HERITAGE SURVEY OF THE PROPOSED PHOTOVOLTAIC AND WIND TURBINE FARM AT QUNU

FOR COASTAL ENVIRONMENTAL SERVICES

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TABLE OF CONTENT

TABLE OF CONTENT	
INTRODUCTION	
NATIONAL HERITAGE RESOURCES ACT OF 1999	
METHOD	
RESULTS	
Desktop Study	
Q1	
Q2	
Q3	
Q4	
Q5	
Q6	
Q7 Q8	
Q9	
Q10 and Q11	
QUN01	
QUN02	
QUN03	
QUN04	
QUN05	
Palaeontology	
MANAGEMENT PLAN	
Fencing	
Monitoring	
Partial excavation	
Community participation.	
Grave removal	
CONCLUSION	39
REFERENCES	40
APPENDIX A	41
SITE RECORD FORMS	41
TABLE OF FIGURES	
FIG. 1 GENERAL LOCATION OF THE NQUNU WIND TURBINE FARM	5
FIG. 2: AERIAL OVERVIEW OF THE STUDY AREA WITH TURBINE AND	
PHOTOVOLTAIC LOCATIONS	6
FIG. 3: 2001 TOPOGRAPHICAL MAP OF THE STUDY AREA	
FIG. 4: LOCATION OF HERITAGE SITES IN 1982	14
FIG. 5: LOCATION OF HERITAGE SITES ON THE 1937 AERIAL PHOTOGR	
	15
FIGURE 6: SOUTHERN HILL IN THE QUNU STUDY AREA	
FIGURE 7: NORTHERN HILL IN THE QUNU STUDY AREA	
FIG. 8: LOCATION OF SITES IN 1937 AND 2011	
FIGURE 9: GRAVES AT Q3FIGURE 10: HOUSE FLOOR REMAINS AND WATTLE WOODLOT	21
FIGURE 10: HOUSE FLOOK REMAINS AND WATTLE WOODLOT	24

	Page 3 of 57
FIG 11: GLASS BEAD NECKLACE AT Q5	24
FIG. 12: HOUSE REMAINS AND POSSIBLE GRAVE AT Q6	
FIG. 13: CLOSE-UP OF POSSIBLE GRAVE AT Q6	26
FIG. 14: CATTLE BYRE AT Q7	27
FIG. 15: HOUSE FLOOR REMAINS AT QUN01	30
FIG. 16 CEMETERY AT QUN02	31
FIG. 17: SINGLE GRAVE AT QUN03	
FIG. 18: SINGLE GRAVE AT QUN04	33
TABLE 1: SUMMARY OF SITES	35

INTRODUCTION

Umlando cc was contracted by Coastal Environmental Services to undertake a Heritage Impact Assessment of the proposed Qunu Wind Energy Project and two photovoltaic farms. The study area is located \sim 20km southwest of Umthatha, Eastern Cape (fig.'s 1 – 3). The study area occurs over two hills that have been mostly ploughed and used for maize fields.

There are three options for the wind turbines, depending on the output voltage required. These are WWD3, V80, and Palm Tree, and require different types of wind turbines. There is also an option for two areas to be developed for photovoltaic electricity.

The study area will have up to ten wind turbines and two photovoltaic areas. The impacts on the area 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 survey located sixteen heritage sites that are of varying significance. Some turbines will need to be moved as they may be too close to human graves. Community meetings would note any living heritage sites and recent graves. These sites are less than 100 years and are not archaeological sites *per se*, but they do fall under heritage.

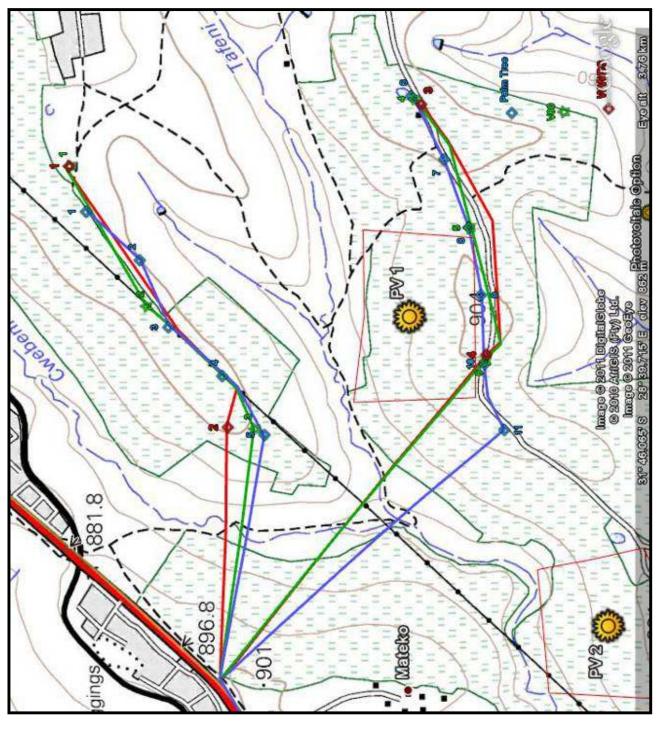
Dick King (A Ngunu Windfarm 31°57'27.84" S 28°42'36.48" E elev 598 m Image © 2011 DigitalGlobe © 2010 AfriGIS (Pty) Ltd. © 2010 Google © 2010 Europa Technologies orth Butterworth

FIG. 1 GENERAL LOCATION OF THE NQUNU WIND TURBINE FARM

Eye alt 4.69 km Photovoltaic Option Imagery Dates. Sep 15, 2005 - Jan 16, 200631* 46,228' S 28" 39 663' E elev 872 m Image © 2011 DigitalGlobe, © 2010 AfriGIS (Pty) Ltd. Image © 2011 GeoEye • Mateko

FIG. 2: AERIAL OVERVIEW OF THE STUDY AREA WITH TURBINE AND PHOTOVOLTAIC LOCATIONS

FIG. 3: 2001 TOPOGRAPHICAL MAP OF THE STUDY AREA¹



¹ 3128DC 2001 Eliotdale

NATIONAL HERITAGE RESOURCES ACT OF 1999

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

- "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—
 - 2.8. Ancestral graves;
 - 2.9. Royal graves and graves of traditional leaders;
 - 2.10. Graves of victims of conflict;
 - 2.11.Graves of individuals designated by the Minister by notice in the Gazette;
 - 2.12. Historical graves and cemeteries; and
 - 2.13. 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—

- 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 battlefields and provincial monuments and in Southern Africa (http://www.vuvuzela.com/googleearth/monuments.html) and cemeteries 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 guick 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.

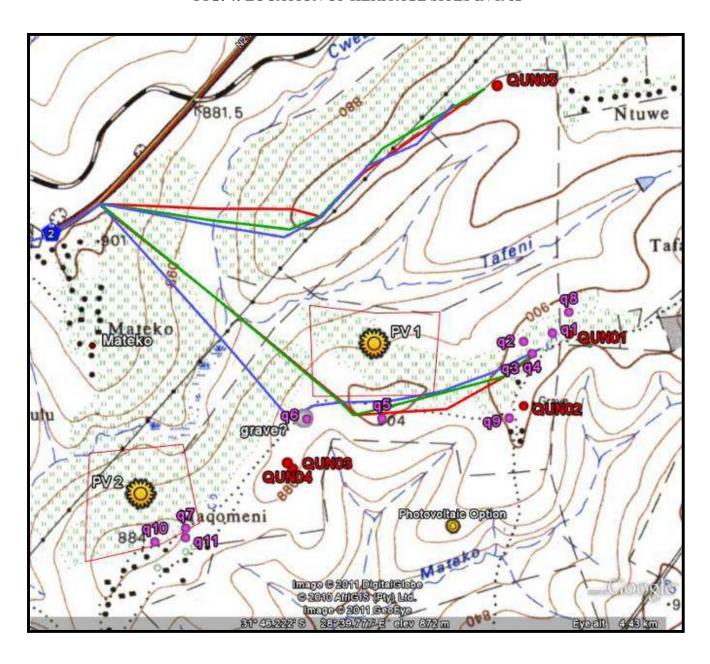
RESULTS

There were eleven areas that were identified as being sensitive from the historical maps and aerial photographs. The survey visited each area and located the eleven sites. These sites have a prefix of 'Q' in the document and maps. A further five sites were identified during the survey and these have the prefix 'QUN'.

Desktop Study

The 1982 1:50 000 topographical map (fig. 4) indicates that several houses exist in the general study area, and that there is a cemetery (QUN02). The cemetery does not occur on the 2001 map. The map also indicates that much of this area was under cultivation. These exact same fields were in use in 1937 (fig. 5). In 1937, the houses were in built according to the more traditional settlement pattern. These can be identified as sites q1 –q11 on fig. 5. However, by 1982 most of these houses had been ploughed and do not exist anymore.

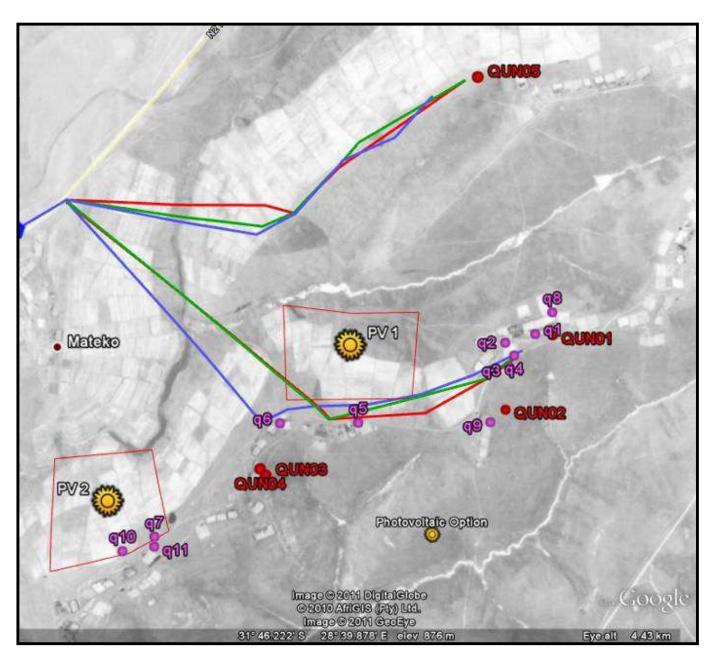
FIG. 4: LOCATION OF HERITAGE SITES IN 1982²



Quna HIA, doc Umbando 03/05/2011

² 3128DC Eliotdale (1982)

FIG. 5: LOCATION OF HERITAGE SITES ON THE 1937 AERIAL PHOTOGRAPHS



The area continues with the settlement pattern I have noted elsewhere in the Eastern Cape. That is, there is little evidence of Late Iron Age (LIA) sites, even though they should exist – Early Iron Age site do exist but in the larger river valleys. This may be partly because of the increase in mechanised ploughing activities that occurred in E. Cape and KwaZulu-Natal from the 1930's – 1970s. Most of the recorded sites date from the late 18th century onwards. Van Ryneveldt (2010, 2011) and Anderson (2009a, 2009b, 2009c, 2010a, 2010b, 2011a, and 2011b) have noted similar trends.

There is also some evidence from our various surveys that there tends to be a continual occupation of the same plot of land over a length of time. For example, Figures 4 and 5 show houses in virtually the same place over a 70-year period, and the 1937 aerial photographs indicate established fields that could predate 1930s. I have observed Historical Period stone walled kraals still in use to this day. In this way, the houses are continually reused and fixed, and new ones built gradually as the families expand. A last suggestion for the lack of LIA settlements is that only a few areas used dry stone walling, while the rest use mud bricks for houses and kraal foundations, and plants such as aloes for kraals. These would erode through time without leaving surface evidence. Human graves may also consist of holes in the ground that are covered with soil and then tree branches on the top. These types of features would not last long past 50 years. This method burial, coupled with agricultural ploughing, would thus destroy LIA settlements.

Figures 6 - 7 shows the northern and southern hills of the affected area.





Q1

Q1 was identified on the 1937 aerial photograph as an individual homestead, with an agricultural field (fig. 8). By the time of the survey, the area had been ploughed and only a wattle woodlot remained. I did not observe any features in the woodlot. A problem with this type of house, and for others like it in the area is that there is a noticeable lack of human graves. It is possible that the graves are not stone cairns, and have sunken below the surface (see above discussion).

The nearest turbines are ~60 – 120m southwest of this site.

Significance: The site is of low significance since it no longer exists, however human remains may occur and these would be of high significance.

FIGURE 7: NORTHERN HILL IN THE QUNU STUDY AREA



Mitigation: No mitigation is currently required, as the turbines have no direct impact. If any earthmoving occurs within 50m of this site, then it will need to be monitored for possible human remains – 50m is the approximate size of the living area in the 1937 maps. The processes involved with human remains is discussed under MANAGEMENT PLAN

Q2

Q2 was identified on the 1937 aerial photograph as an individual homestead, with an agricultural field (fig. 8). By the time of the survey, the area had been ploughed. I did not observe any features in the area. It is possible that human graves occur in this area.

The nearest turbines are ~100m northwest of this site.

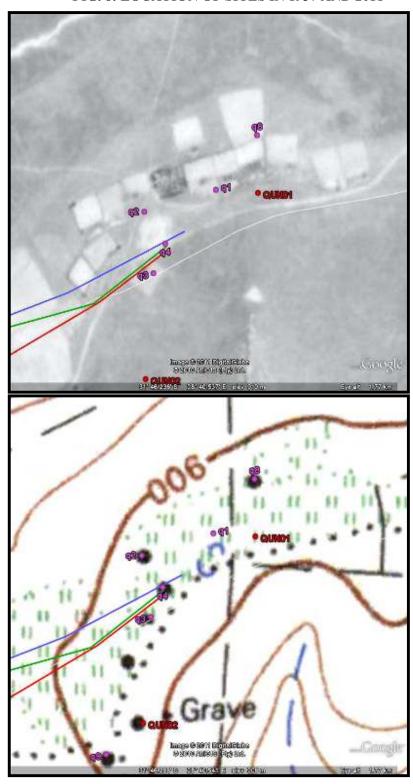
Significance: The site is of low significance since it no longer exists, however human remains may occur and these would be of high significance.

Mitigation: No mitigation is currently required, as the turbines have no direct impact. If any earthmoving occurs within 50m of this site, then it will need to be monitored for possible human remains.

Q3

Q3 is a homestead in the 1937 aerial maps and a group of human graves by 1982 (fig. 8). The graves are undated and belong to three adults and two juveniles (fig. 9). The graves may be related to the 1937 settlement, but they are similar to QUN03 and QUN04 that date to 2004. The graves are currently fenced off. There no visible remains of the homestead.

FIG. 8: LOCATION OF SITES IN 1937 AND 2011³



 $^{^3}$ The aerial photographs are \sim 5-20m out, as it is sometimes difficult to accurately align them, in Google Earth, when the landscape has changed

FIGURE 9: GRAVES AT Q3



The nearest turbine (WWD3 3) is 60m northeast of the graves. The current access road is 4m from the graves. If the Palm Tree 6, or V80 4, turbines are relocated, then they must consider Q3.

Significance: Human graves are always of high significance

Mitigation: The graves need to be fenced off before construction and have a boundary of 20m between the fence and the grave. The fencing must be sturdy and made visible with 'danger netting' before the construction phase. The access road for the turbines will probably follow the existing access road. If this is the case, then the current access road will need to be diverted at least 25m away from Q3. The community should be consulted regarding the grave and its distance from the access road as the ancestral remains probably belong to the community.

Q4

Q4 was identified on the 1937 aerial photograph as an individual homestead, with an agricultural field (fig. 8). By the time of the survey, the area had been ploughed and there were no visible remains. Human graves may occur in this area.

The nearest turbine (WWD3 3) is ~15m southeast of this site, and thus the platform will have a direct impact.

Significance: The site is of low significance since it no longer exists, however human remains may occur and these would be of high significance.

Mitigation: No mitigation is currently required, as the turbines have no direct impact. If any earthmoving occurs within 50m of this site, then it will need to be monitored for possible human remains. If the access road is rerouted because of Q3, then it would probably go over Q4, and the site will need to be monitored.

Q5

Q5 was identified on the 1937 aerial photographs as consisting of at least two homesteads over 300m. The site now consists of an old wattle woodlot and two house floor remains (fig. 10). The house foundations are 5m in diameter. There may be house floor remains in the woodlot. The rest of the site has been ploughed and there is no visible evidence of features. A small area of the bark of one wattle tree has been partially scraped off. This may be for traditional medicine and would be considered as part of the community's living heritage. A bracelet or necklace made from wire and blue glass beads was observed partially exposed in the road and is probably related to the site (fig. 11).

The nearest turbine (Palm Tree 9) is 90m northeast of the trees, while WWD3 4 and V80 6 are ~120m northwest of the house floor. The access road will probably go along the road and thus affect the site.

Significance: The site is generally of low significance.

Mitigation: The necklace should be removed and donated to a local museum as part of its beadwork collection. The local community should be consulted regarding the possible use of the wattle for traditional medicine if the trees are to be removed or poisoned. If the access road goes through this site then it should be monitored for possible human remains during construction activity. While the wattle trees are probably older than 60 years, there is no reason to preserve them.

Q6

Q6 is the remains of a settlement identified from the 1937 aerial photograph. There were three settlements spanning ~300m, although only one now remains. This is a result of ploughing. The site consists of three house foundations, of which only one is in a good condition (fig. 12). There is a possible grave located 15m northwest of the house floor (S31 46' 30.4", E28 39' 34"). The grave consists of a small cairn 1m x 1.5m in an approximate east-west orientation (fig. 13). There are two 'headstones' at each end of the cairn. The possible grave should be treated as a proper grave.

The nearest turbine is Palm Tree 11 that is located 100m to the northwest. The current access road is ~25m northwest of the possible grave.

Significance: The house floor is of low significance, while the possible grave is of high significance.

FIGURE 10: HOUSE FLOOR REMAINS AND WATTLE WOODLOT⁴



FIG 11: GLASS BEAD NECKLACE AT Q5



⁴ Yellow arrow indicates tree possible used for traditional medicine; cerise arrow indicates house floor.

Mitigation: The grave needs to be fenced off and clearly demarcated before construction activity. There needs to be a 20m barrier between the grave and the fence. The access road must remain at least 25m from the grave, or 5m from the fence. The community should be consulted regarding the grave and its distance from the access road as the ancestral remains probably belong to the community. The fencing of the grave should incorporate the house floor remains.



FIG. 12: HOUSE REMAINS AND POSSIBLE GRAVE AT Q6⁵

⁵ Cerise arrow indicates position of grave, 1m black-white scale indicates the house floor.

FIG. 13: CLOSE-UP OF POSSIBLE GRAVE AT Q6



Q7

Q7 was identified from the 1937 aerial photographs as a homestead. The site is still visible and consists of six house floors and a large cattle byre (fig. 14). The houses are uphill from the cattle byre and in two rows of three. The house remains are mostly poorly preserved and are not visible in photographs — only the house floor on the southern side of the access road is well preserved. The current access road passes though the middle of the site. There are only two examples of an historic cattle byre in the study area. This byre probably predates the 1937 photographs.

The site falls within the boundary of the photovoltaic are (PV2). The access road would probably go through the site.

Significance: The site in general is of low significance, however the cattle byre is rare for the area, and human remains may occur in the area.

Mitigation: If the site is to be affected by any form of construction activity then it needs to be monitored for potential human remains. The cattle byre should be recorded in more detail and a segment should be excavated. The excavation would yield cattle dung samples that can be used for environmental reconstruction as well as information regarding the construction of historical cattle byres. If the access road goes through the site, they byre and well-preserved house floor should be fenced off. The road will need to curve around these features.



FIG. 14: CATTLE BYRE AT Q7

Q8

Q8 was identified from the 1937 aerial photographs as being a homestead. At the time of the survey, the site did not exist. There is a more recent settlement on the site with a recent grave on the edge of the mealie field.

The nearest turbine is located ~260m southwest of the site.

Significance: The site is of low significance, as it does not exist. The recent grave is of high significance.

Mitigation: No further mitigation is required.

Q9

Q9 was noted as a settlement from the 1937 aerial maps. The site could not be located during the survey, as the area had been ploughed. The area may have human graves.

The nearest turbine (Palm Tree 7) is located ~270m to the north-northwest of the site. The access road is located ~230m north-northwest of the site. The site is unlikely to be affected by the wind turbines.

Significance: The site is of low significance.

Mitigation: If the turbines locations are moved, then any earthmoving activity within 50m of the site should be monitored for potential human remains.

Q10 and Q11

Q10 and Q11 were noted as two settlements next to each other from the 1937 aerial maps. The site does not exist anymore as more recent buildings of the Maqomeni village have replaced it. There are two graves at Q11, but these are related to recent houses.

The photovoltaic area (PV2) occurs on the opposite side of the road.

Significance: The sites are of low significance.

Mitigation: No mitigation is required, as the area will not be affected.

QUN01

QUN01 was noted as a possible settlement, and this was confirmed during the survey. The site consists of three house foundations (fig. 15) and one circular kraal that are poorly preserved. The house foundations are 5m – 8m in diameter. More of the site, or parts of an adjacent settlement, may continue for ~75m to the northeast. This was visible as potential sites on the Google Earth image and 1937 aerials, but not visible during the field survey.

The access road occurs 50m from the site and the nearest turbine (palm Tree 7) is ~170m southwest of the site.

Significance: The site is of low significance.

Mitigation: The site will not be affected by the current wind turbine farm plans. However, the site will need to be monitored if it is affected by any site realignments and earthmoving equipment.





QUN02

QUN02 is noted on the 1982 1:50 000 topographical maps as an area of graves (fig. 16), but not on the 2001 maps, where it is noted as an agricultural field. The graves are recent and postdate 1990s.

The access road is 190m north of the cemetery and the nearest turbine (Palm Tree 7) is located 260m northwest of the site.

Significance: The site is of high significance.

Mitigation: The site will not be affected by the wind turbine farm; however, the community should be consulted regarding turbines near ancestral graves.

FIG. 16 CEMETERY AT QUN02



QUN03

QUN03 forms part of the historical settlement at Q6 that has been ploughed. QUN03 now consists of a single grave dating to 2004 (fig. 17).

The access road is 190m northwest of the grave and the nearest turbine (Palm Tree 11) is 310m to the north.

Significance: The site is of high significance.

Mitigation: The grave will not, and may not, be affected by the development





QUN04

QUN04 forms part of the historical settlement at Q6 that has been ploughed. QUN04 now consists of a single grave dating to 2004 (fig. 18).

The access road is 130m northwest of the grave and the nearest turbine (Palm Tree 11) is 270m to the north.

Significance: The site is of high significance.

Mitigation: The grave will not, and may not, be affected by the development





QUN05

QUN05 consists of a poorly preserved house floor foundation and parts of a maize field. There are two small stellae at the western corners of the field. These features are not on the 1937 aerial photographs and thus either pre- or postdate 1937. I would support the post date option because the stellae are still in place.

The nearest turbine (WWD3 1 and V80 1) is 65m to the southwest.

Significance: The site is of low significance.

Mitigation: If the area is affected by any earthmoving activity, such as access road construction then it should be monitored for potential human remains.

Palaeontology

The Palaeontological Impact Assessment is dealt with in a separate report.

MANAGEMENT PLAN

The types of impact for the wind turbine farm include:

- 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. These will probably be in a straight line from turbine to turbine and/or run along the access road.
- A small building to house the control instrumentation and interconnection elements, as well as a storeroom for maintenance equipment.

There are five types of heritage management plans for this development:

- Fencing
- Monitoring
- Partial excavation
- Grave removal
- Community participation

The significance and required mitigation for each site is summarised in Table

Fencing

1.

All known graves within 200m of any impact need to be fenced off. This will ensure that they are protected if any deviations occur during the construction phase. There needs to be a 20m border between the fence and the grave. In the case of several graves, it would be 20m from the outer graves. The graves need

to be clearly demarcated with 'danger netting' for the duration of construction. This must be undertaken with community approval.

If Q7 is not to be affected with the photovoltaic area, then it should be fenced off for the widening of the access road. The current access road bisects the site.

All fencing should be confirmed and signed off by a Heritage Impact Assessor.

TABLE 1: SUMMARY OF SITES

Site	Description	Significance	Type of impact	May be affected	Type Mitigation if Affected
Q1	Ploughed homestead	Low	None	Yes	Monitor
Q2	Ploughed homestead	Low	None	Yes	Monitor
Q3	Graves	High	Access road	No	Fenced off and may not be affected.
Q4	Ploughed homestead	Low	Turbine platform	Yes	Monitor
Q5	Ploughed homestead	Low	Access Road	Yes	Monitor and conserve the necklace
Q6	Mostly ploughed homestead; grave	Low, high	Access road	No	Fenced off and may not be affected
Q7	Homestead	Low	Access road, Photovoltaic area	Yes	Partial excavation and monitoring
Q8	Ploughed homestead	Low	None	N/A	Monitor
Q9	Ploughed homestead	low	None	Yes	Monitor
Q10	Old and new homesteads	Low, high	None	N/A	N/A
Q11	Old and new homesteads	Low	None	N/A	N/A
QUN01	Old homestead	Low	None	yes	Monitor
QUN02	Cemetery	High	none	No	Community participation
QUN03	Ploughed homestead; grave	High	None	No	Community participation
QUN04	Ploughed homestead; grave	High	none	No	Community participation
QUN05	Recent ploughed homestead	Low	None	Yes	Monitor

Monitoring

Eight sites need to be monitored during construction activity if they are to be affected. Currently only three sites will be affected. The monitoring is exclusively for potential human remains that may occur beneath the surface. Construction activity would need to stop if any human remains are observed during construction activity. This is discussed in detail under 'GRAVE REMOVAL'

Partial excavation

Two sites require partial excavation if they are to be affected: Q5 and Q7. The bead necklace should be removed and conserved, as it is an example of a beadwork tradition that probably does not occur anymore in this area. The necklace, or bracelet, should be donated to a museum in the E. Cape that deals with beadwork.

Community participation

The current local community would probably claim a link with the historical sites and graves in the study area. They need to be consulted regarding the management plans for known graves. The community should be asked if they could identify unmarked graves in the study area, specifically in the areas where old homesteads have been ploughed and noted in this report. If graves were identified in these areas, then the turbine would need to be moved.

Grave removal

Several graves have been noted in the study area. I would not support attempts to have the human remains removed for the wind farm; however, this would be a community decision, since the known graves are probably younger 60 years.

In terms of the National Heritage Resources Act, (No. 25 of 1999) graves older than 60 years (not in a municipal graveyard) are protected. Only a

registered undertaker should handle human remains younger than 60 years or an institution declared under the Human Tissues Act. Those graves older than 60 years require a qualified archaeologist to undertake the entire process. Anyone who wishes to develop an area where there are graves older than 60 years is required to follow the process described in the legislation (section 36 and associated regulations).

The process is as follows:

- Determine/ confirm the presence of the graves on the property. Normally the
 quickest way to proceed is to obtain the service of a professional
 archaeologist accredited to undertake burial relocations. The archaeologist
 will provide an estimate of the age of the graves. There may be a need for
 archival research and possibly test excavations (permit required).
- The preferred decision is to move the development so that the graves may remain undisturbed. If this is done, the developer must satisfy SAHRA that adequate arrangements have been made to protect the graves on site from the impact of the development. This usually involves fencing the grave (yard) and setting up a small site management plan indicating who will be responsible for maintaining the graves and how this is legally tied into the development. It is recommended that a distance of 10-20 m is left undisturbed between the grave and the fence around the graves.
- If the developer wishes to relocate or disturb the graves:
 - A 60-day public participation (social consultation) process as required by section 36 (and regulations), must be undertaken to identify any direct descendants of those buried on the property. This allows for a period of consultation with any family members or community to ascertain what their wishes are for the burials. It involves notices to the public on site and through representative media. The archaeologist, who can explain the process, may do this but for large or sensitive sites, a social consultant should be employed. Archaeologists often work with undertakers, who rebury the human remains.

- If because of the public participation, the family (where descendants are identified) or the community agree to the relocation process then the graves may be relocated.
- The archaeologist must submit a permit application to SAHRA for the disinterment of the burials. This must include written approval of the descendants or, if there has not been success in identifying direct descendants, written documentation of the social consultation process, which must indicate to SAHRA's satisfaction, the efforts that have been made to locate them. It must also include details of the exhumation process and the place to which the burials are to be relocated. (There are regulations regarding creating new cemeteries and so this usually means that relocation must be to an established communal rural or formal municipal cemetery.)
- Permission must be obtained before exhumation takes place from the landowner where the graves are located, and from the owners/managers of the graveyard to which the remains will be relocated.
- Other relevant legislation must be complied with, including the Human Tissues Act (National Department of Health) and any ordinances of the Provincial Department of Health). The archaeologist can usually advise about this.

Eight areas in total have possible human remains. These areas are in old homesteads that have been ploughed. The graves would be unmarked. Of the eight areas, only three are currently affected by the proposed wind farm. If any human remains were located during construction, activity the Heritage Impact Assessor would need to stop construction. A social consultation process would need to be started with the community since these graves are less than 100 years old, but probably more than 60 years old.

To avoid possible delays to construction time tables the community should be consulted regarding unmarked graves, as soon as possible. A decision needs to be made on how the remains will be dealt with and where they would be reburied. I would suggest that they are reburied at QUN03 as this is an existing cemetery, or at another existing cemetery nearby, if QUN03 is not registered. I suggest that an archaeologist qualified to undertake grave removals is involved with the monitoring of sensitive sites. The archaeologist can at that stage review the fenced of areas for the graves. The archaeologist should apply for an excavation permit before construction, in case human remains are observed.

CONCLUSION

Umlando undertook a heritage survey of the proposed Qunu wind turbine and photovoltaic farm. The proposed wind farm is 20km southwest of Umthatha and near the N2.

A survey of historical maps and aerial photographs indicated that several homesteads occurred at some stage in the study area, as well as graves. The survey identified sixteen sites that consisted of graves, historical homesteads, and areas that had been ploughed that may contain human remains. Of these sixteen sites, three will need to be monitored for human remains, and six may not be affected.

All graves and cemeteries need to be fenced off before any construction activity begins. The community needs to be consulted and agree to the demarcation of the graves. Since three areas may contain human remains, but cannot be confirmed until earthmoving activity, the public participation process should have a formal agreement with the community on how to deal with ancestral remains prior to construction. This will minimise delays if unknown human remains are observed during construction activity.

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APPENDIX A SITE RECORD FORMS

SITE CATEGORY: (X where applicable)

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

Recorder's Site No.: Q1

Official Name: Communal land

Local Name: Mateko

Map Sheet: 3128DC Eliotdale 3128DC GPS reading: S31 46.220 E28 40.547



DIRECTIONS TO SITE: SKETCH OR DESCRIPTION.

2. Get on N2 and drive southwest take Kotishini turnoff S31 43.047 E28 41.548

3. Turn left onto Unpaved Road 3.4 km 3.4 km 0:02:09 0:02:09 219° true S31

44.429 E28 40.294

4. Turn left onto Unpaved Road 4.0 km 615 m 0:02:03 0:04:12 157° true S31

44.731 E28 40.449

5. Turn right onto Unpaved Road 5.1 km 1.1 km 0:03:18 0:07:30 83° trueS31 44.655 E28

41.158

6. Turn right onto Unpaved Road 7.8 km 2.6 km 0:07:47 0:15:17 167° true S31

46.026 E28 41.524

7. Q1 9.5 km 1.7 km 0:04:40 0:19:57 347° true S31 46.220 E28 40.547

SITE DESCRIPTION:

Type of Site: Historical household

Merits conservation: no

Threats: No What threats:

RECORDING: Graphic record: Yes

Digital pictures: x Tracings: Re-drawings:

Recorder/Informant: Name: Gavin Anderson Address: PO Box 102532, Meerensee, 3901

Date: 11/01/2011 Owner: State

Description of site and artefactual content.

Q1 was identified on the 1937 aerial photograph as an individual homestead, with an agricultural field. By the time of the survey, the area had been ploughed and only a wattle woodlot remained. I did not observe any features in the woodlot. May contain graves

SITE CATEGORY: (X where applicable)

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

Recorder's Site No.: Q2

Official Name: Communal land

Local Name: Mateko

Map Sheet: 3128DC Eliotdale

GPS reading: S31 46.248 E28 40.433



DIRECTIONS TO SITE: SKETCH OR DESCRIPTION.

2.	Get on	N2 and	drive sou	ıthwest	0 m	0 m	0:00:00	0:00:00	180° t	rue	S31
43.047	E28 41.	548									
3.	Turn lef	t onto U	npaved	Road	3.4 km	3.4 km	0:02:09	0:02:09	219° t	rue	S31
44.429	E28 40.2	294									
4.	Turn lef	t onto U	npaved	Road	4.0 km	615 m	0:02:03	0:04:12	157° t	rue	S31
44.731	E28 40.4	449									
5.	Turn rig	ht onto	Unpaved	l Road	5.1 km	1.1 km	0:03:18	0:07:30	83° tru	ueS31 44	1.655 E28
41.158											
6.	Turn rig	ht onto	Unpaved	l Road	7.8 km	2.6 km	0:07:47	0:15:17	167° t	rue	S31
46.026	E28 41.	524									
7.	Q2	9.7 km	1.9 km	0:05:06	0:20:23	333° tru	ıe	S31 46.	248 E	28 40.43	3

SITE DESCRIPTION:

Type of Site: historical homestead

Merits conservation: no

Threats: No What threats:

RECORDING: Graphic record: Yes

Digital pictures: x Tracings : Re-drawings:

Recorder/Informant: Name: Gavin Anderson Address: PO Box 102532, Meerensee, 3901

Date: 11/01/2011 Owner: State

Description of site and artefactual content.

Q2 was identified on the 1937 aerial photograph as an individual homestead, with an agricultural field. By the time of the survey, the area had been ploughed and only a wattle woodlot remained. I did not observe any features in the woodlot.

SITE CATEGORY: (X where applicable)

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

Recorder's Site No.: Q3 Official Name: Communal land

Local Name: Mateko

Map Sheet: 3128DC Eliotdale

GPS reading: S31 46.327 E28 40.448



DIRECTIONS TO SITE: SKETCH OR DESCRIPTION.

2.	Get on N2	and c	drive sou	ıthwest	0 m	0 m	0:00:00	0:00:00	180° tru	ıe	S31
43.047	E28 41.548	3									
3.	Turn left o	nto Ur	npaved I	Road	3.4 km	3.4 km	0:02:09	0:02:09	219° tru	ıe	S31
44.429	E28 40.294	1									
4.	Turn left o	nto Ur	npaved I	Road	4.0 km	615 m	0:02:03	0:04:12	157° tru	ıe	S31
44.731	E28 40.449	9									
5.	Turn right	onto l	Jnpaved	Road	5.1 km	1.1 km	0:03:18	0:07:30	83° true	S31 44	.655 E28
41.158											
6.	Turn right	onto l	Jnpaved	Road	7.8 km	2.6 km	0:07:47	0:15:17	167° tru	ıe	S31
46.026	E28 41.524	1									
7.	Q3 9.	6 km	1.8 km	0:05:15	0:20:32	333° tru	ie	S31 46.	327 E28	3 40.448	

SITE DESCRIPTION:

Type of Site: historical homestead and graves

Merits conservation:

Threats: Yes

What threats: Access Road

RECORDING: Graphic record: Yes

Digital pictures: x Tracings : Re-drawings:

Recorder/Informant: Name: Gavin Anderson Address: PO Box 102532, Meerensee, 3901

Date: 11/01/2011 Owner: State

Description of site and artefactual content.

Q3 is a homestead in the 1937 aerial maps and a group of human graves by 1982. The graves are undated and belong to three adults and two juveniles. The graves may be related to the 1937 settlement, but they are similar to QUN03 and QUN04 that date to 2004. The graves are currently fenced off. There no remains of the homestead.

SITE CATEGORY: (X where applicable)

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

Recorder's Site No.: Q4

Official Name: Communal land

Local Name: Mateko

Map Sheet: 3128DC Eliotdale

GPS reading: S31 46.289 E28 40.467



DIRECTIONS TO SITE: SKETCH OR DESCRIPTION.

2.	Get on	N2 and	drive sou	ıthwest	0 m	0 m	0:00:00	0:00:00	180° t	true	S31
43.047	E28 41.	548									
3.	Turn lef	t onto U	npaved	Road	3.4 km	3.4 km	0:02:09	0:02:09	219° t	true	S31
44.429	E28 40.2	294									
4.	Turn lef	t onto U	npaved	Road	4.0 km	615 m	0:02:03	0:04:12	157° t	true	S31
44.731	E28 40.4	449									
5.	Turn rig	ht onto	Unpaved	l Road	5.1 km	1.1 km	0:03:18	0:07:30	83° tr	ueS31 44	1.655 E28
41.158											
6.	Turn rig	ht onto	Unpaved	l Road	7.8 km	2.6 km	0:07:47	0:15:17	167° t	true	S31
46.026	E28 41.	524									
7.	Q4	9.6 km	1.8 km	0:05:04	0:20:21	333° tru	ie	S31 46.	289 E	28 40.46	7

SITE DESCRIPTION:

Type of Site: Historical homestead

Merits conservation: no

Threats: No What threats:

RECORDING: Graphic record: Yes

Digital pictures: x Tracings : Re-drawings:

Recorder/Informant: Name: Gavin Anderson Address: PO Box 102532, Meerensee, 3901

Date: 11/01/2011 Owner: State

Description of site and artefactual content.

Q4 was identified on the 1937 aerial photograph as an individual homestead, with an agricultural field. By the time of the survey the area had been ploughed.

SITE CATEGORY: (X where applicable)

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

Recorder's Site No.: Q5

Official Name: Communal land

Local Name: Mateko

Map Sheet: 3128DC Eliotdale

GPS reading: S31 46.508 E28 39.875



DIRECTIONS TO SITE: SKETCH OR DESCRIPTION.

2.	Get on	N2 and drive sou	uthwest	0 m	0 m	0:00:00	0:00:00	180° true		S31
43.047	E28 41.	548								
3.	Turn lef	t onto Unpaved I	Road	8.1 km	8.1 km	0:05:10	0:05:10	226° true		S31
46.023	E28 38.0	030								
4.	Turn lef	t onto Unpaved I	Road	11.0 km	12.8 km	0:08:19	0:13:29	156° true		S31
47.303	E28 38.	711								
5.	Turn lef	t onto Unpaved I	Road	11.3 km	1376 m	0:01:11	0:14:40	60° trueS31	47.	147 E28
38.763										
6.	Turn rig	ht onto Unpaved	Road	12.2 km	1830 m	0:02:25	0:17:05	50° trueS31	46.8	873 E28
39.152										
7.	Q5	13.7 km1.5 km	0:04:21	0:21:26	175° tru	ıe	S31 46.	508 E28 39.8	375	

SITE DESCRIPTION:

Type of Site: Historical homestead

Merits conservation:

Threats: Yes

What threats: Access Road

RECORDING: Graphic record: Yes

Digital pictures: x Tracings : Re-drawings:

Recorder/Informant: Name: Gavin Anderson Address: PO Box 102532, Meerensee, 3901

Date: 11/01/2011 Owner: State

Description of site and artefactual content.

Q5 was identified on the 1937 aerial photographs as consisting of at least two homesteads over 300m. The site now consists of an old wattle woodlot and two house floor remains. The house foundations are 5m in diameter. There may be house floor remains in the woodlot. The rest of the site has been ploughed and there is no visible evidence of features. A small area of the bark of one wattle tree has been partially scraped off. This may be for traditional medicine and would be considered as part of the community's living heritage. A bracelet or necklace made from wire and blue glass beads was observed partially exposed in the road and is probably related to the site.

SITE CATEGORY: (X where applicable)

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

Recorder's Site No.: Q6 Official Name: Communal land

Local Name: Mateko

Map Sheet: 3128DC Eliotdale

GPS reading: S31 46.510 E28 39.576



DIRECTIONS TO SITE: SKETCH OR DESCRIPTION.

2.	Get on I	N2 and drive sοι	uthwest	0 m	0 m	0:00:00	0:00:00	180° true		S31
43.047	E28 41.5	548								
3.	Turn lef	t onto Unpaved	Road	8.1 km	8.1 km	0:05:10	0:05:10	226° true		S31
46.023	E28 38.0	030								
4.	Turn lef	t onto Unpaved	Road	11.0 km	12.8 km	0:08:19	0:13:29	156° true		S31
47.303	E28 38.7	711								
5.	Turn lef	t onto Unpaved	Road	11.3 km	1376 m	0:01:11	0:14:40	60° trueS31	47.	147 E28
38.763										
6.	Turn rig	ht onto Unpaved	Road	12.2 km	1830 m	0:02:25	0:17:05	50° trueS31	46.	873 E28
39.152										
7.	Q6	13.2 km1.0 km	0:02:52	0:19:57	139° tru	ie	S31 46.	510 E28 39.	576	

SITE DESCRIPTION:

Type of Site:

Merits conservation: Historical households

Threats: Yes

What threats: possible access road

RECORDING: Graphic record: Yes

Digital pictures: x Tracings : Re-drawings:

Recorder/Informant: Name: Gavin Anderson Address: PO Box 102532, Meerensee, 3901

Date: 11/01/2011 Owner: State

Description of site and artefactual content.

Q6 is the remains of a settlement identified from the 1937 aerial photograph. There were three settlements spanning ~ 300 m, although only one now remains. This is a result of ploughing. The site consists of three house foundations, of which only one is in a good condition. There is a possible grave located 15m northwest of the house floor (S31 46' 30.4", E28 39' 34"). The grave consists of a small cairn 1m x 1.5m in an approximate east-west orientation. There are two 'headstones' at each end of the cairn.

SITE CATEGORY: (X where applicable)

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

Recorder's Site No.: Q7 Official Name: Communal land Local Name: Maqomeni Map Sheet: 3128DC Eliotdale

GPS reading: S31 46.881 E28 39.093



DIRECTIONS TO SITE: SKETCH OR DESCRIPTION.

2.	Get on	N2 and drive sou	uthwest	0 m	0 m	0:00:00	0:00:00	180° true	S31
43.047	E28 41.5	548							
3.	Turn lef	t onto Unpaved	Road	8.1 km	8.1 km	0:05:10	0:05:10	226° true	S31
46.023	E28 38.0	030							
4.	Turn lef	t onto Unpaved	Road	11.0 km	12.8 km	0:08:19	0:13:29	156° true	S31
	E28 38.7								
5.	Turn lef	t onto Unpaved	Road	11.3 km	1314 m	0:01:00	0:14:29	47° trueS31	47.154 E28
38.725									
6.	Q7	12.1 km869 m	0:02:33	0:17:02	355° tru	ıe	S31 46.	881 E28 39.0	093

SITE DESCRIPTION:

Type of Site: Historical homestead

Merits conservation: yes

Threats: Yes

What threats: Access road, photovoltaic farm

RECORDING: Graphic record: Yes

Digital pictures: x Tracings : Re-drawings:

Recorder/Informant: Name: Gavin Anderson Address: PO Box 102532, Meerensee, 3901

Date: 11/01/2011 Owner: State

Description of site and artefactual content.

Q7 was identified from the 1937 aerial photographs as a homestead. The site is still visible and consists of six house floors and a large cattle byre (fig. 14). The houses are uphill from the cattle byre. The house remains are not well preserved and are not visible in photographs. The current access road passes though the middle of the site. This is the only example of an historic cattle byre in the study area. This byre probably predates the 1937 photographs.

SITE CATEGORY: (X where applicable)

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

Recorder's Site No.: Q8 Official Name: Communal land

Local Name: Mateko

Map Sheet: 3128DC Eliotdale

GPS reading: S31 46.150 E28 40.612



DIRECTIONS TO SITE: SKETCH OR DESCRIPTION.

2.	Get on N2	and d	rive sou	ıthwest	0 m	0 m	0:00:00	0:00:00	180° t	rue	S31
43.047	E28 41.548										
3.	Turn left or	nto Un	paved I	Road	3.4 km	3.4 km	0:02:09	0:02:09	219° t	rue	S31
44.429	E28 40.294										
4.	Turn left or	nto Un	paved I	Road	4.0 km	615 m	0:02:03	0:04:12	157° t	rue	S31
44.731	E28 40.449	1									
5.	Turn right of	onto U	npaved	Road	5.1 km	1.1 km	0:03:18	0:07:30	83° tru	ieS31 44	.655 E28
41.158											
6.	Turn right of	onto U	npaved	Road	7.8 km	2.6 km	0:07:47	0:15:17	167° t	rue	S31
46.026	E28 41.524										
7.	Q8 9.5	km 1	1.7 km	0:04:15	0:19:32	342° tru	ie	S31 46.	150 E2	28 40.612	2

SITE DESCRIPTION:

Type of Site: Historical homestead

Merits conservation:

Threats: No

What threats: None

RECORDING: Graphic record: Yes

Digital pictures: x Tracings : Re-drawings:

Recorder/Informant: Name: Gavin Anderson Address: PO Box 102532, Meerensee, 3901

Date: 11/01/2011 Owner: State

Description of site and artefactual content.

Q8 was identified from the 1937 aerial photographs as being a homestead. At the time of the survey, the site did not exist. There is a more recent settlement on the site. There is a recent grave in the mealie field.

SITE CATEGORY: (X where applicable)

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

Recorder's Site No.: Q9 Official Name: Communal land

Local Name: Mateko

Map Sheet: 3128DC Eliotdale

GPS reading: S31 46.505 E28 40.377



DIRECTIONS TO SITE: SKETCH OR DESCRIPTION.

2.	Get on N2 and drive southwest	0 m	0 m	0:00:00	0:00:00	180° true	S31
43.047	E28 41.548						
3.	Turn left onto Unpaved Road	3.4 km	3.4 km	0:02:09	0:02:09	219° true	S31
44.429	E28 40.294						
4.	Turn left onto Unpaved Road	4.0 km	615 m	0:02:03	0:04:12	157° true	S31
44.731	E28 40.449						
5.	Turn right onto Unpaved Road	5.1 km	1.1 km	0:03:18	0:07:30	83° trueS31 44	4.655 E28
41.158							
6.	Turn right onto Unpaved Road	7.8 km	2.6 km	0:07:47	0:15:17	167° true	S31
46.026	E28 41.524						
7.	Q9 10.1 km2.3 km 0:06:00	0:21:17	์ 150° trเ	ıe	S31 46.5	505 E28 40.37	7

SITE DESCRIPTION:

Type of Site: Historical settlement

Merits conservation:

Threats: Yes What threats:

RECORDING: Graphic record: Yes

Digital pictures: x Tracings : Re-drawings:

Recorder/Informant: Name: Gavin Anderson Address: PO Box 102532, Meerensee, 3901

Date: 11/01/2011 Owner: State

Description of site and artefactual content.

Q9 was noted as a settlement from the 1937 aerial maps. The site could not be located during the survey, as the area had been ploughed. The site may have human graves.

SITE CATEGORY: (X where applicable)

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

Recorder's Site No.: Q10 Official Name: Communal land Local Name: Maqomeni Map Sheet: 3128DC Eliotdale

GPS reading: S31 46.927 E28 38.972



DIRECTIONS TO SITE: SKETCH OR DESCRIPTION.

2.	Get on N2 and drive southwest	0 m	0 m	0:00:00	0:00:00 180)° true	S31
43.047	E28 41.548						
3.	Turn left onto Unpaved Road	8.1 km	8.1 km	0:05:10	0:05:10 226	6° true	S31
46.023	E28 38.030						
4.	Turn left onto Unpaved Road	11.0 km	12.8 km	0:08:19	0:13:29 156	6° true	S31
47.303	E28 38.711						
5.	Turn left onto Unpaved Road	11.3 km	า314 m	0:01:00	0:14:29 479	trueS31 47	.154 E28
38.725							
6.	Q10 12.0 km687 m 0:01:58	0:16:27	ั 325° trเ	ıe	S31 46.927	E28 38.972	

SITE DESCRIPTION:

Type of Site: Historical settlement

Merits conservation: No

Threats: No What threats:

RECORDING: Graphic record: Yes

Digital pictures: x Tracings : Re-drawings:

Recorder/Informant: Name: Gavin Anderson Address: PO Box 102532, Meerensee, 3901

Date: 11/01/2011 Owner: State

Description of site and artefactual content.

Q10 was noted as two settlements next to each other from the 1937 aerial maps. The site does not exist anymore as more recent buildings of the Maqomeni village have replaced it.

SITE CATEGORY: (X where applicable)

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

Recorder's Site No.: Q11 Official Name: Communal land Local Name: Maqomeni Map Sheet: 3128DC Eliotdale

GPS reading: S31 46.913 E28 39.093



DIRECTIONS TO SITE: SKETCH OR DESCRIPTION.

2.	Get on	N2 and drive so	uthwest	0 m	0 m	0:00:00	0:00:00	180° true	S31
43.0	47 E28 41.	.548							
3.	Turn le	ft onto Unpaved	Road	8.1 km	8.1 km	0:05:10	0:05:10	226° true	S31
46.0	23 E28 38.	.030							
4.	Turn le	ft onto Unpaved	Road	11.0 km	12.8 km	0:08:19	0:13:29	156° true	S31
47.3	03 E28 38.	.711							
5.	Turn le	ft onto Unpaved	Road	11.3 km	1314 m	0:01:00	0:14:29	47° trueS31 47	'.154 E28
38.7	'25								
6.	Q11	12.2 km896 m	0:02:32	0:17:01	175° tru	ıe	S31 46.9	913 E28 39.093	3

SITE DESCRIPTION:

Type of Site: Historical settlement

Merits conservation: No

Threats: No What threats:

RECORDING: Graphic record: Yes

Digital pictures: x Tracings : Re-drawings:

Recorder/Informant: Name: Gavin Anderson Address: PO Box 102532, Meerensee, 3901

Date: 11/01/2011 Owner: State

Description of site and artefactual content.

Q11 was noted as a settlement next to each other from the 1937 aerial maps. The site does not exist anymore as more recent buildings of the Maqomeni village have replaced it. There are two graves at Q11, but these are related to recent houses.

SITE CATEGORY: (X where applicable)

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

Recorder's Site No.: QUN01 Official Name: Communal land

Local Name: Mateko

Map Sheet: 3128DC Eliotdale

GPS reading: S31 46.224 E28 40.613



DIRECTIONS TO SITE: SKETCH OR DESCRIPTION.

Get on N2 and drive southwest	0 m	0 m	0:00:00	0:00:00	180° true	S31
E28 41.548						
Turn left onto Unpaved Road	3.4 km	3.4 km	0:02:09	0:02:09	219° true	S31
E28 40.294						
Turn left onto Unpaved Road	4.0 km	615 m	0:02:03	0:04:12	157° true	S31
E28 40.449						
Turn right onto Unpaved Road	5.1 km	1.1 km	0:03:18	0:07:30	83° true S31 44	.655 E28
Turn right onto Unpaved Road	7.8 km	2.6 km	0:07:47	0:15:17	167° true	S31
E28 41.524						
QUN01 9.4 km 1.6 km 0:04:22	0:19:39	342° tru	ie	S31 46.2	224 E28 40.613	
	E28 41.548 Turn left onto Unpaved Road E28 40.294 Turn left onto Unpaved Road E28 40.449 Turn right onto Unpaved Road Turn right onto Unpaved Road E28 41.524	E28 41.548 Turn left onto Unpaved Road 3.4 km E28 40.294 Turn left onto Unpaved Road 4.0 km E28 40.449 Turn right onto Unpaved Road 5.1 km Turn right onto Unpaved Road 7.8 km E28 41.524	E28 41.548 Turn left onto Unpaved Road E28 40.294 Turn left onto Unpaved Road E28 40.449 Turn right onto Unpaved Road	E28 41.548 Turn left onto Unpaved Road 3.4 km 3.4 km 0:02:09 E28 40.294 Turn left onto Unpaved Road 4.0 km 615 m 0:02:03 E28 40.449 Turn right onto Unpaved Road 5.1 km 1.1 km 0:03:18 Turn right onto Unpaved Road 7.8 km 2.6 km 0:07:47	E28 41.548 Turn left onto Unpaved Road E28 40.294 Turn left onto Unpaved Road E28 40.449 Turn right onto Unpaved Road	E28 41.548 Turn left onto Unpaved Road 3.4 km 3.4 km 0:02:09 0:02:09 219° true E28 40.294 Turn left onto Unpaved Road 4.0 km 615 m 0:02:03 0:04:12 157° true E28 40.449 Turn right onto Unpaved Road 5.1 km 1.1 km 0:03:18 0:07:30 83° true S31 44 Turn right onto Unpaved Road 7.8 km 2.6 km 0:07:47 0:15:17 167° true E28 41.524

SITE DESCRIPTION:

Type of Site: Historical settlement

Merits conservation: No

Threats: No What threats:

RECORDING: Graphic record: Yes

Digital pictures: x Tracings : Re-drawings:

Recorder/Informant: Name: Gavin Anderson Address: PO Box 102532, Meerensee, 3901

Date: 11/01/2011 Owner: State

Description of site and artefactual content.

QUN01 was noted as a possible settlement, and this was confirmed during the survey. The site consists of three house foundations and one circular kraal that are poorly preserved. The house foundations are 5m - 8m in diameter. More of the site, or parts of an adjacent settlement, may continue for \sim 75m to the northeast. This was visible as potential sites on the Google Earth image and 1937 aerials, but not visible during the field survey.

SITE CATEGORY: (X where applicable)

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

Recorder's Site No.: QUN02 Official Name: Communal land

Local Name: Mateko

Map Sheet: 3128DC Eliotdale

GPS reading: S31 46.465 E28 40.435



DIRECTIONS TO SITE: SKETCH OR DESCRIPTION.

2.	Get on N2 and drive southwest	0 m	0 m	0:00:00	0:00:00	180° true		S31
43.047	E28 41.548							
3.	Turn left onto Unpaved Road	3.4 km	3.4 km	0:02:09	0:02:09	219° true		S31
44.429	E28 40.294							
4.	Turn left onto Unpaved Road	4.0 km	615 m	0:02:03	0:04:12	157° true		S31
44.731	E28 40.449							
5.	Turn right onto Unpaved Road	5.1 km	1.1 km	0:03:18	0:07:30	83° trueS31	44.	655 E28
41.158								
6.	Turn right onto Unpaved Road	7.8 km	2.6 km	0:07:47	0:15:17	167° true		S31
46.026	E28 41.524							
7.	QUN02 9.9 km 2.2 km 0:05:33	3 0:20:50	160° tru	ıe	S31 46.	465 E28 40.4	135	

SITE DESCRIPTION:

Type of Site: graves Merits conservation: yes

Threats: No What threats:

RECORDING: Graphic record: Yes

Digital pictures: x Tracings : Re-drawings:

Recorder/Informant: Name: Gavin Anderson Address: PO Box 102532, Meerensee, 3901

Date: 11/01/2011 Owner: State

Description of site and artefactual content.

QUN02 is noted on the 1982 1:50 000 topographical maps as an area of graves (fig. 16), but not on the 2001 maps, where it is noted as an agricultural field. The graves are recent.

SITE CATEGORY: (X where applicable)

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

Recorder's Site No.: QUN03 Official Name: Communal land

Local Name: Mateko

Map Sheet: 3128DC Eliotdale

GPS reading: S31 46.680 E28 39.520



DIRECTIONS TO SITE: SKETCH OR DESCRIPTION.

2.	Get on N2 and drive southwest	0 m	0 m	0:00:00	0:00:00	180° true	S31
43.047	E28 41.548						
3.	Turn left onto Unpaved Road	8.1 km	8.1 km	0:05:10	0:05:10	226° true	S31
46.023	E28 38.030						
4.	Turn left onto Unpaved Road	11.0 km	12.8 km	0:08:19	0:13:29	156° true	S31
47.303	E28 38.711						
5.	Turn left onto Unpaved Road	11.3 km	1376 m	0:01:11	0:14:40	60° true S31 47	7.147 E28
38.763							
6.	Turn right onto Unpaved Road	12.2 km	1830 m	0:02:25	0:17:05	50° true S31 46	6.873 E28
39.152							
7.	QUN03 13.0 km817 m 0:01:54	0:18:59	121° tru	ie	S31 46.	680 E28 39.520)

SITE DESCRIPTION:

Type of Site: historical settlement and recent graves

Merits conservation: no/Yes

Threats: No What threats:

RECORDING: Graphic record: Yes

Digital pictures: x Tracings : Re-drawings:

Recorder/Informant: Name: Gavin Anderson Address: PO Box 102532, Meerensee, 3901

Date: 11/01/2011 Owner: State

Description of site and artefactual content.

QUN03 forms part of the historical settlement at Q6 that has been ploughed. QUN03 now consists of a single grave dating to 2004.

SITE CATEGORY: (X where applicable)

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

Recorder's Site No.: QUN04 Official Name: Communal land

Local Name: Mateko

Map Sheet: 3128DC Eliotdale

GPS reading: S31 46.659 E28 39.499



DIRECTIONS TO SITE: SKETCH OR DESCRIPTION.

2.	Get on N2 and drive southwest	0 m	0 m	0:00:00	0:00:00	180° true	S31
43.047	E28 41.548						
3.	Turn left onto Unpaved Road	8.1 km	8.1 km	0:05:10	0:05:10	226° true	S31
46.023	E28 38.030						
4.	Turn left onto Unpaved Road	11.0 km	12.8 km	0:08:19	0:13:29	156° true	S31
47.303	E28 38.711						
5.	Turn left onto Unpaved Road	11.3 km	1376 m	0:01:11	0:14:40	60° trueS31 47	'.147 E28
38.763							
6.	Turn right onto Unpaved Road	12.2 km	1830 m	0:02:25	0:17:05	50° trueS31 46	5.873 E28
39.152							
7.	QUN04 12.9 km785 m 0:01:56	0:19:01	121° tru	ie	S31 46.0	659 E28 39.499	9

SITE DESCRIPTION:

Type of Site: Merits conservation:

Threats: Yes What threats:

RECORDING: Graphic record: Yes

Digital pictures: x Tracings : Re-drawings:

Recorder/Informant: Name: Gavin Anderson Address: PO Box 102532, Meerensee, 3901

Date: 11/01/2011 Owner: State

Description of site and artefactual content.

QUN04 forms part of the historical settlement at Q6 that has been ploughed. QUN04 now consists of a single grave dating to 2004.

SITE CATEGORY: (X where applicable)

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

Recorder's Site No.: QUN05 Official Name: Communal land

Local Name: Mateko

Map Sheet: 3128DC Eliotdale

GPS reading:



DIRECTIONS TO SITE: SKETCH OR DESCRIPTION.

2.	Get on N2 and drive southwest	0 m	0 m	0:00:00	0:00:00	180° true	S31
43.047	E28 41.548						
3.	Turn left onto Unpaved Road	8.1 km	8.1 km	0:05:10	0:05:10	226° true	S31
46.023	E28 38.030						
4.	Turn left onto Unpaved Road	11.0 kn	12.8 km	0:08:19	0:13:29	156° true	S31
47.303 E28 38.711							
5.	Turn left onto Unpaved Road	11.3 kn	า376 m	0:01:11	0:14:40	60° trueS31 47	.147 E28
38.763							
6.	Turn right onto Unpaved Road	12.2 kn	า830 m	0:02:25	0:17:05	50° true S31 46	.873 E28
39.152							
7.	Grave? 13.1 km978 m 0:02:50	0:19:55	์ 139° trเ	ıe	S31 46.	507 E28 39.567	7
8.	Get on Unpaved Road and drive	northe	ast	13.2 km	23 m	0:00:00 0:19:55	5 319°
true	S31 46.497 E28 39.557						
9.	Turn left onto Unpaved Road	17.8 kn	14.6 km	0:13:14	0:33:09	342° true	S31
45.374 E28 41.271							
10.	QUN05 19.3 km1.5 km 0:03:26	0:36:35	์ 291° trเ	ıe	S31 45.	392 E28 40.327	7

SITE DESCRIPTION:

Type of Site: Historical settlement

Merits conservation: no

Threats: Yes What threats:

RECORDING: Graphic record: Yes

Digital pictures: x Tracings: Re-drawings:

Recorder/Informant: Name: Gavin Anderson Address: PO Box 102532, Meerensee, 3901

Date: 11/01/2011 Owner: State

Description of site and artefactual content.

QUN05 consists of a poorly preserved house floor foundation and parts of a maize field. There are two small stellae at the western corners of the field. These features are no on the 1937 aerial photographs and thus either pre- or postdate 1937. I would support the post date option because the stellae are still in place.