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PHASE 1

ARCHAEOLOGICAL IMPACT ASSESSMENT

RELATING TO THE PROPOSED SOSHANGUVE SS EXTENSION 7 AND 8 TOWNSHIP ESTABLISHMENT WITHIN THE CITY OF TSHWANE METROPOLITAN MUNICIPALITY, GAUTENG PROVINCE.

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EXECUTIVE SUMMARY

Note: This report follows minimum standard guidelines required by the South African Heritage Resources Agency (SAHRA and South African Provincial Heritage Authorities) for compiling a Phase 1 Archaeological Impact Assessment (AIA).

The proposed Township Establishment is located approximately 20 kilometers north western side of Pretoria CBD. The proposed area is bound by Soshanguve Extension BB Location to the west and a stream to the east.

A multi-stepped methodology was used to address the terms of reference. A robust desktop study was carried out to understand the framework for managing and accessing proposed Township Establishment. This included consulting the 1972 Convention, the operational guidelines of 2013, the ICOMOS (2011) guidelines on assessing impact on or near a heritage sites. The IUCN guidelines and standards of best practice were also consulted. Subsequently, a review of the archaeology of the area was carried out using contract archaeology reports, research reports and academic publications. Desktop studies were followed by fieldwork carried out by expert archaeologists and heritage managers in conformity with the National Heritage Resources Act of 1999. Based on an interdisciplinary methodology, that combined ICOMOS methodology with several techniques from various disciplines, the impact of the proposed residential sites was considered.

The following conclusions were reached:

The recent past stone walling was identified on site towards the southern site of the proposed area for development. No further studies / Mitigations are recommended given the fact that within the proposed development footprint and its surrounding there are no archaeological or place of historical significance that will be impacted by the proposed development activities. However, should any chance archaeological or any other physical cultural resources be discovered subsurface, heritage authorities should be informed.

From an archaeological and cultural heritage resources perspective, there are no objections to the proposed Township project and we recommend to the Provincial Heritage Resource Agency and South African Heritage Resource Agency to approve the project as planned.

ACKNOWLEDGEMENTS:

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AIA	Archaeological Impact Assesment
EIA	Environmental Impact Assesment
EIA	Early Iron Age
EMP	Environmental Management Plan
VHHC	VhufaHashu Heritage Consultants
NEMA	National Environmental Management Act, 1998 (Act No.107 of 1998)
NHRA	National Heritage Resources Act, 1999 (Act No.25 of 1999)
SAHRA	South African Heritage Resources Agency
ESA	Early Stone Age
MSA	Middle Stone Age
LSA	Late Stone Age
IA	Iron Age
LIA	Late Iron Age
UNESCO	United Nations Educational, Scientific and Cultural Organization
WHC	World Heritage Conventions of 1972

DEFINITIONS

Archaeological Material remains resulting from human activities, 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.

Chance Finds Archaeological artefacts, features, structures or historical cultural remains such as human burials that are found accidentally in context previously not identified during cultural heritage scoping, screening and assessment studies. Such finds are usually found during earth moving activities such as water pipeline trench excavations and streets.

Cultural Heritage Resources Same as Heritage Resources as defined and used in the South African Heritage Resources Act (Act No. 25 of 1999). Refer to physical cultural properties such as archaeological and paleontological sites; historic and prehistoric places, buildings, structures and material remains; cultural sites such as places of ritual or religious importance and their associated materials; burial sites or *graves* and their associated materials; geological or natural features of cultural importance or scientific significance. Cultural Heritage Resources also include intangible resources such as religion practices, ritual ceremonies, oral histories, memories and indigenous knowledge.

Cultural Significance The complexities of what makes a place, materials or intangible resources of value to society or part of, customarily assessed in terms of aesthetic, historical, scientific/research and social values.

Grave A place of interment (variably referred to as burial), including the contents, headstone or other marker of such a place, and any other structure on or associated with such place. A grave may occur in isolation or in association with others where upon it is referred to as being situated in a cemetery.

Historic Material remains resulting from human activities, which are younger than 100 years, but no longer in use, including artefacts, human remains and artificial features and structures.

***In Situ* material** *Material culture* and surrounding deposits in their original location and context, for example an archaeological site that has not been disturbed by farming.

Late Iron Age this period is associated with the development of complex societies and state systems in southern Africa.

Material culture Buildings, structure, features, tools and other artefacts that constitute the remains from past societies.

Site A distinct spatial cluster of artefacts, structures, organic and environmental remains, as residues of past human activity.

1. INTRODUCTION

Instratin commissioned studies for the proposed Township site in Soshanguve SS Extension 7 and 8 city of Tshwane Metropolitan Municipality, Gauteng Province. To ensure that the proposed development meets the environmental requirements in line with the National Environmental Management Act 107 of 1998 as amended in 2010. They appointed Lambeu Consulting as an Independent Environmental Assessment Practitioner of the proposed project. Vhufa Hashu Heritage consultants appointed to conduct an Archaeological and Cultural Heritage Impact Assessment study as part of the Environmental Impact Assessment for the proposed project.

In order to comply with relevant legislations, the Applicant requires information on the heritage resources that occur within or near the proposed Township development and their significance. This enables the applicant to take pro-active measures to limit the adverse effects that the development could have on such heritage resources. Archaeological/ Heritage Impact Assessment (AIA-HIA) are conducted in line with the National Heritage Resources Act of 1999 (Act No. 25 of 1999). The Act protects heritage resources through formal and general protection. The NHRA (Act No. 25 of 1999) provides that certain developmental activities require consents from relevant Heritage Resources Authorities or Agency. The South African Heritage Resources Agency as custodians of the South African Heritage and Monuments sites developed minimum standards for impact assessment processes, in addition to these local standards, the International Council of Monuments and Sites (ICOMOS) published guidelines that specify and guide impact assessment on heritage sites with Outstanding Universal Value. Furthermore, these guidelines and standards have been strengthened by the Burra Charter of 1999 which require a caution approach to the management of sites, it set out the need to understand the significance of heritage places and the significance guide decisions.

The National Heritage Resources Act (NHRA - Act No. 25 of 1999) protects all structures and features older than 60 years (section 34), archaeological sites and material (section 35) and graves and burial sites (section 36). In order to comply with the legislation, the Applicant requires information on the heritage resources, and their significance that occur

within the project area. This enables the Applicant to take pro-active measures to limit the adverse effects that the development could have on such cultural and heritage resources.

2. RELEVANT LEGISLATION

Two sets of legislation are relevant for the study with regards to the protection of heritage resources and graves.

2.1. The National Heritage Resource Act (25 of 1999)

This Act established the South African Heritage Resource Agency (SAHRA) as the prime custodians of the heritage resources and makes provision for the undertaking of heritage resources impact assessment for various categories of development as determined by section 38. It also provides for the grading of heritage resources (section 7) and the implementation of a three-tier level of responsibly and functions from heritage resources to be undertaken by the State, Provincial and Local authorities, depending on the grade of heritage resources (section 8)

In terms of the National Heritage Resource Act 25, (1999) the following is of relevance:

Historical remains

Section 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.

Archaeological remains

Section 35(3) Any person who discover archaeological or Paleontological object or material or a meteorite in the course of development or agricultural activity must immediately report the find to the responsible heritage resource authority or the nearest local authority or museum, which must immediately notify such heritage resources authority.

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

- destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or paleontological site or any meteorite;
- destroy, damage, excavate, remove from its original position, collect or own any archaeological or paleontological material or object or any meteorite;
- trade in, sell for private gain, export or attempt to export from republic any category of archaeological or paleontological material or object or any meteorite; or
- bring onto or use at an archaeological or paleontological site any excavation equipment or any equipment which assist with the detection or recovery of metal or archaeological material or object or such equipment for the recovery of meteorites.

Section 35(5) When the responsible heritage resource authority has reasonable cause to believe that any activity or development which will destroy, damage or alter any archaeological or paleontological site is underway, and where no application for a permit has been submitted and no heritage resource management procedures in terms of section 38 has been followed, it may

- serve on the owner or occupier of the site or on the person undertaking such development an order for the development to cease immediately for such period as is specified in the order
- carry out an investigation for the purpose of obtaining information on whether or not an archaeological or paleontological site exists and whether mitigation is necessary;
- if mitigation is deemed by the heritage resources authority to be necessary, assist the person on whom the order has been served under paragraph (a) to apply for a permit as required in subsection (4); and
- recover the cost of such investigation from the owner or occupier of the land on which it is believed an archaeological or paleontological site is located or from the person proposing to undertake the development if no application for a permit is received within two week of the order being served.

Subsection 35(6) the responsible heritage resource authority may, after consultation with the owner of the land on which an archaeological or paleontological site or meteorite is situated; serve a notice on the owner or any other controlling authority, to prevent activities within a specified distance from such site or meteorite.

Burial grounds and graves

Section 36 (3) No person may, without a permit issued by SAHRA or a provincial heritage resources authority:

(i) destroy, damage, alter, exhume, remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or

(ii) bring onto or use at a burial ground or grave any excavation equipment, or any equipment which assists in detection or recovery of metals.

Subsection 36 (6) Subject to the provision of any person who in the course of development or any other activity discover the location of a grave, the existence of which was previously unknown, must immediately cease such activity and report the discovery to the responsible heritage resource authority which must, in co-operation with the South African Police service and in accordance with regulation of the responsible heritage resource authority-

(I) carry out an investigation for the purpose of obtaining information on whether or not such grave is protected in terms of this act or is of significance to any community; and

if such grave is protected or is of significance, assist any person who or community which is a direct descendant to make arrangements for the exhumation and re-interment of the contents of such grave or, in the absence of such person or community, make any such arrangement as it deems fit.

Cultural Resource Management

Section **38(1)** Subject to the provisions of subsection (7), (8) and (9), any person who intends to undertake a development*…

- must at the very earliest stages of initiating such development notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.

development means any physical intervention, excavation, or action, other than those caused by natural forces, which may in the opinion of the 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:

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

(ii) Any change to the natural or existing condition or topography of land, and

(iii) Any removal or destruction of trees, or removal of vegetation or topsoil;

place means a site, area or region, a building or other structure

structure means any building, works, device or other facility made by people and which is fixed to the ground.

2.2. The Human Tissue Act (65 of 1983)

This act protects graves younger than 60 years, these falls under the jurisdiction of the National Department of Health and the Provincial Health Department. Approval for the exhumation and reburial must be obtained from the relevant provincial MEC as well as relevant Local Authorities.

2.3. The National Environmental Management Act

This act states that a survey and evaluation of cultural resources must be done in areas where development projects, that will change the face of the environment, will be undertaken. The impact of the development on these resources should be determined and proposals for the mitigation thereof made. Environmental management should also take the cultural and social needs of people into account. Any disturbance of landscapes

and sites that constitute the nation's cultural heritage should be avoided as far as possible and where this is not possible the disturbance should be minimized.

3. TERMS OF REFERENCE

The terms of reference for the study were to undertake an archaeological impacts assessment on the proposed Township and submit a specialist report, which addresses the following:

- Executive summary
- Scope of work undertaken
- Methodology used to obtain supporting information
- Overview of relevant legislation
- Results of all investigations
- Interpretation of information
- Assessment of impact
- Recommendation on effective management measures
- References

4. TERMINOLOGY

The Heritage impact Assessment (HIA) referred to in the title of this report includes a survey of heritage resources as outlined in the National Heritage resources Act,1999(Act No25 of 1999) Heritage resources, (Cultural resources) include all human-made phenomena and intangible products that are result of the human mind. Natural, technological or industrial features may also be part of heritage resources, as places that have made an outstanding contribution to the cultures, traditions and lifestyle of the people or groups of people of South Africa.

The term ' pre – historical' refers to the time before any historical documents were written or any written language developed in a particular area or region of the world. The historical period and historical remains refer, for the project area, to the first appearance or use of 'modern' Western writing brought South Africa by the first colonist who settled in the Cape in the early 1652 and brought to the other different part of South Africa in the early 1800.

The term ‘relatively recent past’ refers to the 20th century. Remains from this period are not necessarily older than sixty years and therefore may not qualify as archaeological or historical remains. Some of these remains, however, may be close to sixty years of age and may in the near future, qualify as heritage resources.

It is not always possible, based on the observation alone, to distiqiush clearly between archaeological remains and historical remains or between historical remains and remains from the relatively recent past. Although certain criteria may help to make this distinction possible, these criteria are not always present, or when they are present, they are not always clear enough to interpret with great accuracy. Criteria such as square floors plans (a historical feature) may serve as a guideline. However circular and square floors may occur together on the same site.

The ‘term sensitive remains’ is sometimes used to distiqiush graves and cemeteries as well as ideologically significant features such as holy mountains, initiation sites or other sacred places. Graves in particular are not necessarily heritage resources if they date from the recent past and do not have head stones that are older than sixty years. The distinction between ‘formal’ and ‘informal’ graves in most instances also refers to graveyards that were used by colonists and by indigenous people. This distinction may be important as different cultural groups may uphold different traditions and values with regard to their ancestors. These values have to be recognized and honored whenever graveyards are exhumed and relocated.

The term ‘Stone Age’ refers to the prehistoric past, although Late Stone Age people lived in South Africa well into the historical period. The Stone Age is divided into an Early Stone Age (3Million years to 150 000 thousand years ago) the Middle Stone Age (150 000 years ago to 40 years ago) and the Late Stone Age (40 000 years to 200 years ago).
The term ‘Early Iron Age’ and Late Iron Age respectively refers to the periods between the first and second millenniums AD.

The ‘Late Iron Age’ refers to the period between the 17th and the 19th centuries and therefore includes the historical period.

Mining heritage sites refers to old, abandoned mining activities, underground or on the surface, which may date from the pre historical, historical or relatively recent past.

The term ‘study area’ or ‘project area’ refers to the area where the developers wants to focus its development activities (refer to plan)

Phase I studies refers to survey using various sources of data in order to establish the presence of all possible types of heritage resources in a given area.

Phase II studies includes in-depth cultural heritage studies such as archaeological mapping, excavating and sometimes laboratory work. Phase II work may include documenting of rock art, engravings or historical sites and dwellings; the sampling of archaeological sites or shipwrecks; extended excavation of archaeological sites; the exhumation of bodies and the relocation of grave yards, etc. Phase II work may require the input of specialist and require the co-operation and the approval of SAHRA.

5. METHODOLOGY

Source of information

Most of the information was obtained through the initial site visit made on the 26 January 2018 by Mr.Richard Munyai; where systematic inspections of the proposed Township Development was covered along linear transects which resulted in the maximum coverage of the entire site. Standard archaeological observation practices were followed; Visual inspection was supplemented by relevant written source, and oral communications with local communities from the surrounding area. In addition, the site was recorded by hand held GPS Garmin Oregon 650 and plotted on 1:50 000 topographical map. Archaeological/historical material and the general condition of the terrain were photographed with a Canon 1000D Camera.

Assumption and Limitations

It must be pointed out that heritage resources can be found in the unexpected places, it must also be borne in mind that survey may not detect all the heritage resources in a given

project area. While some remains may simply be missed during surveys (observations) others may occur below the surface of the earth and may be exposed once development (such as the construction of houses and streets) commences.

6. ASSESSMENTS CRITERIA

This section describes the evaluation criteria used for determining the significance of archaeological and heritage sites. The significance of archaeological and heritage sites were based on the following criteria:

- The unique nature of a site.
- The amount/depth of the archaeological deposit and the range of features (stone walls, activity areas etc).
- The wider historic, archaeological and geographic context of the site.
- The preservation condition and integrity of the site.
- The potential to answer present research questions.

6.1 Site Significance

The site significance classification standards as prescribed in the guideline and endorsed by the South African Heritage Resources Agency (2006) and approved by the Association for Southern African Professional Archaeologists (ASAPA) for the Southern African Development Community (SADC) region, were used as guidelines in determining the site significance for the purpose of this report.

The classification index is represented in the Table below.

FIELD RATING	GRADE	SIGNIFICANCE	RECOMMENDED MITIGATION
National Significance (NS)	Grade 1	-	Conservation; National Site nomination
Provincial Significance (PS)	Grade 2	-	Conservation; Provincial Site nomination
Local Significance (LS)	Grade 3A	High Significance	Conservation; Mitigation not advised
Local Significance (LS)	Grade 3B	High Significance	Mitigation (Part of site should be retained)
Generally Protected A (GP.A)	Grade 4A	High / Medium Significance	Mitigation before destruction
Generally Protected B (GP.B)	Grade 4B	Medium Significance	Recording before destruction
Generally Protected C (GP.C)	Grade 4C	Low Significance	Destruction

Grading and rating systems of heritage resources

6.2 Impact Rating

VERY HIGH

These impacts would be considered by society as constituting a major and usually permanent change to the (natural and/or cultural) environment, and usually result in severe or very severe effects, or beneficial or very beneficial effects.

Example: The loss of a species would be viewed by informed society as being of VERY HIGH significance.

Example: The establishment of a large amount of infrastructure in a rural area, which previously had very few services, would be regarded by the affected parties as resulting in benefits with VERY HIGH significance.

HIGH

These impacts will usually result in long term effects on the social and /or natural environment. Impacts rated as HIGH will need to be considered by society as constituting an important and usually long term change to the (natural and/or social) environment. Society would probably view these impacts in a serious light.

Example: The loss of a diverse vegetation type, which is fairly common elsewhere, would have a significance rating of HIGH over the long term, as the area could be rehabilitated.

Example: The change to soil conditions will impact the natural system, and the impact on affected parties (e.g. farmers) would be HIGH.

MODERATE

These impacts will usually result in medium- to long-term effects on the social and/or natural environment. Impacts rated as MODERATE will need to be considered by the public or the specialist as constituting a fairly unimportant and usually short term change to the (natural and/or social) environment. These impacts are real, but not substantial.

Example: The loss of a sparse, open vegetation type of low diversity may be regarded as MODERATELY significant.

Example: The provision of a clinic in a rural area would result in a benefit of MODERATE significance.

LOW

These impacts will usually result in medium to short term effects on the social and/or natural environment. Impacts rated as LOW will need to be considered by society as constituting a fairly important and usually medium term change to the (natural and/or social) environment. These impacts are not substantial and are likely to have little real effect.

Example: The temporary changes in the water table of a wetland habitat, as these systems are adapted to fluctuating water levels.

Example: The increased earning potential of people employed as a result of a development would only result in benefits of LOW significance to people living some distance away.

NO SIGNIFICANCE

There are no primary or secondary effects at all that are important to scientists or the public.

Example: A change to the geology of a certain formation may be regarded as severe from a geological perspective, but is of NO SIGNIFICANCE in the overall context.

6.3 Certainty

DEFINITE: More than 90% sure of a particular fact. Substantial supportive data exist to verify the assessment.

PROBABLE: Over 70% sure of a particular fact, or of the likelihood of an impact occurring.

POSSIBLE: Only over 40% sure of a particular fact, or of the likelihood of an impact occurring.

UNSURE: Less than 40% sure of a particular fact, or of the likelihood of an impact occurring.

6.4 Duration

SHORT TERM : 0 – 5 years

MEDIUM : 6 – 20 years

LONG TERM : more than 20 years

DEMOLISHED : site will be demolished or is already demolished

6.5 Mitigation

Management actions and recommended mitigation, which will result in a reduction in the impact on the sites, will be classified as follows:

- ✓ A – No further action necessary
- ✓ B – Mapping of the site and controlled sampling required
- ✓ C – Preserve site, or extensive data collection and mapping required; and
- ✓ D – Preserve site
- ✓

7. SITE LOCATION AND PROJECT DESCRIPTION

The proposed Township Establishment site is located approximately 20 kilometers north western side of Pretoria CBD. The proposed site is located at GPS coordinates South 25°.29', 09. 53“& East 28°.06'.55.15”.The total area of the proposed project is 13.0928ha in size. The topography of the area is flat on the northern side and rocky outcrop to the south. The area is open towards the north and visibility was good, while the south section of the proposed site is still having the original vegetation. Past activities would have disturbed or destroyed any evidence of archaeological or historical sites in if they did exist here in the first place.

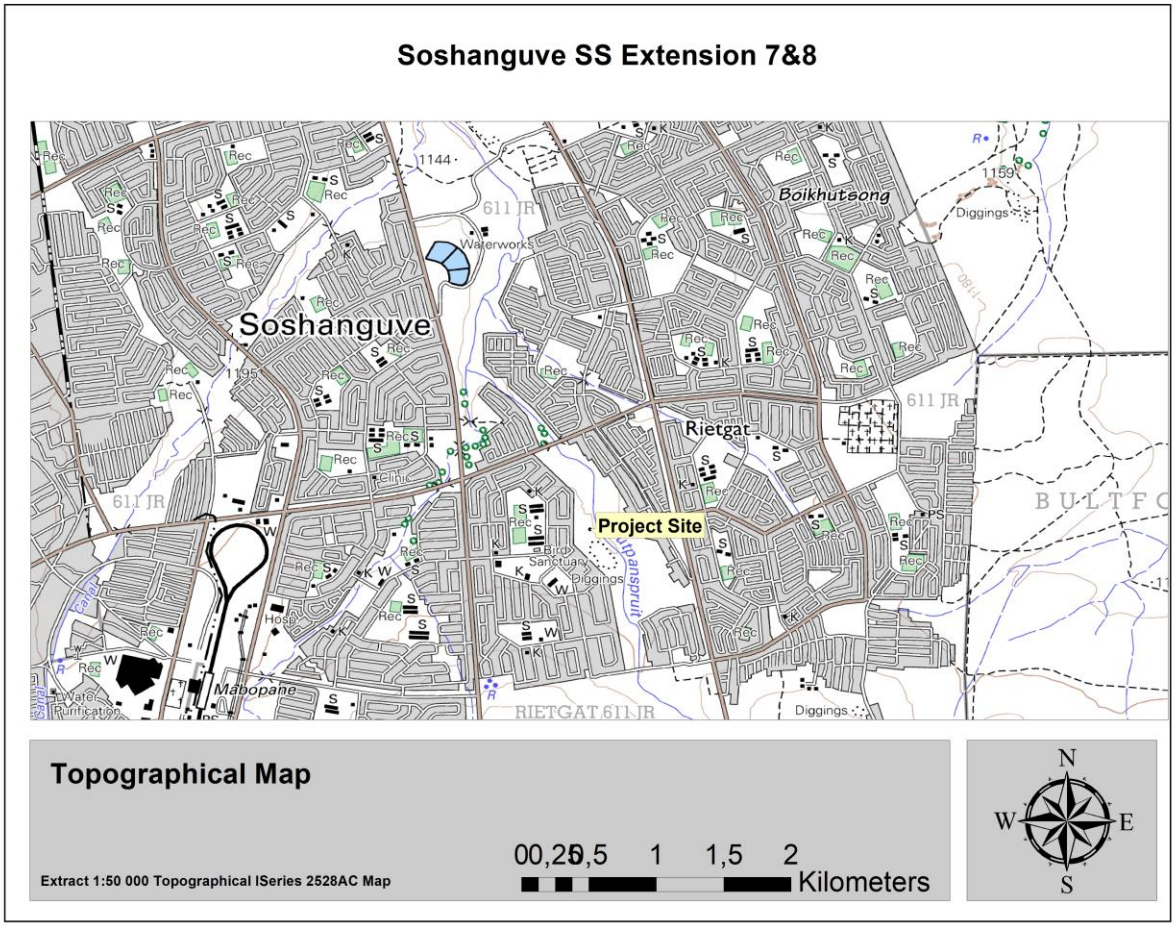


Figure 1: Topographic location of development area.



Figure 2: Arial view of developmental location.



Figure 3: View of section of area (Note the illegal dumping on site).



Figure 4: View of the storm water cutting through the site to Soutpanspruit river.



Figure 5: View of the stone walling.



Figure 6: View of the site from the southern site.

7.1. STONE AGE (ESA, MSA and LSA)

Previous studies conducted to date within the Gauteng Province shows that the province is of significance in term of pre- historic and historical era. The province is of high priority, the heritage and archaeological understanding is supported by overwhelming recorded evidence represented by the presence of cultural material fingerprints (remains).

Generally, the archaeology of human occupation within the Gauteng Province are made out of pre-colonial elements (stone and Iron ages) as well as the colonial components. The Early Stone Age spans a period of between 1.5 million and 250 000 years ago and refers to the earliest Homo predecessors; the period is associated with introduction of tools made out of stones. Similar archaeological material finger prints associated with the early period (Stone tool artifacts) has been found in Tanzania at Olduvai Gorge and elsewhere in the Northern Cape and Free State Provinces of South Africa. The stone tool industry was referred to as the Oldwan Industry. Most of the stone artifacts recovered were not neatly made and they were very crude in makings.

The ESA tools were simple tools which, were among other things used to chop and butcher meat, de- skin animal and probably to smash bones to obtain marrow. The presence of cut marks from animal fossil bones dating to this period has led to the conclusion by researchers that human ancestors were scavengers and not hunters (Esteyhuysen, 2007). They may have preyed on a drowned or crippled animals or shared a kill by another predator, which explains why at some ESA sites occur high bone proportions of large, dangerous game (Wadley, 2007). The industries were later replaced by the Acheulian stone tool Industry which is attested to in diverse environments and over wide geographical areas. The Industry is characterized by large cutting tools mostly dominated by hand axes and cleavers. Bifaces emerged in East Africa more that 1.5 million years ago (mya) but have been reported from a wide range of areas, from South Africa to northern Europe and from India to the Liberian Coast. The end products were astonishingly similar across the geographical and chronological distribution of the Acheulian techno-complex: large flakes that were suitable in size and morphology for the production of hand axes and cleavers perfectly suited to the available raw materials (Sharon, 2009). Evidence presented from Sterkfontein, Makapansgat caves shows that the first tool making hominids belong to either an early species of the Homo or an immediate ancestor which is yet to be discovered here in South Africa (Esteyhuysen, 2007). Both the Oldwan and Acheulian industries are well represented in the archaeology of the Cradle of Humankind from sites at Strekfontein and Kromdraai. These discoveries have made considerable contribution to the body of scientific knowledge in the subject of

tool manufacturing in association with human evolutions. At Kromdraai site two definite Oldwan stone tools estimated to date to around 1.9 million years ago were discovered.

The Middle Stone Age dates back to about 250 000 ago ending at around 25 000 years ago. In general Middle Stone Age tools are smaller than those of the Early Stone Age period. They are characterized by smaller hand axes, cleavers, and flake and blade industries. The period is marked by the emergence of modern humans through the change in technology, behavior, physical appearance, art, and symbolism. Various stone artifact industries occur during this time period, although less is known about the time prior to 120 000 years ago, extensive systemic archaeological research is being conducted on sites across southern Africa dating within the last 120 000 years (Thompson & Marean, 2008). Surface scatters of these flake and blade industries occur widespread across southern Africa although rarely with any associated botanical and faunal remains. It is also common for these stone artifacts to be found between the surface and approximately 50-80cm below ground. Fossil bone may be associated with MSA occurrences. These stone artifacts, like the Earlier Stone Age hand axes are usually observed in secondary context with no other associated archaeological material.

An early South African Middle Stone Age stone artifact industry referred to as the Mangosian had a very wide distribution stretching across Limpopo, the eastern Orange Free State, around Cape Point and Natal (Malan 1949). This stone artifact industry, according to the period, may have represented the final development that the prepared core technique of the Middle Stone Age reached prior to its replacement by the microlithic techniques of the Later Stone Age. Malan (1949) also made mention that there are variations of Middle Stone Age assemblages throughout South Africa (Binnerman *et al,* 2011).

A variety of MSA tools includes blades, flakes, scraper and pointed tools that may have been hafted onto shafts or handles and used as pear heads. Residue analyses on some of the stone tools indicate that these tools were certainly used as spear heads (widely, 2007).

The presence of spear heads on some of the MSA assemblages is an indication that these group of people were hunters who targeted middle sized game such as hartebeest, wildebeest and zebra (Wadley, 2007), Some assemblages are show the presence of bone tools such as bone points.

The last phase of stone tool development is associated with Late Stone tools. The period is associated with the use of micro- lithic stone tools. LSA tool have been found in the Cradle of humankind, however the LSA sites within North West province are currently dominated by rock shelters most of which has polychrome san paintings.

7.2. IRON AGE / FIRST-FARMING COMMUNITIES

Controversy still surround the question of the first arrival of Africans in South Africa, however, archaeological evidence has now disproved the old notion that African arrived at the same time with the colonialist at the Cape Town (Maggs, 1986). Iron Age communities moved into southern Africa by c. AD 200, entering Limpopo and North West Provinces either by moving down via Botswana, Zimbabwe or via coastal plains route. Their movement followed various rivers inland. Being cultivators, they preferred the rich alluvial soils to settle on. It is believed that as Iron Age people moved they came into contact with hunter-gatherers (Klatzow, 1994). Current evidence indicates that the first Iron Age communities were established in the Limpopo Province at 280 AD (Klapwijk 1974; Huffman 2007). These landscapes, drainage systems and good climatic conditions could have influenced diverse societies including wildlife and farming communities to settle within the region. It is indisputable that the natural environment has played the dominant part; nevertheless, it is not deterministic (Katsamudanga, 2007). The introduction of farming communities in southern Africa early in the first millennium AD is characterised by the appearance of distinctive pottery wares (Huffman, 2007), metal working (Friede, 1979), agriculture and sedentism (Maggs, 1980; Phillipson, 2005). Mining and metallurgy were largely limited to the reduction of iron and copper ore for the manufacturing of utilitarian and decorative implements.

Iron Age occupation of the region seems to have taken place on a significant scale and at least three different phases of occupation have been identified, however the last period of pre-colonial occupation consisted of Pedi, Ndebele and the Tswana speaking people that settled on stone-walled sites and caves. At present it is not clear, but, judged on the pottery found; these sites might even date to early historic times. It is generally believed that ceramic potteries are material culture that expresses group identity because they form a repeated code of cultural symbols, as the design form a repeated code (Huffman 2007). As this was a period of population movement, conflict and change, it in large part set the scene for the current population situation in the country. Sites dating to the early Iron Age are known to occur within the Waterberg region. These sites are distinguished from the presence of thicker and decorated pottery shards, kraals, possible remains of domesticated animals, upper and lower grindstones and storage pits are associated for identifying Early Iron Age sites. The sites are generally large settlements, but the archaeological visibility may in most cases be difficult owing to the organic nature of the homesteads. Metal and iron implements are also associated with Early Iron Age communities. Hilltop settlement is mainly associated with Later Iron Age settlement patterns that occurred during the second millennium A.D.

The Later Iron Age communities later moved from settlement in river valleys to the hilltops. Later Iron Age settlements have been formally recorded and cover a relatively extended area in comparison with the EIA settlement patterns. The Iron Age occupation of the study area seems to have taken place on a significant scale as represented by the presence of stonewalled sites. These structures are associated with the latter period dating from 16th to 18th centuries (Thorp, 1996). Much controversy still surrounds the attempts by various linguists to reconstruct the development and the spread of the African family of languages. Linguistic and archaeological evidence suggest that the latter part of the Iron Age period is most likely associated with ancestors of Ba- Pedi, Ndebele and the Tswana.

7.3. HISTORICAL / COLONIAL PERIOD

Historical archaeology refers to the last 500 years when European settlers and colonialism entered into southern Africa. Movement into the interior was closely linked with the change from farming to stock farming. The movement of Boer into the interior got underway when Wilhelm Adrien van der Stel began to issue free grazing permits in 1703. The exoduses went hand in hand with hunting expeditions into the interior which not only provided the farmers with meat, but also enable them to learn more about the resources of the hinterland. British government made its laws which undermine the freedom of the Boers. The mounting conflict between African and white stock farmers played the dominant part. This led to the general dissatisfaction and a feeling of insecurity among the Afrikaner. The frontier wars of 1834/35 caused the frontier farmers to suffer heavy losses. To aggravate matters, land prices rose sharply during the 1820 and 1830 and drought was a serious problem. These conditions threatened the pastoral lifestyle. There was no land for the younger generations. They opted to migration in search of land and grazing in the interior.

During the great trek into the interior they were already acquainted with conditions of the interior and with the main trek routes. They got available information from travelers, hunters and missionaries. The foremost Voortrekker, Louis Tregardt and Hans van Rensburg were the pioneer of the Transvaal Lowveld left in 1835. Andries Hendrik Potgieter, the conservative founder of the Transvaal, emigrated towards the end of 1835. By 1836 the vanguard of Potgieter trek had crossed the Vaal River. When the white entered the Transvaal the plains were restricted by Africans for grazing purposes, while occupying the high altitude and mountains.

Mzilikazi, the powerful Ndebele guarded with growing suspicion the arrival of so many whites from the same direction. He then realized that such a large group of white constituted a threat to the survival of the Ndebele. The Ndebele attacked the Trekkers at Vegkop on the 16 October 1836. In January 1837 Potgieter captured Mzilikazi stronghold

and drove the Ndebele far to the north. Potgieter was firmly convinced that they should seek the salvation of an independent Voortrekker state, far away from British influence.

The 18th century's period is marked by the presence of white, where land was taken from African chiefs and redistributed to the Boers; this was followed by demarcation of portions of land into farms. The first white farms were established along the rivers and tributaries, close to springs consequently the banks of the Marico, Mooi and Apies rivers were well populated at the early stage. This development was also associated with the development of gravel roads and later towns. The followers of Andries Pretorius concentrated around Potchefstroom and Rustenburg, while a group under the leadership of Andries Hendriek Potgieter settled in the Soutpansberg. Other towns that emanated from these settlements were Pretoria which was laid out in 1855. An important factor which determines the initial settlement pattern was the desire to have access to a harbor to break the economic isolation of the Transvaal.

Many of these farms have been in the ownership of families for generations. As a result, they possess a large corpus of information with regarding to the area and its history. A significant number of battles and skirmishes took place in the region. The remains of blockhouses can be found on many ridges and at river crossings (Van Schalkwyk, 2011).

8. ASSESSMENT OF SITES AND FINDINGS

This section contains the results of the heritage site/find assessment. The phase 1 heritage scoping assessment program as required in terms of section 38 of the National Heritage Resource Act (Act 25 of 1999) done for the proposed Soshanguve SS Extension 7&8.

There are no primary or secondary effect at all that are important to scientist or the general public that will be impacted by the proposed project activities.

Heritage Significance: No significance
Impact: Negative
Impact Significance: None
Certainty: Probable
Duration: Permanent
Mitigation: A

9. CONCLUSION AND RECOMMENDATIONS

The phase 1 Archaeological Impacts Assessment for the proposed Soshanguve SS Extension 7 and 8 Township Establishment of the farm Rietgat 611JR located near Soshanguve BB Location within city of Tshwane Metropolitan Municipality, Gauteng Province has been conducted successfully. The study revealed no heritage resources within the proposed development foot print. The area is currently used as garbage refusal site by the nearby Soshanguve BB Location.If any archaeological and historical sites, features or objects did exist here in the past it would have been severely disturbed during the construction of storm water pipe lines and the water pipe lines especially towards the south.The recent past stone walling was identified on the site.

No further studies / Mitigations are recommended given the fact that within the proposed development footprint and its surrounding there is no archaeological or place of historical significance that will be impacted by the proposed development activities. However, should any chance archaeological or any other physical cultural resources be discovered subsurface, heritage authorities should be informed. From an archaeological and cultural heritage resources perspective, there are no objections to the proposed Soshanguve SS extension 7&8 Housing Development and associated infrastructures project and we recommend to the Provincial Heritage Resource Agency, South African Heritage Resource Agency to approve the project as planned.

10. REFERENCE

Acocks, J.P.H. 1975. *Veld Types of South Africa*. Memoirs of the Botanical Survey of South Africa, No.40. Pretoria: Botanical Research Institute.

Deacon, J. 1997. Report: Workshop on Standards for the Assessment of Significance and Research Priorities for Contract Archaeology. *South African Association of Archaeology.* No. 49,

Esterhuysen, A., 2007. The Earlier Stone Age. In Bonner, P., Esterhuysen, A.Jenkins, T. (eds.): *A Search for Origins: Science, History and South African's (Cradle of Humankind',* Johannesburg: Wits University Press. Pg 110 -121.

Holm, S.E. 1966. *Bibliography of South African Pre- and Protohistoric archaeology*. Pretoria: J.L. van Schaik

Huffman, T. N., 2007. The Early Iron Age at Broederstroom and around the 'Cradle of humankind'. In Bonner, P., Esterhuysen, A., Jenkins, T. (eds.): *A Search for Origins: Science, History and Sou th Africa's (Cradle of Humankind'* Johannesburg: Wits University Press. Pg 148 -161.

Seliane, M. 2009. Cultural Heritage Impact Assessment of the proposed WRDM Multi-Purpose Community Centre at portion 26 of the farm Kromdraai 520JQ, unpublished report.

Mason, R.J. 1962. *Prehistory of the Transvaal*. Johannesburg: Witwatersrand University Press.

Maggs,T. 1984. The Iron Age south of the Zambezi, in Klein, R. G 1984. *South African Prehistory and Paleoenvironments.* A.A.Balkema/Rotterdam

Maggs. T. 1986. The early History of the Black people in southern Africa, in Cameroon. T. & S.B. Spies. 1986. An illustrated history of South Africa, Jonathan Ball Publisher, Johannesburg.

Mitchell, P. 2002. *The archaeology of South Africa*. Cambridge: Cambridge University Press.

Mitchell, P. & G. Whitelaw. 2005. The Archaeology of southernmost Africa from c.2000 BP to the Early 1800s: A review of Recent Research: *The journal of African History, Vol 46*, No2, pp 209-241.

Pearce, D., 2007. Rock Engraving in the Magaliesberg Valley. In Bonner, P.Esterhuysen, A., Jenkins, T. (eds.): *A Search for Origins: Science, History and South Africa's (Cradle of Humankind'.* Johannesburg: Wits University Press. Pg136 - 139.

Philipson, D.W. 1976. The Early Iron Age in eastern and southern Africa critical re appraisal. *Azania* 11.1-23

Philipson, D.W. 1977. *The later Prehistory of Eastern and Southern Africa*. Heinemann Publication, London.

Philipson, D.W. 1993. *African archaeology*, Cambridge University Press

Philipson, D.W. 2005. *African archaeology*, Cambridge: 3rd edition, Cambridge University Press

SAHRA, 2005. *Minimum Standards for the Archaeological and the Paleontological Components of Impact Assessment Reports,* Draft version 1.4.

Tobias. P.V 1985. Hominid evolution- past present and future, New York

Tobias. P.V. 1986. The last million years in southern Africa. In Cameroon. T. & S.B. Spies. 1986. An illustrated history of South Africa, Jonathan Ball Publisher, Johannesburg.

Tobias. P.V. 1986. The dawn of the Human family in Africa. In Cameroon. T. & S.B. Spies. 1986. An illustrated history of South Africa, Jonathan Ball Publisher, Johannesburg

Van Schalkwyk, J. A. 2006*. Investigation of archaeological features in site A of the proposed Pumped Storage Power Scheme, Lydenburg district, Mpumalanga.* Unpublished report 2006KH78. Pretoria: National Cultural history museum.

Van Warmelo, N. J. 1935. *Preliminary survey of the Bantu Tribes of South Africa*. Ethnological Publications No. 5. Pretoria: Government Printer.

Wadley. L., 2007. The Middle Stone Age and Later Stone Age. In Bonner, P.,Esterhuysen, A., Jenkins, T. (eds.): *A Search for Origins: Science, History and South Africa's 'Cradle of Humankind'.* Johannesburg: Wits University Press. Pg122 -135.Strategic