HERITAGE IMPACT ASSESSMENT OF PORTION 137 AND THE REMAINDER OF FARM 654, BLOEMFONTEIN, FREE STATE PROVINCE FOR THE PROPOSED CONSTRUCTION OF A ROAD

Location	Portion 137 and the remainder of Farm 654, Bloemfontein
Local and District Municipality	Mangaung Metro Municipality
Magisterial District	Bloemfontein 445
Province	Free State

Relevant reference numbers:			
DESTEA /NEAS FSP/EIA/0000301 /2019			
SAHRIS Case ID 14162			
Type of Development Infrastructure (Road)			

Developer	EAP	Heritage	Heritage consultant	
MPC Developers (Pty) Ltd.	Marguerite Cronje	Loudine	Philip,	National
		Museum		



Department of Anthropology and Archaeology National Museum Bloemfontein +27 51 447 9609

26 September 2019

DECLARATION OF INDEPENDENCE AND CV

This Phase 1 Heritage Impact Assessment was undertaken and reported on by Loudine Philip of the Archaeological Contracts Unit of the National Museum, Bloemfontein, for, and contracted by MPC Developers (Pty) Ltd.

I declare that I am a qualified professional archaeologist (ASAPA Reg No 187) with CRM accreditation in Iron Age and Historical Archaeology. In addition I also hold an M.Phil Degree in Conservation of the Built Environment.

The views stipulated in this report are objective, independent of any views the client might have, and no other interests are displayed during the decision-making processes.

Report Version	Final v2.0		
Title	Phase I Heritage Impact Assessment report for the proposed Heritage Road, Bloemfontein		
Author	Loudine Philip	DB	26 September 2019

EXECUTIVE SUMMARY

PURPOSE OF THE STUDY

This report was prepared in request of MPC Developers (Pty) Ltd. in support of a Section 38(8) application in terms of the National Heritage Resources Act, no 25 of 1999 (NHRA). A Heritage Impact Assessment (HIA) is required in terms of the National Environment Act (NEMA) as part of a Basic Assessment Report (BAR) as the project triggers NEMA Listing Notice 3 (R324 of 7 April 2017) by activities 4b ii b, and 12 b iv.

PROJECT DESCRIPTION

The project entails the development of a road that leads from the area where the new Heritage Lifestyle Centre will be developed (SAHRA Case ID: 10947) through Portion 137 and the remainder of Farm Bloemfontein 654, owned by the Mangaung Metropolitan Municipality (MMM). The purpose of the road is to provide an alternative route to the current Nelson Mandela Road (main road of Bloemfontein) as additional access to the new Heritage Lifestyle Centre in order to alleviate any potential congestion of the Nelson Mandela Road during peak hour traffic.

METHODOLOGY

The research started with a desktop study using, inter alia, popular as well as academic articles, books, archival resources, historic photographs, maps (both historic and current), title deeds and survey diagrams, municipal records and documents including the current Spatial Development Framework, newspapers (archived as well as current), consultation with local historians and topic related museums, and so forth. The focus is to obtain a history of the land use of the area from the earliest time to date, in order to make an informed decision on its potential historic value and to inform the physical reconnaissance of the development area. The field inspection was done on foot by two people walking transects and using two GPSs and cameras for recording the general environment for any potential finds.

FINDINGS

Both Portion 137 and the remainder of Farm Bloemfontein 654 borders the military base, Tempe. Portion 137 was extensively used since the 1970s for military training and the section of the Remainder of Farm Bloemfontein 654 that forms part of this study is a narrow strip of land between an existing road and the military base. The cultural material remains can be grouped into military related finds (empty shells), wrecks of various types of vehicles, building rubble dumps, scrap metal without context as well as a few glass and ceramic sherds without context.

The study area can accordingly not be assigned a heritage grade of significance.

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List of acronyms used in this report:

Anglo-Boer War
Association for Southern African Professional Archaeologists
Basic Assessment Report
Department of Water Affairs
Environmental Assessment Practitioner
Environmental Impact Report
Free State Department of Economic, Small Business Development,
Tourism and Environmental Affairs
Heritage Impact Assessment
Integrated Development Program
Interested and Affected Party
Metropolitan Open Space System
National Environmental Management Act (no 107 of 1998)
National Heritage Resources Act (no 25 of 1999)
South African Heritage Resources Agency
South African Heritage Resources Information System
Vrystaatse Argief Bewaringsplek
Colonial Secretary
Imperial British Blue Books
Chief Superintendent Refugee Camps

REPORT

INTRODUCTION

This report is the result of a desktop analysis for an assessment of the potential impact the construction of a road might have on existing tangible/intangible cultural heritage on and in the immediate environs of the sites of the new development, followed by a field survey to record all potential heritage effects and assess its value. The report was commissioned by MPC Developers (Pty) Ltd.

TERMS OF REFERENCE

The developers acquired the necessary permission (including from DESTEA and SAHRA) for the erection of a Heritage Lifestyle Centre on Erf 22011, Bloemfontein. This property lies adjacent the main road of Bloemfontein, Nelson Mandela Road, which is the main arterial from both the N1 as well as Langenhoven Park, a suburb of Bloemfontein that lies on the opposite side of the N1. In order for the new Heritage Lifestyle Centre not to add to traffic congestion of the Nelson Mandela Road, it was decided to provide an additional alternative route that will meet up with Lucas Steyn Avenue in a north-easterly direction from the proposed new development.

As a requirement of both the NEMA and NHRA, one of the various specialist studies required is the identification of existing cultural heritage on the subject properties and assessment of the proposed development on any identified heritage by a suitably qualified professional and the author was contracted for this. The brief for the heritage report is to provide a full history of the subject properties in order for the stakeholders (including the heritage stakeholders identified for the Heritage Lifestyle Centre project), any other registered interested and affected parties, as well as statutory bodies, to make an informed decision regarding the impact the proposed development might have on identified cultural heritage during the field assessment as well as provide a professional assessment of its importance with recommendations for its preservation or mitigation to both SAHRA, as the commenting authority on heritage aspects, and the developers.

PROJECT DESCRIPTION

General Project Area:

Portion 137 and Remainder of Farm	Portion 137 and the Remainder of the Farm		
Bloemfontein No 654 (Bloemfontein	Bloemfontein No 654		
Townlands), Free State	Size of Portion 137 = 38.29 ha Size of Remainder of the Farm Bloemfontein that will be used for the development = ± 2.5 ha		
	Current zoning: Undetermined		
	Owner (both): Mangaung Metropolitan Municipality (MMM)		
Magisterial District	Bloemfontein 445		
Local Authority	Mangaung Metropolitan Municipality		
1:50 000 map sheet number	2926AA Bloemfontein		
Central co-ordinate of the development	29° 4'57.74"S; 26°10'44.13"E		

Development Detail:

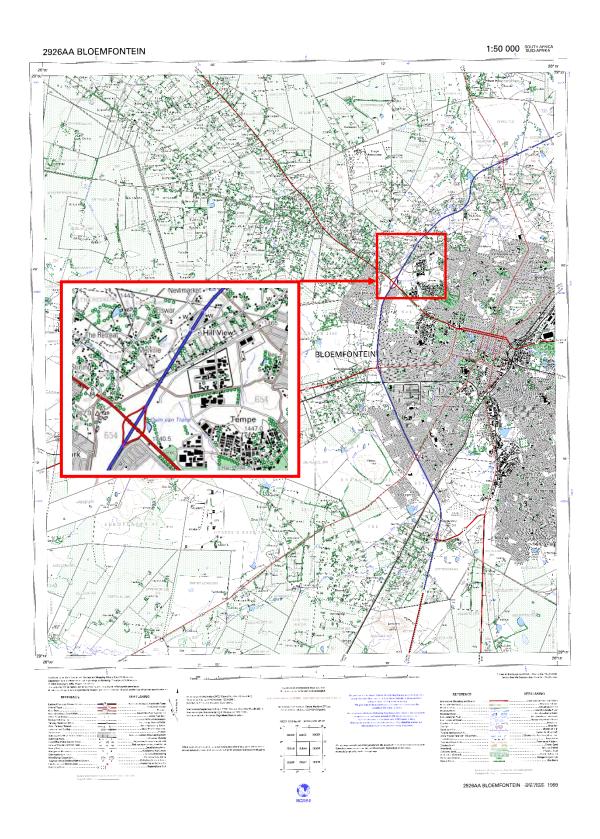
Infra-structure	
Road, pavement and signage	
 Infra-structure Road, pavement and signage Road construction entails the following procedures: Clearing and excavation: The proposed road area is cleared of all vegetation (i.e. trees, shrubs and bushes). Rocks and stones in the way of the road are removed by excavation vehicles. Mounting: Dirt and soil is mounted over the area where the future pathway will run. The surface is then leveled and smoothed by graders. Culverts and drains, consisting of large concrete pipes, are laid to prevent the road from flooding by leading away groundwater, sewage or storm water. Laying aggregate base: An aggregate base made of crushed stone or gravel is placed evenly on the road surface. If required, a curb for the pavement and gutter will be constructed straight after the gravel is 	

	 placed on the surface. The road is then fine graded again. 4. Asphalt paving: A layer of asphalt is poured on the surface which can be up to four layers, depending on the expected traffic on the road. Before the last layer is poured, sidewalks (if required) and gutters are finished. 5. Signage: Construction work is concluded by placing the appropriate road signs at the required places. 	
Applicable legislation	National Environmental Management Act (107 of 1998) EIA Regulations (R327 dd 7 April 2017) Activities: 4b ii(b) - The development is within the Metropolitan Open	
	Space System (MOSS) of the Mangaung Metro Municipality 12b iv – The development is within 100 m of wetland areas associated with the origin of the Bloemspruit	
	National Heritage Resources Act (25 of 1999) Sections 38(3) – Provisions for information to be included in a heritage report should Section 38(8) be triggered Section 38(8) – The heritage impact assessment is required in terms of the National Environmental Management Act (107 of 1998)	



Figure 1: Layout of the new road which starts at Nelson Mandela Rd at the bottom, proceeds through the Heritage Lifestyle Centre (blanked out in white) up to and along Reynecke Avenue and ends at the intersection with Lukas Steyn Avenue at the top. Note, the laydown area for the road construction falls within the area of the Heritage Lifestyle Centre.

Bloemfontein 2926AA 1:50 000 map



LEGISLATIVE REQUIREMENTS

National Environment Management Act, no 107 of 1998 (NEMA) and NEMA 2014 Environmental Impact Assessment Regulations, as amended (Government Notice R327 of 7 April 2017)

Listing Notice 3:

<u>Activity 4:</u> The development of a road wider than 4 metres with a reserve less than 13,5 metres.

(b ii bb): Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority or zoned for a conservation purpose;

<u>Activity 12:</u> The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan.

(12 b iv): Areas within a watercourse or wetland; or within 100 metres from the edge of a watercourse or wetland.

National Heritage Resource Act, no 25 of 1999 (NHRA)

Section 35(3):

No person may, without a permit issued by SAHRA or a provincial 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, 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 equipment, or any equipment which assists in the detection or recovery of metals.

Section 35(4)(a):

No person may, without a permit issued by the responsible heritage resources authority destroy, damage, excavate, alter, deface or otherwise disturb an archaeological or palaeontological site or any meteorite.

Section 38(3):

The responsible heritage resources authority must specify the information to be provided in a report required in terms of subsection 2(a) [also a requirement if Section 38(8) is triggered]: Provided that the following must be included:

- a) The identification and mapping of all heritage resources in the area affected;
- b) An assessment of the significance of such resources in terms of the heritage assessment criteria set out in section 6(2) or prescribed under section 7 [Heritage assessment criteria and grading];
- c) An assessment of the impact of the development on such heritage resources;
- d) An evaluation of the impact of the development on heritage resources relative to the sustainable social and economic benefits to be derived from the development;
- e) The results of consultation with communities affected by the proposed development and other interested parties regarding the impact of the development on heritage resources;
- f) If heritage resources will be adversely affected by the proposed development, the consideration of alternatives; and
- g) Plans for mitigation of any adverse effects during and after the completion of the proposed development.

Section 38(8):

The provisions of this section do not apply to a development as described in subsection (1) if an evaluation of the impact of such development on heritage resources is required in terms of the Environment Conservation Act, 199 (Act No. 50 of 1991), or the integrated environmental management guidelines issued by the Department of Environment Affairs and Tourism, or the Minerals Act, 1991 (Act No. 50 of 1991), or any other legislation: Provided that the consenting authority must ensure that the evaluation fulfils the requirements of the relevant heritage resources authority in terms of subsection (3), and any comments and recommendations of the relevant heritage resources authority with regard to such development have been taken into account prior to the granting of the consent.

Physical Planning Act, No 125 of 1991

Section 27(1)(b):

no person shall use any land in the area to which the regional structure plan or the urban structure plan, as the case may be, applies for a purpose other than the purpose for which it -

- i. was being used immediately before that date; or
- ii. is zoned in terms of a town planning scheme which is or may become binding in that area;

Provided that land to which no such scheme applies may with the consent of, in the case of the regional structure plan, the Administrator concerned or, in the case of the urban structure plan, the responsible authority be used for any purpose determined in the relevant plan or for any other purpose which in the opinion of that Administrator or responsible authority is consistent with the relevant plan;

Municipal Systems Act, No 32 of 2000

Section 23:

the Integrated Development Planning (IDP) is defined as one of the core functions of a municipality in the context of its developmental orientation.

Section 35(2):

A Spatial Development Framework (SDF) contained in a council approved IDP prevails over a plan as defined in section 1 of the Physical Planning Act, 125 of 1991.

Section 27(1)(b):

Land use should be in accordance with the applicable regional or urban structure plan and can only be used for the purpose it was used immediately before that date or the purpose for which it is zoned in terms of a town planning scheme which is or may become binding in that area.

[current zoning of development area is 'undetermined']

Mangaung SDF as reflected in the council approved draft of the Mangaung IDP of 2018/2019

The development area falls within the Metropolitan Open Space System (MOSS) as indicated on the Spatial Development Framework (SDF) of the Mangaung Metro Municipality's Integrated Development (IDP) for 2018/2019.

METHODOLOGY

Literature review

The area for the road falls within an area on which was already reported (by the same author) for an HIA for the Heritage Lifestyle Centre. In addition to the information gleaned from that study, more information was obtained on the development of the Tempe military base itself and its potential effect on the areas adjoining its formal grounds.

Public Consultation and Stakeholder Engagement:

In terms of Regulation 41(2) of Government Notice 326 dated April 2017, the following applies:

- 1. Notices were placed in a local and regional newspaper, namely *Bloemfontein Courant* on 10 January 2019 and *Die Volksblad* on 11 January 2019.
- 2. Notices were placed at a prominent place at/near the site.
- 3. Heritage stakeholders that were identified for the Heritage Lifestyle Project are automatically registered as interested and affected parties of the current project.

Feedback on the public consultation process can only be provided once the stakeholders have had an opportunity to read and comment on the current report. The current report will be amended to reflect the outcome of the public participation process. Refer to Addendum C for newspaper and on-site notices.

Physical Survey

The field survey took place on the 1st, 14^{th} , 18^{th} to 22^{nd} , and 25^{th} and 26^{th} of February. The pedestrian survey was undertaken by one professional archaeologist and one assistant with 12 years' experience of archaeological fieldwork. The entire development area was walked in transects approximately 5 – 10 m apart. All manmade items (not necessarily archaeological) were recorded using a Garmin GPSMAP64s and a Garmin GPSmap60CSx handheld devices as well as a Sony Cyber-shot DSC-H7 camera.

Visibility in the survey area between the Tempe fence and Reynecke Avenue ranged from reasonably fair to poor in areas where the grass was very dense, with the area immediately adjacent the intended Heritage Lifestyle Centre having on average fair visibility.

Site Description:

The proposed road falls in two adjacent sections, namely Portion 137 and the Remainder of the Farm Bloemfontein No 654. Portion 137 has a gentle downward slope from west to east towards the *spruit* and from the *spruit* upwards along Reynecke Avenue towards the conjunction with Lukas Steyn Avenue.

The survey area that falls within the <u>Remainder of the Farm Bloemfontein No 654</u> runs parallel between the fence of Tempe military base and Reynecke Avenue at a relatively even width of approximately 50 m. Despite the fact that there will be a space of approximately 28 m between the roads, the entire area was investigated due to the fact that trucks and machinery will in the process of construction criss-cross the area. No archaeological remains were found in this area which contains several manholes that are part of the municipal infrastructure (drains, water and electricity supply). Several dumps of building rubble occur - from just a few bricks and debris to larger clumps, but still relatively small. It also contains one car wreck under/in a tree. A triangular section at the bottom of Reynecke Avenue, shows evidence of more recent rubbish, reminiscent of vagrant activities. Singular ceramic sherds and older glass sherds are still not old enough to be archaeological and also out of context. The remains of a concrete wall that runs parallel with the current Tempe prefab wall are visible in sections. Visibility in this survey area ranged from reasonably fair to poor in areas where the grass is very dense.



Figure 1: View of the survey area between the Tempe fence and Reynecke Avenue

Although a wider area regarding the road area in <u>Portion 137</u> was surveyed, the recorded tracks are limited to the area of the proposed road, including a buffer zone of 15 m on either side of the road. This area contains large building rubble sites and it is evident that the area was graded at some time in its history as it contains several heaps of soil and stones – most of which are currently covered by vegetation. Close to the fence of the intended new Heritage Lifestyle Centre, similar evidence of vagrant activities was observed. Evidence of the area

having been used as military training area can be found in several empty 84 mm single round 'prac shot' shells with one bearing the date of 12/76.



Figure 2: Single round 84 mm prac shot - presumably shells

This area, too, contained singular glass and ceramic sherds, but out of context and most also not old enough to be archaeological. Visibility at ground level was reasonably fair as can be seen in the above picture.

A detailed record of all the finds with associated co-ordinates can be found in the Results of the Survey section.

Cultural significance or special value because of:		Applicable or not	Rating: Negligible / Low / Low- Medium / Medium / Medium-High / High / Very High
	s importance in the community, or pattern of outh Africa's history	No	
as	s possession of uncommon, rare or endangered spects of South Africa's natural or cultural eritage	No	

Site significance and field-rating:

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C.	Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage	No	
d.	Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects	No	
e.	Its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group	No	
f.	Its importance in demonstrating a high degree of creative or technical achievement at a particular period	No	
g.	Its strong or social association with a particular community or cultural group for social, cultural or spiritual reasons	No	
h.	Its strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa	No	
i.	Sites of significance relating to the history of slavery in South Africa	No	
Reasoned assessment of significance using appropriate indicators outlined above:			

There is no evidence, both in literature and from the field assessment, that the development area was used for any activity other than grazing area for horses and cattle during the early period of Bloemfontein's existence up to and during the Anglo-Boer War and later on from the 1970s periodically by the military for training purposes (shooting and vehicle training).

Field rating:

None

ASSUMPTIONS, GAPS, RESTRICTIONS AND LIMITATIONS

Ground visibility, especially in the area of Reynecke Street, were in places very poor, but the likelihood of that area containing any concealed cultural material is very slim.

DESCRIPTION OF THE SOCIO-ECONOMIC ENVIRONMENT

The Mangaung Metropolitan Municipality (MMM) includes Bloemfontein, Botshabelo, Thaba Nchu, Soutpan/Ikgomotseng, Dewetsdorp, Wepener and Vanstadensrus of which Bloemfontein is the economical hub of the municipal area. According to the 2016 Community Survey, MMM has a population average of 787 929.¹

Bloemfontein is located on the N1 route between Gauteng and the Western Cape and on the N8 between Kimberley in the west and Lesotho to the east. It is the sixth largest city in South Africa and also the judicial capital of the country.

Agriculture, mining and manufacturing sectors cover a relatively small share in the Mangaung Metropolitan area compared to the province and country. Tertiary sector services (service providing in community services, trade, finance and transport) of the local economy is very significant within the context of the province.

The proposed development is expected to have an effect on different levels of economic activity in the area and benefit the economy by creating jobs, generating business sales and increasing disposable income. Temporary jobs will be created during the construction phase.

DESCRIPTION OF THE PHYSICAL ENVIRONMENT

Zoning of the development area:

Remainder of Farm Bloemfontein 654: Undetermined

Portion 137 of the Farm Bloemfontein 654: MOSS

Effects of predominant economic activities on the environment:

Neither one of the two subject areas have been used for any economic activities. Noneconomic activities since before the Anglo-Boer War is the utilisation of Portion 137 as grazing for horses and cattle and since the 1970s as training area for the troops at Tempe. It is no longer utilised by the military.

¹ Mangaung IDP 2018/2019

No evidence could be found that the corridor between Reynecke Street and the Tempe fence was ever used for any particular purpose.

Description of vegetation and of landscape features:

[Information in this section with permission of the ecologist sourced from the ecological report submitted by DPR Ecologists & Environmental Services]

The north eastern portion of the proposed road is situated between the urban area and Tempe Military Base and is consequently transformed and degraded to a large degree. A grass layer is still dominant but is dominated in most areas by pioneer species. Grass species include Eragrostis lehmanniana, Aristida congesta, Themeda triandra, Chloris viragata, Melinis repens and Enneapogon cenchroides. Except for T. triandra which is a climax species and considered a remnant of the natural grassland, all of these are pioneer grasses which dominate in degraded areas. This should already indicate a degraded vegetation layer. Several dwarf shrubs are present and is also indicative of a modified grass layer. These include Nolletia ciliaris, Chrysocoma ciliata and Pentzia incana. These species are present in natural areas but where they increase in abundance they are normally an indicator of disturbance. Other herbaceous species common within the grass layer include Wahlenbergia androsaceae, Bulbine frutescens, Osteospermum scariosum and Nidorella resedifolia. The natural vegetation type also contains an open shrub and tree layer and is still present in this area. Tree and shrub species include Ziziphus mucronata, Diospyros lycioides, Vachellia karroo and Buddleja saligna. This is considered a natural component of the vegetation. Due to the degraded condition of the vegetation in this area exotic weeds and invaders are abundant with exotic weeds including Bidens bipinnata, Verbena tenuisecta, Tragopogon dubius, Conyza bonariensis and Sphaeralcea bonariensis. Invasive species include trees such as Eucalyptus camaldulensis, Schinus molle and Melia azedarach, shrubs such as Caesalpinia gilliesii and succulent species such as Agave americana. From the description of the vegetation in this section of the proposed road it is clearly in a degraded condition with significant transformation. The area has a low species diversity without any species of conservation significance having been observed and consequently this section has a relatively low conservation value.

The south western section of the proposed road is situated in an area with a more natural species assemblage although disturbance remains high and the vegetation is also in a degraded condition. The vegetation is dominated by a grass layer which includes *Eragrostis curvula*, *Hyparrhenia hirta*, *Enneapogon cenchroides*, *Cymbopogon pospischillii*, *Heteropogon contortus*, *Setaria sphacelata*, *Cynodon dactylon*, *Digitaria eriantha*, *Aristida congesta*, *Eragrostis lehmanniana* and *Themeda triandra*. This is a mixture of pioneer and climax species which is considered indicative of a natural grass layer but with significant disturbance. Note also the much higher species diversity which also indicates that this section is somewhat more natural. Several herbaceous species are also prominent with some being considered pioneer species and indicative of disturbance within the grass layer. These herbaceous species include *Nidorella resedifolia*, *Arctotis venusta*, *Gazania*

krebsiana, Pseudognaphalium luteo-album, Atriplex semibaccata and Osteopsermum scariosum. These clearly indicate a higher species diversity than the previously discussed transformed section but also indicates a decrease in grass cover due to disturbance and the consequent increase in herbaceous species, especially pioneer species. A few dwarf shrubs also occur in the grass layer with a few being pioneer species but mostly representative of the natural condition. These include Asparagus suaveolens, Searsia ciliata, Hertia pallens, Pentzia incana, Lycium horridum, Felicia muricata, Ruschia hamata and Nolletia ciliaris. A few geophytic species are also scattered in the grass layer and include Hypoxis hemerocallidea, Androcymbium longipes, Albuca setosa and Brunsvigia radulosa. Of these the last named is a protected species and therefore of conservation significance. The species transplants easily and it is recommended that permits be obtained to transplant any specimens which will be affected by the proposed road to an adjacent area where they will remain unaffected. Trees and shrubs are largely absent from the grass layer but sporadically present, especially where dolerite outcrops occur or where significant disturbance of the soil surface has occurred. Species present include Euclea crispa subsp. ovata, Diospyros austro-africana, Ziziphus mucronata and Vachellia karroo. The exotic weed and invader element again indicates significant disturbance of the natural vegetation and an overall poor condition. Exotic weeds include Verbena tenuisecta, Tagetes minuta, Bidens bipinnata, Sphaeralcea bonariensis, Schkuhria pinata, Ciclospermum leptophyllum, Oenothera rosea, Plantago lanceolata and Datura stramonium. Exotic invasives includes trees such as Eucalyptus camaldulensis, Melia azedarach and Gleditsia triacanthos, shrubs such as Cestrum laevigatum and succulents such as Opuntia ficus-indica and O. engelmannii. The above description clearly indicates a natural vegetation layer but which has been significantly degraded. The species diversity is somewhat higher but cannot be considered as high and elements of conservation significance is largely absent. A single protected geophytic species was identified and although it is widespread is still of some conservation value but can be easily mitigated by transplanting specimens which will be affected by the development. The overall conservation value of this area is still considered as relatively low.

The wetland areas associated with the Bloemspruit contains wetland conditions on a perennial basis and riparian and obligate wetland species are common and cover a large area. Exotic species are also common and indicative of significant disturbance. Vegetation within the wetland area is dominated by several wetland species which includes sedges such as *Eleocharis dregeana*, *Pseudoschoenus sp.* and *Cyperus marginatus*, *Bulrush*, *Typha capensis*, reeds, *Phragmites australis* and hygrophilous grasses such as *Paspalum distichum*. A few scattered trees occur along the fringe of the wetland area and consist mostly of *Searsia lancea*. As previously discussed the Bloemspruit is significantly degraded in this area and consequently numerous exotic weeds has become established and may dominate in some areas. These include *Verbena bonariensis*, *Plantago lanceolata*, *Cirsium vulgare*, *Persicaria lapathifolia*, *Veronica anagalis-aquatica*, *Cortaderia selloana*, *Xanthium strumarium*, *Datura ferox* and *Lolium multiflorum*. A few exotic trees have also become established consisting of *Gleditsia triacanthos* and *Fraxinus americana*. From the description of the vegetation it should be clear that an extensive wetland area is associated with the Bloemspruit but also that it is in a significantly degraded condition. Although

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it is a degraded wetland system it still provides several important functions and should therefore still be regarded as highly sensitive.

In conclusion, from the description of the species composition and vegetation structure it is clear that the proposed road will be situated within natural vegetation but which has been degraded to a significant degree with several areas having been transformed. Consequently the species and habitat diversity is also relatively low. As a result the proposed road is not anticipated to have a large impact in terms of the vegetation and ecology. However, two elements are present which are considered to be of significant conservation value. Firstly, a few specimens of the protected geophyte, *Brunsvigia radulosa* were identified. Although widespread they are still of some conservation value and where they will be affected by the road construction it is recommended that the necessary permits be obtained to transplant them to adjacent areas where they will remain unaffected. Secondly, the road will occur in close proximity to the wetland system associated with the Bloemspruit. It is recommended that the road avoid this wetland area and exclude it from construction. Even though the wetland area will not be transected by the road it will still be necessary to apply for the relevant water uses with the Department of Water and Sanitation (DWS).

Several mammals or tracks and signs of mammals were observed on the site. However, due to the degraded condition of the site as well as the urban proximity of dwellings it is considered unlikely that any species of concern will occur on the site. The mammal population on the site is also likely to be diminished from the natural condition. The proposed development will transform the majority of the vegetation on the site thus decreasing the available habitat for fauna. The proposed development is a linear road which will require transformation of a limited area and thus decreasing the impact. The condition of the habitat is also degraded which will also further decrease the anticipated impact. In order to ensure no direct impact on the mammals on the site the hunting, capturing or trapping of mammals on the site should be strictly prohibited during construction.

The impact significance has been determined and mostly as a result of the degraded condition of the area the impacts before mitigation will be mostly moderate with the exception of the loss of a portion of the wetland area which is considered a moderate-high impact. Through adequate mitigation as discussed, including the exclusion of the wetland area from the road layout, all impacts can be significantly decreased to low-moderate.

[Note: As a result of the ecological report, the road has been adjusted to exclude the wetland area from the road lay-out as reflected in the current study]

Fieldwork season and visibility

Fieldwork was conducted over a period of ten days in February 2019 which falls in the Free State's rain season. Visibility ranged from fair to extremely poor with specific reference regarding the latter in the area between Reynecke Avenue and the Tempe boundary wall.

Description of soil and basic geology

The area between the Orange and Vaal Rivers are known as the southern Highveld. This area, with exception of the Vredefort Dome in the north, small outcrops of the Ventersdorp System in the west, and outliers of the Stormberg lavas in the Caledon Valley, is covered by the sedimentary series of the Karoo System (Maggs 1976: 11).

The primary study area falls within the Mangaung Metro Municipality which is located within the Karoo Super Group geology. The Bloemfontein geology consists of sandstone, shale and mudstone of the lower stage of the Beaufort Group. The north western side of Bloemfontein sedimentary geology has been intensively intruded by magmatic dolerite intrusives such as sills and dykes (DWA, 2012).

Palaeontology

The 2017 palaeontological report for the adjacent area (Heritage Lifestyle Centre) indicates that the proposed area (which is shared by the current study) is underlain by sedimentary strata of Later Permian Adelaide considered to be of low palaeontological sensitivity and was no further palaeontological assessment recommended. This, together with the fact that the construction of the road does not entail excavation into bedrock as will be the case with the area for which the palaeontological report was done, negates the necessity of a further palaeontological assessment of the current development area.

Prior activities in the proposed development area

The area falls within the boundaries of the Bloemfontein townlands as surveyed in 1889 and in the period up to the Anglo-Boer War of 1899-1902 the area was from time to time used as grazing area for livestock. Black townships developed at the opposite side of the town on the south-eastern edges of Bloemfontein and there is also is no indication in the historic records of any forced removals in the current study area. The first known occupation of this area took place during the Anglo-Boer War with the British erecting refugee (concentration) camps for women and children in 1900. During this period two camps were erected and referred to in the British military records as Camp A and Camp B. Although it was initially deduced from the archival records that Camp B might have fallen within the development area, Prof Raath (an expert in this field) pointed out that the camp was formed in an L-shape with the curve close to Spitskop extending respectively to Universitas Ridge (the area on the western side of Nelson Mandela Drive) and the other leg in an easterly direction which could potentially include the section on the opposite side of the N1 to what the current research area is situated. According to him, Camp A originally started in the development area (roughly in the proximity of the Heritage Lifestyle Centre) but was very soon moved to higher grounds on account of the poor drainage properties of the site.

LITERATURE/BACKGROUND STUDY

Introduction

The area between the Orange and Vaal Rivers, initially known as the Trans Gariep and later as the Trans Orangia, was at the beginning of the 19th century the hunting grounds of groups of wandering Bushmen. Bloemfontein has its roots in the growing disputes over territory as various population groups in the early nineteenth century almost simultaneously began to penetrate the region. These population groups, inter alia, included trekboers from the Cape, Griquas led by Adam Kok II and the Basotho headed by King Moshesh (Schoeman 1980).

The first British period (Orange River Sovereignty 1846-1854)

During the period 1846 to 1854, the Free State was under British control and known as the Orange River Sovereignty. In 1846 Henry Douglas Warden was appointed as British Resident in the Trans Orangia with the task to keep the peace between the different population groups and to establish a British Residency at a central location. In March 1846 Warden settled with his band of soldiers, the Cape Mounted Riflemen, on the farm 'Bloem Fontein' where one of the aforementioned early trekkers, Johan Nicolaas Brits, already established himself on the current site of the Old Presidency in Bloemfontein near a strong, permanent fountain and a large spruit. Bloemfontein was chosen because of its central location in the disputed area and had plenty of water and grazing areas for the horses. (Schoeman 1980)

Republic of the Orange Free State (1854-1900):

The British, however, found it increasingly difficult to keep the peace between the Griqua and other indigenous groups as well as the White farmers who had settled in this region and decided to withdraw their forces back to the Cape Colony. After their withdrawal, the Boer Republic of the Orange Free State (OFS) was established by the signing of the Bloemfontein Convention on 23 February 1854. Sir George Clerk represented Britain and 25 representatives of the people of the new country were present. The convention guaranteed the independence of the territory between the Orange River in the south, the Vaal River in the west and north, and the Drakensberg in the east (VAB-OSS, Vol 18).

With the discovery of diamonds in the Orange Free State, the British-controlled Cape Colony realised that these treasures lay outside their reach and the British Cape Colony annexed the diamond-fields area known as Griqualand West as crown land on 27 October 1871 (OFS Gov Notice 19-12-1871). This was followed by a five-year period of arguing between the Orange Free State and the Cape Colony regarding the ownership of the diamond fields which ended in an official agreement concluded on 13 July 1876 whereby the Orange Free State received £90 000 in compensation for the loss of the diamond fields (Spies, 1941).

This financial boost enabled the Orange Free State eventually to become the model state it was known for during the reign of President Brand and Bloemfontein in particular blossomed after the railway line was extended to Bloemfontein and officially opened on 17 December 1890 (Schoeman, 1980).

In 1889 the Bloemfontein townlands, Bloemfontein No 654, was surveyed and secured by title deed G00/1890 to the Bloemfontein Council. Right up to the time of the Anglo-Boer War the development of the town remained centred around the original settlement area and extended to the north-east up to what would later become known as Signal Hill and Naval Hill. Black residents settled on the southern side of the town which became known as Waaihoek. This was the closest area of Bloemfontein to Thaba Nchu1 (a Twana settlement) and the Kingdom of the Basotho, today known as Lesotho.

The current proposed development areas, however, were close to the north-western border of the townland area and on account of its relative level surface and a spruit that ran through the area, the strip of townlands between the western side of Tempe hills and the road marked as 'naar Kimberley'2 (to Kimberley), also known as Spitskop road and today Nelson Mandela Road, was utilised as grazing area for livestock during the late 1800s.

The Anglo-Boer War 1899-1902 (ABW)

Preceding this war, two major events took place that had a decisive effect on the declaration of war between the British and two Boer Republics. The first event was the First Boer War (also called the First Freedom War, the Transvaal War or the Transvaal Rebellion) that took place during the period 16 December 1880 to 23 March 1881 between the Boers of the area north of the Vaal River, and the British administrators of this area (Norris-Newman, c.1885). In violation of the Sand River Convention (17 January 1852) whereby the Transvaal Republic was granted self-governance, the British re-annexed the Transvaal in 1877 (ZAR3 Proclamation No 199, 12 April 1877)(Eybers 1918).

Major-General Sir George Pomeroy Colley took over as Governor of Natal, Transvaal, High Commissioner of SE Africa and Military Commander in July 1880. Colley did not immediately take up position in the Transvaal and by the time a request for reinforcements were requested by the administrator, Sir Owen Lanyon, it was too late and the Boer revolt started on 16 December 1880 with an attack on a British column of the 94th Foot who were returning to reinforce Pretoria. Following a succession of defeats by the British and the final defeat at Majuba during which Sir G.P. Colley was killed, a preliminary peace treaty was signed between the Transvaal President, Joubert, and Sir Evelyn Wood (the remaining leader of the British forces) on 6 March 1881. The vice-President of the Transvaal, Paul Kruger, joined the conference and held out for complete independence. The deadlock was only overcome after President Brand of the Republic of the Orange Free State arrived and interceded (Duxbury, 1980). By this time the Volksraad of the Orange Free State has finally decided on a 'position' of strict neutrality' and was President Brand in a position to mediate the peace negotiations (Norris-Newman, c.1885). At the Pretoria Convention of 3 August 1881 the Transvaal was again granted complete self-government, but subject to the sovereignty of the British Crown and referred to as the Transvaal State (Eybers 1918).

This was followed by a ZAR proclamation published on 8 August 1881. Not happy with all the provisos stipulated at the former convention, the Transvaal State kept on lobbying for total independence and was finally granted total sovereignty at the London Convention of 27 February 1884 and was once again known as the South African Republic (Eybers, 1918) The success of this first Boer War would later serve as incentive for perseverance on the side of the Boers during the ABW of 1899-1902.

The second major and decisive event was the discovery of a rich gold deposit in 1886 on what is today known as the Witwatersrand. The Witwatersrand Gold Rush was a major contributing factor to the failed Jameson Raid of 1895 to 1896, and consequently the outbreak of the Second Boer War in 1899 (Stead 1902). Boer resentment in the Transvaal over the large number of foreigners (Uitlanders) in the Witwatersrand led to heavy taxes and the denial of voting rights for the gold miners, and in response the Uitlanders and the British owners of the mines began to pressure the overthrow of the Boer government (Aston n.d.; Davis, 1897). Cecil John Rhodes acknowledged his complicity in the initial movement and resigned as Prime Minister on 6 January 1896 (Bodleian: MSS.Afr.s.228).

The situation in the Transvaal Republic, however, remained tense and escalated by political manoeuvrings and negotiations attempted to reach compromise on the issues of the rights of the Uitlanders, control of the gold mining industry, and the British desire to incorporate the Transvaal and the Orange Free State into a federation under British control. As the majority of the Uitlanders were of British origin, and more and more Uitlanders kept on arriving on the gold fields, the Boer government recognised that granting full voting rights to the Uitlanders would eventually result in the loss of ethnic Boer control in the South African Republic.

The June 1899 negotiations in Bloemfontein failed, and in September 1899 British Colonial Secretary Joseph Chamberlain demanded full voting rights and representation for the Uitlanders residing in the Transvaal. Paul Kruger, the President of the South African Republic, issued an ultimatum on 9 October 1899, giving the British government 48 hours to withdraw all their troops from the borders of both the Transvaal and the Orange Free State, albeit Kruger had ordered Commandos to the Natal border in early September and the British only had troops in garrison towns far from the border, failing which the Transvaal, allied to the Orange Free State, would declare war on the British government. The British government rejected the South African Republic's ultimatum, resulting in the South African Republic and Orange Free State declaring war on NATIONAL MUSEUM Britain.

The British were confident that the Boers would be quickly defeated and they planned and organised for a short war. The guerrilla warfare tactics of the Boer forces, however, did not fall in with the plans of an organised war and when Kitchener realised that more drastic measurements should be put in place to force the Boers into defeat, the Scorched Earth policy was put in place. This is simply a military strategy that targets anything, such as food sources and transportation, that might be useful to the enemy while advancing or withdrawing from a particular area and was used from the earliest time of warfare, e.g. during the reign of Darius I, the third king of the Persian Achaemenid Empire (522-486 BCE).

As a result, the British ordered destruction of the farms and the homes of civilians in order to prevent the still-fighting Boers from obtaining food and supplies. This, however, also resulted in women and children left on the farms without shelter or food while men were away fighting the British. This in turn resulted in the now infamous concentration camps that the British preferred to refer to as refugee camps set up for the protection of these women, children and elderly people. The first camp was set up in Bloemfontein as the main town of the Orange Free State was defeated and occupied by the British on 13 March 1900 and placed under military administration and on 20 April 1900 the whole Orange Free State was annexed and became the Orange River Colony. Bloemfontein became the new British headquarters for this war.

Although it was announced on 22 September 1900 that a refugee camp will be established at Bloemfontein (IBB-Cd. 426/1900), it already existed in August 1900 (VBA-CO 43 file 2390/01). The aim of this document is, however, not to give a detailed account of the ABW war but instead to focus on information that had an impact on the footprint of Bloemfontein and in particular the proposed development area.

No archival maps or plans could be located and for the location of the various camps we have to rely on descriptions of the approximate positions of the various camps. At the end of the war there were two concentration camps, Camp A and Camp B – the latter the biggest and often in the records referred to as the main camp – and smaller camps away from the former two such as the isolation camp for women breaking the camp regulations, and 'undesirable' camp for men in the concentration camp that refused to work the required six hours per day, the hospital camp, etc.

Camp A: This camp, established in August 1900, was situated from the foot to almost the top of a hill. The lowest part of the camp is described as being on the most western part of the hill (Cd 819/90). This could potentially place this camp within the current Tempe military area.

Camp B: In a note of the District Commissioner Troops, Old Fort Bloemfontein to D.A.A.G., Bloemfontein dated 13 April 1901 a site for a new camp was identified as at the slopes of a hill close to Spitskop, south of the spruit, north of the Spitskop Road and west of the British artillery camp. On 15 April 1901 permission was granted for the erection of the new camp, Camp B. (VAB-SRC-RC1243).

From this description it is clear that the proposed development area does not fall within the general area of Camp B. The historical events, from the 1st Boer War up to the ABW, is described in detail to gain an understanding for the social importance a certain sector of the South African population attach to concentration camps in particular. 27 927 persons died in the camps, 1 676 men, mainly those too old to be on commando, 4 177 women and 22 074 children under sixteen which essentially wiped out a whole generation of Afrikaners.

Without diminishing the suffering the black people suffered during this war, the focus is on reporting historical events that would shed light on the proposed development area in particular. The atrocities committed against the Afrikaner women and children during the ABW served during the later years as an incentive for a resurgence of Afrikaner Nationalism in 1930s and 1940s. Both the 'Dam van Trane' and the tube well around which the 'Bron van Herinnering' monument was erected, situated near the current development area, date to the Anglo-Boer War. A report from Dr Franks on the Burgher Camp at Bloemfontein dated November 1901 refers to a dam that was constructed on the south-western side of the camp, using the labour of the men in the camp. This could possibly refer to a different dam than the current Dam van Trane. Mention is also made of three tube pumps in Camp B (IBB-Cd. 934/1901).

The Orange River Colony (1900-1910):

The war ended in May 1902 with the last of the Boers surrendering and formally concluded with the signing of the Treaty of Vereeniging signed on 31 May 1902. After this, inhabitants of the concentration camps were gradually released as burghers came to claim the members of their families still living, while others left on their own to return to their burnt down houses and farms. The repatriation of both prisoners of war (POWs) and those in the various concentration camps was, however, a slow process with the result that especially the Bloemfontein camp, which was the largest of all the camps, was the last to have been finally closed down. For instance, a letter by the Colonial Secretary of the Orange River Colony dated 20 October 1902, i.e. five months after the official ending of the war, questions the desirability of the 'large number of immoral women' that were moved from the town to the Bloemfontein camp (VAB-SRC-RC10092).

At the end of the Anglo-Boer War in 1902 both Boer republics (i.e. the Republic of the Orange River and the South African Republic) were annexed as separate British colonies to be known as the Orange River and Transvaal Colonies. Tempe remained a British military base but by the end of the war military headquarters moved from Bloemfontein to Pretoria. The temporary structures erected at Tempe, in particular those connected to the various concentration camps, were dismantled and sold at auctions (VAB-SRC-RC10069).

The Orange Free State Province (of the Union of South Africa 1910-1961):

The Union of South Africa came into being on 31 May 1910 with the unification of four separate British colonies, namely the Cape Colony, Natal Colony, Transvaal Colony and Orange River Colony. The Union of South Africa was a dominion of the British Empire, and became sovereign on 11 December 1931. It was governed under a form of constitutional monarchy, with the Crown represented by a governor-general. The Union came to an end when the 1961 constitution was enacted. On 31 May 1961 the country became a republic and left the Commonwealth, under the new name Republic of South Africa.

The 1st World War (WW1) [1914-1918]:

Although the causes of this war remain controversial and debated questions, it is generally accepted that it began in the Balkans in late July 1914. In the period 1910 to 1931 the Union of South Africa remained under the British Crown as a self-governing dominion of the British Empire. As such South Africa, like many other British dominions at the time, was drawn into the war through their connection with Britain.

Prior to the outbreak of the war Britain still had a large force of her troops in South Africa. In 1908 the garrison at Tempe was the largest in the country (Groenewald, 1984).

At the outbreak of war, however, Britain finally recalled its troops from South Africa and military control was taken over by the SA Cavalry. The South African Calvary became the new permanent force in the Union. At the end of 1914 the combined military/police training school in Pretoria-West was moved to Tempe and its personnel were accommodated in the Royal Field Artillery camp (Unit File. SA Army College, Vol 3, p.9).

During WW1 German officers were originally interned at the Tempe military base, but later moved to Port Elizabeth. Archival records dating to 1916, however, make reference to the Mayor of Bloemfontein offering ground on the town commonage for a prisoners of war internment camp. This camp was for German civilian women and children and it appears that some of them seem to have remained at this camp until the last stages of the war in 1919. As this area was already utilised by the military from time to time as grazing area for their horses, it is possible that the internment camp was in the area of the proposed Heritage Lifestyle Centre.

Nearby Identified Heritage Sites

The Dam van Trane, Bron van Herinnering as well as the old Garrison Hospital dating to the Anglo-Boer War period and which is situated within the boundaries of the Tempe military base, falls within a 500 m radius of the proposed road.

RESULTS OF THE SURVEY AND THE ASSIGNED SIGNIFICANCE FIELD-RATING

With the aforementioned background in mind, with specific reference to the period of the Anglo-Boer War which was aimed at White Afrikaners, but also negatively affected Black South Africans in the process, meticulous care was taken to find any traces of activities dating to that specific period (without excluding subsequent events) that might shed more light on this part of the history of South Africa.

The surveyed area, however, proved to be totally devoid of any heritage resources that could be linked to that particular period or any subsequent period, save for activities dating to the 1970s and later, with the exception of singular sherds of ceramic and glass that could date to approximately the 1930s and later up to recent times, and was, apart from its low level of occurrence, also out of context with no potential associated midden or any other indication of human inhabitation.

Description of Identified Heritage Resources

Remainder of Farm Bloemfontein 654:

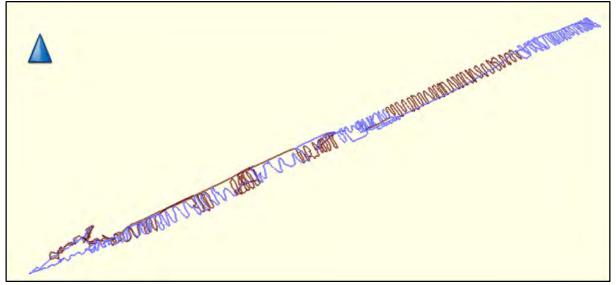


Figure 3: Transects of survey for the north-eastern section of the road with the upper long edge bordered by Reynecke Avenue and the lower edge by the Tempe boundary wall.

This section concerns the north-eastern section of the road (refer to road plan on page 4) and is situated between Reynecke Avenue and the north-eastern boundary wall of Tempe military base. It is a narrow strip measuring approximately 45 m x 1 700 m measured from the edge of Reynecke Avenue to the Tempe boundary wall and lengthwise from the intersection with Lukas Steyn to the N1 road in the west.

This area was surveyed on the 1st, 14th, 18th and 19th of February 2019 and contains several indications of municipal services such as drain manholes, water pipes and overhead electricity

cables. The area is littered with small pockets of building rubble, a car wreck, and the concrete remains of an earlier Tempe boundary wall (which today is a high prefab wall) as well as road drainage culverts for a partially paved dirt road that runs adjacent and parallel with the boundary wall of Tempe up to an entrance gate in the mid-section. In addition there is evidence of vagrant activities at the remote corner after the western end of Reynecke Avenue. This section is not affected by the road, but was included in the survey to complete the section up to the N1.

Finds related to the infrastructure





Figure 4: Manholes

GPS coordinates of manholes in this survey area:

S29° 04' 54.1" E26° 10' 46.5"	S29°04'52.8"S; E026°10'49.2"	S29° 04' 49.3" E26° 10' 56.4"
S29° 04' 35.4" E26° 11' 28.6"	S29° 04' 34.6" E26° 11' 31.1"	S29° 04' 34.1" E26° 11' 31.5"
S29° 04' 45.7" E26° 11' 04.0"	S29° 04' 48.1" E26° 10' 58.8"	S29° 04' 47.1" E26° 11' 00.9"
S29° 04' 51.5" E26° 10' 52.0"	S29° 04' 47.7" E26° 11' 01.7"	S29° 04' 40.1" E26° 11' 19.3"
S29° 04' 40.6" E26° 11' 18.0"	S29° 04' 39.7" E26° 11' 16.6"	S29° 04' 40.2" E26° 11' 15.6"
S29° 04' 41.5" E26° 11' 16.1"	S29° 04' 41.0" E26° 11' 15.8"	S29° 04' 43.0" E26° 11' 09.9"



Figure 5: Cements slabs with a metal trapdoor S29° 04' 57.7" E26° 10' 38.5"



Figure 6: Metal plate fixed on concrete slab - found close to above cement slab structure S29° 04' 57.8" E26° 10' 38.4"



Figure 7: A second cement slab feature with metal trapdoor and breathing pipe S29° 04' 50.2" E26° 10' 56.5"



Figure 8: Water pipe S29° 04' 35.4" E26° 11' 28.6"



Figure 9: Road drainage culverts (S29° 04' 41.5" E26° 11' 16.1"; S29° 04' 41.0" E26° 11' 15.8"; S29° 04' 42.1" E26° 11' 13.9")



Remains of demolished concrete/brick/metal pipe wall (Tempe)

Figure 10: Some of the rubble show evidence of having or having had a pipe inserted. The concrete rubble occurs piled over a large section of this survey area



Figure 11: In situ section of the concrete structure which is presumed to have been a wall



Figure 12: Building rubble, presumably linked with the earlier tempe wall - possibly the pillars of a gate entrance as it is thicker than the wall sections and contains metal brackets that might have served to fix the gate to the pillars - S29° 04' 52.4" E26° 10' 50.8"



Figure 14: Close-up view of metal brackets



Figure 13: Close-up view of bricks



Figure 16: Liquor bottles S29° 04' 55.3" E26° 10' 40.2"



Figure 15: Liquor bottles and rusted tins (modern) - typical of vagrant activities in unbuilt areas S29° 04' 58.3" E26° 10' 37.4"



Figure 18: Metal button with fake gemstones and a blue plastic bead found at the edge of Reynecke Avenue, near the bottom of the street.



Figure 17: Unidentified metal wreck - bears a Volkswgen stamp on the pipe section at the lower end (see insert) S29° 04' 52.6" E26° 10' 52.6"



Figure 20: Collection of surface finds in a radius of two meters. Out of context and modern. S29° 04' 51.2" E26° 10' 54.5"



Figure 19: Sherds of a white glazed ceramic plate showing minimal wear on account of exposure to the elements - S29° 04' 47.5" E26° 11' 02.8"



Figure 22: Small clusters of building material found in this section can be associated with building activities of buildings along Reynecke Avenue (visible in the background). No evidence of foundations were found in this section of the survey area.



Figure 21: Surface finds of glass sherds and washers (modern) S29° 04' 49.0" E26° 10' 58.8"



Figure 23: Car wreck and rubbish that indicates the car might have been used as a shelter - S29° 04' 38.9" E26° 11' 21.0"



Figure 24: A heavily weathered horseshoe. Finds like these are common in a wide area in and around the Tempe military base as, in addition to the military cavalry, it was also in later years the base for the mounted police squadron and to this day the police still use horses in Bloemfontein for patrolling the streets although at a much smaller scale. It could equally well have belonged to the horse of a civilian or farmer.. S29° 04' 38.2" E26° 11' 20.7"

Portion 137 of the Farm Bloemfontein 654:

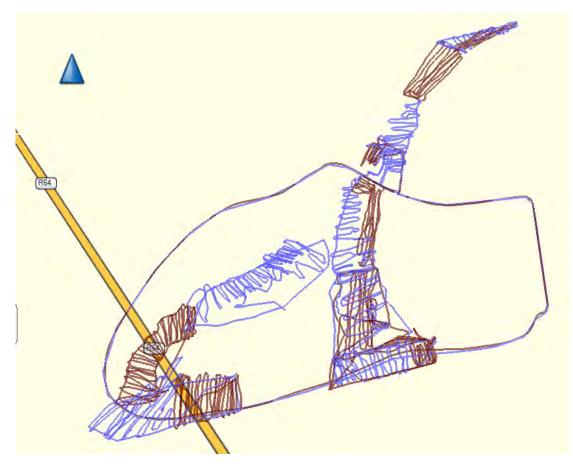


Figure 25: Track record for Portion 137. Please note the R64 (Nelson Mandela Road) is incorrectly positioned on the basemap as it is situated further to the left, outside the boundaries of the survey area.

This section concerns the south-western section of the road (refer to road plan on page 4) and on the southern side borders Erf 22011 on which the construction of the Heritage Lifestyle Centre will take place and which is also the reason for the current road project as part of its infrastructure.

Although the greater part of Portion 137 was also surveyed, only the tracks for the road area were recorded. The area was surveyed on the 20th, 21st, 22nd, 25th and 26th of February 2019 and contains surprisingly little evidence of human activities. It is clear that the site must have been graded at some stage as several, by now overgrown with vegetation, heaps of soil and stones can be found. Any activities that could've taken place prior to the 1970s when the Tempe military base started using this section adjoining the base for training purposes (shooting and driving), would have been obliterated by the grading that presumably took place during this time. The current surface material can primarily be linked to military activities and possibly vagrant inhabitation in the south-western corner under the Bluegum trees.

Finds:



Figure 27: Portion of a thin, rusted metal sheet - S29° 05' 20.0" E26° 10' 38.3"



Figure 26: Four cement bricks still attached to each other with morter. No sign of any foundations in the vicinity. S29° 05' 19.4" E26° 10' 38.9"



Figure 29: Several small mounds of stone and soil can be found in this area - now densely covered with grass



Figure 28: A mound with sparse vegetation to indicate the nature of the mounds



Figure 31: The lip, collar and neck of a Codd bottle – Codd bottles were widely in use between the 1870s and 1930s S29° 05' 18.5" E26° 10' 38.7"



Figure 30: A metal pipe planted in concrete- S29° 05′ 14.5″ E26° 10′ 37.3″



Figure 33: A rectangular moulded slab of cement painted white -S29° 05' 15.4" E26° 10' 37.6"



Figure 32: A single ceramic sherd with blue decoration - S29° 05′ 17.6″ E26° 10′ 38.3″



Figure 35: Green glass sherds - S29° 05' 13.5" E26° 10' 37.6"



Figure 34: Broken slab of concrete -S29° 05' 13.4" E26° 10' 36.9"



Figure 37: Concrete slabs - top one with two thin metal rods inside -S29° 05' 13.5" E26° 10' 37.6"



Figure 36: Rusted disc-shaped metal item - likely a small wheel hub - S29° 05' 11.8" E26° 10' 39.0"



Figure 38: Unidentified metal object - S29° 05′ 11.8″ E26° 10′ 38.1″



Figure 40: Piece of folded metal sheet -S29° 05' 11.5" E26° 10' 37.7"



Figure 39: Rusted, flattened metal object - likely associated with small wheel hub and rubber objects in next picture - S29° 05' 11.4" E26° 10' 37.8"



Figure 42: Sections of rubber -S29° 05' 11.3" E26° 10' 37.9"

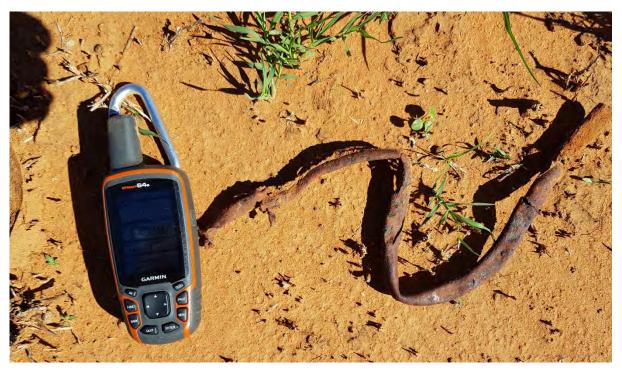


Figure 41: Twisted metal object -\$29° 05' 11.1" E26° 10' 37.8"



Figure 44: Building rubble - S29° 04' 55.1" E26° 10' 48.1"



Figure 43: Building rubble -S29° 05' 07.3" E26° 10' 38.3"



Figure 45: Drain culvert - western corner of Tempe military base -S29° 04' 55.7" E26° 10' 46.1"



Figure 46: Section of an armoured tank traction belt - S29° 04' 55.7" E26° 10' 46.1"



Figure 48: Concrete rubble - including concrete trapdoor -S29° 05' 10.2" E26° 10' 38.8"



Figure 47: Single ceramic sherd with brown print -S29° 05' 02.5" E26° 10' 40.5"



Figure 50: Lip of a codd bottle -S29° 05' 01.1" E26° 10' 41.8"



Figure 49: Light green and dark green glass fragments of bottles -S29° 05' 02.9" E26° 10' 40.4"



Figure 52: Metal bracket -S29° 05' 22.3" E26° 10' 27.3"



Figure 51: Tyres and concrete - metal bracket above in lower end of picture



Figure 54: Selection of glass and ceramic sherds collected over an area of 3x 3m – includes two decorated ceramic sherds and one codd bottle ball - -S29° 05' 21.3" E26° 10' 28.8" (taken at centre of collection area) – no associated midden or any indication of a building in the vicinity



Figure 53: Metal rod -S29° 05' 21.4" E26° 10' 30.2"



Figure 56: Dark green glass sherds - S29° 05' 20.1" E26° 10' 31.7"



Figure 55: Bullet shell - S29° 05' 20.6" E26° 10' 30.9"



Figure 57: Metal sheet and pipe - S29° 05' 21.8" E26° 10' 29.9"



Figure 58: Single sherd of blue glass - S29° 05' 20.3" E26° 10' 30.1"



Figure 59: Collection of glass sherds - S29° 05' 19.8" E26° 10' 31.2"



Figure 60: Glass sherds and a broken horse shoe - S29° 05' 20.3" E26° 10' 31.5"



Figure 61: Rusted metal pipe - S29° 05' 19.7" E26° 10' 32.0"



Figure 62: Several empty shells of 84 mm 'Prac Shots' were found, some in clusters as can be seen in the following pictures – refer to table of co-ordinates below



Figure 63: A cluster of prac shot shells

Co-ordinates for prac shot shells:

S29° 05' 16.4" E26° 10' 39.6"	S29° 05' 14.1" E26° 10' 38.8"
S29° 05' 20.1" E26° 10' 32.3"	S29° 05' 20.4" E26° 10' 28.8"
S29° 05' 12.6" E26° 10' 35.3"	

Laydown area:

The laydown area for road construction material as well as equipment falls within an area that has already been surveyed and reported on for the Heritage Lifestyle Centre (SAHRA Case ID: 10947), but is subject to mitigation measures which will have to take place before the commencement of the road construction. (Refer to Addendum A)

IMPACT ASSESSMENT

The cultural material remains can be grouped into military related finds (empty shells), wrecks of various types of vehicles, building rubble dumps, scrap metal without context as well as glass and ceramic sherds without context. The field survey finds confirm the desktop study that this area was not formally occupied since the establishment of Bloemfontein.

The study area can accordingly not be assigned a heritage grade of significance.

CONCLUSIONS & RECOMMENDATIONS

In light of the results of the field survey results, it is recommended that SAHRA approves the development with the following provisos:

- That the developer agrees to and sign the attached Chance Find Procedures document (Addendum B) and in turn ensure that once a construction company has been appointed, they too (including site managers) sign the CMP and commit to the implementation thereof. The developer-signed copy should be uploaded to SAHRIS;
- 2. That mitigation for Erf 22011 (which includes the laydown area) takes place before development can commence)(Refer to Addendum A);
- 3. That, on account of the intended road being within the Bloemfontein built environment, comments from Heritage Free State also be obtained.

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ADDENDUM 'A': SAHRA APPROVED RECOMMENDED MITIGATION MEASURES FOR ERF 22011, BLOEMFONTEIN

<u>Recommended mitigation measures for SAHRIS Case ID: 10947 as accepted by SAHRA final</u> <u>comment dd 3 January 2018 (letter attached)</u>

(Phase I Heritage Impact Assessment Report for the proposed Hospital and Heritage Lifestyle Centre, Bloemfontein – SAHRIS Case ID: 10947)

- 1. Mitigation measures for identified heritage effects that will be relocated and/or destroyed:
 - a. <u>Small monument</u> at northern boundary of Erf 22011 (Position A on Google Earth map): As the mitigation measure for this monument is to be relocated within the development site to one of the two Grade II heritage areas where it will be more visible and also safe from any accidental damage, the following applies:



Figure 1: Small memorial – diameter at base 75 cm X height 75 cm

- b. This cone-shaped monument is small (75 cm wide at its base and standing 75 cm high) and to avoid accidental damage from the onset, it should be relocated prior to the more intense phase of site clearance takes place. The Bron van Herinnering complex (position B on Google Earth map) is a more ideal site than the Dam van Trane as its immediate environs is in less danger of accidental damage during the construction phase on account of the trees around it that forms part of the monument. On top of this, the construction around the Dam van Trane would most likely take place during the later phases of the development process and the monument should preferably be moved once only.
 - i. Before moving the monument it should first be stabilized by covering it with pliable plastic sheeting followed by a thick layer of Plaster of Paris. Once the Plaster of Paris has sufficiently set to form an exterior shell, it can be carefully lifted by machinery in a manner that supports the bottom during the transfer process.
 - ii. The receiving site should first be leveled and the soil compacted, followed by a layer of partially set cement to make provision for any uneven sections at the bottom of the monument that might cause it to break once the upper casing has been removed.
 - iii. Once the cement base has fully cured, the upper casing can be cut away.

c. <u>Water troughs (Position C to H on Google Earth map)</u>: As part of the mitigation measures for the water troughs, at least two should be moved at the cost of the developer to the War Museum for curation and safekeeping. The following prerequisites apply :-



Figure 2: Brick troughs - 100 cm (width) X 685 cm (length) x 65 cm (height)

- i. The removal process should be planned and supervised by a person with applicable experience in relocating large and heavy, yet potentially fragile, objects.
- ii. Arrangements should be made with the War Museum for its exact placement on the receiving end prior to its removal to avoid further moving.
- iii. The remainder of the water troughs that will be incorporated into the landscape of the development area should be cordoned off during the development phase to avoid accidental damage as it is envisioned that these, too, will only be moved once the landscaping phase has been completed. The same provisos as in (i) and (ii) apply to relocating water troughs within the development area.
- d. <u>Historic brick ruin</u> (Position I on Google Earth Map), remainder area of Erf 22011 and <u>sunken structure</u>: (Position J on Google Earth map) and general surface of development area.



Figure 3: Foundation of historic brick ruin - 2.5 x 3 m



These areas should be cleared of vegetation in a non-invasive manner (i.e. without disturbing the surface layer of soil, e.g. with controlled burning) to enable a systematic surface collection by a suitably qualified archaeologist under a permit obtained from SAHRA. The purpose for the systematic surface collection is not immediate analysis, but instead rescuing archaeological material that can be curated at the National Museum (as official repository of archaeological material in the Free State) for future research. It is, accordingly, recommended that SAHRA's approval for the development should not be dependent on completion of the analysis of the collected material, but instead on completion of the collection process.

Figure 4: Sunken structure Outer dimensions 745 x 140 cm

Marker No.	Coordinates	Description	
А	29° 5'22.40"S; 26°10'29.20"E	Small monument	
В	29° 5'21.55"S; 26°10'45.58"E	Centre of Bron van Herinnering Area	
	29 5 21.55 5; 20 10 45.58 E	(circle of trees = outer perimeter)	
C	29° 5'25.16"S; 26°10'45.49"E	Water Trough 1	
D	29° 5'26.00"S; 26°10'45.88"E	Water Trough 2	
E	29° 5'27.36"S; 26°10'46.33"E	Water Trough 3	
F	29° 5'28.14"S; 26°10'46.68"E	Water Trough 4	
G	29° 5'29.63"S; 26°10'46.87"E	Water Trough 5	
Н	29° 5'27.76"S; 26°10'48.54"E	Water Trough 6	
I	29° 5'22.15"S; 26°10'42.74"E	Brick ruin (foundation)	
J	29° 5'24.78"S; 26°10'45.02"E	Sunken Structure	
Red Hatched	Surface Area = 16.2 sq/m	Laydown area for road construction	
Area			
Red Outline		Erf 22011, Bloemfontein	

Table 1: Coordinates and Description of markers in Figure 5 on Page 4:



Figure 5: Red outline = Erf 22011; Red hatched area = laydown area. Mitigation heritage elements as indicated in Table 1 = A to J on previous page (3).

Heritage Lifestyle Centre Development Bloemfontein

Our Ref: 10947



an agency of the Department of Arts and Culture

T: +27 21 462 4502 | F: +27 21 462 4509 | E: info@sahra.org.za South African Heritage Resources Agency | 111 Harrington Street | Cape Town P.O. Box 4637 | Cape Town | 8001 www.sahra.org.za

Enquiries: Ragna Redelstorff Tel: +27 (0)21 202 8651 Email: rredelstorff@sahra.org.za CaseID: 10947 Date: Wednesday January 03, 2018 Page No: 1

Final Comment

In terms of Section 38(8) of the National Heritage Resources Act (Act 25 of 1999)

Attention: MPC Developers (Pty) Ltd

Proposed development for a Heritage Lifestyle Centre on the Remainder of Erf 22011, Bloemfontein, Mangaung Metro Municipality, Free State Built Environment. The site is 23.6664ha in size and located adjacent to and to the north-west of the Tempe military grounds and to the north-east of the Bible House on Nelson Mandela Drive

The proposed project entails the development of a Heritage Lifestyle Centre on the Remainder of Erf 22011 in Bloemfontein, Free State Province. The extent of the site is 23.6664ha. Historical features on site are to be to incorporated and enhanced in the proposed development plans. Structures include commercial, business, retail, hotel and residential components as well as a hospital on Subdivision 1 of Erf 22011, for which a separate EIA process is n place (SAHRA CaseID 10939). A Heritage Scoping Report and desktop Palaeontological Impact Assessment were submitted with the application.

Philip, L. May 2017. Heritage Scoping Report for the proposed Hospital and Heritage Lifestyle Centre, Bloemfontein.

The author identified two key sites from the Anglo-Boer War, namely the 'Dam van Trane' and the borehole 'Bron van Herinnering', both of which will be incorporated in the development. The proposed area is known for its use during the Anglo-Boer War and World War I. Preliminary proposed gradings are Grade II for the Bron van Herinnering monument, Grade IIIA for the 'Dam van Trane' and Grade IIIB for the remainder of the Erf. The author recommends that a full phase 1 Heritage Impact Assessment be done for the proposed area.

An amended PIA including all figures as requested in an interim comment from 24 May 2017 has been submitted:

Rossouw, L. April 2017. Palaeontological Desktop Assessment of portion of Erf 1/22011 and Remainder of Erf 22011, Farm 654, Bloemfontein, FS Province.

The proposed development area is underlain by sediments of the Late Permian Adelaide Subgroup (Karoo Supergroup), mantled by well developed superficial Quaternary deposits of low to very low palaeontological sensitivity. As the Adelaide Subgroup is known to contain fossils, the author recommends that any excavation

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T: +27 21 462 4502 | F: +27 21 462 4509 | E: info@sahra.org.za South African Heritage Resources Agency | 111 Harrington Street | Cape Town P.O. Box 4637 | Cape Town | 8001 www.sahra.org.za

Enquiries: Ragna Redelstorff Tel: +27 (0)21 202 8651 Email: rredelstorff@sahra.org.za CaseID: 10947 Date: Wednesday January 03, 2018 Page No: 2

extending 1 m² and deeper than 1 m into unweathered/fresh bedrock as well as when geotechnical sampling is to be conducted, will need monitoring by a professional palaeontologist.

A Heritage Impact Assessment (HIA) as requested in an interim comment from 24 May 2017 has also been submitted:

Philip, L. 2017. Phase I Heritage Impact Assessment Report for the proposed Hospital and Heritage Lifestyle Centre, Bloemfontein.

The author identified the following heritage resources:

Of high significance:

- Dam van Trane water body
- Bron van Herinnering monument
- small memorial of cone-shaped packed stones

Of medium significance:

- Water troughs
- Concentration Camp/ WW1 refugee camp surface areas

Of low significance:

- 8 foundations
- Brick and mortar ruin

Separate recommendations were provided for each heritage resource identified. A CMP must be implemented that includes monitoring and recommendations as stipulated in the HIA.

Our Ref: 10947



Department of Arts and Culture T: +27 21 462 4502 | F: +27 21 462 4509 | E: info@sahra.org.za

South African Heritage Resources Agency | 111 Harrington Street | Cape Town P.O. Box 4637 | Cape Town | 8001 www.sahra.org.za

Enquiries: Ragna Redelstorff Tel: +27 (0)21 202 8651 Email: rredelstorff@sahra.org.za CaseID: 10947 Date: Wednesday January 03, 2018 Page No: 3

Final comment

The SAHRA Archaeology, Palaeontology and Meteorites (APM) Unit reviewed the HIA and PIA and accepts the recommendations therein. The development may go ahead and if Environmental Authorisation is granted, the following conditions and the ones in the heritage reports must be strictly adhered to and must be incorporated into the Environmental Management Programme (EMPr) for implementation:

1. Mitigation and demolition permits must be applied for.

2. A CMP must be implemented that includes monitoring and recommendations as stipulated in the HIA.

3. A Chance Finds Procedures must be developed for the project to ensure that standard protocols and steps are followed should any heritage and/or fossil resources be uncovered during all phases of the project. These procedures should outline the steps and reporting structure to be followed in the instance that heritage resources are found. This must be included in the Environmental Awareness Plan.

4. Should any objects of archaeological or palaeontological remains be found during construction activities, work must immediately stop in that area and the Environmental Control Officer (ECO) must be informed.

5. The ECO must inform the South African Heritage Recourse Agency (SAHRA) and contact an archaeologist and/or palaeontologist, depending on the nature of the find, to assess the importance and rescue them if necessary (with the relevant SAHRA permit). No work may be resumed in this area without the permission from the ECO and SAHRA.

6. The final EIA and appendices must be submitted to SAHRA upon submission to DEA. Should the project be granted Environmental Authorisation, SAHRA must be notified and all relevant documents submitted to the case file.

Should you have any further queries, please contact the designated official using the case number quoted above in the case header.

Yours faithfully

Ry Lal

Our Ref: 10947



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T: +27 21 462 4502 | F: +27 21 462 4509 | E: info@sahra.org.za South African Heritage Resources Agency | 111 Harrington Street | Cape Town P.O. Box 4637 | Cape Town | 8001 www.sahra.org.za

Enquiries: Ragna Redelstorff Tel: +27 (0)21 202 8651 Email: rredelstorff@sahra.org.za CaseID: 10947

Date: Wednesday January 03, 2018 Page No: 4

Ragna Redelstorff Heritage Officer South African Heritage Resources Agency

Phillip Hine Acting Manager: Archaeology, Palaeontology and Meteorites Unit South African Heritage Resources Agency

ADMIN:

Direct URL to case: http://www.sahra.org.za/node/397623 (DESTEA, Ref: NEAS Ref: FSP/EIA/0000124/2017)

Terms & Conditions:

- 1. This approval does not exonerate the applicant from obtaining local authority approval or any other necessary approval for proposed work.
- 2. If any heritage resources, including graves or human remains, are encountered they must be reported to SAHRA immediately.
- 3. SAHRA reserves the right to request additional information as required.

ADDENDUM 'B' : CHANCE FINDS PROCEDURE DOCUMENT



Department of Archaeology and Anthropology National Museum 36 Aliwal Street

Bloemfontein

ARCHAEOLOGICAL/PALAEONTOLOGICAL CHANCE FIND PROCEDURE (CFP)

Prepared for

EAP: Marguerite Cronjé Developer: CMP Developers Project co-ordinator for construction: Development Project: Heritage Road, Bloemfontein

Date: 4 March 2019

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- 2. POTENTIAL IMPACT ACTIVITIES
- 3. RELEVANT LEGISLATION
- 4. EXECUTION
- 5. **RESPONSIBILITIES**
- 6. ACKNOWLEDGEMENT OF RECEIPT OF CFP AND ITS LEGAL IMPLICATION

1. SUMMARY

The purpose of this document is to address the possibility of archaeological and/or palaeontological deposits becoming exposed during ground altering activities within the project area and to provide protocols to follow in the case of a chance find to ensure that such sites are documented and protected as required.

Archaeological sites are protected by the National Heritage Resources Act, No 25 of 1999 and these procedures are accordingly to ensure compliance with laws and regulations related with cultural heritage in South Africa. Archaeological/palaeontological sites are non-renewable, very susceptible to disturbance and are finite in number. Archaeological sites are an important resource that is protected for their historical, cultural, scientific and educational value. Impacts to archaeological sites must be avoided or managed by development proponents. The objectives of this Chance Find Procedure (CFP) are to promote preservation of archaeological data while minimizing disruption of construction scheduling. All on-site personnel and contractors are required to be informed of the Archaeological Chance Find Procedure and have access to a copy while on the construction site.

2. POTENTIAL IMPACT ACTIVITIES

Activities that involve excavation, movement, or disturbance of soils have the potential to impact archaeological materials, if present. Activities such as road construction, land clearing, and excavation of foundations or for any other purpose, are all examples of activities that may adversely affect archaeological deposits.

A permit is required for any subsurface investigation of an archaeological site or investigation with the intent to locate a site. Disturbance and/or removal of artefacts from an archaeological site may result in penalties.

3. RELEVANT LEGISLATION

The National Heritage Resources Act (NHRA) automatically protects all archaeological and palaeontological sites, whether on government or private land.

Archaeological means:-

- material remains resulting from human activity 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;
- rock art, being any form of painting, engraving or other graphic representation on a fixed rock surface or loose rock or stone, which was executed by human agency and which is older than 100 years, including any area within 10m of such representation;
- features, structures and artefacts associated with military history which are older than 75 years and the sites on which they are found.

Palaeontological means any fossilised remains or fossil trace of animals or plants which lived in the geological past, other than fossil fuels or fossiliferous rock intended for industrial use, and any site which contains such fossilised remains or trace. In terms of this particular development Sections 35 and 36 of the NHRA are applicable of which the relevant sections are quoted herewith:

Section 35(3): (Archaeology, palaeontology and meteorites)

Any person who discovers archaeological or palaeontological objects or material or a meteorite in the course of development or agricultural activity must immediately report the find to the responsible heritage resources authority, or to the nearest local authority offices or museum, which must immediately notify such heritage resources authority.

Section 36(6): (Burial grounds and graves)

Subject to the provision of any other law, any person who in the course of development or any other activity discovers 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 resources authority which must, in co-operation with the South African Police Service and in accordance with regulations of the responsible heritage resources authority—

- (a) 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
- (b) 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 reinterment of the contents of such grave or, in the absence of such person or community, make any such arrangements as it deems fit.

4. CHANCE FIND PROCEDURE EXECUTION

In the event of the accidental exposure of previously subsurface archaeological material as per description in section 3 above, the following applies:

- All construction activity in the vicinity of the remains is to cease immediately.
- The find location must be recorded, and all remains must be left in place.
- An archaeologist should be contacted to investigate.
- Potential significance of the remains will be assessed and mitigative options will be identified.
- If the significance of the remains is judged to be sufficient to warrant further action and they cannot be avoided, then the investigating archaeologist in consultation with the Archaeology, Palaeontology and Meteorite (APM) unit of the South African Heritage Resources Agency (SAHRA) will determine the appropriate course of action.
- In the case of human remains, the SA Police pathologist must be contacted to determine if it is of an archaeological nature. If not, the remains will be dealt with by the SAP.
- If the remains are assessed to be archaeological, an archaeologist <u>with experience in</u> <u>archaeological burial sites</u> should be contacted who will in consultation with the Graves and Burial unit of SAHRA determine the course of action to be taken. Options could include avoidance or respectful removal and reburial.

For the CFP to be effective, the site manager must ensure that all personnel on the development site understand the CFP and the importance of following it if cultural heritage resources are encountered. Additionally, training on cultural heritage resources that might potentially be found on site should be provided to key on-site personnel.

5. RESPONSIBILITIES

Developer	The developer must undertake to ensure the project- coordinator assigned for this project (if different to the developer) signs this document and consequently takes responsibility for implementing this Chance Find Procedure	
Project coordinator	The top level person who has ultimate responsibility for the implementation of this plan and who will be legally responsible to ensure the proper execution thereof. This is typically the firm that subcontracts all the various service providers.	
Project manager(s)	The person responsible for supervising all site teams and has the responsibility that all site members are aware of the archaeological chance find procedures.	
Archaeology consultant	The consultant is referred in the event of a chance find for his/her advice and for reporting and recording found items according to applicable legislation.	

The following people hereby acknowledge receipt of a copy of the CFP and upon signature agrees to implement the CFP if and when required:

DEVELOPER:

.....

Name

.....

ID Number

.....

Company/Employer

.....

Signature

PROJECT COORDINATOR: (To be completed and signed once such person has been appointed)

..... Name **ID Number** Company/Employer Signature PROJECT MANAGER: (to be completed and signed once such a person has been appointed) Name **ID Number** Company/Employer Signature

ARCHAEOLOGIST: (to be completed and signed once such a person has been appointed)

Name ID Number Company/Employer

Signature

Please note a copy of this document, signed by the developer, must be uploaded to SAHRIS at the same time SAHRA is notified of this project by means of registering the case for statutory commenting.

ADDENDUM 'C' : PUBLIC PARTICIPATION NOTICES







LOCAL MUNICIP

11 January 2019

ENVIRONMENTAL IMPACT ASSESSMENT: PUBLIC PARTICIPATION PROCESS

OMGEWINGSIMPAKEVALUERINGSPROSES: OPENBARE DEELNAMEPROSES

Notice is given in terms of Section 41(2)(c) of Regulations No. 326 published in Government Notice No. 40772 of 7 April 2017 of the National Environmental Management Act (Act No. 107 of 1998) (NEMA) with the intent to carry out the following activity in respect of which an Environmental Authorisation in terms of NEMA is required:

- Project: Proposed development of a road between the Heritage Ufestyle Centre and Reynecke Avenue / Frans Kleynhans Road, Bloemfontein.
- Locality: The proposed road is planned to the east of the N1 and to the west and north of the Tempe Military Grounds to connect the Heritage Lifestyle Centre development (located at the "Dam van Trane") to Heuvelsig. A portion of the proposed road will also run parallel to Reynecke Avenue up to Frans Kleynhans Road, Heuvelsig, Bloemfontein.
- Projek: Voorgestelde ontwikkeling van 'n pad tussen die Erfenis Leefstylsentrum en Reyneckelaan / Frans Kleynhansstraat, Bloemfontein.
- Ligging: Die voorgestelde pad word beplan oos van die N1 en wes en noord van die Tempe Militêre Gronds om die Erfenis Leefstylesentrum (geleë by die "Dam van Trane") en Heuwelsig te verbind. 'n Gedeelte van die voorgestelde pad sal ook parallel met Reyneckelaan loop tot by Frant Kleynhansstraat, Heuwelsig, Bloemfontein.
 - Applicant / Applikant: MPC Developers

Should you require additional information, have comments on the project or would like to register as an interested party, please contact us by <u>11 Fabruary 2019</u>.

indien u enige navrae het, kommentaar wil lewer of as 'n belangstellende party vil registreer, kontak ons asb teen 11 Februarie 2019.

Marguerite

tel: 082 703 0547 + emoil: morouertistronin@pmoil.com / P.O. Box 29729, Danhol. Blasmformein. 9310



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	XVEBUCOW-VBTIOTIS	Aansoeke sluit: 21 Januarie 2019 Salaris onderhandelbaar. Diensaanvaarding so spoedig moontlik. Stuur aansoeke na careers@sernickgroup.co.za	 Sterk MS Excel SQL data basis navrae Meat Matrix SAFEX-boekhouding 	ONDERVINDING VAN VOLGENDE TOT VOORDEEL VAN AANSOEK: • Sage Evolution en People • Caseware	· CIMA · CA (SA)
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miership Rugby word gese dat Reinach "nuwe lewe ge blaas het" in 'n sukkelende Northampton Saints. Reinach (28) het in Desember twee onvergeetlike drieë gedruk in wedstryde teen die Exeter Chiefs en Worcester Warriors.

Worcester Warriors. "Hy is wat spelpeil betref die voorste skrumskakel in die Premierliga en ongelooflik belangrik vir die Northampton Saints," sê Ugo Monye, voormalige Engelse



Cobus Reinach met sy trofee vir die Engelse Premierliga se Speler van die Maand vir Desember. Foto: FACEBOOK

vleuel wat Reinach fyn dophou in sy rol as kommentator by BT Sport. Saints geblaas. Sy spelpeil in die agtereenvolgende wedstryde teen Worcester

"Hy het nuwe lewe in die

en Exeter - met twee onder-

cester in 'n gemaklike posisie gewees het, maar daardie duikslag, en die onderskepdrie teen Exeter, het Reinach laat uitstaan." Reinach is die eerste Suid-Afrikaner sedert Ruan Ackermann, in November 2017, wat dié toekenning

■ Reinach het al tien toetse
 ■ Reinach het al tien toetse
 vir Suid-Afrika gespeel,
 waarvan die laaste in 2015
 teen Argentinië in Buenos
 Aires was.



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X1V5G83R-VB11011

teen 11 Februarie 2019 Locality: Project: carry out the following activity in respect of which an Environmental Authorisation in terms of NEMA is required: 7 April 2017 of the National Environmental Management Act (Act No. 107 of 1998) (NEMA) with the intent to Indien u enige navrae het, kommentaar wil lewer of as 'n belangstellende party wil registreer, kontak ons asb interested party, please contact us by 11 February 2019. Should you require additional information, have comments on the project or would like to register as an Notice is given in terms of Section 41(2)(c) of Regulations No. 326 published in Government Notice No. 40772 of Applicant / Applikant: 101: 082 702 05A7 · Die voorgestelde pad word beplan oos van die N1 en wes en noord van die Tempe Militêre The proposed road is planned to the east of the N1 and to the west and north of Tempe Military Grounds to connect the Heritage Lifestyle Centre development (located at the Dam van Trane) to Proposed development of a road between the Heritage Lifestyle Centre and Reynecke Avenue / 'n Gedeelte van die voorgestelde pad sal ook parallel met Reyneckelaan loop tot by Frans Gronde om die Erfenis Leefstylesentrum (geleë by die Dam van Trane) en Heuwelsig te verbind. Voorgestelde ontwikkeling van 'n pad tussen die Erfenis Leefstylsentrum en Reyneckelaan / Frans Frans Kleynhans Road, Bloemfontein. Kleynhansstraat, Heuwelsig, Bloemfontein. Kleynhansweg, Bloemfontein. Kleynhans Road, Heuwelsig, Blloemfontein. Heuwelsig. A portion of the proposed road will also run parallel to Reynecke Avenue up to Frans **OMGEWINGSIMPAKEVALUERINGSPROSES** ENVIRONMENTAL IMPACT ASSESSMENT: MPC Developers PUBLIC PARTICIPATION PROCESS OPENBARE DEELNAMEPROSES Marqueitte P.O. Box 29729, Da

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