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**REPORT ON A PHASE 1 HIA FOR PROPOSED DEVELOPMENT
ON PORTIONS 53, 127, 131 & 135 OF THE FARM DE ONDERSTEPSOORT 300JR
IN THE PRETORIA MAGISTERIAL DISTRICT OF TSHWANE, GAUTENG**

For:

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REPORT: APAC017/47

by:

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July 2017

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Although all efforts are made to identify all sites of cultural heritage (archaeological and historical) significance during an assessment of study areas, the nature of archaeological and historical sites are as such that it is always possible that hidden or subterranean sites, features or objects could be overlooked during the study. APELSEER Archaeological Consulting can't be held liable for such oversights or for costs incurred as a result thereof.

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A handwritten signature in black ink, appearing to be 'J. Pel' or similar, written in a cursive style.

SUMMARY

APelser Archaeological Consulting (APAC) was appointed by EcoPartners, on behalf of Four Rivers Trading 263 (Pty) Ltd to undertake a Phase 1 HIA on Portions 53, 127, 131 & 135 of the farm De Onderstepoort 300JR, in the Pretoria Magisterial District area of Tshwane in Gauteng. The extension of an existing quarry on Portions 53, 127 & 131 is proposed, while new development is proposed on Portion 135.

A number of known cultural heritage (archaeological and historical) sites exist in the larger geographical area within which the study area falls, while some sites and features were also identified in the specific study areas. The report will discuss the results of the desktop and field assessment and provide recommendations on the way forward at the end of the document.

Although some of the sites found are of fairly high significance from an archaeological perspective, it is however recommended that the proposed development actions be allowed to continue once the recommended mitigation measures proposed in the report are implemented.

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1. INTRODUCTION

APelser Archaeological Consulting (APAC) was appointed by EcoPartners, on behalf of Four Rivers Trading 263 (Pty) Ltd to undertake a Phase 1 HIA on Portions 53, 127, 131 & 135 of the farm De Onderstepoort 300JR, in the Pretoria Magisterial District area of Tshwane in Gauteng. The extension of an existing quarry on Portions 53, 127 & 131 is proposed, while new development is proposed on Portion 135.

A number of known cultural heritage (archaeological and historical) sites exist in the larger geographical area within which the study area falls, while some sites and features were also identified in the specific study areas. The sites and features recorded date mainly to the Late Iron Age (LIA), although there are some recent historical features as well. This included a known recent historical graveyard.

The client indicated the location and boundaries of the Project Area, and the assessment focused on this.

2. TERMS OF REFERENCE

The Terms of Reference for the study was to:

1. *Identify all objects, sites, occurrences and structures of an archaeological or historical nature (cultural heritage sites) located on the portion of land that will be impacted upon by the proposed development;*
2. *Assess the significance of the cultural resources in terms of their archaeological, historical, scientific, social, religious, aesthetic and tourism value;*
3. *Describe the possible impact of the proposed development on these cultural remains, according to a standard set of conventions;*
4. *Propose suitable mitigation measures to minimize possible negative impacts on the cultural resources;*
5. *Review applicable legislative requirements;*

3. LEGISLATIVE REQUIREMENTS

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

3.1 The National Heritage Resources Act

According to the above-mentioned act the following is protected as cultural heritage resources:

- a. **Archaeological artifacts, structures and sites older than 100 years**
- b. Ethnographic art objects (e.g. prehistoric rock art) and ethnography

- c. Objects of decorative and visual arts
- d. Military objects, structures and sites older than 75 years
- e. Historical objects, structures and sites older than 60 years
- f. Proclaimed heritage sites
- g. Grave yards and graves older than 60 years
- h. Meteorites and fossils
- i. Objects, structures and sites of scientific or technological value.

The National Estate includes the following:

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

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

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

Structures

Section 34 (1) of the mentioned act states that no person may demolish any structure or part thereof 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 of structural or other works, by painting, plastering or the decoration or any other means.

Archaeology, palaeontology and meteorites

Section 35(4) of this act deals with archaeology, palaeontology and meteorites. The act states that no person may, without a permit issued by the responsible heritage resources authority (national or provincial)

- 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 that assists in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.
- e. alter or demolish any structure or part of a structure which is older than 60 years as protected.

The above mentioned may only be disturbed or moved by an archaeologist, after receiving a permit from the South African Heritage Resources Agency (SAHRA). In order to demolish such a site or structure, a destruction permit from SAHRA will also be needed.

Human remains

Graves and burial grounds are divided into the following:

- a. ancestral graves
- b. royal graves and graves of traditional leaders
- c. graves of victims of conflict
- d. graves designated by the Minister
- e. historical graves and cemeteries
- f. human remains

In terms of Section 36(3) of the National Heritage Resources Act, no person may, without a permit issued by the relevant heritage resources authority:

- a. destroy, damage, alter, exhume or remove from its original position or otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;

- b. destroy, damage, alter, exhume or 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
- c. bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation, or any equipment which assists in the detection or recovery of metals.

Human remains that are less than 60 years old are subject to provisions of the Human Tissue Act (Act 65 of 1983) and to local regulations. Exhumation of graves must conform to the standards set out in the **Ordinance on Excavations (Ordinance no. 12 of 1980)** (replacing the old Transvaal Ordinance no. 7 of 1925).

Permission must also be gained from the descendants (where known), the National Department of Health, Provincial Department of Health, Premier of the Province and local police. Furthermore, permission must also be gained from the various landowners (i.e. where the graves are located and where they are to be relocated to) before exhumation can take place.

Human remains can only be handled by a registered undertaker or an institution declared under the **Human Tissues Act (Act 65 of 1983 as amended)**.

3.2 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 are 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 and remedied.

4. METHODOLOGY

4.1 Survey of literature

A survey of available literature was undertaken in order to place the development area in an archaeological and historical context. The sources utilized in this regard are indicated in the bibliography.

4.2 Field survey

The field assessment section of the study will be conducted according to generally accepted HIA practices and aimed at locating all possible objects, sites and features of heritage significance in the area of the proposed development. The location/position of all sites, features and objects is determined by means of a Global Positioning System (GPS) where possible, while detail photographs are also taken where needed.

4.3 Oral histories

People from local communities are sometimes interviewed in order to obtain information relating to the surveyed area. It needs to be stated that this is not applicable under all circumstances. When applicable, the information is included in the text and referred to in the bibliography.

4.4 Documentation

All sites, objects, features and structures identified are documented according to a general set of minimum standards. Co-ordinates of individual localities are determined by means of the Global Positioning System (GPS). The information is added to the description in order to facilitate the identification of each locality.

5. DESCRIPTION OF THE AREA

The study area is located on Portions 53, 127, 131 & 135 of the farm De Onderstepoort 300JR, in the Pretoria Magisterial District of Tshwane, Gauteng. Portions 53, 127 & 131 have been relatively disturbed through current and earlier historical development (quarrying), while Portion 135 has been less disturbed but does lie adjacent to the Bon Accord Municipal quarry, with some recent historical diggings visible in sections.

The topography of the study areas are characterized by hills and rocky ridges, although there are some flatter sections as well. The vegetation during the field assessment was fairly dense, making visibility and access to some sections difficult. However, a number of stone-walled LIA sites and features were identified and recorded in the study areas, as well as a known recent historical graveyard.

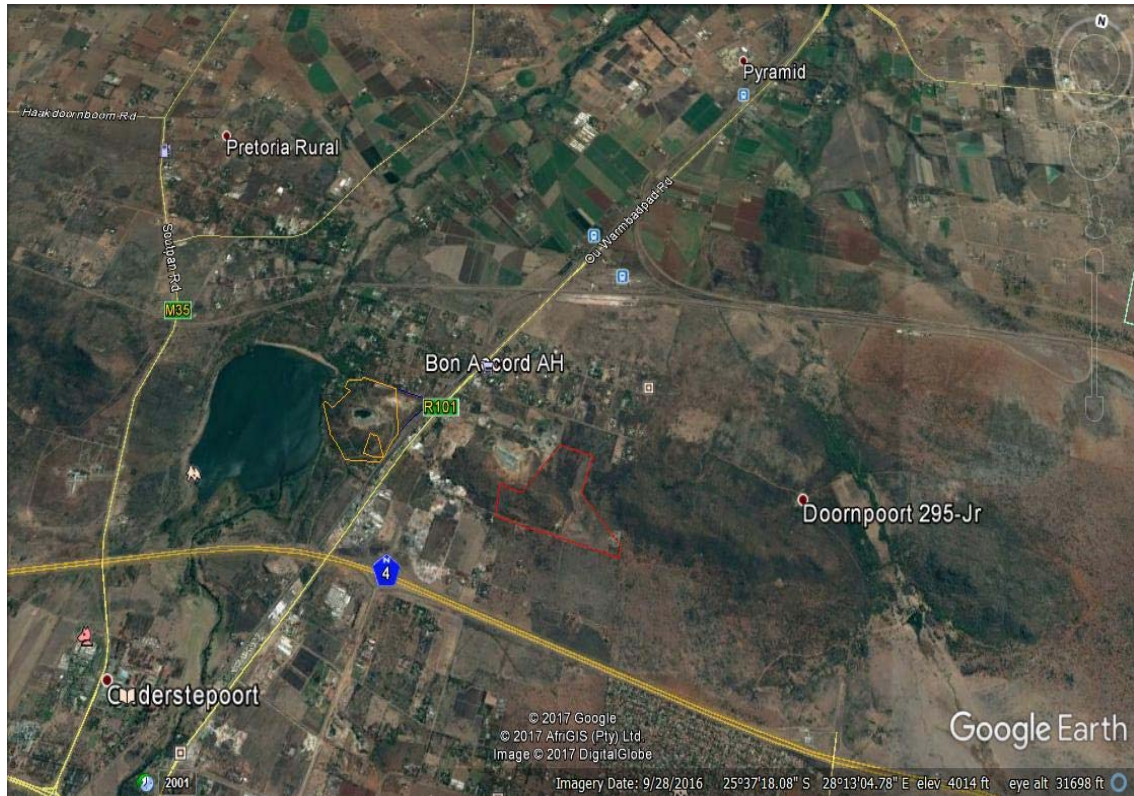


Fig.1: General location of study areas. Portions 53, 127 & 131 in yellow polygon & Portion 135 in red (Google Earth 2017 – Image date 09/28/2016).



Fig.2: A closer view of the Portion 53, 127 & 131 study area (Google Earth 2017 – Image date 09/28/2016).



Fig.3: A closer view of the Portion 135 study area (Google Earth 2017 – Image date 09/28/2016).

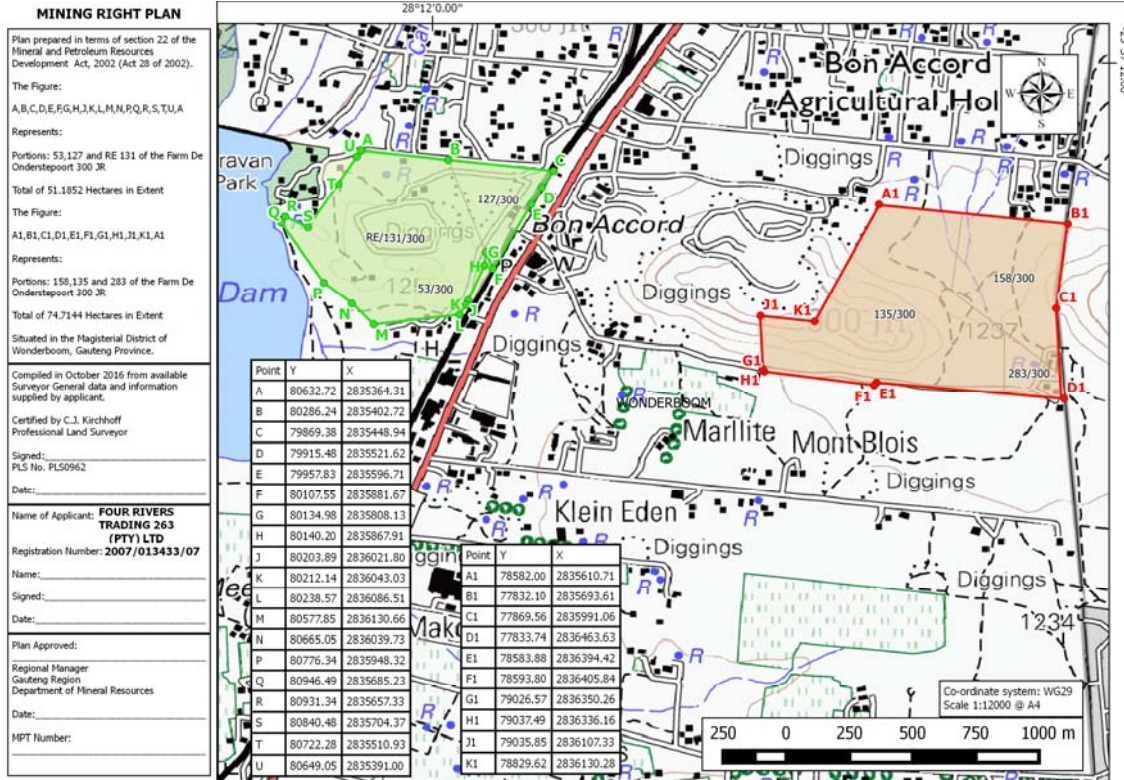


Fig.4: Mining Right Plan showing Portions 53, 127 & 131 in green and Portion 135 in red (courtesy EcoPartners).



Fig.5: A view of a section of the Ptn53, 127 & 131 area. The existing quarrying is visible as well as the hill in the background where the archaeological sites are located.



Fig.6: A view from the hill on Ptns 53, 127 & 131 towards the existing quarry.



Fig.7: Another view showing the dense vegetation in the area.



**Fig.8: A view of a section of Portion 135.
Note the dense vegetation again.**



Fig.9: A view of the hill that dominates the Ptn 135 area.

6. DISCUSSION

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

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

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

No known Stone Age sites or artifacts are present in the area. The closest known Stone Age sites are those of the well-known Early Stone Age site at Wonderboompoort and a number of sites in the Magaliesberg area (Bergh 1999: 4). Stone Age people occupied the larger area since earliest times. This, for example, is evidenced by the site they used to occupy in the Wonderboom neck, probably dating back as much as 200 000 years ago. Tools derived from these people's habitation of the area are found in a number of areas close to the Apies River to the west and the Hartebeesspruit to the east. Middle and Late Stone Age people also roamed over the area, sheltering close to the river banks, with the latter group usually settling in caves and rock shelters (Van Schalkwyk 2013: 7). If any Stone Age artifacts are to be found in the area then it would more than likely be single, out of context, stone tools. Urbanization over the last 150 years or so would have destroyed any evidence if indeed it did exist. Huffman, in a Phase 1 AIA report he did for a township development close to the study area, does indicate the existence of single and small clusters of MSA tools and flakes in the area (Huffman 2003: 2-3).

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

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

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

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

No Early Iron Age sites are known in the larger geographical area of Pretoria, while Later Iron Age sites do occur in the Pretoria area (Bergh 1999: 7). Pyramid Koppies to the west and the mountain range to the east of the study area on the farm Onderstepoort are renowned for LIA stone walled sites. Just to the east of the study area is the well-known stone walled complex of KwaMnyamana (Van der Walt 2014: 15).

Iron Age occupation of the area did not start much before the 1500s. By that time, groups of Tswana and Ndebele speaking people were moving into the area, occupying the different hills and outcrops, using the ample resources such as grazing, game and metal ores. During the early decades of the 19th century, the Tswana- and Ndebele-speakers were dislodged by the Matabele of Mzilikazi. Internal strife caused Mzilikazi, a general of King Shaka, and his followers to move away from the area between the Thukela and Mfolozi River (KwaZulu-Natal). Eventually, after a sojourn in the Sekhukhuneland area, followed by a short stay in the middle reaches of the Vaal River, they settled north of the Magaliesberg. One of three main settlements established by them, eKungwini, was on the banks of the Apies River, just north of Wonderboompoort. However, no remains of this settlement have ever been identified. It was during the Matabele's stay along the Apies River that the first white people entered the area: travelers and hunters such as Cornwallis Harris and Andrew Smith, traders Robert Schoon and Andrew McLuckie, and missionaries James Archbell and Robert Moffat. It is known from oral

history the Robert Schoon sent Mzilikazi huge quantities of glass trade beads, rather than the guns that the latter coveted so much (Van Schalkwyk 2013: 7-8).

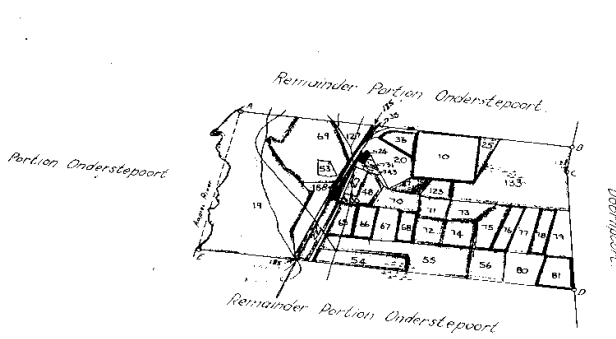
A number of Late Iron Age occurrences (stone-walled features) were identified in the study area during the assessment. These sites and their significance will be discussed in the next section of the report.

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

The oldest map for De Onderstepoort 300JR (Portion 2) that could be obtained from the Chief Surveyor General's database (www.csg.dla.gov.za) dates to 1904, and shows that the whole of the original farm was granted by deed to Daniel Elardus Erasmus in January 1859 and was surveyed during October & December 1902 (CSG Document 10GBFR01). No map for Portion 131 could be found, but maps for Portions 53, 127 & 135 (dating to 1939, 1948 & 1949 alternatively) were traced (CSG Documents 103LO701; 10BPXE01 & 10BPZM01). No historical sites or features are shown on any of these maps however.

* Now known as
Portion 2 of the farm
DE ONDERSTEEPOORT N° 300 J.R.
9 Sept. 1961.

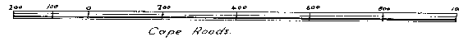
J. S. Klopper



Sides.	Angles.
AR 908.87	A 97.40 50
BC 79.83	B 89.10 30
CD 347.86	C 101.25 50
DE 1035.14	D 79.28 10
EA 445.92	E 02.14.40

Coordinates	
A + 3575.70	- 481.30
B + 3670.31	- 1384.14
C + 3391.80	- 1373.00
D + 3024.97	- 1389.17
E + 3143.67	- 370.86

Rec'd Area: 710 Morgen 4.8 sq Roads.



The above diagram lettered ABCDE and iv. represents 717 Morgen 32 Square Roads of land, being subdivision * of the Eastern portion of the farm

ONDERSTEEPOORT N° 436.

situate in the district of Pretoria Ward Aapies River Transvaal Colony.

Bounded as indicated above

The whole farm was originally granted to Daniel Elardus Frasmus Sr by Deed of Grant N° dated the third of January 1859 and was surveyed in by Surveyor Jas. Brooks

The beacons were pointed out by J. I. Bronkhorst + Surveyor and have been erected according to Law.

Surveyed in October + December 1902 by me

(Sgnd) P. S. Krige
Government Land Surveyor.

N° 594-9/1903 Examined The numerical data of this diagram are sufficiently consistent
Approved, (Sgnd) H. M. Jackson.
Surveyor General's Office, Surveyor General.

Pretoria, 3 December 1903

This diagram belongs to Deed of Transfer N° 6208/1904. Issued this day in favour of Jacobus Laurens Pieterus Bronkhorst.

(Sgnd) Geo. Donoon.
asst Registrar of Deeds.

Deeds Office, Pretoria, 23 JUL 1904.
D. S. 1 P. T. REGICH J. R. 5 A - 25

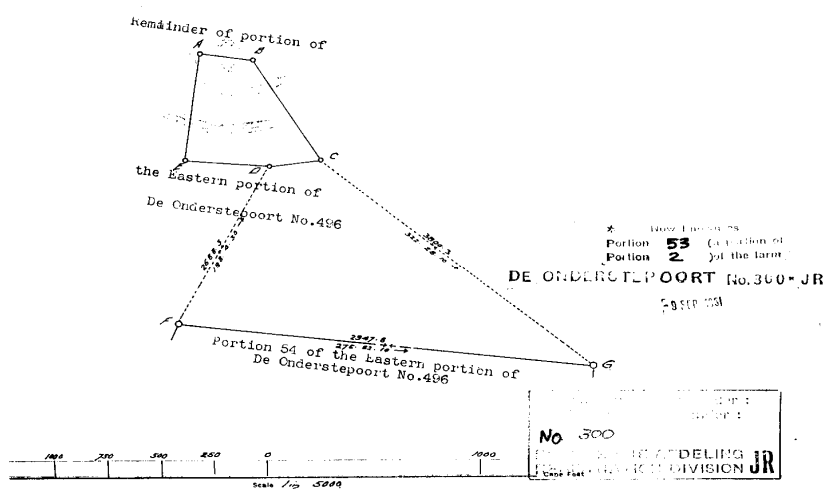
Fig.10: 1904 map of the Portion 2 of the farm (www.csg.dla.gov.za).

Approved

Chas. Hill
Surveyor-General

SIDES	ANGLES	SYSTEM	
Chain Feet	of Direction	CO-ORDINATES	
		CONSTANTS	
AB	257.6	274.49.40	A - 8370.8 - 42062.1
BC	624.9	327.33.40	B - 8587.5 - 42040.4
CD	245.0	78. 6.10	C - 8322.7 - 41513.0
DE	402.8	54.49.40	D - 8083.0 - 41462.5
EA	567.8	181.58.20	E - 8521.6 - 41495.4
			F - 8705.4 - 38200.8
			G - 11637.7 - 38469.3

Description of Beacons A, E, C, D, E: 1/2" pegs in cairns
F, G: Half fencing standards and circular trenches.



The figure A B C D E represents 3.0000 Morgen of land being
* Portion 53 of portion of the Eastern portion of the farm DE ONDERSTEPPOORT NO. 496 situate in the DISTRICT of Pretoria PROVINCE of TRANSVAAL

Surveyed in May 1939 by me *J. L. R. Bronkhorst* Land Surveyor.

This diagram relates to Deed of No. in favour of <i>Mr. 18308/39</i> Registrar of Deeds.	The original diagram is No. A 5000/03 relating to Deed of transfer No. 6208/1904 dated 23-7-1904 in favour of J.L.R. Bronkhorst	S.G. File No. 1110/4/9388/39 Survey Records No. 940/39 Compilation No. 18/23 JR 50-445 Lat. South 25°37' Long East 28°11' Degree Sheet No. 13 Pretoria 07
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Published by authority—Director of Survey, P.O. Box 240, Johannesburg—31/1/38.

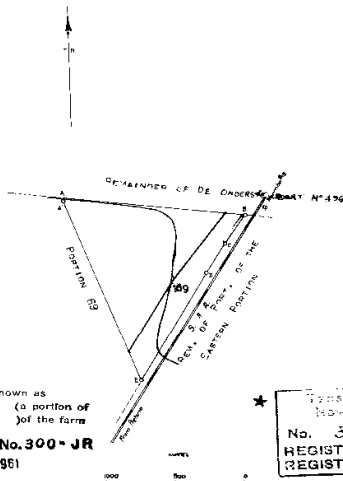
T.P.S. (P.T.A. REGION)

Fig.11: 1939 map of Portion 53 (www.csg.dla.gov.za).

S.G. No. A. 3610/48

Approved

[Signature]
 Surveyor-General 20 SEP 1948



SIDES Cape feet	ANGLES OF DIRECTION.	CO-ORDINATES.	
		Y	X
AB	1341.2	276.18.30	54913.15
BC	282.3	32.29.30	53580.05
CD	273.9	29.25.40	53731.2
DE	1029.6	27.43.00	53865.8
EA	1633.0	159.30.20	54341.4
A'A	28.8	159.30.20	54803.1

* Now known as
 Portion 127 (a portion of
 Portion 128) of the farm
RUSTEPOORT No. 300 - JR
 9. 9. 1961

* This area is registered under:
 Now registered under:
No. 300
REGISTRASIE AFDELING
REGISTRATION DIVISION JR

For Servitudes
 Deductions and
 Endorsements
 See Over.

THIS PORTION IS SUBJECT TO
 CLAIMS OF SERVITUDES, DEDUCTIONS
 AND ENDORSEMENTS.

Scale 1:7500

The Figure A B C D E A represents
 11,105.3 Morgen of Land, being PORTION 127 (A PORTION OF PORTION 128)
 of the farm
★ DE ONDERSTPOORT No. 496 -
 situate in the DISTRICT of PRETORIA, PROVINCE OF TRANSVAAL

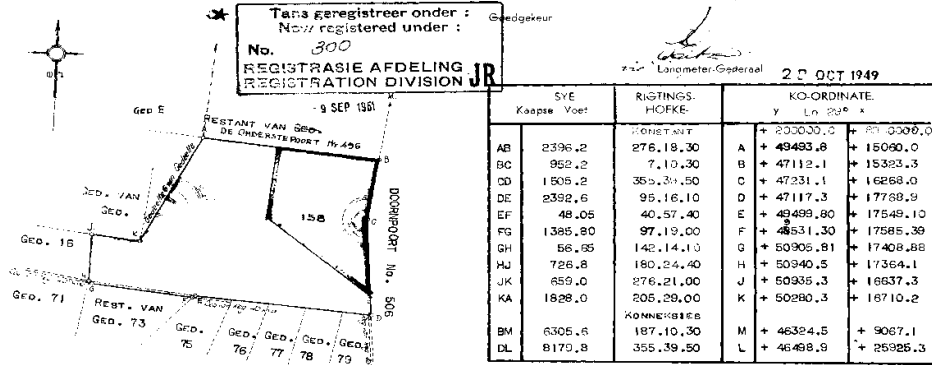
Surveyed in MAY 1948 by me *[Signature]*
 Land Surveyor.

This diagram is annexed to Deed of
 No.
 in favour of

The original diagram is No. *A 3610/48*
 annexed to Deed of *Transfer*
No. 1200/48
 in favour of

S.G. File No. *110/4/7287/48*
 Survey Records No. *1034/48*
 Compilation No. *2877*

Fig.12: 1948 map of Portion 127 (www.csg.dla.gov.za).



Tans geregistreer onder :
 Now registered under :
 No. 300
 REGISTRASIE AFDELING
 REGISTRATION DIVISION JR

Landmeter-Gederaal 22 OCT 1949

SYE	Kaapse Voet	RIGTINGS- HOEK	KO-ORDINATE	
			x	y
AB	2396,2	CONSTANT	+ 200030,0	+ 811000,0
BC	952,2	276,18,30	A + 49493,8	+ 15090,0
CD	1505,2	7,10,30	B + 47112,1	+ 15323,3
DE	2392,6	352,30,50	C + 47231,1	+ 16268,0
EF	48,05	95,16,10	D + 47117,3	+ 17789,9
FG	1385,80	40,57,40	E + 49499,80	+ 17549,10
GH	56,55	97,19,00	F + 48531,30	+ 17585,39
HJ	726,8	142,14,10	G + 50905,81	+ 17408,88
JK	659,0	180,24,40	H + 50940,5	+ 17364,1
KA	1828,0	276,21,00	J + 50935,3	+ 16637,3
BM	6305,6	205,29,00	K + 50280,3	+ 16710,2
DL	8170,8	KONNEKSBIE	M + 46324,5	+ 9067,1
		187,10,30	L + 46468,9	+ 25926,3

BESKRYWING VAN BAKENS
 A : YSTERPYL IN BETON
 B : GAT IN ROTSE EN KLIPSTAPEL
 C G J : YSTERPEN EN KLIPSTAPEL
 D : 3^o YSTERPAAL IN KLIPSTAPEL
 E : HOUTPAAL
 F : 1^o YSTERPEN EN NOORD VAN HOUTDRAADPAAL
 H : 1^o SILINDRIESEBETONBAKEN EN OP GROND
 K : GEMESSELDE BAKEN MET 3^o YSTERPYL

- Die gedakte H.E.F.G.H. is omdraaiende aan 'n Sentraal van
 180 van No. 2001 (No. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100)
- (1) DIE FIGUUR A B C D E H J K A STEL VOOR GED. 133 (IN GED. VAN
 GED. 134) GROOT 86,5734 MORGE.
 SIEN KAART L.G. NO. A 4085/49
- (2) DIE FIGUUR H E F G H STEL VOOR GED. 134 (IN GED. VAN GED. 73)
 GROOT 86789 V.V.T.
 SIEN KAART L.G. NO. A 4084/49

Staal 1:15,000
 Die figuur A B C D E F G H J K A
 87,2304 Morge gron. synde
 GED. 135
 De Onderstapoor No 496.
 EN BEVAT FIGURE (1) EN (2) BOOR
 PROVINSE TRANSWAAL
 SAAMGESTEL
 1949 deur by G. O. R. ...
 Landmeter.

Hierbo UITEENGESIT
 16 in die DISTRIK
 PRETORIA.

Die oorspronklike kaart No. 8008 HIERBO
 UITEENGESIT.
 No. gedateer
 ten gunste van

Landmeter.
 L.G. Leer No. 1110/1112/13/14/15
 Meetstukke No. JR 5 A - 25
 Kommissie No. 23/4 JR 4 C
 Suiderbreedte Oosterlengte

T.P.S. (P.T.A. REGION.)

Fig.13: 1949 map of Portion 135 (www.csg.dla.gov.za).

Results of the June 2017 Assessment

The assessment focused on Portions 53, 127 & 131, located at the Four Rivers quarry, first. Although sections of the area have been disturbed by recent historical and current quarrying operations, portions have not been disturbed, especially on and close to the hill dominating the area. The assessment focused on these sections mainly as well as the known recent historical graveyard here.

Historical Graveyard

This site is located close to the entrance to Four Rivers and contains an unknown number of mostly stone-packed and unknown graves (in terms of age). There could be in excess of 50 graves located here. One of the graves has a granite headstone and dressing with a legible inscription on it. It is the grave of one Samuel Majozi who was born 15 July 1951 and who died on 2 June 1956. The grave is therefore older than 60 years of age and deemed as historical. It can be assumed that the other graves in the graveyard are of similar age.

Although no development actions are planned close to or on the site where the graves are located, the site needs to be managed as part of the existing operations at Four Rivers. Currently the site is in a bad state of repair and completely overgrown. The old fence that used to surround the site has also collapsed. **Graves always carry a High Significance rating and a number of mitigation measures are recommended below.**

GPS Location: S25.62428 E28.20319.

Cultural Significance: High – Graves always carry a High Significance rating

Heritage Significance: Grade III: Other heritage resources of local importance and therefore worthy of conservation

Field Ratings: Local Grade IIIB: should be included in the heritage register and may be mitigated (high/ medium significance).

Mitigation: Normally if graves cannot be protected in situ and is to be negatively impacted then they could be exhumed and relocated after detailed consultation with possible descendants have been concluded and permits have been obtained from various local, provincial and National government departments. The first prize would however be to preserve and Manage the Site and graves intact. It is recommended that the site containing the graves be cleaned and kept clean and that a new fence be erected around it, with an access gate to the site as well. A sign indicating the presence of a cemetery here should also be erected.



Fig.14: View of the Graveyard site.



Fig.15: One of the graves on the site.



Fig.16: The headstone on Samual Majozi's grave.



Fig.17: One of the other graves on the site.

Remains of old Brick Works

This site contains the remnants of the old brickworks at the Four Rivers operations site. The age of the remains are unknown and have been impacted on extensively over the years. No further development actions are envisaged here. It is however recommended that no further damage to or demolition to the site takes place and that it be left intact.

GPS Location: S25.62516 E28.20255.

Cultural Significance: Low to Medium

Heritage Significance: Unknown

Field Ratings: General protection B (IV B): Site should be recorded before destruction (Medium significance)

Mitigation: Leave intact. If development is planned here then the site should be recorded in more detail before demolition and a permit obtained from SAHRA.



Fig.18: A view of a section of the old Brickworks remains.



Fig.19: Another view of part of the structure.



Fig.20: A view of the structure showing the air shaft/furnace?

Remnants of Recent Historical remains associated by quarrying in the area

This site and features located on it consists of the foundations and walled remains of possibly living quarter and work areas associated with earlier quarrying in the area. The age is unknown, but is most likely not older than 60 years of age based on the bricks, asphalt and other refuse seen on the site. The heritage significance of these remains are seen as being low and no mitigation measures are required should development actions move into this area.

GPS Location: S25.62943 E28.19857.

Cultural Significance: Low

Heritage Significance: None

Field Ratings: General protection C (IV C): Phase 1 is seen as sufficient recording and it may be demolished (Low significance)

Mitigation: None required



Fig.21: One of the stone and cement structures on the site.



Fig.22: More remains on the site.



Fig.23: A stone-built braai area on the site.

Late Iron Age (LIA) stone-walled sites and features on Portions 53, 127 & 131

A fairly large number of stone-walled features, including cattle kraals (enclosures), possible hut bays and agricultural terracing, were found in the study area. These features are located mostly around the foot of the large hill that dominates the area, as well as the saddles between hillocks and the larger hill. The dense vegetation made visibility and access difficult and it is possible that many more of these features are present in the area. The aim during the assessment was to try and indicate the extent of these sites/features that most likely formed part of a larger settlement complex or village that were located here.

The sites are typical of the LIA Tswana settlements found in the larger geographical area for example at Pyramid Koppies near Onderstepoort and elsewhere, and possibly dating to between the late 17th and mid-19th centuries. From an archaeological perspective these sites are of high significance and should be preserved if possible and definitely mitigated if to be impacted by development actions. It is quite possible that sections of these sites would have been disturbed and even destroyed by historical and more recent quarrying activities. With the high likelihood of unmarked burials associated with these sites any development actions taken in the vicinity of these sites need to proceed with caution as well. With the sites carrying a High Significance rating a number of mitigation measures are recommended below.

GPS Location: S25.62717 E28.20048; S25.62772 E28.20044; S25.62795 E28.20074; S25.62823 E28.20135; S25.62855 E28.20139; S25.62894 E28.19792; S25.62767 E28.19643.

Cultural Significance: High

Heritage Significance: Grade II: Heritage resources with qualities giving it provincial or regional importance although it may form part of the national estate

Field Ratings: General protection A (IV A): Sites should be mitigated before destruction (High/Medium significance)

Mitigation: If the sites are to be impacted the following is recommended (a) Detailed mapping and drawing of sites and features (b) Archaeological excavations on sections of the sites and (c) the obtaining of a demolition permit from SAHRA once mitigation measures have been implemented. The alternative is to avoid the sites in total and then preserve it in situ and to Manage the site through a Cultural Heritage Management Plan.

Late Iron Age (LIA) stone-walled sites and features on Portion 135

Although the total area could not be assessed during the fieldwork, a number of sites and features similar to those on Portions 53, 127 & 131 were identified and recorded on Portion 135. Again these features are located along the foot of the hill dominating the area. There are more than likely many more of these sites and features located here and similar mitigation measures as for the other 3 farm portions are recommended should the proposed development actions take place here. This will include a detailed assessment of the area, mapping and drawing of the sites and features and possible archaeological excavations.

GPS Location: S25.63248 E28.21807; S25.63258 E28.21727; S25.63243 E28.21642; S25.63202 E28.21556; S25.63202 E28.21508; S25.63213 E28.21402.

Cultural Significance: High

Heritage Significance: Grade II: Heritage resources with qualities giving it provincial or regional importance although it may form part of the national estate

Field Ratings: General protection A (IV A): Sites should be mitigated before destruction (High/Medium significance)

Mitigation: If the sites are to be impacted the following is recommended (a) Detailed mapping and drawing of sites and features (b) Archaeological excavations on sections of the sites and (c) the obtaining of a demolition permit from SAHRA once mitigation measures have been implemented. The alternative is to avoid the sites in total and then preserve it in situ and to Manage the site through a Cultural Heritage Management Plan.



Fig.24: Stone-walled cattle kraal near Four Rivers.



Fig.25: Part of a stone-packed terrace.



Fig.26: One of the saddles where stone walling is located. The tall grass obscures the stone walled enclosures.



Fig.27: More stone walling in the Ptns 53, 127 & 131 area.



Fig.28: More stone walling & terracing.



Fig.29: Stone walling on Portion 131.
The euphorbia trees are normally found close to and on top of sites like these.



Fig.30: Stone walling on Portion 135.



Fig.31: More stone walling & terracing on Ptn 135.



Fig.32: A section of terrace wall on Ptn 135. These terraces were used for agricultural practices.



Fig.33: A fragment of undecorated pottery from one of the sites on Portion 135.



Fig.34: One of the best preserved stone walls on Portion 135.



Fig.35: Another stone-walled enclosure on Portion 135.



Fig.36: Distribution of sites found on Ptns 53, 126 & 131 (Google Earth 2017 – Image date 09/28/2016).



Fig.37: Distribution of sites found on Portion 135 (Google Earth 2017 – Image date 09/28/20016).

7. CONCLUSIONS AND RECOMMENDATIONS

APelser Archaeological Consulting (APAC) was appointed by EcoPartners, on behalf of Four Rivers Trading 263 (Pty) Ltd to undertake a Phase 1 HIA on Portions 53, 127, 131 & 135 of the farm De Onderstepoort 300JR, in the Pretoria Magisterial District area of Tshwane in Gauteng. The extension of an existing quarry on Portions 53, 127 & 131 is proposed, while new development is proposed on Portion 135.

A number of known cultural heritage (archaeological and historical) sites exist in the larger geographical area within which the study area falls, while some sites and features were also identified in the specific study areas. The sites and features recorded date mainly to the Late Iron Age (LIA), although there are some recent historical features as well. This included a known recent historical graveyard.

The recent historical graveyard site is located close to the entrance to Four Rivers and contains an unknown number of mostly stone-packed and unknown graves (in terms of age). There could be in excess of 50 graves located here. One of the graves has a granite headstone and dressing with a legible inscription on it. It is the grave of one Samuel Majozi who was born 15 July 1951 and who died on 2 June 1956. The grave is therefore older than 60 years of age and deemed as historical. It can be assumed that the other graves in the graveyard are of similar age. Although no development actions are planned close to or on the site where the graves are located, the site needs to be managed as part of the existing operations at Four Rivers. Currently the site is in a bad state of repair and completely overgrown. The old fence that used to surround

the site has also collapsed. Graves always carry a High Significance rating and it is recommended that the site containing the graves be cleaned and kept clean and that a new fence be erected around it, with an access gate to the site as well. A sign indicating the presence of a cemetery here should also be erected.

This age of the Brickworks site remains is unknown and the site has been impacted on extensively over the years. No further development actions are envisaged here. It is however recommended that no further damage to or demolition to the site takes place and that it be left intact. If development is planned here then the site should be recorded in more detail before demolition and a permit obtained from SAHRA.

The recent historical (quarry related) site and features located on it is most likely not older than 60 years of age based on the bricks, asphalt and other refuse seen on the site. The heritage significance of these remains are seen as being low and no mitigation measures are required should development actions move into this area.

A fairly large number of stone-walled features, including cattle kraals (enclosures), possible hut bays and agricultural terracing, were found in the study area (on all 4 farm portions). These features are located mostly around the foot of the large hill that dominates the area, as well as the saddles between hillocks and the larger hill. The dense vegetation made visibility and access difficult and it is possible that many more of these features are present in the area.

The sites are typical of the LIA Tswana settlements found in the larger geographical area for example at Pyramid Koppies near Onderstepoort and elsewhere, and possibly dating to between the late 17th and mid-19th centuries. From an archaeological perspective these sites are of high significance and should be preserved if possible and definitely mitigated if to be impacted by development actions. With the high likelihood of unmarked burials associated with these sites any development actions taken in the vicinity of these sites need to proceed with caution as well. With the sites carrying a High Significance rating a number of mitigation measures are recommended. If the sites are to be impacted the recommendations are that the sites be mapped and drawn in detail, archaeological excavations on sections of the sites be undertaken and finally that a demolition permit from SAHRA be obtained for these sites once mitigation measures have been implemented. The alternative is to avoid the sites in total and then preserve it in situ and to manage the site through a Cultural Heritage Management Plan.

From a cultural heritage point of view the development should be allowed to continue if the mitigation measures are implemented before development commences. The subterranean presence of archaeological or historical sites, features or objects must always be taken into consideration as well. If any are uncovered during any development actions a heritage specialist/archaeologist should be called in to investigate and recommend on the best way forward.

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APPENDIX A

DEFINITION OF TERMS:

Site: A large place with extensive structures and related cultural objects. It can also be a large assemblage of cultural artifacts, found on a single location.

Structure: A permanent building found in isolation or which forms a site in conjunction with other structures.

Feature: A coincidental find of movable cultural objects.

Object: Artifact (cultural object).

(Also see Knudson 1978: 20).

APPENDIX B
DEFINITION/ STATEMENT OF HERITAGE SIGNIFICANCE:

Historic value: Important in the community or pattern of history or has an association with the life or work of a person, group or organization of importance in history.

Aesthetic value: Important in exhibiting particular aesthetic characteristics valued by a community or cultural group.

Scientific value: Potential to yield information that will contribute to an understanding of natural or cultural history or is important in demonstrating a high degree of creative or technical achievement of a particular period

Social value: Have a strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.

Rarity: Does it possess uncommon, rare or endangered aspects of natural or cultural heritage.

Representivity: Important in demonstrating the principal characteristics of a particular class of natural or cultural places or object or a range of landscapes or environments characteristic of its class or of human activities (including way of life, philosophy, custom, process, land-use, function, design or technique) in the environment of the nation, province region or locality.

APPENDIX C SIGNIFICANCE AND FIELD RATING:

Cultural significance:

- Low: A cultural object being found out of context, not being part of a site or without any related feature/structure in its surroundings.
- Medium: Any site, structure or feature being regarded less important due to a number of factors, such as date and frequency. Also any important object found out of context.
- High: Any site, structure or feature regarded as important because of its age or uniqueness. Graves are always categorized as of a high importance. Also any important object found within a specific context.

Heritage significance:

- Grade I: Heritage resources with exceptional qualities to the extent that they are of national significance
- Grade II: Heritage resources with qualities giving it provincial or regional importance although it may form part of the national estate
- Grade III: Other heritage resources of local importance and therefore worthy of conservation

Field ratings:

- i. National Grade I significance: should be managed as part of the national estate
- ii. Provincial Grade II significance: should be managed as part of the provincial estate
- iii. Local Grade IIIA: should be included in the heritage register and not be mitigated (high significance)
- iv. Local Grade IIIB: should be included in the heritage register and may be mitigated (high/medium significance)
- v. General protection A (IV A): site should be mitigated before destruction (high/medium significance)
- vi. General protection B (IV B): site should be recorded before destruction (medium significance)
- vii. General protection C (IV C): phase 1 is seen as sufficient recording and it may be demolished (low significance)

APPENDIX D
PROTECTION OF HERITAGE RESOURCES:

Formal protection:

National heritage sites and Provincial heritage sites – Grade I and II

Protected areas - An area surrounding a heritage site

Provisional protection – For a maximum period of two years

Heritage registers – Listing Grades II and III

Heritage areas – Areas with more than one heritage site included

Heritage objects – e.g. Archaeological, palaeontological, meteorites, geological specimens, visual art, military, numismatic, books, etc.

General protection:

Objects protected by the laws of foreign states

Structures – Older than 60 years

Archaeology, palaeontology and meteorites

Burial grounds and graves

Public monuments and memorials

APPENDIX E
HERITAGE IMPACT ASSESSMENT PHASES

1. Pre-assessment or Scoping Phase – Establishment of the scope of the project and terms of reference.
2. Baseline Assessment – Establishment of a broad framework of the potential heritage of an area.
3. Phase I Impact Assessment – Identifying sites, assess their significance, make comments on the impact of the development and makes recommendations for mitigation or conservation.
4. Letter of recommendation for exemption – If there is no likelihood that any sites will be impacted.
5. Phase II Mitigation or Rescue – Planning for the protection of significant sites or sampling through excavation or collection (after receiving a permit) of sites that may be lost.
6. Phase III Management Plan – For rare cases where sites are so important that development cannot be allowed.