Progress Information for Eskom Solar Project

Background Information

Pleistocene: Middle and Earlier Stone Age

Beaumont et al. (1995:240-1) note a widespread low density stone artefact scatter of Pleistocene age across areas of Bushmanland to the south where raw materials, mainly quartzite cobbles, were derived from the Dwyka till. Systematic collections of this material made at Olyvenkolk, south west of Kenhardt and Maans Pannen, and east of Gamoep, could be separated out by abrasion state into a fresh component of Middle Stone Age (MSA) with prepared cores, blades and points, and a large aggregate of moderately to heavily weathered Earlier Stone Age (ESA).

Beaumont et al. have shown that "substantial MSA sites are uncommon in Bushmanland" 1995:241): and those that have been documented thus far have generally yielded only small samples (Morris & Beaumont 1991; Smith 1995). The ESA included Victoria West cores on dolerite, long blades, and a very low incidence of handaxes and cleavers. The Middle (and perhaps in some instances Lower) Pleistocene occupation of the region that these artefacts reflect must have occurred at times when the environment was more hospitable than today.

Any area or linear, primary and secondary, disturbance of surfaces in the development locales could have a destructive impact on heritage resources, where present. In the event that such resources are found, they are likely to be of a nature that potential impacts could be mitigated by documentation and/or salvage following approval and permitting by the South African Heritage Resources Agency and, in the case of any built environment features, by Ngwao Bošwa ya Kapa Bokone (the Northern Cape Heritage Authority). Although unlikely, there may be some that could require preservation in situ and hence modification of intended placement of development features. Disturbance of surfaces includes any construction including any clearance of, or excavation into, a land surface. In the event of archaeological materials being present such activity would alter or destroy their context (even if the artefacts themselves are not destroyed, which is also obviously possible). Without context, archaeological traces are of much reduced significance. It is the contexts as much as the individual items that are protected by the heritage legislation.

Regional Cultural Context

Stone Age

This area is home to all three of the known phases of the Stone Age, namely: the Early-(2.5 million – 250 000 years ago), Middle- (250 000 – 22 000 years ago) and Late Stone Age (22 000 – 200 years ago). The Late Stone Age in this area also contains sites with rock art from the San and Khoi San cultural groups. Early to Middle Stone Age sites are less common in this area, however rock-art sites and Late Stone Age sites are much better known.

During the Middle Stone Age, 200 000 years ago, modern man or Homo sapiens emerged, manufacturing a wider range of tools, with technologies more advanced than those from earlier periods. This enabled skilled hunter-gatherer bands to adapt to different environments. From this time onwards, rock shelters and caves were used for occupation and reoccupation over very long periods of time. The Late Stone Age, considered to have started some 20 000 years ago, is associated with the predecessors of the San and Khoi Khoi. Stone Age hunter-gatherers lived well into the 19th century in some places in SA. Stone Age sites may occur all over the area where an unknown number may have been obliterated by mining activities, urbanisation, industrialisation, agriculture and other development activities during the past decades especially associated with the town of Upington.

A limited number of Rock-Art sites are located in this area, mostly due to the lack of suitable shelter sites.

The Historic Era

Although the town which today is Upington only officially came to be named in 1884, its tempestuous prior history cannot be ignored. Long before white settlers reached the area, Korana Hottentots had settled at the ford in the Great River they called Gariep, the northern border of the Cape Colony. They had been ousted from their ancestral lands in the south and found a last refuge here, on the lush banks of the river. When, inevitably, eventually the white man followed, war broke out between them and the Korana, who had nowhere else to go. They were defeated and the few remaining tribespeople dispersed.

Earlier, a Dutch Reformed Mission had been established under the guidance of the Reverend C. Schreuder at Olijvenhouts Drift, as the ford was called by hunters and traders because of the many wild olivewood trees growing there.

In 1879, after the second and last Korana War, Sir Thomas Upington, Attorney-General of the Cape Colony, sent 80 policemen to the Drift to maintain law and order along the river. Commanded by Captain Dyason they set up camp under the trees, but by 1885 already barracks had been built where later the police station was erected.

Schreuder wanted the Mission to be moved elsewhere and in a letter dated the 11th of February 1884 writes, ""It is my wish that Olyvendrift or Upington not become a town but remain a Mission Station.""

This was the first time the name Upington was officially written to denote the place known as Olijvenhouts Drift and then only out of resentment against the police sent by Thomas Upington.

Cultural Landscape

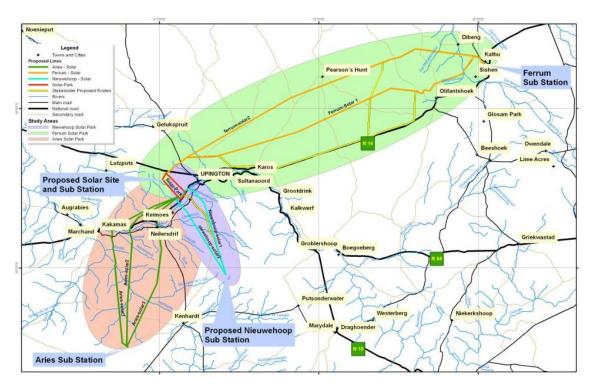
The following landscape types could possibly be present in the study area.

Landscape Type	Description	Occurrence still possible?	Likely occurrence?
1 Paleontological	Mostly fossil remains. Remains include microbial fossils such as found in Baberton Greenstones	Yes, sub- surface	Unlikely
2 Archaeological	Evidence of human occupation associated with the following phases – Early-, Middle-, Late Stone Age, Early-, Late Iron Age, Pre- Contact Sites, Post-Contact Sites	Yes	Unlikely
3 Historic Built Environment	 Historical townscapes/streetscapes Historical structures; i.e. older than 60 years Formal public spaces Formally declared urban conservation areas Places associated with social 	No	No

	identity/displacement		
4 Historic	These possess distinctive patterns of	Yes	Likely
Farmland	settlement and historical features such as:		
	- Historical farm yards		
	- Historical farm workers		
	villages/settlements		
	- Irrigation furrows		
	- Tree alignments and groupings		
	- Historical routes and pathways		
	- Distinctive types of planting		
	- Distinctive architecture of cultivation		
	e.g. planting blocks, trellising,		
	terracing, ornamental planting.		
5 Historic rural	- Historic mission settlements	No	No
town	- Historic townscapes	110	
6 Pristine	- Historical patterns of access to a	Yes	Likely
natural	natural amenity	100	Lincery
landscape	- Formally proclaimed nature reserves		
landbeape	- Evidence of pre-colonial occupation		
	- Scenic resources, e.g. view		
	corridors, viewing sites, visual		
	edges, visual linkages		
	- Historical structures/settlements		
	older than 60 years		
	- Pre-colonial or historical burial sites		
	- Geological sites of cultural		
	significance.		
7 Relic	- Past farming settlements	No	Unlikely
Landscape	- Past industrial sites		<i>cc</i> .,
	- Places of isolation related to		
	attitudes to medical treatment		
	- Battle sites		
	- Sites of displacement,		
8 Burial	- Pre-colonial burials (marked or	Yes,	Likely
grounds and	unmarked, known or unknown)		
grave sites	- Historical graves (marked or		
-	unmarked, known or unknown)		
	- Graves of victims of conflict		
	- Human remains (older than 100		
	years)		
	 Associated burial goods (older than 		
	100 years)		
	 Burial architecture (older than 60 		
	years)		
9 Associated	 Sites associated with living heritage 	No	No
Landscapes	e.g. initiation sites, harvesting of		
	natural resources for traditional		
	medicinal purposes		
	 Sites associated with displacement 		
	& contestation		
	 Sites of political conflict/struggle 		
	 Sites associated with an historic 		
	event/person		
	 Sites associated with public memory 		
10 Historical	 Setting of the yard and its context 	Yes	Irrigation
Farmyard	- Composition of structures		farming
	 Historical/architectural value of 		within the

	 individual structures Tree alignments Views to and from Axial relationships System of enclosure, e.g. defining walls Systems of water reticulation and irrigation, e.g. furrows Sites associated with slavery and farm labour Colonial period archaeology 		Orange River Valley.
11 Historic institutions	 Historical prisons Hospital sites Historical school/reformatory sites Military bases 	No	Unlikely
12 Scenic visual	- Scenic routes	No	No
13 Amenity landscape	 View sheds View points Views to and from Gateway conditions Distinctive representative landscape conditions Scenic corridors 	No	No

Fieldwork Time Table



Power Line section	Date	Hours
Solar Park	12/04/23 – 12/04/24	21

Upington – Karos	12/04/25 - 12/04/26	24
Niewehoop Solar 1	12/04/27 – 12/04/29	40
Niewehoop Solar 2	12/04/30 - 12/04/31	32
Arries Solar 3	12/05/01 – 12/05/03	41
Arries Solar 2	12/05/04 – 12/05/05	14
Arries Solar 1	12/05/06 - 12/05/08	41
	Total:	213

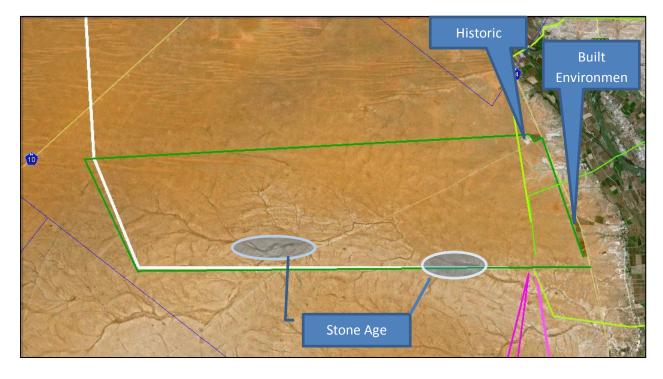
Solar Park

Archaeology – 3 sites Stone Age, 1 Possible Historic Site

Built environment - Occupational structures on southern boundary of site

Palaeontology – Possible

Cultural Landscape – None



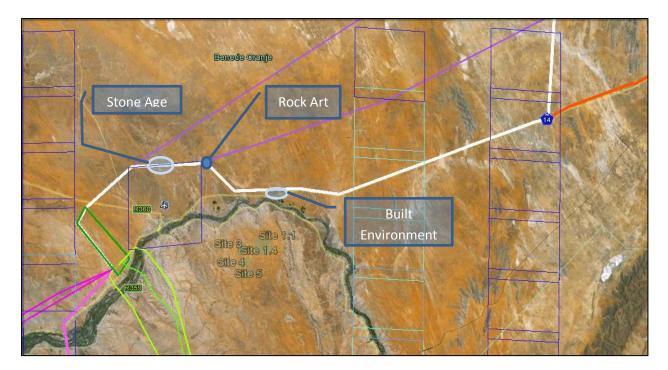
Upington to Karos Line (Full extent not yet surveyed)

Archaeology – 2 x Stone Age sites, 1 Possible Rock art site (to be revisited)

Built Environment – $2 \times$ Farming structures (especially along the river front), some dilapidated structures,

Palaeontology – Possible

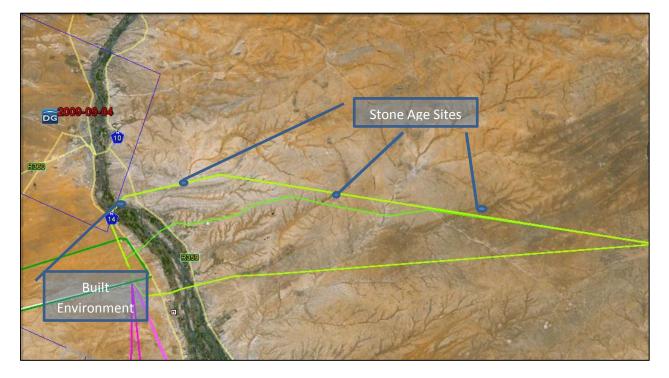
Cultural Landscape - Varying



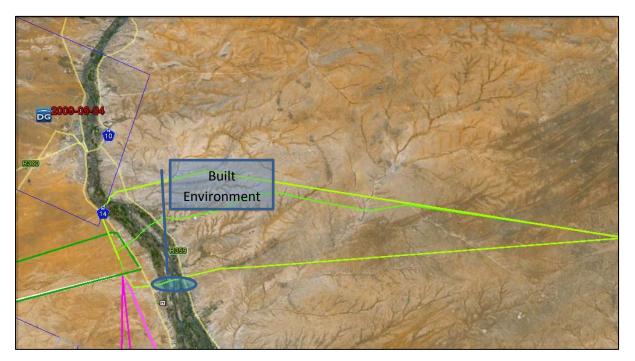
Niewehoop Solar 1

Archaeology – 3 x Stone Age

Built Environment – 1 Site

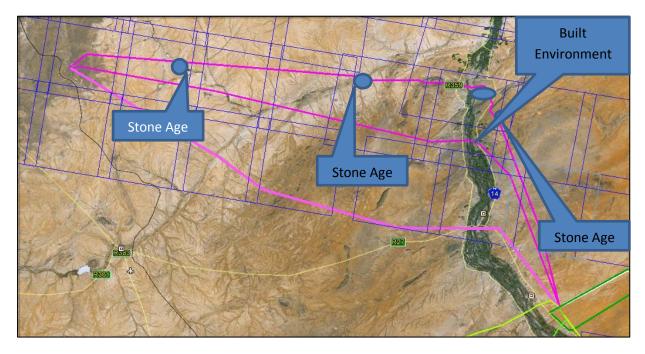


Niewehoop Solar 2



Built Environment – 2 x sites

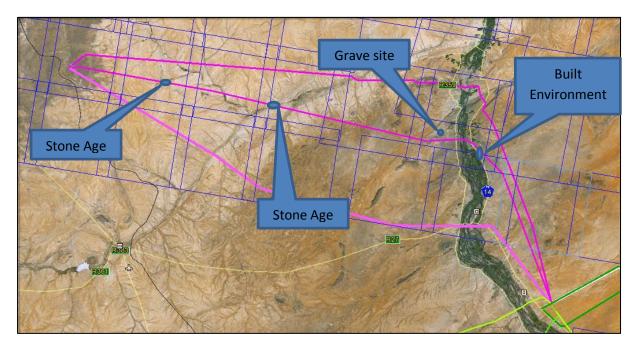
Aries Solar 1



Stone Age x 3 sites

Built environment x 1

Aries Solar 2

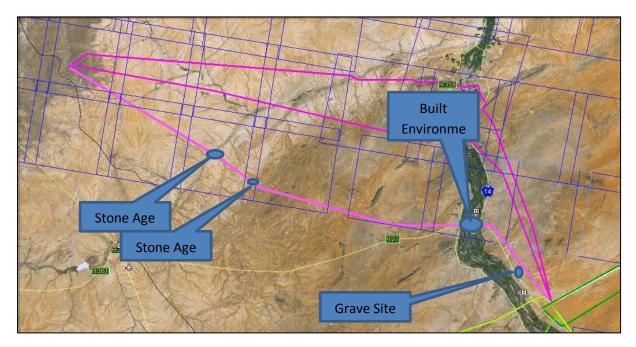


Stone Age x 2 sites

Built Environment x 1

Cemetery site

Aries Solar 3



Stone Age x 2 sites

Built Environment x 2 sites

Grave Site x 2 sites

Examples of sites and artefacts documented on various routes

















