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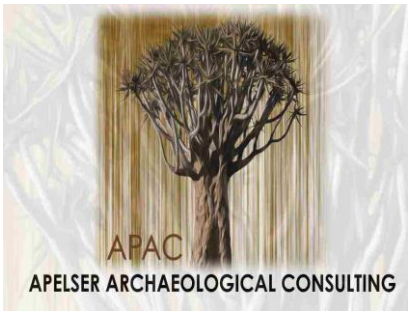

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APAC022/52 **2022-06-14**

To: Mr. Andrew Salomon
South African Heritage Resource Agency
P O Box 4637
Cape Town
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RE: MOTIVATION FOR EXEMPTION FROM FULL PHASE 1 HERITAGE IMPACT ASSESSMENT – PROPOSED UNIVERSITY OF PRETORIA (UP) SOLAR FACILITY DEVELOPMENT ON A PORTION OF KOEDOESPOORT 456JR, UNIVERSITY OF PRETORIA, CITY OF TSHWANE.

APelser Archaeological Consulting cc (APAC cc) was appointed by EarthnSky Environmental to undertake a short site assessment and provide a motivation for Exemption from a Full Phase 1 HIA for the proposed UP Solar Facility Development on a portion of the original farm Koedoespoort 456JR. The study area and proposed development is located close to University of Pretoria's' Experimental Farm Campus and Sport Campus.

In terms of a Phase 1 Heritage Impact Assessment (HIA) versus Motivation for Exemption from a Full HIA SAHRA recommends the following:

"In terms of the National Heritage Resources Act, no 25 of 1999, heritage resources, including archaeological or palaeontological sites over 100 years old, graves older than 60 years, structures older than 60 years are protected. They may not be disturbed without a permit from the relevant heritage resources authority. This means that prior to development it is incumbent on the developer to ensure that a Heritage Impact Assessment is done. This must include the archaeological component (Phase 1) and any other applicable heritage components. Appropriate (Phase 2) mitigation, which involves recording, sampling and dating sites that are to be destroyed, must be done as required.

The quickest process to follow for the archaeological component is to contract an accredited specialist (see the web site of the Association of Southern African Professional Archaeologists www.asapa.org.za) to provide a Phase 1 Archaeological Impact Assessment Report. This must be done before any large development takes place. The Phase 1 Impact Assessment Report will identify the archaeological sites and assess their significance. It should also make recommendations (as indicated in section 38) about the process to be followed. For example, there may need to be a mitigation phase (Phase 2) where the specialist will collect or excavate material and date the site. At the end of the process the heritage authority may give permission for destruction of the sites.

Where bedrock is to be affected, or where there are coastal sediments, or marine or river terraces and in potentially fossiliferous superficial deposits, a Palaeontological Desk Top study must be undertaken to assess whether or not the development will impact upon palaeontological resources - or at least a letter of exemption from a Palaeontologist is needed to indicate that this is unnecessary. If the area is deemed sensitive, a full Phase 1 Palaeontological Impact Assessment will be required and if necessary a Phase 2 rescue operation might be necessary. Please note that a nationwide fossil sensitivity map is available on SAHRIS to assist applicants with determining the fossil sensitivity of a study area.

If the property is very small or disturbed and there is no significant site the heritage specialist may choose to send a letter to the heritage authority motivating for exemption from having to undertake further heritage assessments. *Any other heritage resources that may be impacted such as built structures over 60 years old, sites of cultural significance associated with oral histories, burial grounds and graves, graves of victims of conflict, and cultural landscapes or viewscapes must also be assessed".*

Last mentioned option was decided on for this project which included a short site visit as well as desktop research as part of the assessment.

Relevant Legalisation

Aspects concerning the conservation of cultural resources are dealt with mainly in two Acts. These are the National Heritage Resources Act (Act 25 of 1999) and the National Environmental Management Act (Act 107 of 1998).

The National Heritage Resources Act

According to the Act the following is protected as cultural heritage resources:

a. Archaeological artefacts, structures and sites older than 100 years
b. Ethnographic art objects (e.g. prehistoric rock art) and ethnography
c. Objects of decorative and visual arts
d. Military objects, structures and sites older than 75 years
e. Historical objects, structures and sites older than 60 years
f. Proclaimed heritage sites
g. Grave yards and graves older than 60 years
h. Meteorites and fossils
i. Objects, structures and sites of scientific or technological value.

The National Estate includes the following:

a. Places, buildings, structures and equipment of cultural significance
b. Places to which oral traditions are attached or which are associated with living heritage
c. Historical settlements and townscapes
d. Landscapes and features of cultural significance
e. Geological sites of scientific or cultural importance
f. Sites of Archaeological and palaeontological importance
g. Graves and burial grounds
h. Sites of significance relating to the history of slavery
i. Movable objects (e.g. archaeological, palaeontological, meteorites, geological specimens, military, ethnographic, books etc.)

A Heritage Impact Assessment (HIA) is the process to be followed in order to determine whether any heritage resources are located within the area to be developed as well as the possible impact of the proposed development thereon. An Archaeological Impact Assessment (AIA) only looks at archaeological resources. According to Section 38 (1) of the Act an HIA must be done under the following circumstances:

a. The construction of a linear development (road, wall, power line, canal etc.) exceeding 300m in length.
b. The construction of a bridge or similar structure exceeding 50m in length.
c. Any development or other activity that will change the character of a site and exceed 5 000m2 or involve three or more existing erven or subdivisions thereof.
d. Re-zoning of a site exceeding 10 000 m^2.
e. Any other category provided for in the regulations of SAHRA or a provincial heritage authority.

Results of Short Site Visit and Desktop Study: Proposed UP Solar Facility Development on a portion of Koedoespoort 456JR

The proposed UP Solar Facility Development area is located on a portion of the original farm Koedoespoort 456JR. The larger study area is surrounded by already established and on-going residential and other urban developments, as well as various campuses associated with the University of Pretoria including their Experimental Farm and their Sport Campus. The topography of the study area & development area is flat and open. During the site visit vegetation was not dense and visibility on the ground was therefore not hampered.

The area where the proposed development will take place would have been utilized in the historical past for agricultural purposes, and as part of the UP Experimental Farm property this has been an on-going activity in the recent past as well. The area has been ploughed and used for agricultural purposes and these activities would have severely impacted on any archaeological and/or historical sites, features or material that might have been present here. Aerial images of the area (Google Earth) also shows the flat, open and disturbed nature of the area and the likelihood of any sites, features or material of cultural heritage significance being present is highly unlikely.

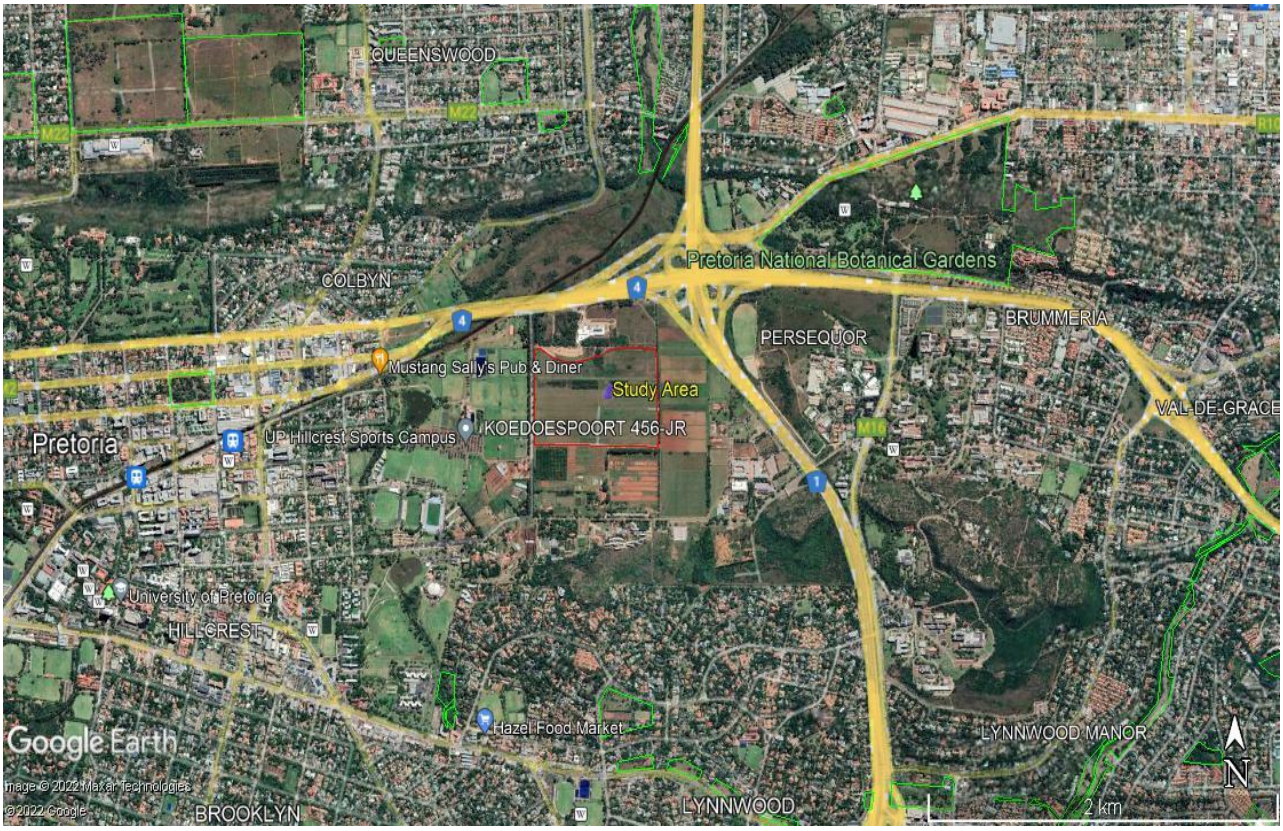

Figure 1: General location of the study & proposed development area (Google Earth 2022).

Figure 2: Closer view of the study and proposed development area. The agriculturally disturbed nature of the area is clearly visible (Google Earth 2022).

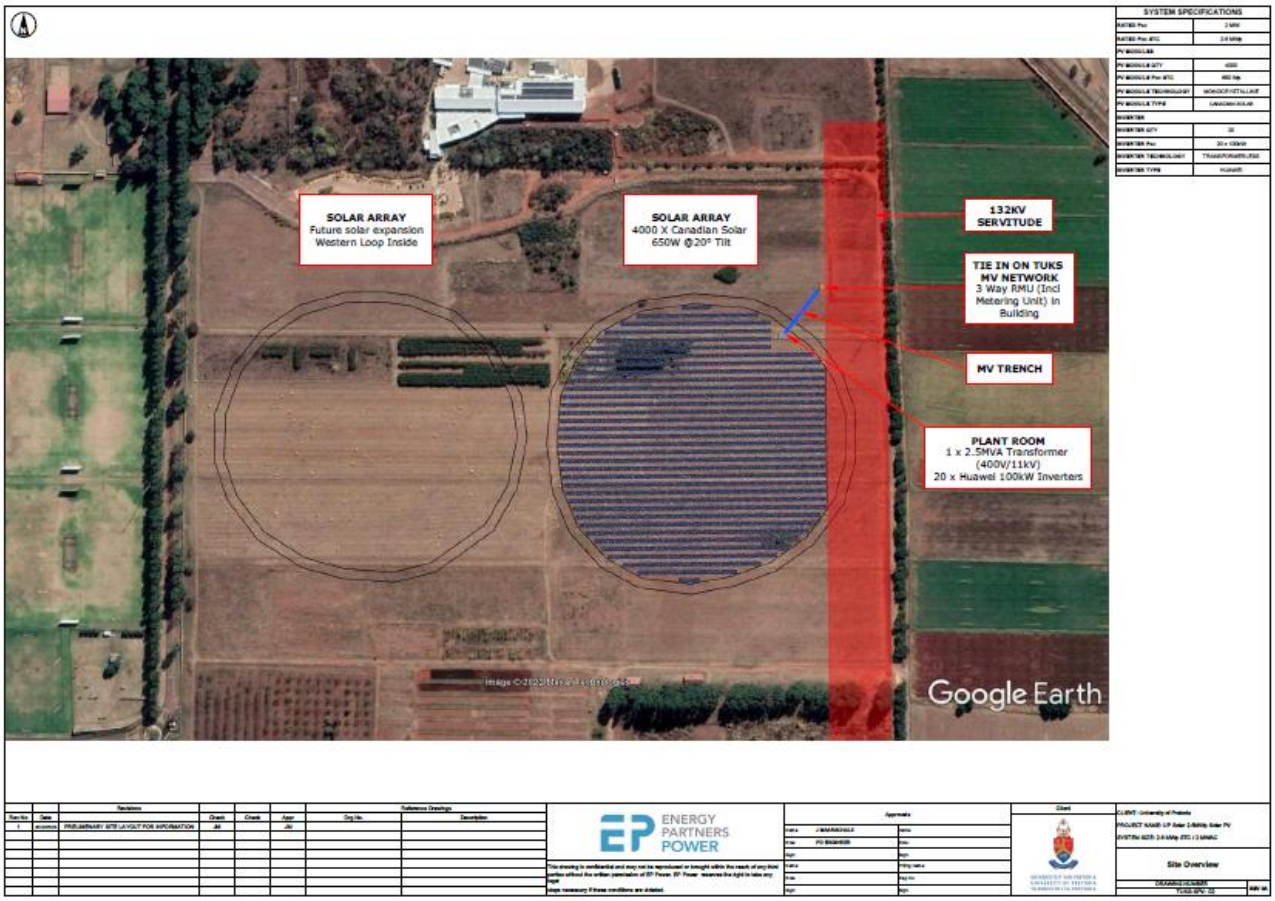

Figure 3: Preliminary Layout Plan (provided by EarthnSky Environmental @EP Power).

The Stone Age is the period in human history when lithic (stone) material was mainly used to produce tools. In South Africa the Stone Age can be divided basically into three periods. It is however important to note that dates are relative and only provide a broad framework for interpretation. A basic sequence for the South African Stone Age (Lombard et.al 2012) is as follows:

Earlier Stone Age (ESA) up to 2 million – more than 200 000 years ago
Middle Stone Age (MSA) less than 300 000 – 20 000 years ago
Later Stone Age (LSA) 40 000 years ago – 2000 years ago

It should also be noted that these dates are not a neat fit because of variability and overlapping ages between sites (Lombard et.al 2012: 125).

No known Stone Age sites or artefacts are present in the area. The closest known Stone Age sites are those of the well-known Early Stone Age site at Wonderboompoort and a number of sites in the Magaliesberg area (Bergh 1999: 4). Stone Age people occupied the larger area since earliest times. This, for example, is evidenced by the site they used to occupy in the Wonderboom neck, probably dating back as much as 200 000 years ago. Tools derived from these people's habitation of the area are found in a number of areas close to the Apies River to the west and the Hartebeesspruit to the east. Middle and Late Stone Age people also roamed over the area, sheltering close to the river banks, with the latter group usually settling in caves and rock shelters (Van Schalkwyk 2013: 7). Middle Stone Age material has been identified at Erasmusrand and the Groenkloof Nature Reserve (Van Vollenhoven 2006: 183). At the Erasmusrand cave some Late Stone Age tools were also identified as well as at Groenkloof (Van Vollenhoven 2006: 184). LSA material has also been found at Zwartkops and Hennops River (Bergh 1999: 4). This last phase of the Stone Age is associated with the San people. If any Stone Age artefacts are to be found in the area then it would more than likely be single, out of context, stone tools. Urbanization over the last 150 years or so would have destroyed any evidence if indeed it did exist.

The Iron Age is the name given to the period of human history when metal was mainly used to produce metal artefacts. In South Africa it can be divided in two separate phases (Bergh 1999: 96-98), namely:

Early Iron Age (EIA) 200 – 1000 A.D
Late Iron Age (LIA) 1000 – 1850 A.D.

Huffman (2007: xiii) however indicates that a Middle Iron Age should be included. His dates, which now seem to be widely accepted in archaeological circles, are:

Early Iron Age (EIA) 250 – 900 A.D.
Middle Iron Age (MIA) 900 – 1300 A.D.
Late Iron Age (LIA) 1300 – 1840 A.D.

According to Delius (1983: 12) and Horn (1996: 23) LIA people moved into the Pretoria area after 1600 A.D. No Early Iron Age sites are known in the larger geographical area of Pretoria, while Later Iron Age sites do occur in the Pretoria area (Bergh 1999: 7). The closest known LIA sites are at Silver Lakes and near Mamelodi on the farm Hatherley (Van Schalkwyk et.al 1996). These sites are related to the Manala Ndebele (Bergh 1999: 10) who was present in the area at the time when the first Europeans arrived here during the mid-19th century.

Iron Age occupation of the area did not start much before the 1500s. By that time, groups of Tswana and Ndebele speaking people were moving into the area, occupying the different hills and outcrops, using the ample resources such as grazing, game and metal ores. During the early decades of the 19th century, the Tswana- and Ndebele-speakers were dislodged by the Matabele of Mzilikazi. Internal strife caused Mzilikazi, a general of King Shaka, and his followers to move away from the area between the Thukela and Mfolozi River (KwaZulu-Natal). Eventually, after a sojourn in the Sekhukhuneland area, followed by a short stay in the middle reaches of the Vaal River, they settled north of the Magaliesberg. One of three main settlements established by them, eKungwini, was on the banks of the Apies River, just north of Wonderboompoort.

It is a well-established fact that the stone walled sites on various farms in the larger area around the east of Pretoria and the Bronberge were inhabited mainly by the southern Ndebele. The former were most probably among the earliest Nguni-speaking people in the immediate area north of the Magaliesberg range north of Pretoria. During the rule of a chief named Musi, they split into five separate migrating groups, namely the Manala, Ndzundza, Kekana, Mhwaduba and Sibasa sections (Van Schalkwyk et.al 1996:47-48). The Manala settled over a wide area towards the east of present-day Pretoria.

No Iron Age sites, features or cultural material was identified during the short site assessment in the study area.

The historical age started with the first recorded oral histories in the area. It includes the moving into the area of people that were able to read and write. The first Europeans to move through and into the area were the groups of Schoon and McLuckie and the missionaries Archbell and Moffat in 1829 (Bergh 1999: 12). They were followed by others such as Andrew Smith (1835), Cornwallis Harris (1836) and David Livingstone in 1847 (Bergh 1999: 13). These groups were closely followed by the Voortrekkers after 1844 and Pretoria was established in 1855 (Bergh 1999: 14-17). White settlers started to occupy huge tracts of land, claiming it as farms after the late 1840s. Of these, some of the earliest were Lucas Bronkhorst (Groenkloof), David Botha (Hartebeestpoort – Silverton) and Doors Erasmus (Wonderboom). With the establishment of Pretoria (1850) services such as roads, started to develop. An increase in population also demanded more food, which stimulated development of farming on the alluvial soils on the banks of the Apies River, close to the water (Van Schalkwyk 2013: 8).

Figure 4: General view of a section of the area towards the east.

Figure 5: Another section of the proposed development area towards the west.

Figure 6: Another section of the area towards the south.

Figure 7: A section of the area towards the north.

Figure 8: A general view of a section of the study and development area.

Based on the site assessment, aerial images and desktop study it is therefore deemed unlikely that any significant sites, features or material of cultural heritage (archaeological and/or historical) origin might exist in the study area. Recent historical activities (agricultural and urban) would have impacted on any that did exist here in the past and would have disturbed or destroyed these to a large degree. However, known archaeological and historical sites, features and material have been identified in the larger geographical area and this needs to be taken into consideration during any future actions related to the proposed development.

It is therefore recommended that Exemption from a Full Phase 1 Heritage Impact Assessment (HIA) for the proposed UP Solar Facility Development on a portion of Koedoespoort 456JR be granted to the applicants taking into consideration the following:

The subterranean nature of cultural heritage (archaeological and/or historical) resources must always be kept in mind. Should any previously unknown or invisible sites, features or material be uncovered during any development actions then an expert should be contacted to investigate and provide recommendations on the way forward. This could include previously unknown and unmarked graves.

Should there be any questions or comments on the contents of this document please contact the author as soon as possible.

Kind regards

Anton Pelser

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