PROPOSED ESTABLISHMENT OF THE NAMAKWA SPECIAL ECONOMIC ZONE ON PORTION 1 OF THE FARM BLOEMHOEK 61 AND THE REMAINDER OF PORTION 57 OF THE FARM AROAMS 57, NORTHERN CAPE



For:



February 2021

REPORT DETAILS

Report Details	Rev O		
Report Title	Proposed establishment of the Namakwa special economic zone on Portion 1 of the Farm Bloemhoek 61 and on the Remainder of Portion 57 of the Farm Aroams 57, Northern Cape		
Date Submitted	February 2021		
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	of the National Environmental Management Act, 1998 (Act No. 107 of 1998)		
	2014 EIA Regulations as amended and the National Heritage Resources		
	Act, 1999 (Act 25 of 1999).		
Copyright Warning	Unless otherwise noted, the copyright in all text and other content		
	(including the manner of presentation) is the exclusive property of Leonie		
	Marais Heritage Practitioner.		
Disclaimer	Although all possible care is taken to identify/find all sites of cultural		
	importance during the initial survey of the study area, the nature of		
	archaeological and historical sites is as such that it is always possible that		
	hidden or sub-surface sites could be overlooked during the study. Leonie		
	Marais Heritage Practitioner will not be held liable will not be held liable for		
	such oversights or for the costs incurred as a result thereof.		

EXECUTIVE SUMMARY

Leonie Marais was appointed by KEMS to carry out a Phase 1 Heritage Impact Assessment (HIA) the proposed of the Namakwa special economic zone on Portion 1 of the Farm Bloemhoek 61 and on the Remainder of Portion 57 of the Farm Aroams 57, Northern Cape. The site visit took place on 29 October 2020.

A field survey was conducted after which a survey of literature was undertaken. Various studies have been conducted in the greater study area and one specific on the same farm as the subject report. This study referred to was prepared in 2013 by Morris, D. 2013. Heritage Impact Assessment proposed Aggeneys Photovoltaic Solar Energy Facility at Bloemhoek near Aggeneys, Northern Cape Province. Unpublished report prepared for Solar Capital (Pty) Ltd. Kimberley: McGregor Museum.

Heritage sites are present on the area earmarked for development.

It should be noted that the sub-surface archaeological and/or historical deposits and graves are always a possibility. Care should be taken during any work in the entire area and if any of the above is discovered, an archaeologist/heritage practitioner should be commissioned to investigate.

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DEFINITION OF TERMS:

"alter" means any action affecting the structure, appearance or physical properties of a place or object, whether by way of structural or other works, by painting, plastering or other decoration or any other means.

"archaeological'' means-

(a) material remains resulting from human activity which are in a state of disuse and are in or on land and which are older than 100 years, including artefacts, human and hominid remains and artificial features and structures;

(b) rock art, being any form of painting, engraving or other graphic representation on a fixed rock surface or loose rock or stone, which was executed by human agency and which is older than 100 years, including any area within 10m of such representation;

(c) wrecks, being any vessel or aircraft, or any part thereof, which was wrecked in South Africa, whether on land, in the internal waters, the territorial waters or in the maritime culture zone of the Republic, as defined respectively in sections 3, 4 and 6 of the Maritime Zones Act, 1994 (Act No. 15 of 1994), and any cargo, debris or artefacts found or associated therewith, which is older than 60 years or which SAHRA considers to be worthy of conservation; and

(d) features, structures and artefacts associated with military history which are older than 75 years and the sites on which they are found.

"conservation", in relation to heritage resources, includes protection, maintenance, preservation and sustainable use of places or objects so as to safeguard their cultural significance.

"cultural significance" means aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value or significance.

"development" means any physical intervention, excavation, or action, other than those caused by natural forces, which may in the opinion of a heritage authority in any way result in a change to the nature, appearance or physical nature of a place, or influence its stability and future well-being, including—

(a) construction, alteration, demolition, removal or change of use of a place or a structure at a place;

(b) carrying out any works on or over or under a place;

(c) subdivision or consolidation of land comprising, a place, including the structures or airspace of a place;

(d) constructing or putting up for display signs or hoardings;

(e) any change to the natural or existing condition or topography of land; and (f) any removal or destruction of trees, or removal of vegetation or topsoil; or object that is specifically designated by that state as being of importance.

"'grave'' means a place of interment and includes the contents, headstone or other marker of such a place, and any other structure on or associated with such place. "heritage resource" means any place or object of cultural significance.

"heritage resources authority" means the South African Heritage Resources Agency (SAHRA), or in respect of a province, a provincial heritage resources authority.

"heritage site" means a place declared to be a national heritage site by SAHRA or a place declared to be a provincial heritage site by a provincial heritage resources authority.

''improvement'', in relation to heritage resources, includes the repair, restoration and rehabilitation of a place protected in terms of Act 25 of 1999.

"living heritage" means the intangible aspects of inherited culture, and may include—

(a) cultural tradition;

- (b) oral history;
- (c) performance;
- (d) ritual;
- (e) popular memory;
- (f) skills and techniques;
- (g) indigenous knowledge systems; and

(h) the holistic approach to nature, society and social relationships.

"local authority" means a municipality as defined in section 10B of the Local Government Transition Act, 1993 (Act No. 209 of 1993).

"management", in relation to heritage resources, includes the conservation, presentation and improvement of a place protected in terms of Act 25 of 1999.

"meteorite" means any naturally-occurring object of extraterrestrial origin.

"object" means any movable property of cultural significance which may be protected in terms of any provisions of Act 25 of 1999, including— (a) any archaeological artefact;

(b) palaeontological and rare geological specimens;

(b) palaeoniological and rate geolo

(c) meteorites; and

(d) other objects.

"palaeontological" means any fossilised remains or fossil trace of animals or plants which lived in the geological past, other than fossil fuels or fossiliferous rock intended for industrial use, and any site which contains such fossilised remains or trance.

"place" includes—

(a) a site, area or region;

(b) a building or other structure which may include equipment, furniture, fittings and articles associated with or connected with such building or other structure; (c) a group of buildings or other structures which may include equipment, furniture, fittings and articles associated with or connected with such group of buildings or other structures;

(d) an open space, including a public square, street or park; and

(e) in relation to the management of a place, includes the immediate surroundings of a place.

"presentation" includes—

(a) the exhibition or display of;

(b) the provision of access and guidance to;

(c) the provision, publication or display of information in relation to; and

(d) performances or oral presentations related to, heritage resources protected in terms of Act 25 of 1999.

"public monuments and memorials" means all monuments and memorials— (a) erected on land belonging to any branch of central, provincial or local government, or on land belonging to any organisation funded by or established in terms of the legislation of such a branch of government; or

(b) which were paid for by public subscription, government funds, or a publicspirited or military organisation, and are on land belonging to any private individual.

"site" means any area of land, including land covered by water, and including any structures or objects thereon.

"structure" means any building, works, device or other facility made by people and which is fixed to land, and includes any fixtures, fittings and equipment associated therewith.

"victims of conflict" means—

(a) certain persons who died in any area now included in the Republic as a direct result of any war or conflict as specified in the regulations, but excluding victims of conflict covered by the Commonwealth War Graves Act, 1992 (Act No. 8 of 1992); (b) members of the forces of Great Britain and the former British Empire who died in active service in any area now included in the Republic prior to 4 August 1914; (c) persons who, during the Anglo-Boer War (1899-1902) were removed as prisoners of war from any place now included in the Republic to any place outside South Africa and who died there; and

(d) certain categories of persons who died in the ''liberation struggle'' as defined in the regulations, and in areas included in the Republic as well as outside the Republic.

1. INTRODUCTION

The Namaqua SEZ is an initiative driven by NCEDA to unlock the industrial potential afforded by the mining proximity and the agricultural economy of the Northern Cape. The planned SEZ reflects a trend in South African industrial planning. The South African National government drives the creation of industrial parks and SEZs as a means to cluster together businesses that can benefit from proximity to one another.

In addition, local manufacturing is boosted through incentives, duty-free imports and tax rebates. The policy of SEZ development aims to attract new skills and develop new industries.

To ensure economic growth that will lead to increased development and prosperity for the people of the Northern Cape Province, a conscious effort is required to change the economic trajectory of the Province. The development of the Namaqua SEZ is an ideal economic catalyst. The Namaqua SEZ will adhere to the following identified developmental outcomes and focus area:

- Agriculture and Agro-Processing;
- Mining and Mineral Beneficiation;
- Manufacturing and Trade;
- Competitive Infrastructure Development;
- Employments and Skills Development; and
- Innovation and Knowledge Economy

The SEZ as a whole will focus on an Agri Hub, Mining manufacturing, Shared services and Noxious industry. This Noxious industry part of the SEZ will be handled by the Black Mountain Mining Pty Ltd and all Hazardous and or Noxious elements will not be handled or included in the EIA associated with the project.

The project EIA will include and not be limited to the following components:

- Agri-hub;
- Mining manufacturing;
- Shared services;
- Railway line;
- Water and sanitation infrastructure and reservoirs;
- Main roads, access roads and internal roads;
- Storage of dangerous goods; and
- 100MW PV Solar installation

1.1 WHY A PHASE 1 HERITAGE IMPACT ASSESSMENT IS REQUIRED?

This project may potentially impact on any types and ranges of heritage resources that are outlined in Section 3 of the National Heritage Resources Act, 1999 (Act No. 25 of 1999). Subsequently a Phase 1 Heritage Impact Assessment (HIA) was commissioned by KEMS and conducted by Leonie Marais.

1.1.1 BASELINE STUDY

The objective of this Phase 1 Heritage Impact Assessment (HIA) was to gain an overall understanding of the heritage sensitivities of the area and indicate how they may be impacted on through development activities. The site survey took place on 29 October 2020.

A baseline study was conducted to identify and compile a comprehensive inventory of sites of cultural heritage within the proposed project area, which include:

(i) all sites of archaeological interest;

(ii) all buildings and structures older than 60 years;

(iii) landscape features include sites of historical events or providing a significant historical record or a setting for buildings or monuments of architectural or archaeological importance, historic field patterns and graves.

The baseline study also included a desk-top research and a field survey.

The desktop research was conducted to analyse, collect and collate extant information. The desktop research included:

- Search of the list of declared heritage sites protected by the National Heritage Resources Act, 1999 (Act no. 25 of 1999);
- Search of publications on local historical, architectural, anthropological, archaeological and other cultural studies;
- Search of other unpublished papers, records, archival and historical documents through public libraries, archives, and the tertiary institutions; and
- Search of cartographic and pictorial documents and maps.

The above baseline categories are sufficient for a report of this nature.

1.1.2 SEASON AND RELEVANCE THEREOF

The survey was conducted during late Spring. Unlike botanical studies heritage surveys are not restricted by season.

1.2 ARCHAEOLOGICAL CONTEXT AND HISTORY OF THE STUDY AREA

1.2.1 Archaeological context

Morris¹ surveyed area on the same farm and located bedrock arinding hollows with associated scatters of stone artefacts, pottery and ostrich shell located around water sources. These are bedrock exposures with fissures in them that trap rainwater. Others have been located to the east of Aggeneys² examined and area to the north of the N14 and recorded many isolated artefacts and a few occurrences of light quartz and quartzite artefacts scatters. Orton (2015)³ worked in the same area and located a heavily used, grooved double-sided lower grindstone. Morris's⁴ nearby survey found much sand cover and only a small number of isolated quartz artefacts. He does, however, note the presence of a rock painting on a boulder nearby. The painting is a fingerpainting likely associated with the Khoekhoen. Similiar art is found on granite outcrops throughout Namagualand but in very low densities⁵. Within the Gamsberg Inselberg to the east of the study area there are a variety of archaeological traces preserved. Scatters of early Stone Age (ESA) artefacts occur in open, often eroding areas, while a small rock shelter preserves a c. 30cm deep Later Stone Age (LSA) deposit and rock art is found in the kloof that drains the mountain⁶.

More generally, it can be noted that archaeological sites in the area tend to be more commonly encountered around the fringes of rocky hills, on sand dunes or around pans⁷. Other surveys in the region support this contention.

1.2.2 Historical period

Because of the distance from the original Cape Colony (i.e. Cape Town), this area was colonised quite late with most farms only surveyed and granted in the late 19th or even early 20th century. As a result, very few historical structures and features exist on the landscape. The majority of structures date to the early to mid 20th

¹ D. Morris, *Heritage Impact assessment: proposed Aggeneys Photovoltaic Solar Energy Facility at Bloemhoek, near Aggeneys, Northern Cape Province.* Unpublished report prepared for Solar capital (Pty) Ltd, 2013

² L. Webley and D Halkett, *Heritage Impact Assessment: proposed Aggeneys Photo-Voltaic Solar Panel Plant on Portion 1 of the Farm Aroams 57, Northern Cape Province.* Unpublished report prepared for Digby-Wells Environmental, 2012

³ J. Orton, Final archaeological mitigation report for the proposed Aggeneys Solar Energy Facility Namakwaland Magesterail district, Northern Cape. Unpublished report prepared for Savannah Environmental (Pty) Ltd., 2015

⁴ D. Morris, *Black Mountain Concentrated Solar Power Faciloity Development at Aggeneys, Northern Cape: Heritage Impact Assessment.* Unpublished report for SRK Consulting, 2011

⁵ J. Orton, *Geometric rock art in western South Africa and its implication for the spread of early hearding*. South African Archaeologiacl Bulletin 68: 27-40

⁶ J. Orton, *Final archaeological mitigation report of the Gamsberg Zinc Mine, Aggeneys, Northern Cape.* Unpublished report prepared for ERM Southern Africa (Pty) Ltd., 2014

⁷ P.B. Beaumont, A.B. Smith and J.C. Vogel, Before the Einiqua: archaeology of the frontier zone in A.B. Smith (ed.) *Einiqualand: studies of the Orange River frontier*, 1995

century and tend to be of low or no heritage significance. A number of surveys in the Bushmanland area have recorded possible isolated graves represented by unusual rocks (either isolated standing rocks or unnatural clusters). These could be related to aerly "trekboers" passing through the area. Because of there nomadic lifestyle, their physical traces are extremely ephemeral. The ruins of small stone structures on rock outcrops (occasionally found) in the Bu8shmanland are likely to represent enclosures built either by 19th century "trekboers" or early 20th century shepherds⁸.

1.3 LOCATION AND PHOTOGRAPHIC RECORD OF STUDY AREA

The proposed SEZ will be situated on Portion 1 of the Farm Bloemhoek 61 and on the remainder of portion 57 of the Farm Aroams 57. The location of the SEZ is roughly 10 km to the East of the town Aggeneys. The proposed Namakwa SEZ is strategically located along a bulk commodity corridor, which runs from a planned port on the Atlantic coast (the Boegoebaai Deep Port Harbour) through Aggeneys to the large urban centre of Upington and beyond to the concentrations of iron ore and manganese ore at Sishen and Kathu. The land is owned by Black Mountain Mining Pty Ltd.

The town Aggeneys is located approximately 67 kilometres south west of Pofadder, on the N14 highway to Springbok, on the farm Aggeneys 56. The town is located in the Khâi-Ma Local Municipality, which falls within the Namakwa District Municipality, in the northern part of the Northern Cape Province.

⁸ J. Orton, *Heritage Impact Assessment for the proposed Sol Invictus 1 PV Facility, Namakwaland Magesterial District, Northern Cape.* Unpublished report prepared for Savannah Environmental (Pty) Ltd., 2016.

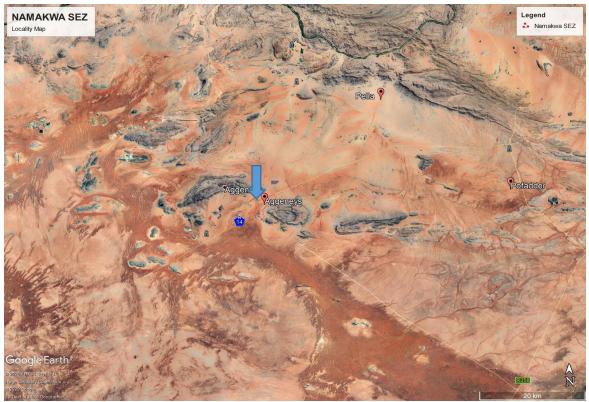
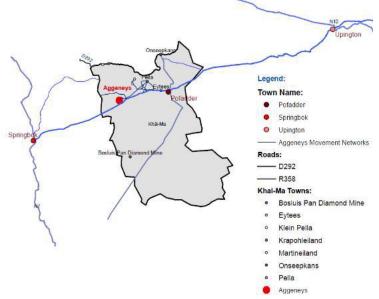


Figure 1: Location of study area



Map Reflecting Regional Context of Aggeneys in the context of Khai Ma Municipality

Figure 2: Map reflecting Regional Context of Aggeneys in the context of the Khai Ma Municipality



Figure 3: Proposed site layout



Photograph 1: Site characteristics (northern section of study area)



Photograph 2: Site characteristics (southern section of study area)



Photograph 3: Site characteristics (western section of study area)



Photograph 4: Site characteristics (eastern section of study area)

2. FINDINGS

Three archaeological sites previously identified by Dr D. Morris of the McGregor Museum are situated in the study area:

South of Gamsberg

Locality SG 1 29.24859 S 18.90780 E	Description A possible grave site on the lower slope of a dune flanking a dry watercourse south west of the Gamsberg, consisting of two small mounds of stone (diameter 0.5 m), two disturbed mounds of stone and a patch of somewhat less concentrated stones. It could not be stated with certainty that these were graves but if they are they do not reflect colonial/missionary-influenced rectangular grave form. Broken bottle glass was the only artefactual material in the vicinity, not necessarily associated.	Heritage Significance High subject to verificat
SG2 29.24849 S 18.91609 E	A surface scatter of Ceramic Later Stone Age material on a flat sandy area upslope from a dry watercourse. Artefacts include fragments of ostrich eggshell, pottery (including decorated sherds and a lug fragment), stone tools made on quartz and river-rounded pebbles. In addition there is bottle glass and porcelain. Bone is preserved in places. The assemblage is consistent with late herder sites in the region, with an over- printing of proto-colonial traces. There is a stone cairn similar to that noted at the alleged grave site SG 1 mentioned above. The site reflects sub- recent Later Stone Age activity in the area. It appears that people of this period were exploiting resources mainly on the outer edges of the inselberg and to a lesser extent on the mountain or within the basin.	High

ation



Figure 4: Location of sites referred to as SG1 and SG2



Photograph 5: SG1 site



Photograph 6: SG1 site



Photograph 7: Ceramic fragment



Photograph 8: Ostrich shell fragment



Photograph 9: Glass fragment



Photograph 10: Ostrich shell fragment



Photograph 11: Glass fragment

North of Gamsberg

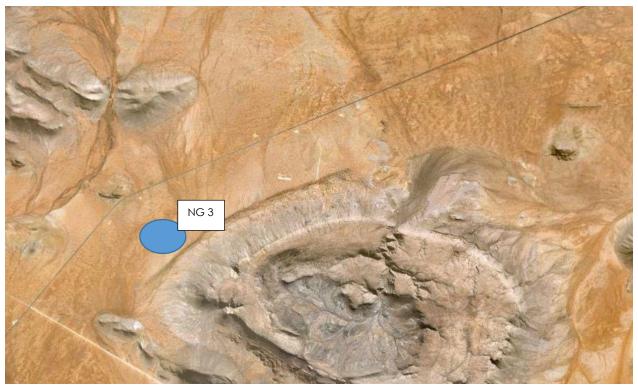


Figure 5: Location of site referred to as NG3

NG3 29.236 \$ 18.932 E Isolated Earlier Stone Age Low (ESA) cleaver found on the plain below the inselberg, noted by P. Desmet. Such isolated finds indicate off-site activity. Small clusters of ESA artefacts have been found in the basin. This single instance lacks context and is hence of limited archaeological significance.

3. CATEGORIES OF HERITAGE VALUE (NATIONAL HERITAGE RESOURCES ACT, 1999 (ACT NO. 25 OF 1999)

The National Heritage Resources Act, 1999 (Act no. 25 of 1999) identifies the following categories of value under section 3(1) and (2) of the Act under the heading "National Estate":

"3 (1) For the purpose 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-
 - (a) places, buildings, structures and equipment of cultural significance;
 - (b) places which oral traditions are attached or which are associated with living heritage;
 - (c) historical settlements and townscapes;
 - (d) landscapes and natural features of cultural significance;
 - (e) geological sites of scientific or cultural importance;
 - (f) archaeological and palaeontological sites;
 - (g) graves and burial grounds, including-
 - (i) ancestral graves;
 - (ii) royal graves and graves of traditional leaders;
 - (iii) graves of victims of conflict;

(iv) graves of individuals designated by the Minister by notice in the Gazette

(v) historical graves and cemeteries; and

(vi) other human remains which are not covered in terms of the Human Tissue Act, 1983 (Act No. 65 of 1983);

- (h) sites of significance relating to the history in South Africa;
- (i) movable objects, including-
 - (i) objects recovered from the soil or waters of South Africa including archaeological and palaeontological objects and material, meteorites and rare geological specimens;
 - (ii) objects to which oral traditions are attached or which are associated with living heritage;
 - (iii) ethnographic art and objects;
 - (iv) military objects;
 - (v) objects of decorative or fine art;
 - (vi) objects of scientific or technological interests; and
 - (vii) 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 I (xiv) of the National Archives of South Africa Act, 1996 (Act No. 43 of 1996).
- (3) Without limiting the generality of the 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-
 - (a) It's importance in the community, or pattern of South Africa's history;
 - (b) Its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;
 - (c) Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage;
 - (d) Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural objects;

- (e) Its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;
- (f) Its importance in demonstrating a high degree of creative or technical achievement at a particular period;
- (g) Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;
- (h) Its strong or special association with the life and work of a person, group or organisation of importance in the history of South Africa; and
- (i) Sites of significance relating to the history of slavery in South Africa".

3.1 HERITAGE VALUE WEIGHED AGAINST CULTURAL SIGNIFICANCE CATEGORIES

3.1.1 Spiritual value

During the site visit/field work no indication of spiritual activity was observed on the site earmarked for development.

3.1.2 Scientific value

No sites of scientific value were observed on or near the site earmarked for development.

3.1.3 Historical value

No historical value associated with the site could be found in primary and secondary sources.

3.1.4 Aesthetic value

No heritage item with exceptional aesthetic (architectural) value was identified in the study area.

3.1.5 Social value

Social value is attributed to sites that are used by the community for recreation and formal and informal meetings regarding matters that are important to the community. These sites include parks, community halls, sport fields etc.

None of the above is situated on the area earmarked for development.

3.2 SPECIFIC CATEGORIES INVESTIGATED AS PER SECTION 3 (1) AND (2) OF THE NATIONAL HERITAGE RESOURCES ACT, 1999 (ACT NO. 25 OF 1999)

3.2.1 Does the site/s provide the context for a wider number of places, buildings, structures and equipment of cultural significance?

The study area does not provide context for a wider number of places, buildings, structures and equipment of cultural significance. The reason being the low density of heritage items in the study area.

3.2.2 Does the site/s contain places to which oral traditions are attached or which are associated with living heritage?

Places to which oral traditions are attached or associated with living heritage are usually found in conjunction with traditional settlements and villages which still practise age old traditions. None of these are evident near or on the proposed site.

3.2.3 Does the site/s contain historical settlements?

No historical settlements are located on or near the proposed site.

3.2.4 Does the site/s contain landscapes and natural features of cultural significance?

Due to previous agricultural and infrastructure development the original character of the landscape has been altered significantly in the study area. The site does not contain natural features of cultural significance.

3.2.5 Does the site/s contain geological sites of cultural importance?

Geological sites of cultural importance include meteorite sites (Tswaing Crater and Vredefort Dome), fossil sites (Karoo and Krugersdorp area), important mountain ranges or ridges (Magaliesburg, Drakensberg etc.). The proposed site is not located in an area known for sites of this importance.

3.2.6 Does the site/s contain a wide range of archaeological sites?

The proposed site does contain surface archaeological deposits as described previously.

The possibility of sub-surface findings always exists and should be taken into consideration in the Environmental Management Programme.

If sub-surface archaeological material is discovered work must stop and a heritage practitioner preferably an archaeologist contacted to assess the find and make recommendations.

3.2.7 Does the site/s contain any marked graves and burial grounds?

Possible graves are situated on the site earmarked for development.

The possibility of graves not visible to the human eye always exists and this should be taken into consideration in the Environmental Management Plan. It is important to note that all graves and cemeteries are of high significance and are protected by various laws. Legislation with regard to graves includes the National Heritage Resources Act (Act 25 of 1999) whenever graves are 60 years and older. Other legislation with regard to graves includes those when graves are exhumed and relocated, namely the Ordinance on Exhumations (no 12 of 1980) and the Human Tissues Act (Act 65 of 1983 as amended).

If sub-surface graves are discovered work should stop and a professional preferably an archaeologist contacted to assess the age of the grave/graves and to advice on the way forward.

3.2.8 Does the site/s contain aspects that relate to the history of slavery?

No evidence of the above evident on the site earmarked for development.

3.2.9 Can the place be considered as a place that is important to the community or in the pattern of South African history?

In primary and secondary source material the proposed site is not described as important to the community or in the pattern of South African history.⁹

3.2.10 Does the site/s embody the quality of a place possessing uncommon or rare endangered aspects of South Africa's natural and cultural heritage?

The proposed site does not possess uncommon, rare or endangered aspects of South Africa's natural and cultural heritage. These sites are usually regarded as Grade 1 or World Heritage Sites.

3.2.11 Does the site/s demonstrate the principal characteristics of South Africa's natural or cultural places?

The proposed site does not demonstrate the principal characteristics of South Africa's natural or cultural places. These characteristics are usually associated with aesthetic significance.

⁹ Standard Encyclopaedia of Southern Africa and the KAB database at the National Archives of South Africa;

3.2.12 Does the site/s exhibit particular aesthetic characteristics valued by the community or cultural groups?

This part of the greater study area does not exhibit particular aesthetic characteristics valued by the community or cultural groups. The reason being the low density of heritage buildings and structures located in the greater study area.

3.2.13 Does the site/s contain elements, which are important in demonstrating a high degree of creative technical achievement?

The site does not contain elements which are important in demonstrating a high degree of creative technical achievement. Reason being none of the above are evident on site.

3.2.14 Does the site/s have strong and special associations with particular communities and cultural groups for social, cultural and spiritual reasons?

The proposed site does not have a strong or special association with particular communities and cultural groups for social, cultural and spiritual reasons. No comment in this regard was received during the Public Participation Process (PPP).

3.2.15 Does the site/s have a strong and special association with the life or work of a person, group or organisation?

No indication of the above could be found in primary and secondary research sources. $^{10}\,$

4. IMPACT ON ARCAHEOLOGICAL SITES

Artefact occurrence SG 1, which is suspected as being a grave site, is located to the south west of the Inselberg. Furthermore, artefact occurrence SG2, which is a surface scatter of Ceramic Later Stone Age material, is also located to the south west of the Inselberg. Both artefacts occurrences have been allocated a high importance. Based on the infrastructure proposed, these two sites (SG1 and SG2) may likely be impacted during the construction phases.

Artefact occurrence NG3 will likely be impacted by construction and potential activities related to the construction phase. This artefact has been allocated a low archaeological significance, as this is an individual instance of an isolated Earlier Stone Age cleaver that lacks context and hence is of limited archaeological importance.

¹⁰ Dictionary of South African Biography (vol I-V) and the KAB database at the National Archives of South Africa

5. RECOMMENDED MITIGATION

In the case of site NG3 it is suggested that a sufficient record exists and/or the sites are of low significance so that no further mitigation is recommended.

In the case of sites SG2, it is recommended that mitigation by way of salvage be carried out. Physical salvage of sites would need to take place before commencement of the construction and operational phases. Detailed recommendations and proposals for mitigation need to be made.

In regard to SG1 it is recommended that if during construction a grave or graves are exposed, work must halt and a heritage practitioner contacted to assess the situation. A road was constructed near the possible graves and no graves were exposed which may indicate that the possible graves are just rock pilings of the road construction.

6. **RECOMMENDATIONS**

- In terms of heritage the proposed project may continue if the above mitigation measures are adhered to;
- The discovery of subsurface archaeological and/or historical material as well as graves must be taken into account in the Environmental Management Programme. See 3.2.6 and 3.2.7; and
- Submit this report as a Section 38 application to the relevant heritage authority for approval/comment.

7. WAY FORWARD

• Submit this report as a Section 38 application in terms of the National Heritage Resources Act, 1999 (Act no. 25 of 1999) to the relevant heritage authority for approval/comment.

GENERAL REFERENCES

AUSTRALIA ICOMOS. Charter on the Conservation of places of cultural significance (Burra Charter), 1999.

Bergh, J.S. *Geskiedenis Atlas van Suid-Afrika. Die vier Noordelike Provinsies*. Van Schaik Uitgewers, 1998.

Beyers C.J. (Editor-in-Chief). Dictionary of South African Biography (Vol I – V). Pretoria, 1987.

Coetzee, F.P. HIA Xstrata Eastern Mine, Magareng (Phase II), Unpublished Report.

Coertze, P.J. & Coertze, R.D. Verklarende vakwoordeboek vir Antropologie en Argeologie. Pretoria, 1996.

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

Human Tissues Act, 1983 (Act No. 65 of 1983 as amended)

Government Printers. 1: 50 000

National Heritage Resources Act, 1999 (Act No. 25 of 1999)

National Environmental Management Act, 1998 (Act No. 107 of 1998)

Ordinance on Exhumations (no 12 of 1980)

Potgieter, D.J. (editor-in-chief) Standard Encyclopaedia of Southern Africa. London 1971.

Republic of South Africa, Cencus 2011

Rosenthal E. (Editor) Encyclopaedia of Southern Africa. London and New York 1973

The National Archives of South Africa databases.

SPECIFIC REFERENCES

Beaumont, P.B., Smith, A.B. and Vogel, J.C. Before the Einiqua: archaeology of the frontier zone in A.B. Smith (ed.) *Einiqualand: studies of the Orange River frontier*, 1995

Morris, D. Heritage Impact assessment: proposed Aggeneys Photovoltaic Solar Energy Facility at Bloemhoek, near Aggeneys, Northern Cape Province. Unpublished report prepared for Solar capital (Pty) Ltd, 2013

Orton, J. Final archaeological mitigation report for the proposed Aggeneys Solar Energy Facility Namakwaland Magesterail district, Northern Cape. Unpublished report prepared for Savannah Environmental (Pty) Ltd., 2015 Morris, D. Black Mountain Concentrated Solar Power Faciloity Development at Aggeneys, Northern Cape: Heritage Impact Assessment. Unpublished report for SRK Consulting, 2011

Orton, J. Geometric rock art in western South Africa and its implication for the spread of early hearding. South African Archaeologiacl Bulletin 68: 27-40

Orton, J. Final archaeological mitigation report of the Gamsberg Zinc Mine, Aggeneys, Northern Cape. Unpublished report prepared for ERM Southern Africa (Pty) Ltd., 2014

Orton J. Heritage Impact Assessment for the proposed Sol Invictus 1 PV Facility, Namakwaland Magesterial District, Northern Cape. Unpublished report prepared for Savannah Environmental (Pty) Ltd., 2016.

Webley, L and Halkett, D. Heritage Impact Assessment: proposed Aggeneys Photo-Voltaic Solar Panel Plant on Portion 1 of the Farm Aroams 57, Northern Cape Province. Unpublished report prepared for Digby-Wells Environmental, 2012