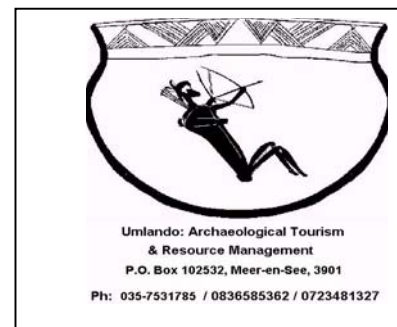
QUM04 is not a site *per se*, rather an isolated artefact that deserved recording. The single medium end-scraper (on dolerite) was located at the top of the hill, or mountain, at an altitude of 1202m. The scraper was in a secondary context. The scraper probably pre-dates 8000 years

UMLANDO ARCHAEOLOGICAL SITE RECORD FORM

SITE CATEGORY: (X where applicable)

Stone Age:
Early Iron Age:
Late Iron Age:
Historical Period: X

Recorder's Site No.: **QUM05**
Official Name: Mbalisweni
Local Name:
Map Sheet: 3128BB Qumbu
GPS reading: S31 09.446 E28 57.741 1225 m



DIRECTIONS TO SITE: SKETCH OR DESCRIPTION.

Follow the N2 South from Qumbu, for 2.2km, turn left. Turn right after 35m and then left after 217m. Turn left after 2.8km.

QUM05 is located on the top of a hill, just below the rock outcrop on the top.

SITE DESCRIPTION:

Type of Site: Grave
Merits conservation: Yes
Threats: Yes
What threats: The Proposed Qumbu Wind Farm

RECORDING:

Graphic record: Yes
Digital pictures: x Tracings : Re-drawings:

Recorder/Informant: Name: **Gavin Anderson**
Address: PO Box 102532, Meerensee, 3901
Date: 03/02/2012
Owner:
References:

Description of site and artefactual content.

The site consists of a single grave that is clearly marked. The grave has a capstone that has been whitewashed. The grave appears to be recent, i.e. last 20-30 years. The centre of the proposed tower will be ~55m east of the grave, and thus impact on the site in terms of visual and spatial impact.

UMLANDO ARCHAEOLOGICAL SITE RECORD FORM

SITE CATEGORY: (X where applicable)

Stone Age:

Early Iron Age:

Late Iron Age:

Historical Period: X

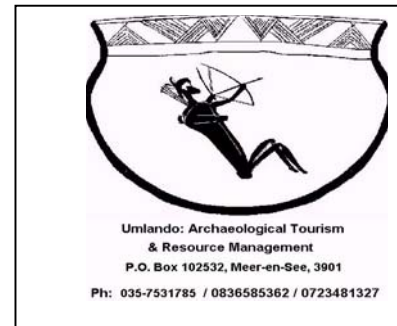
Recorder's Site No.: **QUM06**

Official Name: Mbalisweni

Local Name:

Map Sheet: 3128BB Qumbu

GPS reading: S31 08.838 E28 57.964 1198 m



DIRECTIONS TO SITE: SKETCH OR DESCRIPTION.

Follow the N2 South from Qumbu, for 2.2km, turn left. Turn right after 35m and then left after 217m. Turn left after 2.8km.

QUM06 is located on the top of a hill, just south of QUM04, 8.6km from the last turn.

SITE DESCRIPTION:

Type of Site: Grave

Merits conservation: Yes

Threats: Yes

What threats: The Proposed Qumbu Wind farm

RECORDING:

Graphic record: Yes

Digital pictures: x

Tracings :

Re-drawings:

Recorder/Informant: Name: **Gavin Anderson**

Address: PO Box 102532, Meerensee, 3901

Date: 03/02/2012

Owner:

References:

Description of site and artefactual content.

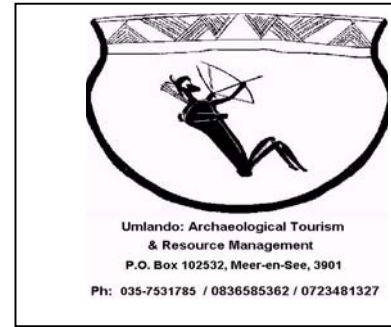
The site consists of a single stone cairn that is probably a grave. The grave appears to be relatively old, as the cairn has sunken substantially below the surface.

UMLANDO ARCHAEOLOGICAL SITE RECORD FORM

SITE CATEGORY: (X where applicable)

Stone Age:
Early Iron Age:
Late Iron Age:
Historical Period: X

Recorder's Site No.: **QUM07**
Official Name: Mbalisweni
Local Name:
Map Sheet: 3128BB Qumbu
GPS reading: S31 09.245 E28 57.980 1196 m



DIRECTIONS TO SITE: SKETCH OR DESCRIPTION.

Follow the N2 South from Qumbu, for 2.2km, turn left. Turn right after 35m and then left after 217m. Turn left after 2.8km.

QUM07 is located near the top of the northern ridge, 7.2km from the last turn.

SITE DESCRIPTION:

Type of Site: Settlement with possible grave
Merits conservation: Yes
Threats: Yes
What threats: The Proposed Qumbu Wind Farm

RECORDING:

Graphic record: Yes
Digital pictures: x Tracings : Re-drawings:

Recorder/Informant: Name: **Gavin Anderson**
Address: PO Box 102532, Meerensee, 3901
Date: 03/02/2012
Owner:
References:

Description of site and artefactual content.

The site consists of a rectangular stone walled structure on the flat area. Three house foundations occur uphill of the kraal. One of these foundations has been affected by dump material, presumably from a water reticulation project that has recently occurred in the area. There is a small stone cairn to the northeast of the kraal that may or may not be a grave. A turbine, N-05, is located ~80m north of the site; however the access road will pass over, or near the stone walling.

UMLANDO ARCHAEOLOGICAL SITE RECORD FORM

SITE CATEGORY: (X where applicable)

Stone Age:

Early Iron Age:

Late Iron Age

Historical Period: X RECENT

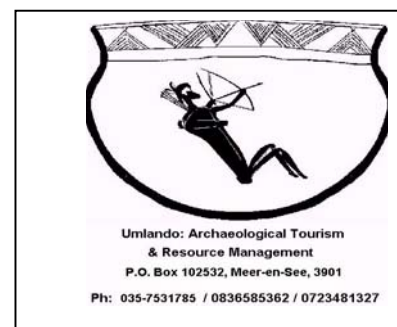
Recorder's Site No.: **QUM08**

Official Name: Mkhambeni/Nqwashu

Local Name: Mkhambeni/Nqwashu

Map Sheet: 3128BB Qumbu

GPS reading: S31 10.381 E28 57.644



DIRECTIONS TO SITE: SKETCH OR DESCRIPTION.

Follow the N2 South from Qumbu, for 2.2km, turn left. Turn right after 35m and then left after 217m. Turn left after 2.8km.

QUM08 is located on a hill above the road southeast of the village of Ngqwashu.

SITE DESCRIPTION:

Type of Site: Cemetary

Merits conservation: Yes

Threats: Yes

What threats: The Proposed Qumbu Wind farm

RECORDING:

Graphic record: Yes

Digital pictures: x

Tracings :

Re-drawings:

Recorder/Informant: Name: **Gavin Anderson**

Address: PO Box 102532, Meerensee, 3901

Date: 03/02/2012

Owner:

References:

Description of site and artefactual content.

The site consists of a cemetery that appears to have been in use for several decades. The cemetery extends for at least 150m in width and 90m in length. That is it occurs over half of the hill. There is a small access road behind the cemetery along the southern side of the hill.

A turbine, SE-08, is proposed to occur 80m on the top of the hill to the southeast.