

*For all Heritage Matters- because Heritage Matters
Annie van Deventer Radford- Freelance Heritage Practitioner*

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Archaeological/Heritage Impact Assessor

Archaeological, Palaeontological and Meteorite Unit

South African Heritage Resources Agency

PO Box 4637

Cape Town

8000

LETTER OF MOTIVATION FOR THE EXEMPTION OF HERITAGE IMPACT ASSESSMENT FOR THE PROPOSED SOLAR UPGRADE, LONDOLOZI GAME RESERVE (SPARTA FARMS 259KU), EHLAMZENI DISTRICT MUNICIPALITY (DC32) AND THE BUSHBUCKRIDGE LOCAL MUNICIPALITY (MP325) - SAHRIS CASE ID - 21258

Annie van Deventer-Radford was requested by Zunckel Ecological & Environmental Services to draft a Motivation for Exemption from a Heritage Impact Assessment (HIA) as envisaged in the National Heritage Resources Act (NHRA) of 1999, as requested by SAHRA (SAHRIS Case ID- 21258).

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1. Project background

Londolozzi Game Reserve (Pty) Ltd. is in the process of applying for environmental authorisation and to undertake a basic assessment of the proposed solar upgrade on the farm Sparta Farms 259KU in the Sabi Sands Game Reserve. Londolozzi Game Reserve (Pty) Ltd wishes to increase its renewable energy generation capacity by developing a 1MW solar array covering an area of just more than 1 hectare. This will increase the resilience of their operations to the fickleness of the South African grid supply as well as reduce their reliance on non-renewable sources of energy. The area selected for the array will be terraced to accommodate the solar panels and the excavated soil will be used to construct berms around the array so that it is not visible from the ground.

The proposed developments are located within the Londolozzi Game Reserve on Marthly 258 KU, portion 1. The Londolozzi Game Reserve is located within the Sabi Sands Wildtuin (SSW). It falls within the Mpumalanga Province, the Ehlanzeni District Municipality (DC32) and the Bushbuckridge Local Municipality (MP325). The 21-digit Surveyor General code for the property is TOKU00000000025800001.

2. Description of the proposed developments

In order to limit the amount of earth works required and the height of the berms, the panels will be secured as low to the ground as possible, i.e. lowest end 500mm above the ground. The berms will be vegetated with plant material recovered from the earth works. The berms will be vegetated with plant material recovered from the earth works.

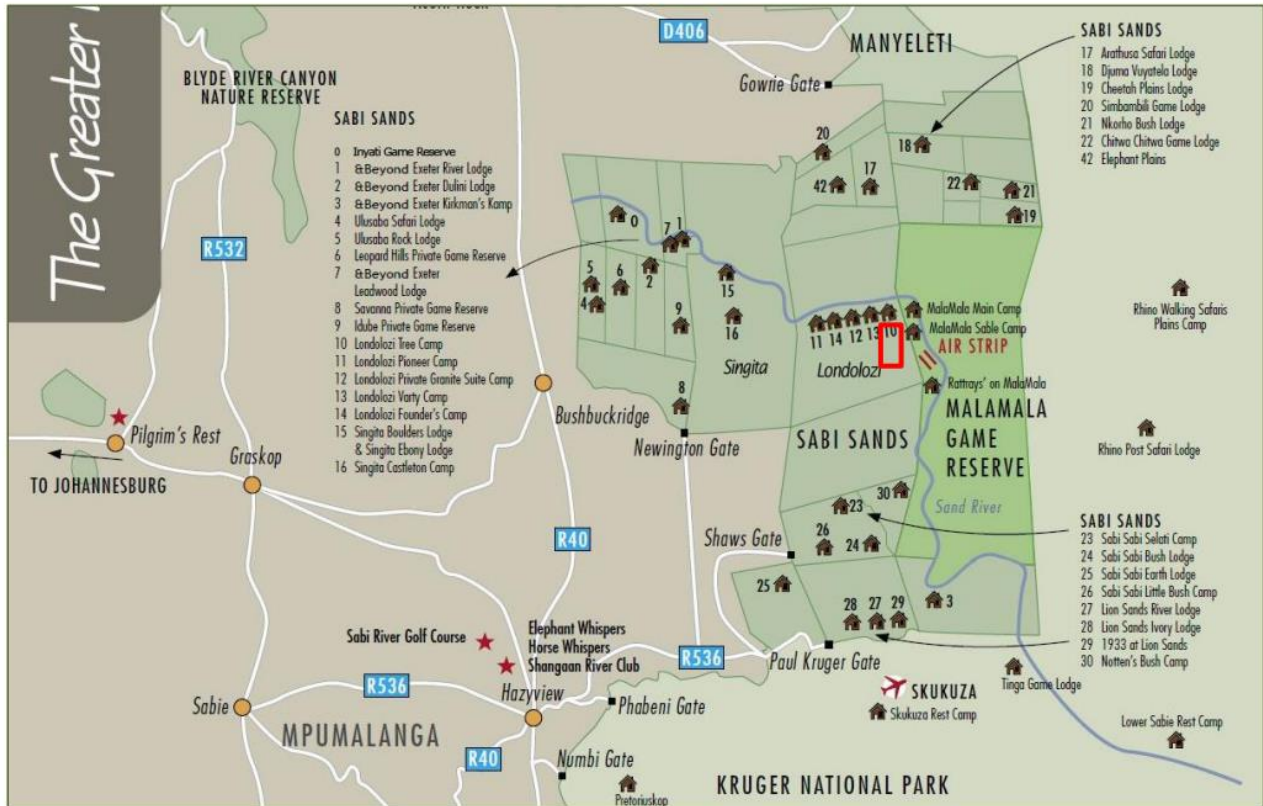


Figure 1: Location of the proposed development on the property Marthly on the Londolozi Game Reserve in the Sabi Sands Game Reserve.



Figure 2: The location of the three alternative sites for the proposed solar array and transmission infrastructure.

Table 1: Location of the three alternative sites.

Figure 1: Location of the proposed development within the Sabi Sands Game Reserve.

Figure 2: Location of the 3 development options.

Table 1: Coordinates for the three alternative sites and the transmission infrastructure

ALTERNATIVE	CENTRAL COORINDATES		TRANSMISSION INFRASTRUCTURE (START, CENTRAL AND END POINTS)
			24°48'10.52"S - 31°29'52.98"E 24°48'4.53"S - 31°29'52.67"E 24°47'56.43"S - 31°29'53.22"E
B	24°48'2.28"S	31°29'51.74"E	N/A
C	24°47'58.23"S	31°29'46.03"E	N/A

Note that areas in Options A & B have been surveyed by myself during a previous survey (SAHRIS CASE ID – 18784) are in proximity of previous surveyed areas (Figure 34, with some areas overlapping. It is also important to note that approximately 1/3rd of the surface area of Option A was previously disturbed in that it was the area where the original waste water settling ponds had been constructed. This is visible on Google Earth in the recent imagery and on older arial photos the actual ponds can be see. (Figure 4)

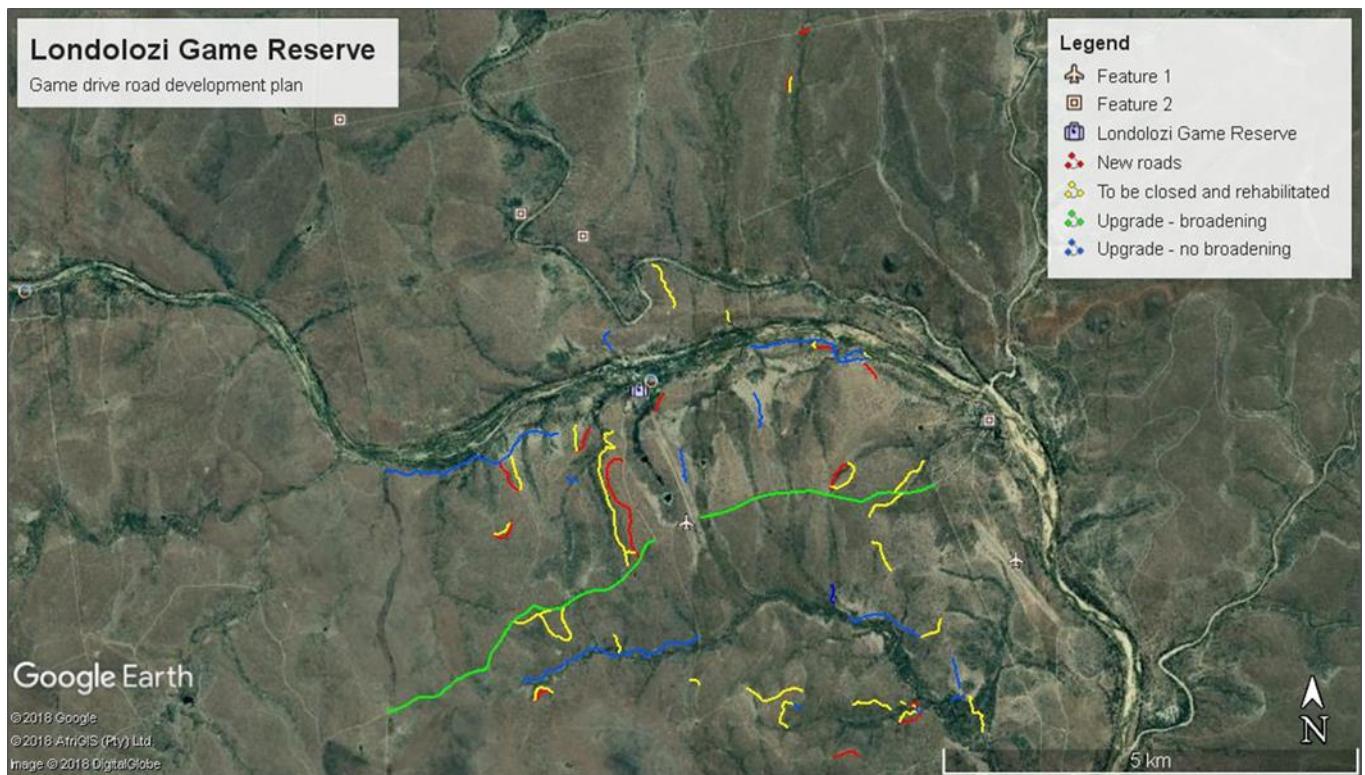


Figure 3: Previously surveyed areas



Figure 4: Location of the old waste water ponds, same location as Option A.

It is also the wish of the developer that Option A is used as the site for the proposed development, and that Options B and C are merely EIA related alternatives.

3. Listed activities

The following Listed Activities have been identified as being relevant to the proposed development discussed above:

Activity under Listing Notice 1 (National Environmental Management Act 107 of 1998, GNR 985, GG 38282 of 4 December 2014, as amended in GG 40772, GN No. 324 of 7 April 2017):

Activity 1: The development of facilities or infrastructure for the generation of electricity from a renewable resource where—

(ii) the output is 10 megawatts or less but the total extent of the facility covers an area in excess of 1 hectare (note that the berms surrounding the array will bring to total area to more than 1 ha.

Activity 27: The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation.

Activity under Listing Notice 3 (National Environmental Management Act 107 of 1998, GNR 985, GG 38282 of 4 December 2014, as amended in GG 40772, GN No. 324 of 7 April 2017):

Activity 12: The clearance of an area of 300 square metres or more of indigenous vegetation iii. On land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning or proclamation in terms of NEMPAA.

Activity 14: The development of—(ii) infrastructure or structures with a physical footprint of 10 square metres or more; where such development occurs—within 32 metres of a watercourse, measured from the edge of a watercourse f.

Mpumalanga i. Outside urban areas: (aa) A protected area identified in terms of NEMPAA, excluding conservancies.

4. Legislative requirements with regards to cultural heritage

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

- a. Archaeological artefact, structures and site older than 100 years
- b. Ethnographic art objects
- 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. Graves older than 60 years
- h. Meteorites and palaeontological material
- i. Objects, structures and sites of technological or scientific 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 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 of slavery 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 interest; 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 1(xiv) of the National Archives of South Africa Act, 1996 (Act No. 43 of 1996).

Section 38(4) of NHRA requires a process of assessment to be followed in order to determine whether any cultural heritage resources are located within an area to be developed, as well as the possible impact of the proposed development thereon. This process must be followed under the following circumstances:

(a) the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length

(b) the construction of a bridge or similar structure exceeding 50 m in length

(c) any development or other activity which will change the character of a site—

(i) exceeding 5 000 m² in extent; or

(ii) involving three or more existing erven or subdivisions thereof; or

(iii) involving three or more erven or divisions thereof which have been consolidated

Within the past five years; or

(iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority

(d) the re-zoning of a site exceeding 10 000 m² in extent or

(e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority.

Section 38(8) is, however, applicable to this proposed project:

(8) The provisions of this section do not apply to a development as described in subsection (1) if an evaluation of the impact of such development on heritage resources is required in terms of the Environment Conservation Act, 1989 (Act No. 73 of 1989), or the integrated environmental management guidelines issued by the Department of Environment Affairs and Tourism, or the Minerals Act, 1991 (Act No. 50 of 1991), or any other legislation: Provided that the consenting authority must ensure that the evaluation fulfils the requirements of the relevant heritage resources authority in terms of subsection (3), and any comments and recommendations of the relevant heritage resources authority about such development have been considered prior to the granting of the consent.

Notice must also be taken of the following Sections:

- 34. (1) No person may alter or demolish any structure or part of a structure which is older than 60 years without a permit issued by the relevant provincial heritage resources authority.

A 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.

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

- 35(4) No person may, without a permit issued by the responsible heritage resources authority—

(a) destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;

(b) destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;

(c) trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or palaeontological material or object, or any

meteorite; or

(d) bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment which assist in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.

5. Literature review.

The literature review conducted for SAHRIS Case ID– 18784 is applicable to this proposed development. The section below has been copied from the HIA Report for that development.

Several Heritage Impact Assessments have been undertaken in the larger geographical area. No Grade I or II sites (National or Provincial Heritage Sites) have been identified near to the proposed development area yet.

Several Heritage Impact Assessments have been undertaken in the area, none of them on this specific property.

HIA Cases in the area.

1. The proposal to build a 22Kv SWER Power line in farm Arathusa 241 KU, Sabie Sand Game Reserve was approved by SAHRA without the need to do a HIA as the power line will be erected near disturbed land (i.e.: the road nearby).
2. A phase 1 Archaeological Survey on the farm Toulon 383 KU located in Sabie Sand Nature Reserve, Mpumalanga Province was done by Celliers in 2016. Eight heritage sites were recorded.
3. The reconstruction and modification of West St Bridge- MalaMala Game Reserve did not require a HIA.
4. The proposed construction of an overhead 22 kV power line, from the Lisbon 22kV rural feeder. The power line will be located on the farm Huntington 281 KU, in the Bushbuckridge Local Municipality of Mpumalanga Province. SAHRA requested an HIA to be done.
5. A report on a Cultural Heritage Impact Assessment for the proposed development of upmarket tourism accommodation on the Selati Railway Bridge, Skukuza, Kruger National Park, Mpumalanga Province, was produced by A. van Vollenhoven in 2018. During the survey three sites/ features of cultural heritage significance were identified.
6. SAHRA requested an HIA for the intention to build power lines with various voltages, from the Seville Pegging Project. Just outside the area of Seville in Kwa-Tsakani, Farm Seville 224 KU, Thulamahashe Administrative District, Bushbuckridge Local Municipality, Mpumalanga Province. (2014)
7. SAHRA requested an HIA for the Safari Lodge and associated infrastructure in Skukuza, Kruger National Park.

8. The author conducted an HIA for proposed developments at the nearby Singita Sabi Sands in 2019. Three heritage sites were recorded.

9. The author conducted an HIA for a proposed development on the same property on 2019. Several Stone Age Sites of low significance were recorded, along with some historical features.

A limited amount of research projects has been conducted in the wider area surrounding the proposed development. They include:

1. Van Vollenhoven and Pelser investigated various sites associated with the Anglo Boer War in the Kruger National Park since 2005. Van Vollenhoven is continuing with this research.
2. Birkholtz (1997) investigated the archaeology of the Pretorius Kop area in the Kruger National Park.
3. Meskell (2005) researched the Archaeological Ethnography around the Kruger National Park.
4. Meyer (1970s & 1980s) conducted research on the Iron Age in the Kruger National Park.
5. Ina Plug studied the archaeology of various Stone Age and Iron Age sites in the Kruger National Park during the 1980s and 1990s.
6. Unpublished reports include the rock art surveys in the Kruger National Park and surrounding areas by English and de Roshner, the current work being undertaken by Anton Pelser at Mahula and reports by this author on fieldwork conducted in 2017 in the Kruger National Park.

In order to be able to get a better understanding of the heritage of this area, it is necessary to give a background regarding the different phases of human history.

The Stone Age is the period in human history when lithics (stone) were used to make tools. In Southern Africa the Stone Age is divided into three periods. The sequence for the Southern 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

- The Early Stone Age (ESA)

The Southern Africa ESA dates from ~2 million to 250 000 thousand years ago. The hominids who were present during this time was developing physically, mentally and socially, bone and stone tools were developed. One of the most influential advances was their control of fire and diversifying their diet by exploitation of the natural environment (Esterhuizen & Smith in Delius, 2007).

The first tools date to ~ 2, 5 million years ago from the site of Gona in Ethiopia. Stone tools from this site shows that early hominids had the cognitive ability to select raw material and shape it for a specific application.

Mary Leaky discovered tools like these in the Olduvai Gorge in Tanzania during the 1960s. The stone tools are named after this gorge and known as the Oldowan industry. These tools, only found in Africa, are mainly simple flakes which were struck from cobbles. Two species of hominid, an early form of Homo and Parathropus robustus, may have been responsible for making these tools.

Around 1, 7 million years ago more specialised tools known as Acheulean tools, appeared. They are named after a site in France with the name of Saint Acheul, where they were first discovered in the 1800s. Homo ergaster was probably responsible for the manufacture of Acheulean tools in South Africa. ESA sites within situ deposits are very rare. Most tools of these people have been washed into caves, eroded out of riverbanks and washed downriver. Deluis (2007) states that Early Stone Age tools (Oldowan & Acheulean) are widely distributed across Southern Africa, especially near watercourses such as rivers and streams, but many sites are not found in primary context. An example from Mpumalanga is Maleoskop on the farm Rietkloof, where ESA tools have been discovered. This is one of only a few such sites in Mpumalanga.

Van Deventer -Radford (2019) found an isolated Oldawan chopper during a HIA survey at the nearby Sabi Sands Singita Game Reserve.

- Middle Stone Age (MSA)

A greater variety of tools, with diverse sizes and shapes appeared by 250 000 BP. These replaced the large hand axes and cleavers of the ESA. This technological change introduces the Middle Stone Age (MSA). This period is characterised by tools that are reduced in size but different in manufacturing technique (Esterhuizen & Smith in Delius, 2007).

In contrast to the ESA technology of removing flakes from a core, MSA tools were flakes to start with. They were of a predetermined size and shape and were made by preparing a core of suitable material and striking off the flake so that it was flaked according to a shape which the toolmaker desired. The mounting of stone tools onto wood or bone to produce spears, knives and axes became popular during the MSA. These early humans not only settled close to water sources but also occupied caves and shelters. It was during the MSA archaic physical type of Homo evolved to anatomically modern humans, Homo sapiens.

The MSA has not been widely studied in Mpumalanga but evidence of this period has been excavated at Bushman Rock Shelter, a well-known site on the farm Klipfonteinhoek in the Ohrigstad District. The MSA layers indicates that the cave was repeatedly visited over a long period. Lower layers have been dated to in excess of 40 000 BP while the top layers date to approximately 27 000 BP (Esterhuizen & Smith in Delius, 2007; Bergh, 1998).

Two sites containing MSA tools were recorded by van Deventer-Radford (2019) during a recent survey at Singita Sabi Sands Game Reserve. The tools were deemed not to be in-situ, but transport by water

action from elsewhere up the drainage system. Several isolated, out of context stone tools were also recorded during a survey at Londolozi in 1990 by the same author.

- Later Stone Age (LSA)

Early hunter gatherer societies were responsible for several technological innovations and social transformations during the LSA that started at around 20 000 years BP. Hunting of animals proved more successful with the innovation of the bow and link-shaft arrow. These arrows were constructed of a bone tip which was poisoned and loosely linked to the main shaft of the arrow. Upon impact, the tip and shaft separated leaving the poisoned arrow-tip imbedded in the prey animal. Other innovations include bored stones used as digging stick weights to uproot tubers and roots; small stone tools, mostly less than 25mm long, used for cutting of meat and scraping of hides; polished bone tools such as needles; twine made from plant fibres and leather, tortoiseshell bowls, ostrich eggshell beads and other ornaments and artwork (Esterhuizen & Smith in Delius, 2007).

At Bushman Rock Shelter the MSA is also represented and starts at around 12 000 BP but only lasted for some 3 000 years. The LSA marks the transition from the Pleistocene to the Holocene was accompanied by a gradual shift from cooler to warmer temperatures. This change had a larger impact on higher lying parts of South Africa. Both Bushman Rock Shelter and a site close by, Heuningneskrans, have shown a greater use of plant foods and fruit during this period (Esterhuizen & Smith in Delius, 2007; Bergh, 1998).

Ostrich eggshell beads were found in most of the levels at these two sites. It appears that there is a gap of approximately 4 000 years in the Mpumalanga LSA record between 9 000 BP and 5 000 BP. It must be noted that the Stone Age has been under-researched in the province. It is, however, also a period known for rapid warming and major climate fluctuation, which may have led people to seek out protected environments in this area. The Mpumalanga Stone Age sequence is visible again during the mid-Holocene at the farm Honingklip near Badplaas in the Carolina District (Esterhuizen & Smith in Delius, 2007; Bergh, 1998).

Two LSA sites in the Kruger National Park (close to Skukuza, called SK4 (Bergh 1999: 4) date to the last 2500 years and are associated with pottery and microlithic stone tools (Bergh, 1998: 95). They are typical of a hunter-gatherer lifestyle and may also have been sites frequented by San, who were the first inhabitants of the eastern Lowveld. They were a nomadic people who lived together in small family bands and relied on hunting and gathering of food for survival. Although rock art has been less well studied in Mpumalanga (Deluis 2007:75) some sites have been recorded where evidence of Stone Age people were found in numerous rock shelters throughout the Lowveld where some of their rock paintings are still visible. Many rock art sites are found in the Kruger National Park, especially in the southern section (Eloff 2007: 12). A number of these shelters have also been documented in the Nelspruit area (Bornman, 1995; Schoonraad in Barnard, 1975). It has been argued that the red ochre source for these paintings is to be found at Dumaneni, near Malelane (Bornman, 1995).

A small amount of Geometric Tradition rock art (associated with the Khoekoen, are found through the Lydenburg district and into the Nelspruit area. (Deluis 2007:76).

A third group that produced rock art was Iron Age farmers. See below.

The close vicinity of water sources and ample grazing in the area of the proposed development would have made it a prime spot for hunting and obtaining water during the past. Therefore, one may assume that Stone Age people probably would have moved through the area.

Two possible Stone Age sites were identified and recorded during this survey. The results will be discussed in the next section.

Varty and Buchanan (1997) indicates “Stone Age Site” on a map of Londolozi, but no further information is recorded. It is understood that it was a site recorded by Conrad de Roschner and might be a rock art site.

During the period following the Stone Age Bantu-speaking people moved into this area from the northern parts of Southern Africa and settled here. This period is referred to as the Iron Age. The Iron Age is the name given to the period of human history when metal was mainly used to produce 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.

- Early Iron Age (EIA)

The Early Iron Age (~200-1 000 A.D.) began when pastoralist groupings moved into the north eastern parts of South Africa. Among these were the makers of the Lydenburg Heads, ceramic masks dating to about A.D. (Celliers 2017)

Ceramics comparable to those from the Lydenburg Heads site were also found at the Gustav Klingbiel Nature Reserve and archaeologists believe that they are related to the ceramic wares (pottery) of the Lydenburg Heads site in form, function and decorative motive.

The earliest research in Iron Age archaeology was conducted by Trevor and Hall in 1912. This revealed prehistoric copper-, gold- and iron mines. Schwelinus (1937) reported smelting furnaces, a salt factory and terraces near Phalaborwa. In the same year D.S. van der Merwe excavated stone walling, graves, furnaces, terraces and soapstone objects in the Letaba area.

Mason (1964, 1965, 1967, 1968) conducted the first scientific excavation in the Lowveld, followed by N.J. van der Merwe and Scully. M. Klapwijk (1973, 1974) excavated an EIA site at Silverleaves and excavated at Harmony and Eiland, both EIA sites.

Some archaeological research was done during the 1970's at sites belonging to the EIA (Early Iron Age), location Plaston, a settlement close to White River (Evers, 1977). This site is located on a spur between the White River and a small tributary. It is situated on holding 119 at Plaston.

Early Iron Age ceramic collections from elsewhere in Mpumalanga and Limpopo can be compared to the Plaston sample. They include Silver Leaves, Eiland, Matola, Klingbiel and the Lydenburg Heads site. The Plaston sample is distinguished from samples of these sites in terms of rim morphology, most rims from

Plaston are rounded and very few bevelled. Rims from the other sites display more bevelled rims (Evers, 1977:176).

During the early 1970's Evers also conducted fieldwork and excavations in the Eastern Transvaal. Two areas were studied, the Letaba area south of the Groot Letaba River, west of the Lebombo Mountains, east of the great escarpment and north of the Olifants River. The second area was the Eastern Transvaal escarpment region between Lydenburg and Machadodorp.

Early Iron Age pottery was also excavated by archaeologist, Prof. Tom Huffman during 1997 on location where the Riverside Government Complex is situated (Huffman, 1998). This site known as the Riverside site is situated a few kilometres north of Nelspruit next to the confluence of the Nelspruit and Crocodile River. The site was exposed during an environmental impact assessment for the new Mpumalanga Government complex/ offices. A bulldozer cutting exposed storage pits, cattle byres, a burial and a midden. Rescue conducted during December 1997 and March 1998 recovered the burial and contents of several pits.

One of the pits excluded among other items, pottery dating to the eleventh century (AD 1070 ± 40 BP) this relates the pottery to the Mzonjani and Broederstroom phases. The early assemblage belongs to the Kwale branch of the Urewe tradition.

An Early Iron Age site in Sekhukuneland, known as Mototolong (Van Schalkwyk, 2007) was the National Cultural History Museum. The site is characterized by four large cattle kraals containing ceramics which may be attributed to the Mzonjani and Doornkop occupational phases.

Van Deventer-Radford (2019) also found a possible Mzonjani phase site during her HIA at the nearby Sabi Sands Singita Game Reserve.

EIA sites are often found in specific locations: < 100m from water (riverbank or the confluence of streams). This meant that they were found on alluvial fans, which soils were nutrient rich and suitable for agriculture. Environmental reconstruction shows that this time (900-1100AD) was drier and these wetter soils and flood plains played an important role in EIA settlement. A drier period again followed after 1450AD. (Delius 2007)

- Late Iron Age (LIA)

Historians and ethnographers describe the Lowveld was frequented by Swazi and Sotho-Tswana factions during the LIA (1500-1800 A.D.). (Barnard, 1975; Bergh, 1998; Bornman, 2002; Herbst, 1985; Myburgh, 1949).

Smaller groups, such as the Pai and Pulana were attacked by and forced to escaping the aggressive Swazi under Mswati, especially during the Mfecane (Difaqane). They (Swazi) were particularly active in the Lowveld during the Difaqane period (1820's) and it is well-known that they frequently attacked and ousted smaller herder groups like the Pai and Pulana, especially in the Low's Creek area. They were however prevented from settling in the low-lying areas owing to the occurrence of the tsetse fly and malaria. Consequently, there is not much evidence of large-scale settlement in the Crocodile River Valley until the time of colonial settlement (1890's) and later. Small, isolated dry-packed stone-walled enclosures found near Nelspruit and surrounding areas may be attributed to these smaller groups who

hid away from the Swazi attack. The sites were only short-term places of refuge, as these refugees had to frequently move as a result of the onslaught and therefore small, indistinct and with little associated cultural material.

Mswati systematically occupied this area with his own family and trusted commoners after they killed Tsibeni and evicted the remnants of his people who fled to an area near Legogote, where they are still living today” (Bornman, 1995).

Trade routes were already established before the period of colonial expansion, when they were used for the transfer of iron, tin, copper and some gold (Bergh, 1998:103). The earliest evidence of iron mining and working in the former Transvaal dates to approximately 300 AD and copper mining and working in Southern Africa may have been practiced as early as 620 A.D. (Bergh, 1998:103).

These people were responsible for the establishment of large settlements like Monomotapa the Zimbabwe Complex and the famed Mapungubwe in the Limpopo Valley. Around 900 AD Arab traders established a trade post at Sofala (Beira). Since the start of the 11th century, these Arabs had trade relations with the people of Zimbabwe. Cloths, porcelain and glass beads were traded for gold, ivory and other minerals.

Ancient trade routes passed close-by the current Nelspruit and started from Delagoa Bay in a westward direction, cutting through the Lebombo Mountains at the Sabie (Matala) Poort through the Lowveld towards the gold fields of Lydenburg or through Malalapoort, the Nkhomati and Crocodile Rivers to Skipberg inside the current Kruger National Park near where Pretoriuskop Rest Camp is situated. From here onwards there were two likely routes up the mountains to go to the goldfields. The first passed by Spitskop (Sabie) and from there on to Lydenburg. The second passed south of the Devils Knuckles to Lydenburg. There were also routes connecting to existing main routes, one of which started from Sabie or Lydenburg to the route which linked Delagoa Bay to the Soutpansberg through Pilgrim’s Rest. It is also thought that a footpath existed at the foothills of the (Transvaal) Drakensberg which led around the mountain to link again with a main route alongside the Olifants River (Bergh, 1998:104). Delius (2007) states that “By the 1700s, economically driven centres of control had begun to emerge and, following the establishment of Portuguese trade posts, the eastern Transvaal became an important thoroughfare for both local and foreign traders.” Long distance trade involved copper, tin, ivory, animal hides and rhino horns that were exchanged for cloths, glass beads and other European items such as firearms. The Voortrekkers used one of these routes in 1845 while making the wagon route between Ohrigstad and Delagoa Bay (Berg, 1998: 104).

Iron Age people also produced rock art- The ancestors of the Sotho-Tswana painted and the ancestors of the Nguni speaker engraved. (Deluis 2007:76) Deluis (2007) describes the paintings as “ finger-painted anthropomorphic, zoomorphic and geometric designs almost exclusively in white and occasionally in red.”. They were painted with fingers and not brushes like that of the San. They are often referred to as Late White Paintings, but can be classified into an earlier (rhino, zebra, elephant, lion, hyena, crocodile and mostly giraffe images – with some scenes of stick fighting) and later period. Sotho-Tswana rock art tends to occur in remote, hilly areas. During the Dfiqane these hills became places of refuge. These people were the ancestors of the Pedi and related groups. The art dates in some cases to 1 000ya. (Deluis 2007)

Iron Age sites were identified in the south of the Kruger National Park (Eloff et.al. 2007: 35-39). Jordaan is currently working on two Early Iron Age sites close to Skukuza, namely SK17 and TSH1 (SAHRIS Database). Bergh (1999: 7) indicates that ~48 LIA sites have been identified here. This work was mainly completed by Meyer (1986). Again, it can be stated that the good grazing and access water in the area would have provided a suitable environment for Iron Age people.

Delius (2007) mentions that there is a difference in the distribution of Iron Age sites between the northern and southern parts of Mpumalanga, with the north having less of an agricultural focus, but "... with poor soils, but situated near ore resources, with mining by-products found..."

- Historical Period

The Historical Period began with the first recorded oral histories in the area. It includes the arrival of people that were literate, however, more recently also refers to the latter five hundred years of South African history.

Dutch sailors reached Delagoa Bay in 1721 and stayed there for nine years, during this time they started expeditions inland. During August 1723 lieutenant Jan Steffler and 17 men started the first of these expeditions but they were ambushed by natives shortly after crossing the Lebombo Mountains. Where they traversed the mountains is uncertain, but it is possible that they were in northern Swaziland once they were attacked. Steffler succumbed because of this ambush and his faction returned to Delagoa Bay (Bergh, 1998:116).

An additional attempt to initiate an interior route in June 1725, was unsuccessful after Francois de Cuiper and 34 men departed from Delagoa Bay and advanced in a north-western direction. They arrive at Gomondwano in the current Kruger National Park where they were attacked by a local tribe. This resulted in them also having to return to Delagoa Bay. Although this attempt was not successful, it is seen as the first European intrusion into this northern area (Bergh, 1998:116).

- The Voortrekkers

The Groot Trek of the Voortrekkers started with the Tregardt- van Rensburg trek in 1835. They happen upon Tregardt and his followers traversed the Orange River at Buffelsvlei (Aliwal North). Here van Rensburg joined the trek northwards. On 23 August 1837 the Tregardt trek left for Delagoa Bay from the Soutpansberg. They travelled eastwards beside the Olifants River to the eastern foothills of the Drakensberg. From here they trekked through the Lowveld and the current KNP, where they eventually traversed the Lebombo Mountains in March 1838. They reached the Fortification at Lourenço Marques on 13 April 1838 (Bergh, 1998:124125).

Permanent European (Voortrekker) settlement of the eastern areas of Mpumalanga began when a commission under the leadership of A.H. (Hendrik) Potgieter who negotiated with the Portuguese Governor at Delagoa Bay in 1844 for land. It was agreed that these settlers could settled down in an area that was a four-day journey from the east coast of Africa between 10° and 26° South. Voortrekkers started migrating into the region in 1845. Andries-Ohrigstad was the first town established in this area in July 1845 after the Voortrekkers negotiated for land with the Pedi Chief Sekwati. Farms were granted as

far west as the Olifants River. The western boundary was not formalised but at a Volksraad meeting in 1849 it was determined that the Elands River would be the boundary between the districts of Potchefstroom and Lydenburg as this eastern piece of the Transvaal was then known (Bergh, 1998).

Owing to internal strife and differences between the various Voortrekker groups that stayed in the broader Transvaal region, the settlers in the Ohrigstad area governed from the town of Lydenburg decided to secede from the Transvaal Republic in 1856. The Republic of Lydenburg encompassed land that included not only the land originally obtained from the Pedi Chief Sekwati in 1849, and other areas of land negotiated for from the Swazis. The Republic of Lydenburg was a vast area and stretched from the northern Strydpoort Mountains to Wakkerstroom in the south and Bronkhortspruit in the west to the Swazi border and the Lebombo mountains east. The movement of Europeans into the north would have significant consequences for the local people who inhabited the land. (Celliers 2017) In 1839 Mswati succeeded Sobhuza (also known as Somhlomo) as king of the Swazi. Intimidated by the ambitions of his half-brothers, with Malambule, who had support from the Zulu King Mpande, he turned to the Ohrigstad Boers for protection. He claimed that the land that the Boers had settled on was Swazi territory. The Commandant General of the Ohrigstad community, Andries Hendrik Potgieter, replied that the land was ceded to him by the Pedi leader Sekwati, in return for protection of the Pedi from Swazi attacks (Giliomee, 2003).

In reaction to the increasingly authoritarian way in which Potgieter conducted affairs at Ohrigstad, the Volksraad of Ohrigstad saw Mswati's offer to obtain more respectable title deeds for the property (Bonner, 1978). According to a sales contract set up between the Afrikaners and the Swazi people on 25 July 1846, the former were the owners of the land that had its southern border at the Crocodile River, which extended in a westerly direction up to Elandspruit, of which the eastern border was where the Crocodile and Komati Rivers joined and then extended up to Delagoa bay in the north (Van Rooyen, 1951). The Europeans purchased the land for a 100 heads of cattle (Huyser).

- History of the Anglo Boer War (1899-1902) in the area

General Louis Botha, with his Boer forces, marched through Nelspruit on 11 September 1900. On 18 September 1900, the British battalion of Lieutenant General F. Roberts arrived at Nelspruit. No major skirmishes in the war took place near Nelspruit, but a concentration camp for Africans was established a small distance to the north of the town. The reason for this is possibly that there was a railway station at Nelspruit. (Celliers 2017)

Van Vollenhoven listed the Steinaecker's Horses' Sabi Bridge Post as a heritage site in his 2018 HIA Report.

Steinaecker's Horse was a volunteer military unit that fought on the side of the British. It functioned mainly in the Lowveld and Swaziland (Pienaar 1990: 343). Apart from its part during the War, it placed the base for the establishment of the Kruger National Park. It therefore is an important part of the history of the Park.

The unit was started by Francis Christiaan Ludwig von Steinaecker (Van Vollenhoven et.al.1998: 6).

The Sabi Bridge Post is one of several outposts established by the unit. He likewise erected military outposts along the Swaziland border up to the north of Letaba where he stationed an officer and a few troops at each post (Pienaar, 1990).

Fort Mpisane at Bushbuckridge (Pienaar 1990: 345), was placed under command of Captain HF (Farmer) Francis. The garrison consisted of 30 men, but the local faction of Chief Mpisane were also armed (Pienaar 1990: 348). In the battle Captain Francis was killed and buried next to the fort. Some black troops that were killed and buried in a trench to the southeast of the fort (Pelser 1999: 57).

- The Eastern and Selati Railway Lines

The building of the railway line between Pretoria and Delagoa Bay commenced after the Kruger Government presented the concession for the construction of the line to the Nederlandsche Zuid Afrikaansche Spoorweg-Maatschappij (NZASM). The railway line was completed in 1895 (de Jong et al. 1988).

Prior to the completion of the Eastern (Delagoa Bay) Railway line in 1895, gold was discovered in the Lowveld areas of Gravelotte, Leydsdorp, Rubbervale, Trichardtsdal and the Selati Goldfields. This needed a railway line to link the North-eastern Transvaal with the central markets of the ZAR be constructed (Pienaar, 1990).

President Paul Kruger backed this idea and in July 1890 he managed to convince the “Volksraad” that a proposed railway line connecting the Soutpansberg and Selati Goldfields with the main line to Lourenço Marques (Delagoa Bay) be approved.

The Selati Railway Line would be 307 km long and the task took three years to complete at an projected cost of £6 000 per km.

Westwood & Winby was chosen and completed surveying of the line in early 1893 and by July of that year 40 km of the line was finished (Pienaar, 1990). Regrettably, Oppenheim acted unlawfully in his transactions with the ZAR and after an enquiry initiated by Smit, all work on the railway halted after approximately 120 km connecting Komatipoort and Newington was completed. After countless legal battles both in ZAR and abroad, all contracts granted to Oppenheim was nullified and at that point the Selati Railway line was ended. Materials and tools used for the construction of the line were left abandoned in the wilderness, along with many unmarked graves of British labourers that died of malaria (Pienaar, 1990). The graveyard in Komatipoort is evidence of this and several individuals lie buried here. Though no evidence could be found, it is probable that the grave of C.C. Moloney, who died 22 July 1894, located very nearby the Selati line in the Sabi Sand Reserve and near Kirkmans Kamp is further testimony to the adversities endured by the railway labourers.

Van Vollenhoven (2018) recorded the historical railway bridge on the Sabi River at Skukuza as part of the HIA for the proposed tourist development at the bridge. It was constructed in 1912. He also recorded the associated steam engine. This locomotive ran in the last trip through the Kruger Park before the railway line was decommissioned in 1972. This locomotive, no. 3638, was granted to the Park in October 1978. It therefore commemorates an historical occasion and as such has heritage significance.

In his 2016 HIA for the Kirkman's Camp on the nearby Toulon Farm Celliers recorded a single grave. The grave is well-marked and fenced. It is orientated in an east-west direction with the headstone, in the form of a cross, reads: "In Loving Memory of C.C. Moloney who died 22 July 1894". Research is essential to corroborate that the grave may have been related with the construction of the first section of the Selati Railway Line during the years 1893-1894.

He also recorded the site of the remains of the historic Selati Railway Line in two sites. At both locations the rails and sleepers were strip off, but the ballast and some parts of the sub-grade are visible. It is a historically significant feature since it was a key role in the development of the KNP and Sabi Sand Reserve. It is a historically significant feature as it played a key part in the development of the Kruger National Park and Sabi Sand Reserve.

The Selati Line was challenging with veld fires produced by sparks from the train, collisions with game and train accidents each happening. The increase in traffic on the line due to the mining in the /Phalaborwa area led to the electrification of the line. The S.A.S decided to divert the line to the west of the KNP border. In 1968 a new line from Kaapmuiden was built West of the Nsikazi River and at Metsi, a few kilometres North of Newington, it joined the Selati Line. Upon completion of this new line traffic diminished severely and from April 1971 a single daily service between Komatipoort and Skukuza was operated to transport of supplies (Pienaar, 1990).

- The Sabie Game Reserve and Kruger National Park

In the later part of the 19th century was decided that a Nature Reserve in the Eastern Transvaal Lowveld is necessary to conserve game for future generations. On 26 March 1898 President Paul Kruger signed the proclamation of the "Goevernements wildduin" (Sabie Game Reserve). (van Vollenhoven 2018) The outbreak of the Anglo-Boer War (1899-1902) changed this because of new British government and after the War in 1902 the Reserve was re-proclaimed with a larger area included between the Olifants and Sabie Rivers (Pienaar, 1990). Shortly afterwards Major James Stevenson-Hamilton was chosen as Warden of the reserve. His vision and commitment performed a major role in the advent of nature conservation in the Lowveld and culminated in the establishment of the KNP in the early 20th century. (van Vollenhoven 2018) Pioneer and visionary of the later KNP, Col. James Stevenson-Hamilton appointed the first field ranger and sent Mr E.G. (Gaza) Grey to Gomondwane. In 1902 Stevenson-Hamilton made von Steinaecker's blockhouse at Sabie Bridge his first home. This outpost later grew into the Skukuza Rest Camp (Pienaar, 1990). The regiment was posted at this site from 1900 and between 1901 and 1902 operated the train between Komatipoort and Kilo 104. The railway bridge was not yet finished, but a temporary wooden bridge on a diversion line was used (Woolmore 2006: 18).

After September 1902 the blockhouse at the site, built by the Steinaecker's Horse Regiment (south of the temporary bridge), was used by Major J Stevenson-Hamilton as his office upon his employment as the first warden of the Park (Stevenson-Hamilton 1952: 55-56). In April 1903 a Game Reserve in the Soutpansberg region was proclaimed and named the Shingwedzi Game Reserve. The Shingwedzi and Sabie Game Reserves was combined by way of the proclamation of a conservation area between these two reserves in December 1914. In 1916 the two reserves were consolidated, and it was named the "Transvaal Game Reserves".

- The Sabi Sand Reserve

In 1922 the Transvaal Consolidated Land Company tasked Major Percy Greathead to assess the possibility of establishing a cattle farm nearby the Sabie Bridge (Skukuza). By the end of that year some 800 cross race cattle were introduced on the farm Toulon located around 6km from Sabie Bridge (Pienaar, 1990).

The newly appointed Manager of the Toulon Estate, Mr Crosby, became friends with the conservator of the Shingwedzi and Sabie Game Reserve, Mr James Stevenson-Hamilton and even organised tennis matches between staff of both establishments! (Celliers 2017)

In 1926 the KNP was proclaimed as South Africa's first national conservation region and it ensured a new time of nature conservation in the country. After the proclamation of the KNP and its new western boundary, next-door landowners founded the Sabie Private Game Reserves in 1934. This was followed in 1948 by the formation of the Sabi Sand Reserve. During 1961 because of the danger of foot and mouth disease and the continued hunting of game on private land next to the National Park, a fence was erected sandwiched between the Sabi Sands Reserve and the KNP. The Sabi Sand Reserve erected fences on the Western boundary to prevent the movement of game from the area. In 1993 the fence between the KNP and the Sabi Sands Reserve was dropped again, and game could roam between the reserves freely.

Celliers (2017) recorded the location of the current Kirkman's Camp tourist accommodation and facilities. A key feature is the original Toulon Estate farmhouse which is used as reception, office and shop space, dining and relaxation. The building is in a remarkable state and an excellent example of 1920's colonial architecture.

- Londolozi Game Reserve

Charles Varty and Frank Unger bought the 10 000 acre Sparta farm in 1926 from Transvaal Consolidated Investments (TCI) during an afternoon of tennis in Johannesburg. Sparta was used as a hunting farm. Four thatched mud rondawels were built in the 1930s, along with staff accommodation. Soon after an airstrip was cleared near the Selati Railway line. This was the first time that a private aircraft accessed the local farms. (Varty & Buchanan, 1997)

After Charles Varty died, John Varty and his brother, Dave Varty, terminated the hunting activities and converted it into a game reserve in 1973. The property was renamed Londolozi. (<https://www.londolozi.com/en>) Construction for Varty Camp started in the early 1970s.

Londolozi is one of the original pioneering Private Game Reserves of the ecotourism industry in South Africa.

In 2019 the author was appointed by Emross Consulting (Pty) Ltd to undertake a Phase 1 HIA for the proposed development of 13 new roads with a cumulative distance of 5.39km, the upgrading and broadening of two existing roads with a cumulative distance of 7.05km and the development of a rural abattoir on Sparta Farms 259KU, Londolozi Game Reserve, Mpumalanga.

Four sites of archaeological potential were identified during the physical survey phase of the project of which only one (Stone Age) will be impacted on by the proposed developments. This site seems to be the remaining part of a larger deposit and it is suggested that an archaeologist familiar with the Stone Age records it or the site be secure via fencing.

No Iron Age sites, features or material were identified

6. Conclusion

From a heritage perspective the study area is, generally speaking, of low heritage significance and Option A has previously been impacted upon by the presence of the waste water facility.

7. Recommendation

Due to the apparent lack of known heritage resources of significance in the study area it is recommended that the project is exempted from an HIA, but that a chance find procedure should be included in the EMPr as outlined below. It is recommended that an Exemption of a HIA is issued for the proposed development. Alternative an Exemption for Option A, as it has been impacted upon and is currently the preferred option.

This should be kept in mind when development work commences and if any sites (incl. unmarked or unknown low stone-packed graves) are identified the following 'Chance find Procedure' should be followed:

- Upon finding any archaeological or historical material all work at the affected area must cease.
- The area should be demarcated in order to prevent any further work there until an study has been completed.
- An archaeologist should be contacted immediately to provide advice on the matter.
- Should it be a minor issue, the archaeologist will decide on future action, which could include adapting the HIA or not. Depending on the nature of the find, it may include a site visit.
- SAHRA's APM Unit may also be notified.
- If needed, the necessary permit will be applied for with SAHRA. This will be completed in conjunction with the appointed archaeologist.
- The removal of such archaeological material will be done by the archaeologist in lieu of the approval given by SAHRA, including any conditions stipulated by the latter.
- Work on site will only continue after removal of the archaeological/ historical material was done.

The above protocol has been taken from van Vollenhoven (2018).

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