

Phase I Heritage Impact Assessment Report for the proposed Hospital and Heritage Lifestyle Centre, Bloemfontein

Location	Erven 22011 and 1/22011, Bloemfontein
Local and District Municipality	Mangaung Metro Municipality
Magisterial District	Bloemfontein 445
Province	Free State

Erf 22011	Erf 1/22011
DESTEA: Ref: EMS, 28(1), 15, 4(b) ii (bb), 6(b) ii (bb), 8(b) ii (bb) (cc), 14(ii) (a) (b) (bb) ii (bb)/1705 NEAS ref: FSP/EIA/0000124/2017	DESTEA: Ref: EMB/27/17/04 NEAS ref: FSP/EIA/0000111/2017 Environmental authorisation granted
SAHRIS Case ID: 10947	SAHRIS Case ID: 10939 Final comment issued : case closed
Type of development: Commercial, Business, Retail, Hotel, Residential, Heritage areas	Type of development: Hospital (Institutional)

Developer	EAP	Heritage Consultant
MPC Developers (Pty) Ltd	Mrs M Cronje, independent consultant for Spatial Solutions Inc	Ms L Philip, National Museum



30 October 2017


Author: Loudine Philip

Declaration of Independence and CV:

This Phase I 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, Spatial Solutions Inc.

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.

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Acronyms used in this report:

ABW	Anglo-Boer War
ASAPA	Association for Southern African Professional Archaeologists
BAR	Basic Assessment Report
BCE	Before Common Era
BID	Basic Information Document
DWA	Department of Water Affairs
EAP	Environmental Assessment Practitioner
EIA	Environmental Impact Assessment
EIR	Environmental Impact Report
FS	Free State
FS-DESTE A	Free State Department of Economic, Small Business Development, Tourism and Environmental Affairs
FS DRC	Free State Dutch Reform Church

HIA	Heritage Impact Assessment
HFS	Heritage Free State (the same as FS PHRA)
IDP	Integrated Development Program
I&AP	Interested and Affected Party
MOSS	Metropolitan Open Space System
NEMA	National Environmental Management Act (no 107 of 1998)
NHRA	National Heritage Resources Act (no 25 of 1999)
OFS	Orange Free State
FS PHRA	Free State Provincial Heritage Resources Authority
S&EIR	Scoping & Environmental Impact Reports (two separate reports)
SAHRA	South African Heritage Resources Agency
SAHRIS	South African Heritage Resources Information System
SDF	Spatial Development Framework
SG	Survey-general
WW1	World War I
WW2	World War II
ZAR	Zuid-Afrikaansche Republiek (Old Transvaal Boer Republic)
<i>RE ARCHIVAL RECORDS</i>	
VAB	Free State Archive Repository
CO	Colonial Secretary [Source of document]
IBB	Imperial British Blue Books
SRC	Chief Superintendent Refugee Camps [Source of Document]

Executive Summary

Purpose of the study:

This report was prepared in request of Spatial Solutions Inc. on behalf of MPC Developers (Pty) Ltd. in support of two Section 38(8) applications in terms of the National Heritage Resources Act, no 25 of 1999 (NHRA) as required in terms of the National Environmental Management Act, No 107 of 1998 (NEMA) and 2014 EIA Regulations, as amended, Government Notices Nos. R.324 to 327 of 7 April 2017. It involves two adjacent properties, erven 22011 and 1/22011, Bloemfontein, each with a different development focus, but intended to be a complementary development as a whole. The two projects are, however, not interdependent as each is viable as an entity on its own. Due to the close proximity of the two properties it was agreed that in order to avoid duplication, a single heritage report will be compiled and both consenting and commenting authorities are requested to provide their input to each property as individual entities.

Brief description of the proposed development project:

Erf 22011: The proposed mixed-use development is for a Heritage Lifestyle Centre with commercial, retail, office, hospitality and residential components as well as incorporating and enhancing current historical features ('Dam van Trane' and 'Bron van Herinnering' monument) with an on-site museum/information centre (See Appendix A). The environmental impact assessment (EIA) is undertaken in terms of the National Environmental Act, no 107 of 1998 (NEMA) and EIA 2014 Regulations, as amended (Reg. No R324 to 327 of 7 April 2017). For this development the aforementioned EIA regulations require both a scoping and an environmental impact report (S&EIR).

Erf 1/22011: This site, which is already zoned 'Institutional' and accordingly allows for the erection of a hospital, is still indicated on the Mangaung Metro Municipality's Micro Framework Map of 2016/7 as 'MOSS' (Metropolitan Open Space System) and listing notice 3 activities in terms of the NEMA is triggered and accordingly requires authorisation from the Free State Department of Economic, Small Business Development, Tourism and Environmental Affairs (FS-DESTE) with the South African Heritage Resources Agency being the statutory commenting authority in terms of Section 38(8) of the National Heritage Resources Act, no 25 of 1999 (NHRA). This development, however, only requires a basic assessment report (BAR) in terms of the EIA Regulations No 982 published on 14 December 2014.

[Please note that although this report covers both erven 22011 and portion 1 of 22011, for official purposes only Erf 22011 is relevant. The information on Erf 1/22011 is solely included to supplement the SAHRIS record on this erf for future reference.]

Brief methodology of desktop study and fieldwork:

A *desktop study* was undertaken for the scoping report using, inter alia, popular as well as academic articles, topic specific books, general historical references, 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 such as the War Museum.

The focus was to obtain a history of the development and land use of the area from the earliest time to date, in order to make an informed decision on its potential historic value. This was also needed to inform the physical reconnaissance that followed.

Pedestrian field surveys were conducted during all four seasons over a combined period of nine days by one qualified archaeologist and one experienced field assistant. The entire development area was walked in transects approximately 10-15 m apart running from north to south as well as east to west for a visual surface inspection. Features, architectural remains and small finds (e.g. scatters of pottery and glass sherds, etc.) were recorded using a Garmin GPSMap 64s and GPSmap 60CSx handheld devices as well as Sony Cyber-shot DSC-H7 camera. Measurements of architectural remains as well as, where possible, features were recorded in a field notebook.

Identification and outline of consultation with interested and affected parties relating specifically to heritage resources:

In addition to the posting of site notices and public notices in one local newspaper and one provincial newspaper for each of the proposed developments, potential heritage stakeholders for both development projects were identified by the heritage practitioner prior to the afore-mentioned notices and provided with a basic information document (BID). As the proposed development area falls within the area utilised by the British during the Anglo-Boer War period, institutions/organisations within the Afrikaner community were targeted as potential stakeholders.

After completion of the scoping report the stakeholders were provided with a copy thereof and afforded a 30-day commenting period. At the end of the former period, a stakeholder meeting was held to discuss any concerns they might have had at the time. As the response was in general positive, a draft copy of the current HIA report was provided for a further 30-day period for commenting to include in the current final report. By request of one of the stakeholders, this was in turn extended by a further three weeks. All comments are included in this report.

Findings:

Site Name	Short Description	Location in relation to closest development components	Significance/field rating	Impact rating before mitigation	Impact rating after mitigation	Recommended mitigation measures
Dam van Trane	An artificial body of water created during the ABW for Concentration Camp B	Within the project boundary	High/Grade II	Medium/High	Low	To be incorporated in development plans and preserved as heritage area. Requires a CMP which should include monitoring by an ecologist during the development phase.
Bron van Herinnering complex	A monument complex consisting of a brick entrance, a centre platform around the historic tube well, a statue of a woman and children, an information plaque set on a podium, the planted indigenous trees surrounding the complex that forms part of the symbolism of the monument and a small marble headstone within the complex.	Within the project boundary	High/Grade II	Medium/Low	Low	To be incorporated in development plans and preserved as monument and heritage area as is. Requires a CMP which includes monitoring of any potential negative impacts during the construction phase and maintenance thereafter.
Small memorial	Cone-shaped packed stones bound with cement and a plaque affixed to it commemorating the women and children who died in the Bloemfontein concentration camps	Within the project boundary	High/Grade IIIB	Medium/High	Low	To be relocated to one of the two above heritage areas, incorporated in development plans and preserved as memorial. To be included in the CMP for maintenance.
Water troughs	6 x concrete water troughs on a stand of dressed dolorite 'bricks'	Within the project boundary	Medium/ Grade IIIB	Medium/High	Low	Two representative examples to be relocated to the War Museum for curation and the remainder to be incorporated into the landscaping of the development area

						where possible and included in the CMP for maintenance thereafter.
Foundations	8 foundations	Within the project boundary	Low/Grade IIIC	Low	Low	Sufficiently recorded – no further mitigation required. Can be demolished.
Brick Ruin	Brick and mortar ruin	Within the project boundary	Low/Grade IIIC	Medium	Low	Archaeologist to inspect the ruin and immediate surrounds for any evidence as to the purpose of the structure after vegetation has been cleared during the pre-construction phase. All information to be recorded, any cultural material collected and reported to SAHRA as part of mitigation measures. Can be removed after sufficiently recorded.
ABW Concentration Camp/ WW1 refugee camp surface areas	According to Prof Raath, an expert in the field of the Bloemfontein concentration camps, Camp B of the Bloemfontein concentration camps originally started in this area, but was soon moved to a more sloped area for better drainage. He also claims that the hospital for the camps was adjacent (not in) the development area and that the troughs were used for the hospital laundry. The WW1 internment camp, however, was in its entirety situated on this erf and was also occupied for a longer period than any of the concentration camps.	Within the project boundary	Medium/ Grade IIIB	High	Low	Archaeologist to do a systematic reconnaissance of the area after clearance of vegetation and systematically collect and record any further finds that could shed light on the occupation period of this site as part of future research. Material to be collected under permit obtained from SAHRA and curated at the National Museum as official repository of archaeological material for the Free State. This should include the area for the road that runs along an existing gravel road on the adjacent property and has been severely disturbed by military activities subsequent to the ABW and WW1.

The ABW concentration camps form an important part of South Africa's history and served in the immediate post-ABW years to forge a strong Afrikaner cohesion. Although there were casualties on both sides of the war, it wiped out almost an entire generation of Afrikaners in the two former Boer Republics of Transvaal and the Orange Free State in terms of the number of deaths of children under 18 years of age. As a minority group in South Africa then, as it is now, it had a huge economic effect in the long run on the Afrikaner communities at a personal level. Understandably, concentration camp areas serve as visual reminders of this momentous event in the history of South Africa. A decision to condone development in such an area will therefore not be without the assurance that the memory of its original function will be kept alive for future generations as part of the South African heritage.

There are several reasons why sensitive development is preferred to the status quo, namely:

1. The development area contains only a small section of the ABW-related sites and activities and what remains will be better served and preserved as part of the proposed development and as part of the Anglo-Boer War Museum's collections.
2. In addition to this, the development area did not form part of any of the actual concentration camps for women and children, but the Dam van Trane (which is described as having been some distance from the camps) was used by the inhabitants of these camps. This, however, will be preserved and incorporated into the development plans and will have a stronger possibility of survival than is currently the case.
3. The erection of the Bron van Herinnering monument complex on the site was a positive move in commemorating the concentration camps in a visible and positive manner, but due to its location in an unbuilt area is not safe to visit alone (should one be able to gain access to the area). This development would, accordingly, make the monument more accessible to the general public.
4. Incorporating the four heritage components¹ dating to and/or commemorating the women and children of the ABW into the development of the area, including the addition of an on-site museum and amphitheatre, brings it back into the public sphere and is considered a move from exclusivity to inclusivity which will ensure its survival, as well as the memory of concentration camps, in future years. The museum would provide information that is not currently available on the site and the amphitheatre will ensure that future celebrations on the 16th of December, as is currently the practice, can continue. For this purpose a conservation management plan (CMP) for the heritage components should form a vital part of the development plans.

¹ Bron van Herinnering complex, Dam van Trane, small mortar and stone memorial, and water troughs

5. In terms of the ABW events, the site has already potentially been compromised by its use for a second internment camp for German women and children during WWI. However, the latter merits further research and it is important that as mitigation measure all surface material should be collected under permit in a systematic and scientific manner before development can take place and curated in a museum for future potential research projects on the military landscape of Tempe. It should be noted that no middens were discovered within the development area and it is very unlikely that any existed during either the ABW or WW1 period.
6. The water troughs are fast deteriorating and the relocation of some of them to the Anglo-Boer War Museum for curation would ensure its survival as part of the military history of Bloemfontein.
7. The palaeontological impact assessment is negative in terms of any potential palaeontological deposits.

Recommendations:

For the aforementioned reasons it is, accordingly, recommended that the development is approved in terms of its heritage component, provided that the provisos and mitigation measures as stated in this report are made obligatory and are adhered to before development can commence.

1. Introduction and Terms of Reference

Introduction to the development project:

This report is the result of a desktop analysis for an assessment of the potential impact the proposed new developments 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 Spatial Solutions Inc on behalf of MPC Developers (Pty) Ltd.

Terms of Reference:

The developers obtained 99-year leasehold rights on erven 22011 and 1/22011, Bloemfontein, from the owner of the properties, the Dutch Reformed Church of the Free State. MPC Developers intend to develop the two properties as a hospital complex (erf 1/22011) as well as a Heritage Lifestyle Centre with commercial, business, retail, hospitality, residential and heritage components (erf 22011). The latter site contains an existing monument, the 'Bron van Herinnering', as well as a small dam locally known as the 'Dam van Trane', both associated with the Bloemfontein concentration camp. Both these elements, as well as a small memorial and water troughs are incorporated into the plans for the new development. In addition to this, a small on-site museum on the concentration camp as well as an amphitheatre is also planned as part of designated heritage areas.

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 such heritage by a suitably qualified professional and the author was contracted for this. The two properties were originally one erf and it was agreed that a single report covering both properties would avoid unnecessary duplication in terms of the background history of the area. Reporting includes a Scoping Report as well as a Phase I HIA after a field survey has been completed.

The brief for the heritage report is to provide a full history of the subject properties in order for the stakeholders identified by the heritage consultant, 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 scoping phase and any remains that might be identified 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 commenting authority and the developers.

Applicant and EAP details:

Applicant	EAP
MPC Developers (Pty) Ltd	Mrs M Cronje, independent consultant for Spatial Solutions Inc

2. Project Description2.1 General Project Area:

Farm Bloemfontein No. 654 (Bloemfontein Townlands) Free State Province	Remainder Erf 22011 Size: 28, 0592 ha SG Diagram No 886/79 Current Zoning: Unidentified Title Deed No: 13415/80 Owner: Dutch Reformed Church, Free State Province
	Erf 1/22011 (for record purposes only) Size: 3,5539 ha SG Diagram No 891/1990 Current Zoning: Institutional Title Deed No: 14300/1990 Owner: Dutch Reformed Church, Free State Province
Magisterial District	Bloemfontein 445
Local Authority	Mangaung Metropolitan Municipality
1:50 000 map sheet number	2926AA Bloemfontein
Central co-ordinate of the development	29°5'27.35"S; 26°10'36.89"S

2.2 Development detail:

ERF 22011	
Type of Development	Heritage Life Style Centre
Proposed Components	Commercial, Business, Retail, Hospitality, Residential, Museum, Monument, Heritage Area with amphitheatre
Proposed Activities	Site clearance, geotechnical sampling, blasting if required, construction phase, and landscaping. Laydown areas and construction camps will be on-site within the

	development area.	
Applicable Legislation	National Environmental Management Act, No 107 of 1998) (NEMA) 2014 EIA Regulations, as amended (Reg. No. 324, 325, 326 and 327 of 7 April 2017).	
	National Heritage Resources Act, No 25 of 1999 (NHRA), Section 38(8)	
Size of project components:		
Proposed erf:	Description:	Site Area (m ²)
Erf 22011/02	Motor Car Dealer	12 664
Erf 22011/03	Hotel	9 948
Erf 22011/04	Private Open-Air Theatre	17 400
Erf 22011/05	Office	3 160
Erf 22011/06	Office	3 155
Erf 22011/07	Retail 1	42 672
Erf 22011/08	Doctor's Rooms	11 201
Erf 22011/09	Parking	8 854
Erf 22011/10	Retail 2	88 525
Erf 22011/11	Street	39 541

ERF 1/22011 (for record purposes only)	
Type of Development	Hospital Complex
Proposed Components	Hospital and associated buildings
Proposed Activities	Site clearance, geotechnical sampling, blasting if required, construction phase, and landscaping. Laydown areas and construction camps will be on-site within the development area.
Applicable Legislation	National Environmental Management Act, No 107 of 1998) (NEMA) EIA Regulations (Reg. No. 982 of 14 December 2014).
	National Heritage Resources Act, No 25 of 1999 (NHRA), Section 38(8)

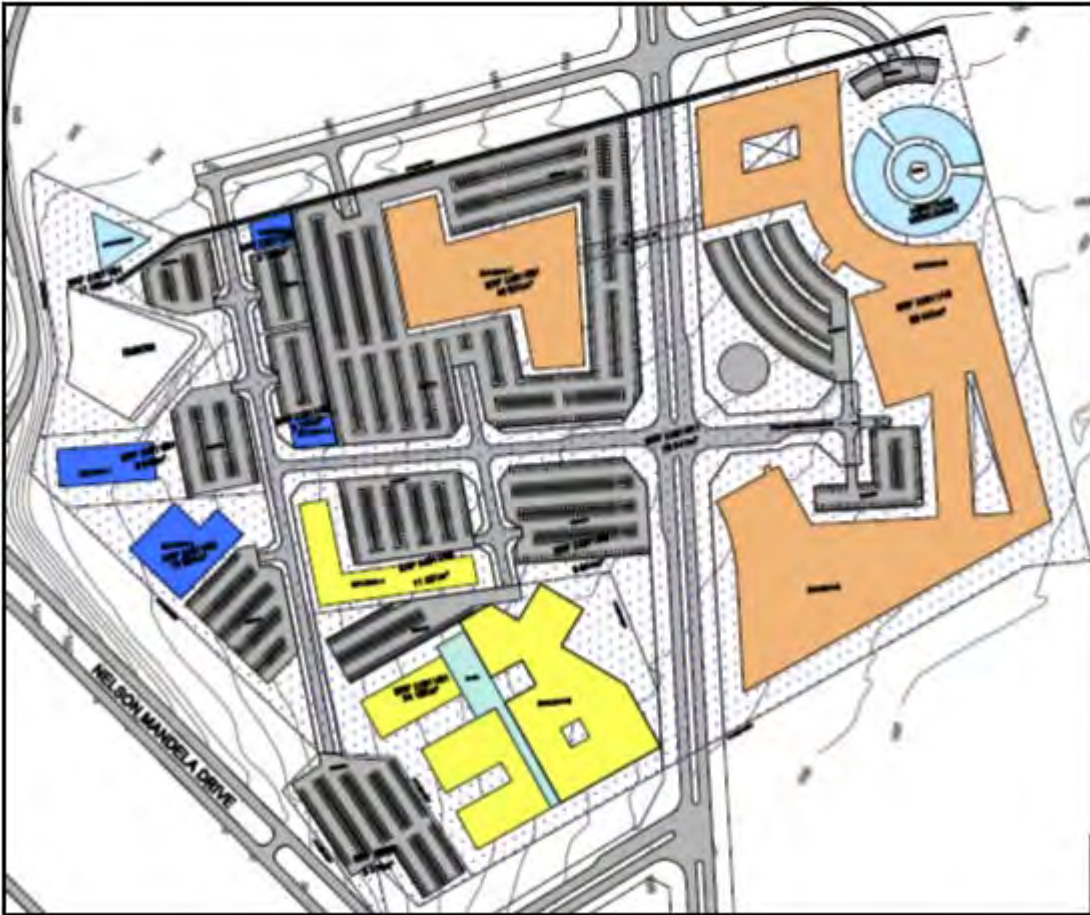
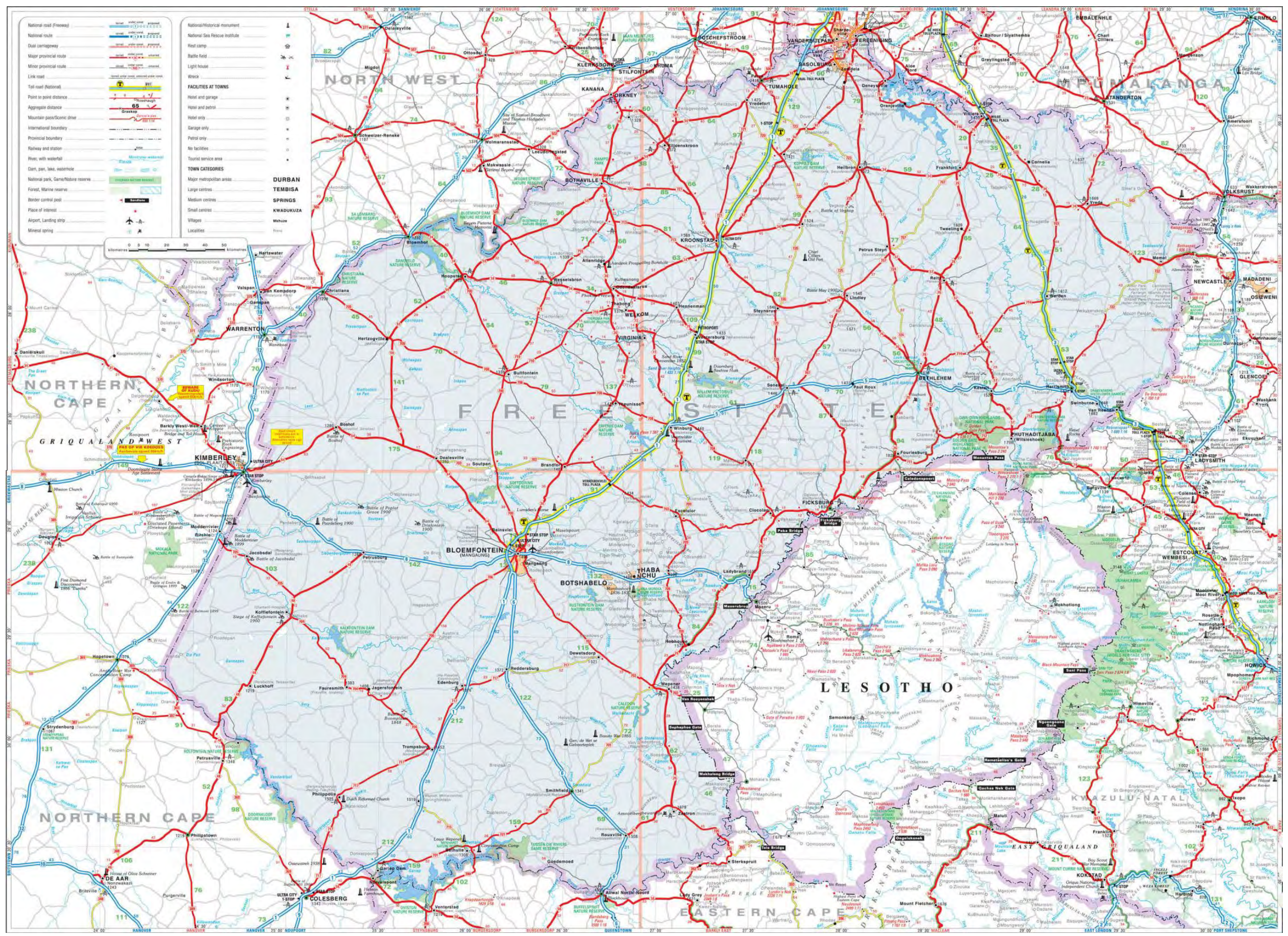


Figure 1: Site development plan - heritage areas to be incorporated in the development indicated in light blue

Figure 2: 1:250 000 Map Free State Province



3. Legislative Requirements:

National Environmental Management Act, No 107 of 1998) (NEMA) and NEMA 2014 Environmental Impact Assessment Regulations, as amended (Government Notices No. R. 324, 325, 326 and 327 of 7 April 2017)

NEMA 2014 Regulations, as amended (No. 327 of 7 April 2017 (Listing Notice 1):

Activity 11

“The development of facilities or infrastructure for the transmission and distribution of electricity –

(ii) inside urban areas or industrial complexes with a capacity of 275 kilovolts or more.”

Excluding the development of bypass infrastructure for the transmission and distribution of electricity where such bypass infrastructure is –

(a) temporarily required to allow for maintenance of existing infrastructure;

(b) 2 kilometres or shorter in length;

(c) within an existing transmission line servitude; and

(d) will be removed within 18 months of the commencement of development.

Activity 28:

“Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture or afforestation on or after 01 April 1998 and where such development:

(i) will occur inside an urban area, where the total land to be developed is bigger than 5 hectares.”

excluding where such land has already been developed for residential, mixed, retail, commercial, industrial or institutional purposes.”

NEMA 2014 Regulations, as amended (R. 325 of 7 April 2017)(Listing Notice 2):

Activity 15:

“The clearance of an area of 20 hectares or more of indigenous vegetation, excluding where such clearance of indigenous vegetation is required for-

(i) the undertaking of a linear activity; or

(ii) maintenance purposes undertaken in accordance with a maintenance management plan.”

NEMA Regulations No. R. 924 of 7 April 2017 (Listing Notice 3):

Activity 4

“The development of a road wider than 4 metres with a reserve less than 13.5 metres.

(a)(ii) In urban areas:

(bb) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority or zoned for a conservation purpose.”

Activity 6

“The development of resorts, lodges, hotels and tourism and hospitality facilities that sleep 15 people or more.

(b)(ii) In urban areas:

(bb) Areas designated or conservation use in Spatial Development Frameworks adopted by the competent authority or zoned or a conservation purpose.”

Activity 8

“The development and related operation of above ground cableways and funiculars.

(b)(ii) In urban areas:

(bb) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority or zoned for conservation purpose.”

Activity 14

“The development of-

(ii) infrastructure or structures with a physical footprint of 10 square metres or more; where such development occurs –

(a) within a watercourse;

(b)(ii) In urban areas:

(bb) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority, zoned for a conservation purpose.”

National Heritage Resources Act (NHRA), no 25 of 199

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 37:

Public monuments and memorials must be protected in the same manner as places which are entered in a heritage register referred to in Section 30.

Section 38(8):

The provisions of this section do not apply to a development as described in subsection 38(1) if an evaluation of the impact of such development on heritage resources is required in terms of the Environment Conservation Act, 1989 (Act No. 73 of 1989), or the integrated environmental management guidelines issued by the Department of Environment Affairs and Tourism, or the Minerals Act, 1991 (Act No. 50 of 1991), or any other legislation: Provided that the consenting authority must ensure that the evaluation fulfils the requirements of the relevant heritage resources authority in terms of subsection (3), and any comments and recommendations of the relevant heritage resources authority 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.

Mangaung SDF as reflected in the council approved draft of the Mangaung IDP of 2016/2017

Both erven fall within the Metropolitan Open Space System as indicated on the Spatial Development Framework (SDF) of the Mangaung Metropolitan Municipality (MMM) Integrated Development Plan (IDP) for 2016/17. Although Erf 1/22011 has been zoned as 'institutional' which allows for the development of a hospital, Erf 22011 has no determined zoning yet.

4. Methodology:

4.1 Literature Review:

As the proposed development areas are purported to be on a section of one of the Bloemfontein concentration camps, the background study is based on information obtained from topic-specific reference books, archival documentation, academic journal articles, general surveyor maps as well as historic military maps, information and photographs obtained from the War Museum, archived newspaper articles, the Mangaung Metropolitan Municipality IDP and SDF, interviews with local historians and experts, the archives of the FS Dutch Reformed Church Synod and the military museum at Tempe. Only one reference to a nearby site was found on SAHRIS which incidentally is for a development north of the N1 which was, according to the current literature review, potentially also part of the concentration camp.

4.2 Public Consultation and Stakeholder Engagement:

Due to the nature of the site, stakeholders representative of a certain sector of the population were identified such as, inter alia, the Heritage Foundation, Rapportryers, Dameskring, Bloemfonteinse Afrikaner Kultuurraad, National Women's Monument Commission, Friends of the War Museum, the Voortrekkers, etc. whom it is assumed would have a vested interest in this development. Stakeholders were contacted via email and provided with a Basic Information Document (BID) on the development. In addition, the required public notices for each development were placed in both a local and provincial newspaper [Refer to Appendix C]. The scoping report was made available to all stakeholders and other registered interested and affected parties (I&APs) for a 30-day commenting period. As no concerns were raised during this period, a stakeholders meeting was held to provide the opportunity for a questions and answers session. A draft of the current report was provided for a 30-day commenting period which was later extended to accommodate a request for a site inspection, followed by comments. All comments are included in this final version of the report.

Identified stakeholders and registered I&APs:

	Organisation	Contact Person	Email
1	Heritage Foundation	Mrs Cecilia Kruger	bd@vtm.org.za
2	Rapportryers	Prof Barry Frey	27834621963@vodamail.co.za
3	Dameskring	Mrs Karin Botha	karnbotha@hotmail.com
4	Bloemfonteinse Afrikaner Kultuurraad	Dr Chris Verwoerd	Chris.verwoerd@gmail.com
5	Koördinerende Afrikaner Kultuurraad	Dr Chris Verwoerd	Chis.verwoerd@gmail.com
6	Nasionale Vrouemonument	Prof Piet Strauss	straussp@ufs.ac.za

	Kommissie		
7	Vriende van die Oorlogsmuseum	Mr Gert Theart	Gert.theart@vodamail.co.za
8	Vriende van die Bron van Herinnering	Mr Willie Engelbrecht	Willie7@iburst.co.za
9	Die Voortrekkers	Mr Willie Engelbrecht	Willie7@iburst.co.za
10	Historiese Vereeniging van die Ou Presidensie	Mr Lambertus van Rensburg	vanrensburgljb@gmail.com
11	Die Volksepele Vereeniging	Mr Mike Jacobs	tralie@internext.co.za
12	The War Museum	Mr Johan Van Zyl	jvanzyl@anglo-boer.co.za
13	Mangaung Metro Municipality: Environmental Management	Motheo Pooe & Mpolokeng Kolobe	Mpolokeng.kolobe@mangaung.co.za
14	Mangaung Metro Municipality: Roads & Stormwater	Jeff Letsie	Jeff.letsie@mangaung.co.za
15	Department of Water Affairs	Dakalo Ramuhovhi & Willem Grobler	ramuhovhid@dws.gov.za
16	South African Heritage Resources Agency	APM unit	Online submission
17	Free State Provincial Heritage Resources Authority (HFS)	Ms Mbatha	Mbatha.npz@sacr.fs.gov.za
18	South African National Defence Force	Brig-General S. Moyo	Fax: +2751 402 1003
19	Mangaung Metropolitan Municipality	Mr Nelson Mofokeng	Fax. +27 51 405 8738

4.3 Physical survey:

The physical survey took place during all four seasons of the year over a period of nine days as follows: 17 November 2016 (Spring), , 13 February 2017 (Summer), (15 May 2017 (Fall), 8/10/13/15/16 & 17 August 2017 (Winter). The pedestrian survey was undertaken by one professional archaeologist and one assistant with 10 years' experience of fieldwork. The entire development area was walked in transects approximately 10 - 15 m apart in a north to south direction and again in a west to east direction. Features, architectural remains and small finds (e.g. scatters of pottery and glass sherds, etc.) were recorded using a Garmin GPSMap 64s and GPSmap 60CSx handheld devices as well as Sony Cyber-shot DSC-H7 camera. Measurements of architectural remains as well as, where possible, features were recorded in a field notebook.

Due to low visibility on account of the density of the vegetation (80-90 surface coverage), artefact density as reported in Section 10 of this report might be skewed and not a true reflection of potential finds.

4.4 Site Description:

The site consists of two adjacent erven, respectively 28,0592 ha and 3,5539 ha in size. The development area falls within an area that is purported to be that of one of the concentration camps. There are two current features namely the Bron van Herinnering monument and 'Dam van Trane' associated with the concentration camps. In addition to this, it is also potentially the area where an internment camp was erected for German women and children during WW1. The literature review did not reveal any structures in this area connected to the ABW period, nor any other period, but the foundations discovered are most likely linked to the WW1 internment camp.

The area is relatively flat and no buildings other than one small (2.5 x 2.5 m) modern power house could be observed above the level of the grass. Apart from the known heritage features mentioned above, the pedestrian survey revealed:

- 8 foundations (all 2.3 x 8.3 m),
- one brick ruin 2.5 x 3 m in size with walls ranging from two to five bricks in height,
- one small conic shaped stone and mortar memorial with a diameter of one meter at the base and one meter high,
- six identical animal water troughs (100 x 685 cm) and one sunken associated structure (745 x 140 cm),
- 70 artefact scatters (although this includes places where singular finds were observed) which mainly consists of glass and ceramic sherds, rusted nails, nuts and bolts as well as short lengths of wire, slate board sherds, tins and one section of a ceramic doll arm. Singular red bricks can be found over a large area of Erf 22011.

All foundations and structures were georeferenced, measured and photographed. All scatters were georeferenced and a representative sample of ceramic and glass sherds were cleaned and photographed on site to enable identification as well as look for specific features such as manufacturer's marks or decorative detail.

All abovementioned heritage effects occur in Erf 22011 (the bigger of the two erven). Erf 1/22011 contained no surface scatters and only rubble of buildings less than 60 years old.

No other historical structures were observed.

4.5 Site significance and field-rating:

Cultural significance or special value because of -	Applicable or not	Rating <i>Negligible / Low / Low-Medium / Medium / Medium-High / High / Very High</i>
a. Its importance in the community, or pattern of South Africa's history	Yes	High
b. Its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage	Yes	High
c. Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage	Yes	High
d. Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects	Yes	High
e. Its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group	Yes	High
f. Its importance in demonstrating a high degree of creative or technical achievement at a particular period	No	-
g. Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons	Yes	High
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	-
<p><i>Reasoned assessment of significance using appropriate indicators outlined above:</i></p> <p>The site's main heritage value lies in it potentially forming part of two significant periods in South Africa's history namely the ABW (1899-1902) and WW1 (1914 to 1918). During both periods it was used as concentration/internment camp area; first for the Boer women and children during the ABW (the latter only for a very short period before it was moved to higher ground) and then potentially for the German women and children during WW1 (occupied 1916 to 1919).</p>		

The main difference between the two camps is the high death rate of children and older women in ABW concentration camps. The camps were big, numerous and poorly administrated on account of, e.g. a general shortage of food during the ABW period. Conditions were to a large extent inhumane, in particular when compared to the second refugee period during WW1. There is, accordingly, a very strong emotive element to these camps for the Afrikaner community in general.

Despite the high number of camps throughout South Africa, but in particular in the Free State, it has not received any significant heritage status or protection in the 115 years since the end of the ABW. Several concentration camp sites have already been severely looted by illegal bottle collectors and others using metal detectors to obtain buttons and collectable metal objects. For this reason, preserved concentration camps have become endangered and are indeed rare. It is regrettable that this particular area that was erroneously preserved as concentration camp site turned out not to be so whilst the greater part of where the camps were situated are now built-up or disturbed by military activities or farming (University of the Free State's agricultural fields).

Very little archaeological research has been conducted to date on concentration camps and those that were researched are not published yet. Information on these camps, in particular the general everyday life, is mainly obtained from the few personal accounts of people who have been in these camps and limited archival records such as Emily Hobhouse's report on the condition of the camps. Concentration camps do, therefore, have the potential to yield information via archaeological research that will contribute to a general understanding of the daily life of the internees of these camps.

The Bron van Herinnering monument complex exhibits particular aesthetic characteristics in the expression of specific values of women in these camps by means of the monument itself as well as the associated statue of a woman and two children. To the local Afrikaner community, it would most likely also be to the greater South African Afrikaner community if they had access to it, it is of great value and incorporated into the yearly celebrations on 16 December.

Combining all the aforementioned arguments for a very high rating, it goes to reason that it should also receive a high rating for a strong association with a particular community or cultural group for cultural as well as spiritual reasons as the celebrations/commemorations of 16 December attest to.

Field rating:

Despite this, however, the integrity of this particular Bloemfontein concentration camp has been severely impacted by the following factors:

- The current site was occupied for a very short period which might not have resulted in much surface evidence of its occupation.
- The potential archaeological record (potential to yield information) for the ABW camp has been severely compromised by the erection of a later camp on the same site and covered approximately two thirds of Erf 22011 (the larger of the two erven) whereas the concentration camp most likely occupied only a small area before it was moved.
- Aspects in points (a), (e) and (g) remain unaffected on account of its intangible nature and should retain its value with the incorporation of the heritage aspects (a – d below) as well as a new on-site museum in the development plans.

The resultant field rating is accordingly as follows:

- a. Dam van Trane – High/Gr II
- b. Bron van Herinnering monument complex – High/Gr II
- c. Small memorial – High/Gr IIIB
- d. Water troughs & associated structure – High/Gr IIIB
- e. Foundations – Low/Gr IIIC
- f. Brick Ruin – Low/Gr IIIC
- g. Surface Scatters – High/Grade IIIB

4.6 Impact Assessment Methodology: (Refer to pg 74 for its application)

The impact assessment takes into account the nature, scale and duration of effects on the heritage environment and whether such effects are positive (beneficial) or negative (detrimental). Each issue/impact is also assessed according to the project stages from planning, through construction and operation to the decommissioning phase (if applicable). Where necessary, the proposal for mitigation or optimisation of an impact is noted. A brief discussion of the impact and the rationale behind the assessment of its significance is also included.

A rating system is applied to the potential impact on the receiving heritage environment and includes an objective evaluation of the mitigation of the impact. In assessing the significance of each issue the following criteria is used:

Impact rating criteria:

Nature	A brief description of the heritage aspect being impacted upon by a particular action or activity is presented.	
Extent (Scale)	Considering the area over which the impact will be expressed. Typically, the severity and significance of an impact have different scales and as such bracketing ranges are often required. This is often useful during the detailed assessment phase of a project in terms of further defining the determined significance or intensity of an impact.	
	Site	Within the construction site
	Local	Within a radius of 2 km of the construction site
	Regional	Between 2 and 30 km from the site
	National	The whole of South Africa
Duration	Indicates what the lifetime of the impact will be	
	Short-term	The impact will either disappear with mitigation or will be mitigated through natural processes in a span shorter than the construction phase
	Medium-term	The impact will last for the period of the construction phase, where after it will be entirely negated
	Long-term	The impact will continue or last for the entire operational life of the development, but will be mitigated by direct human action or by natural processes thereafter
	Permanent	The only class of impact which will be non-transitory. Mitigation either by man or natural process will not occur in such a way or in such a time span that the impact can be considered transient
Intensity	Describes whether an impact is destructive or benign	
	Low	Impact affects the environment in such a way that natural, cultural and social functions and processes are not affected.
	Medium	Effected environment is altered, but natural, cultural and social functions and processes continue albeit in a modified way.
	High	Natural, cultural and social functions and processes are altered to extent that they temporarily cease.
	Very high	Natural, cultural and social functions and processes are altered to extent that they permanently cease.

Probability	Describes the likelihood of an impact actually occurring.	
	Improbable	Likelihood of the impact materializing is very low
	Possible	The impact may occur
	Highly probable	Most likely that the impact would occur
	Definite	Impact will certainly occur
Significance	Significance is determined through a synthesis of impact characteristics. It is an indication of the importance of the impact in terms of both physical extent and time scale, and therefore indicates the level of mitigation required.	
	Low impact	No permanent impact of significance. Mitigation measures are feasible and are readily instituted as part of a standing design, construction or operating procedure.
	Medium Impact	Mitigation is possible with additional design and construction inputs.
	High impact	The design of the site may be affected. Mitigation and possible remediation are needed during the construction and/or operational phases. The effects of the impact may affect the broader environment.
	Very high impact	The design of the site may be affected. Intensive remediation as needed during construction and/or operational phases. Any activity which results in a “very high impact” (negative) is likely to be a fatal flaw.
Status	Denotes the perceived effect of the impact on the affected area	
	Positive (+)	Beneficial impact
	Negative (-)	Deleterious or adverse impact
	Neutral	Impact is neither beneficial nor adverse
	It is important to note that the status of an impact is assigned based on the status quo – i.e. should the project not proceed. Therefore not all negative impacts are equally significant.	

4.7 Assumptions, Gaps, Restrictions and Limitations:

Ground visibility:

Ground visibility, in particular on Erf 22011 which forms the greater part of the development area, is extremely poor and remained so throughout different seasons of the year. The grass forms a dense carpet at ground level of large sections of the study area which minimises the possibility of small finds such as diagnostic sherds of glass and pottery that could shed a light on successive time periods of use.

The first visit to the site was a brief inspection for planning purposes and took place on 17 November 2016. This was followed on 13 February 2017 for the first survey focusing on recording the animal water troughs. Survey of the remainder area took place on 15 May and the 8th, 10th, 13th, 15th, 16th, and 17th of August 2017.

Throughout the various survey periods, visibility at ground level remained extremely poor in what would have been the camp area for both the concentration camp and a possible internment camp that dates to a later period. Surface finds are, however, distributed over a large portion of Erf 22011 (approximately 50%) and it is expected that much more would be found if the grass could be cut short without disturbing the surface.

One day prior to the August surveys vagrants accidentally set light to a section of Erf 1/22011 (the section for the intended hospital area), but despite improved visibility in this area, nothing but building rubble was found. This is, however, an area that was for a prolonged period used for festivals, first by the Afrikaner community and later by the military. It was, accordingly, also regularly cleaned for this purpose up and until the 1980s and ground cover did not have such a long period as the remainder of the development area to take a foothold.



Figure 4: Ground surface visibility after fire



Figure 5: Photograph dated 13 February 2017 was taken during the raining season. Note density of grass at surface level



Figure 6: Photograph dated 8 August 2017 - general view over Erf 1/22011 which includes the area of the tented camps. At surface level is a dense cover similar to that in the photograph above

Limited availability of information / assumptions:

No records were found that could be used as a direct reference to the utilisation of the development area in the post-ABW period. Assessments of the timeframe for the erection of certain structures are, accordingly, based on assumptions derived from indirect references that might be proven erroneous in a more in-depth research study of the military history of Tempe for the period after the end of the ABW, including the period during and immediately after the evacuation of the concentration camps.

Non-availability of finalised plans:

The original brief that was received for the project did not include a road leading from the northern side of the development area up to the N1 and was this section accordingly not included in the current study. At the time more final plans were made available the developers were, however, informed that the road would lead through a section which could potentially have formed part of the ABW concentration camp. It should, however, be pointed out that there is already a gravel road which follows approximately the same path as that of the intended new road. In addition to this, this entire area, similar to all other areas bordering the development property, is severely disturbed on account of subsequent military activities.

5. Description of the Socio-Economic Environment:

The Mangaung Metropolitan Municipality (MMM) includes Bloemfontein, Botshabelo, Thaba Nchu, Dewetsdorp, Wepener and Vanstadensrus of which Bloemfontein is the economical hub of the municipal area. Based on the 2011 census, prior to the inclusion of the last three towns, the population of the Mangaung Municipal area was 747 431, with that of Bloemfontein being 256 534 (MMM IDP 2016/7). 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. The capital value of the proposed development is R 2000 million. Approximately 188 temporary jobs will be created during the construction phase and approximately 800 permanent employment opportunities during the operational phase.

6. Description of the physical environment:

6.1 Zoning of the area:

Erf 1/22011: Institutional & MOSS

Remainder Erf 22011: MOSS

6.2 Effects of predominant economic activities on the environment:

Neither one of the two subject properties have been used for any economic activities. Non-economic activities since the Anglo-Boer War include the use of the area of Erf 22011 as grazing area for horses as is still the case from time to time. During the First World War the area was again used for a tented camp which included the erection of several structures. The ecological report describes the effect these activities (including the period of the ABW) had on the natural environment is a significant degradation of the natural vegetation.

Erf 1/22011, however, was up to the 1980's regularly cleared for social festivals with the result that the section closest to where the Oranje Feeshuis was erected has a less dense spread of grassland whereas the remainder of this erf shows a denser spread of various types of grasses.

6.3 Description of vegetation and of landscape features:

The topography of the site consists of a plain sloping gently from Northwest to Southeast with elevation varying from 1443 to 1433. The historic Dam van Trane (an artificial water body) is situated in the north-western corner of the site. The north-eastern corner of the site contains wetland conditions associated with the origin of the Bloemspruit, a watercourse (currently canalised) flowing through the city.

The vegetation on the site consists of a well-defined low grass layer with a few scattered trees. Two windbreaker rows consisting of exotic *Eucalyptus camaldulensis* trees also alter the vegetation structure to some extent. The scattered trees on the site consist of *Searsia lancea*, *Vachellia karroo*, *Olea europaea subsp. africana* and *Diospyros lycioides*. These are all widespread although the *O. europaea subsp. africana* is a protected species in the Free State Province. The shrub, *Asparagus larcinus*, is also common under trees. Exotic tree species on the site consists of *Eucalyptus camaldulensis* (Bluegum) and *Fraxinus americana*. Some of the Bluegum trees are of a considerable age.

The dominant grass layer consists of *Eragrostis lehmanniana*, *E. superba*, *E. obtusa*, *Cymbopogon pospischillii*, *Tragus koelerioides*, *T. berteronianus*, *Heteropogon contortus*, *Hyparrhenia hirta*, *Themeda triandra*, *Digitaria eriantha*, *Sporobolus fimbriatus*, *Fingerhuthia africana* and *Aristida congesta*. This species composition consists of several

climax grass species but with a significant component of pioneer grasses which indicates a natural grass layer.

Apart from the indigenous weed, *Nidorella resediflora*, several herbs and dwarf shrubs also occur on the site and the most abundant species include *Sutera caerulea*, *Ruschia hamata*, *Hermannia coccocarpa*, *Ipomoea oenotheroides*, *Salvia verbenaca*, *Felicia muricata*, *Berkheya onopordifolia*, *Senecio inaequidens*, *Geigeria filifolia*, *Nenax microphylla* and *Pentzia incana*. Two protected bulb species (*Brunsvigia radulosa* and *Eucomis autumnalis*) have also been identified.

[Information in this section sourced from the ecological report submitted by Eko-Environmental.]



Figure 7: Windbreaker row of blue gum trees close to the eastern boundary of the development area.
[Photograph dated 13 February 2017]



Figure 8: Trunk of one of the older blue gum trees

6.4 Fieldwork season and visibility:

Fieldwork was conducted during all four seasons with no drastic variation in visibility which is on average described as extremely poor with particular reference to potential small finds at surface level. Refer to point H.8 (Limitations and Restrictions).

6.5 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).

6.6 Prior activities on 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 (see Fig 20 on page 37) and there is also 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 on 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 erf north of the current research area. According to him Camp A originally started in the development area but was very soon moved to higher grounds on account of the poor drainage properties of the site.

Archival records indicate that towards the end of the Anglo-Boer War, a black labour camp was erected overlapping or close to the development area – most likely linked to the breaking down of temporary structures erected during the ABW. Subsequent to the ABW the military also used this area as grazing area for their horses.

In addition to this, archival references were also discovered that might place the internment camp for German women and children during World War 1 in the area of Erf 22011. In the area currently known as Erf 1/22011 the Oranje-Volksfeeshuis was erected in the 1960s and subsequently demolished with no recorded use of that erf since.



Figure 9: View of site (Erf 22011), orientation Southeast (left) to Southwest from 29° 5'20.02"S; 26°10'41.29"E (see position 1 in Google image that follows on page 31)



Figure 10: View away from site, orientation West (left) to North from 29° 5'20.02"S; 26°10'41.29"E (See position 1 in Google image that follows on page 31)



Figure 11: View of site (Erf 22011), orientation Southwest (left) to North from $29^{\circ} 5'30.82''\text{S}$; $26^{\circ}10'46.81''\text{E}$ (See position 2 in Google image that follows on page 31)



Figure 12: View away from site, orientation South (left) to Southwest from $29^{\circ} 5'30.82''\text{S}$; $26^{\circ}10'46.81''\text{E}$ (See position 2 in Google image that follows on page 31)



Figure 13: View of site (Erf 22011), orientation Northwest (left) to Northeast from $29^{\circ} 5'34.69''\text{S}$; $26^{\circ}10'38.71''\text{E}$ (See position 3 in Google image that follows on page 31)



Figure 14: View of site (Erf 1/22011 – hospital development), orientation Southwest (left) to Northwest from 29° 5'34.69"S; 26°10'38.71"E (See position 3 in Google image that follows on page 31)



Figure 15: View of Erf 22011, orientation Northeast (left) to Southwest from 29° 5'21.92"S; 26°10'29.13"E (See position 4 in Google image that follows on page 31)

7. Results of Public Consultation and Stakeholder Engagement:

The stakeholders as identified in point 4.2 on pg 11 were provided with a download link to the Scoping report on 17 May 2017. As no comments were received close to the end of the 30-day review period it was decided to follow up with a stakeholder meeting on 14 June 2016. Apart from the author as responsible heritage practitioner, Mr Nienkemper on behalf of MPC Developers, and the EAP, Mrs Cronje, the following stakeholders were present:

- Mr Joseph Renaud on behalf of Afriforum
- Ms Simoné Harms on behalf of the Afriforum youth branch
- Mr Lambertus van Rensburg on behalf of the Old Presidency Historical Society

- Mr Willie Engelbrecht on behalf of the Vriende van die Bron van Herinnering (Mr Engelbrecht is also the listed representative for the Voortrekkers)
- Ds Lewis Strauss on behalf of the Bloemfontein Afrikaner Kultuurraad, and
- Mr Johan Pretorius, ward councillor for the municipal ward within which the proposed development area falls

Apologies were received from Mrs Cecilia Kruger (Heritage Foundation) and Mr Johan van Zyl (War Museum) only.

The following concerns were noted and accordingly addressed:

Issue	Reply
The trees around the Bron van Trane Monument should be retained as it forms part of the monument	The trees will be incorporated into the landscaping of the development area (Mr Nienkemper).
The authenticity of the Dam van Trane should not be compromised by, e.g., the addition of fountains, etc.	No radical changes will be made to the dam but the consistency of the dam level will have to be maintained by means of canals that will channel excess water away (Mr Nienkemper).
Enquiry about accessibility to the monuments and whether the history of the site will be portrayed to inform visitors of its original nature as a concentration camp area.	The monuments will be more accessible to the general public than is currently the case and an on-site museum exhibiting the history of the site forms part of the development plans (Mr Nienkemper).
It was expressed that cultural organisations would like to give input on the Afrikaner history and the context of the museum content must be relevant to the history of the site.	It was agreed that the sense of place will be reflected in the content of the museum and that expert researchers on the ABW as well as in museology such as at the War Museum will be involved in the nature of the content as well as displays of the on-site museum. Any additional input would, however, be welcome. (Ms Philip)
A concern was expressed on the proposed name of the intended development (Heritage Lifestyle Centre) and a request was put forward for a consideration of a more suitable alternative that would reflect its history, e.g. an Afrikaans version of the current name.	The developers are open to suggestions for an alternative name (Mr Nienkemper).
Enquiry was made as to the future of the current water troughs on the site.	The exact date of the erection of the water troughs is uncertain, but as they are no doubt connected to the military history of the area it will be conserved. The War Museum has already agreed that some of it can be relocated to their premises (Ms Philip). It can also be incorporated in the landscape of the new development (Mr Nienkemper).
It was requested that the statue of the woman and children at the Bron van Herinnering Monument should remain where it currently is within the monument area and that the Dam van Trane should not be transformed to such an extent that it loses its historic context.	The statue forms part of the monument and cannot be moved on account of the monument being protected by the National Heritage Resources Act, no 25 of 1999 (Ms Philip). The landscape architect will keep the historical context within the planning (Mr Nienkemper).

A concern was expressed about the addition of a hotel.	The need for a hotel to complement the rest of the development was explained (e.g. accommodation for family members of patients at the hospital) (Mr Nienkemper).
An enquiry was made as to any restriction on the nature of the hotel.	The type of development will respect the contract with the landowner, the Dutch Reformed Church, e.g. a casino will not be allowed. (Mr Nienkemper)
Mr van Rensburg (Friends of the Old Presidency Historical Society) did not raise any concerns during this meeting and was asked if he had anything to add to which he replied that he was satisfied for the time being.	

Positive conclusions:

1. Mr Engelbrecht commented that the development can be viewed in a positive light.
2. Mr Pretorius said that although he was initially concerned about the heritage that forms part of this site, he now feels excited about the development.
3. Mr Renaud said he is positive about the development and feels that more information on the heritage of the site will be available with the development than is currently the case.

Subsequent to this a first draft of the current report was made available to the stakeholders on 29 August 2017 for a 30 day commenting period. On 21 September a request was received from Ds Strauss to extend the review period in order to have a site visit with the heritage consultant and Prof Raath. Prof Raath is an expert in the field of concentration camps and has published several books in this regard. Those relevant to the current study were already consulted during the scoping phase and it was an ideal opportunity to obtain a first-hand expert opinion. The site visit took place on the 5th of October.

Present were the following:

Prof AWG Raath, Chairperson: VCHO-hoofbestuur¹

Ds LJ Strauss, Predikant: Onafhanklike Hervormde Gemeente Bloemfontein²

Mr HJ Hays, Ouderling: Afrikaanse Protestantse Kerk, Bainsvlei³

Ms L Philip, Archaeologist: National Museum

Mr MJ Uys, Archaeological Assistant: National Museum

Prof Raath informed that the concentration camp was stretched out over an area north-east to east from the development area. In a later telephonic conversation he added that it also stretched up to Universitas Ridge which is the area on the western side of Nelson Mandela

¹ Association for Christian Higher Education: Executive management

² Minister, Independent Reformed Congregation, Bloemfontein

³ Elder, Afrikaans Protestant Church, Bainsvlei

Drive in a roughly L-shape with Spitskop at the elbow. In support of this statement he provided the two photographs in figures 17 and 18 on pages 31 and 32.

The comments and concerns that were discussed on site were communicated via email dd 9 October 2017 by Prof Raath and 22 October by Ds Strauss as follows:

Issues raised & recommendations:	Heritage Practitioner's Comment
As the intended road between the proposed development area and the N1 runs through a section of the concentration camp, this area also requires a heritage impact assessment. [Prof Raath]	This area is severely disturbed by military activities, but still has the potential to yield surface finds that might shed light on the ABW period and concentration camp in particular. Mitigation measures include surface collection in this area.
The troughs are actually basins for the hospital that was on the eastern (Tempe) side of the <i>spruit</i> and was used for laundering the hospital linen. The request is for all of them to remain <i>in situ</i> . [Prof Raath]	The developer has already indicated that they are willing to incorporate the troughs in the landscaping. It is, however, important that at least two should be moved to the War Museum for curation.
It is recommended that the landscaping should be such that it forms a connecting trail between the various heritage elements. [Prof Raath]	The intended lay-out of the site is of such a nature that all the areas are connected by pathways or roads. The museum will contain a map of the area indicating all the various heritage elements that can be visited – with information on each.
The intended amphitheatre on the site of the Dam van Trane is out of character and should rather be moved to the Bron van Herinnering monument. (Including the museum) [Prof Raath]	As the Bron van Herinnering has been designed and laid out representing specific values, this suggestion was forwarded to Mr Engelbrecht as chairperson of the FS Branch of the Voortrekkers and he replied that the Bron van Herinnering must remain as is. This, however, does not necessarily imply that the amphitheatre and museum may not be in close proximity to the monument.
The Bron van Herinnering should be kept as a monument.	It is stated in both the scoping and draft Phase 1 HIA that the Bron van Herinnering will be kept as is and incorporated in the development plans.
The remains indicated in Figure 64 on pg 70 as 'oven' was viewed during the site visit and it was mentioned that further research should be done on the placements of the ovens. [Ds Strauss]	In Prof Raath's comments received on 9 October he stated that the ovens that were erected for the concentration camps were situated on the ridge on the other side of the N1.
Further enquiries should be made from the Vrouekomitee as to why the small stone memorial was erected in that specific place before it is moved to a different position. [Ds Strauss]	The Vrouekomitee is one of the identified stakeholder organisations and did not make any comments on either the scoping or draft HIA. It is assumed that they have no objection to the removal of the memorial to the area next to the Dam van Trane as recommended in these reports.
The interlocutors (referring to those present at the site visit) have been in contact with other individuals and institutions that would also like to be involved with future proceedings and would also like to make suggestions regarding the museum. [Ds Strauss]	The developer has extended an open invitation to all who are interested to be involved in the planning of the heritage aspects.



Figure 16: Google image indicates positions 1 - 4 from where various views towards and away from the site were taken. The dotted arrow lines indicate the range that each composite photograph covers.



Figure 17: Concentration Camp B viewed from Tempe Hills. The camp curves from Spitskop into an eastern direction on the right side and in a southern direction on the left side.



Figure 18: Orientation south-east. According to Prof Raath the Dam van Trane is as indicated which clearly shows no tented area close to it.

8. Literature/Background Study:

8.1 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).

8.2 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

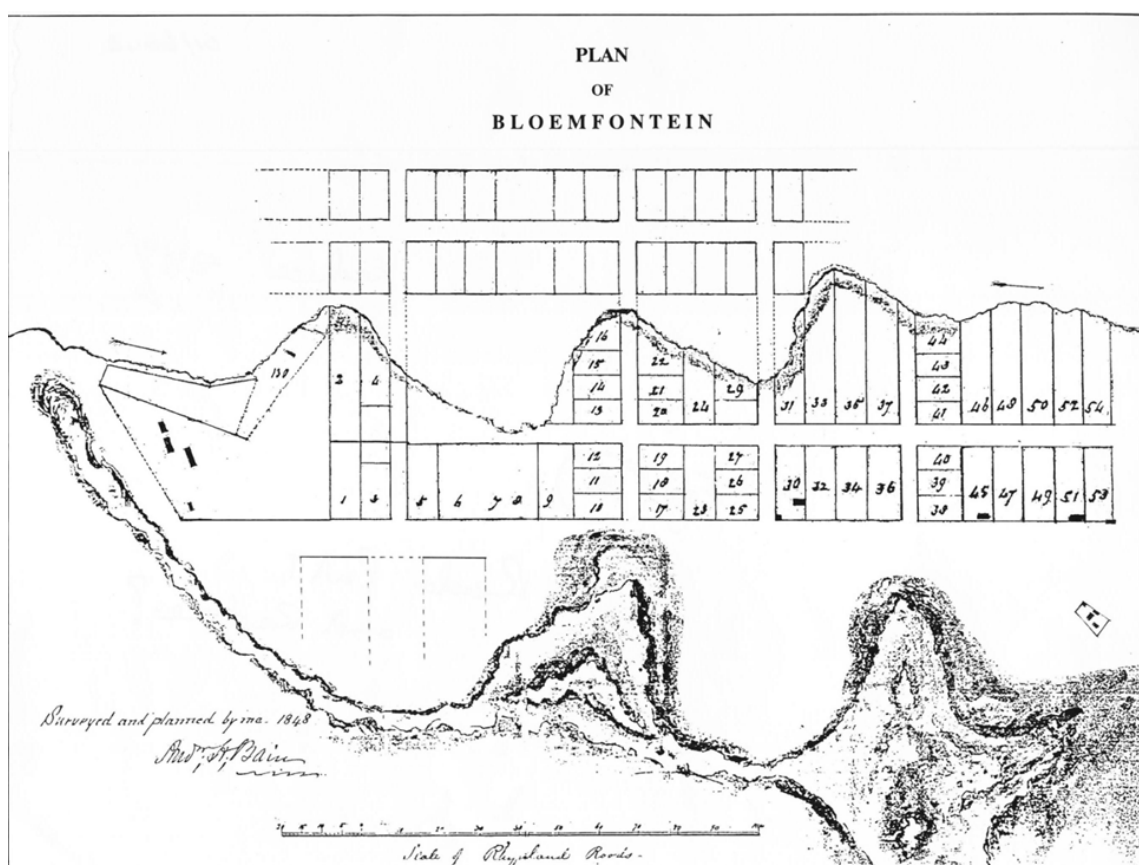


Figure 19: 1948 Town plan of Bloemfontein surveyed and drawn by Andrew Bain (VAB Map collection, map 1/35)

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)

8.3 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. [See SG 3087/1889 – Figure 20].

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

¹ Missionaries of the Wesleyan Methodist Missionary Society led the Rolong group to Thaba ‘Nchu in approximately 1834 where they settled under leadership of the Tswana chief Moroka (Shillington 2013: 807)

² The markings on the various roads leading into and out of Bloemfontein are not very legible in the small format of the plan and two of the roads relevant to this research are indicated in blue

Nelson Mandela Road, was utilised as grazing area for livestock during the late 1800s (refer to Figure 20).

8.4 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.

³ Zuid-Afrikaansche Republiek (an independent Boer republic)

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 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 would 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. Refer to the excerpt of Aerial photograph 47316 dated 14 June 1941 in Fig.22 on p.41 (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



Figure 21: Bloemfontein Camp B with Spitskop on the right-hand side. National Archives UK Photos CO_1069-215-82 & CO_1069-215-83

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 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 most likely refers 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).

8.5 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).



Figure 22: Aerial photograph 47316 dated 14 June 1941 indicating the possible location of the WW1 internment camp for women and children in red box

This also explains a letter dated four days earlier questioning the establishment of a black location 'in close proximity to the tents belonging to the Staff of the Refugee Camp and the Hospital'. The answer received on the 24th of October 1902 merely states that the 'matter has been satisfactorily explained to the Superintendent of the Refugee Camp' (VAB-SRC-RC10070). What is of importance is that the description of the location thereof coincides with the placement of a 'native location' on a 1913 (surveyed in 1910) map of Bloemfontein (Figure 23 on p. 43). To the left of this area is the 'Dam van Trane' which confirms its placement as overlying a portion of the current development area. This coincides with Prof Raath's statement of the position of the camp hospital as in the area within Tempe at the eastern border of the development area. It is assumed that this location was a temporary arrangement for workers involved with the breaking down of structures such as the various corrugated iron huts in and around the various camps which had already begun by this time. It presumably ceased to exist after the withdrawal of the British troops in 1914.

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).

8.6 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.

8.7 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.

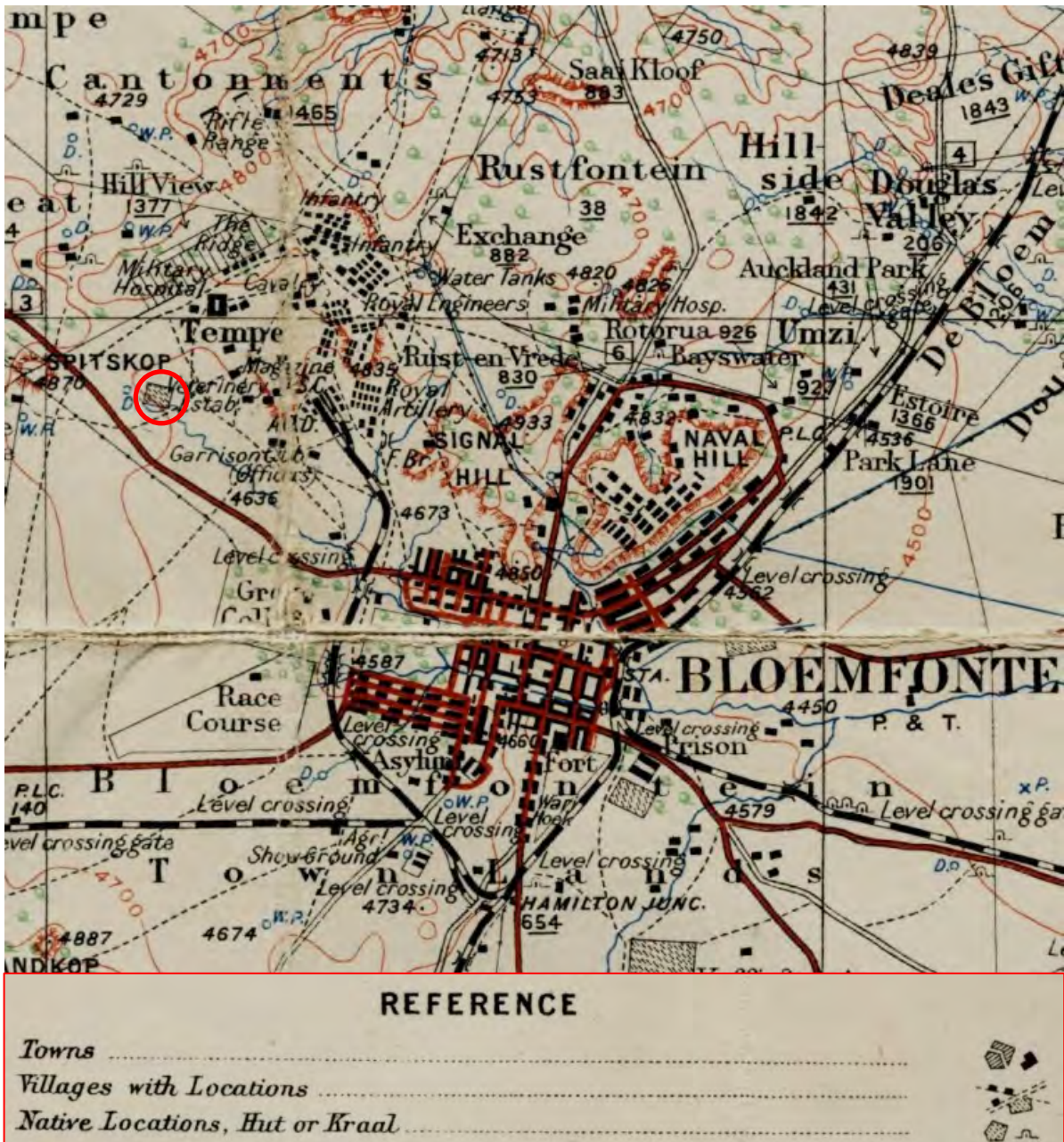


Figure 23: Excerpt of Bloemfontein 1:50 000 map dd 1913 with a partial extract of the reference and location circled in red.

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 Cavalry 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) (See fig. 23 on p. 43).

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 this area.

8.8 Oranje-Volksfeeshuis

The Oranje-Volksfeeshuis was erected on the portion that was later sub-divided as Erf 1/22011. Construction must have started in the early 1960s as a fundraising pamphlet for the completion of the project dating to c. 1966 states that the steel construction has been completed and that a further R70 000 is required for the completion of the building. It is not clear whether this structure was ever completed as per the proposed plan in Figure 24, p.45, but the minutes of the 34th meeting of the Free State Dutch Reformed Church (FS-DRC) dated 18 September 1979 provides some insight as to both the use and potential completion of the project. From these minutes it is deduced the project was completed but as only R50 000 of the required R70 000 was raised for the completion of the project, the end result most likely didn't look exactly like the proposed design. Secondly, mention is made by the National Women's Monument Commission⁴ (who at that stage were responsible for the upkeep of the building) that the Oranje-Volksfeeshuis was only being used once a year for Day of the Covenant festivals (which is contrary to what they envisaged in the erection of this building), but that the Free State Commando of the South African Army made regular use of this facility. The suggestion was for the erf on which the Oranje-Volksfeeshuis was situated to be subdivided from the original erf and sold to the SA Defence Force. Although the decision was to agree to the sale of the subdivided erf it must for some reason not have realised as the minutes of September 1987 once again make mention of Erf 22011 (prior to the subdivision) and this time it was proposed to sell it to the War Museum

⁴ At this stage the church held this property in trust for the National Women's Monument Commission

for the erection of a concentration camp museum. This didn't realise either and the structure was subsequently demolished and it remained the property of the DR Church.

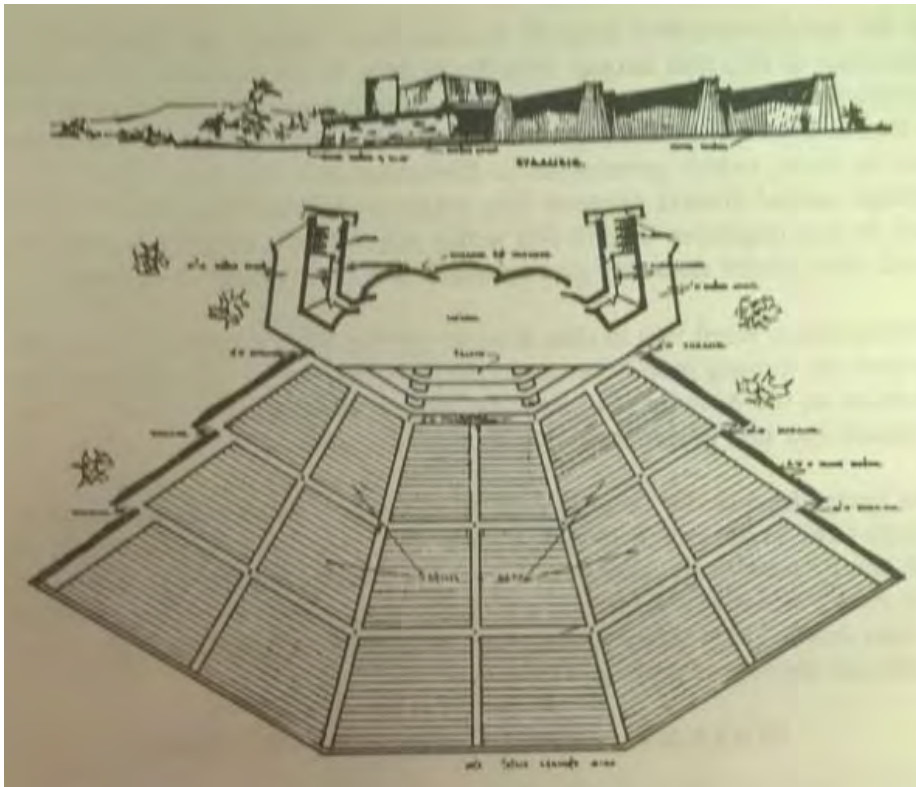


Figure 24: Proposed design for the completed Oranje-Volksfeeshuis as published in a fundraising information leaflet for the completion of the project [Inligtingstuk oor die Oranje-Volksfeeshuis te Bloemfontein c.1966]

8.9 The Bron van Herinnering monument

In celebration of the first five years of the Republic, the Rapportryers of Bloemfontein decided to restore the pump at what was known as the Bloemfontein concentration camp and replaced the eucalyptus trees around the pump with indigenous trees. The monument itself was erected in several stages. In 1974 the first stage was completed with the erection of a five-pointed platform for a flagpole with the well as centre. The five points symbolise the five imperishable characteristics revealed by the women in the camp which eventually turned their suffering into celebration and spiritual victory. The completed project comprises the five pointed platform situated in a paved and low walled five pointed courtyard in the shape of the Castle in Cape Town, each point with a plaque containing a word symbolising the afore-mentioned characteristics, namely faith, courage, patriotism, perseverance and acumen. A couple of meters away on the southern side is a statue of a woman with two children and symbolic graves in the form of crosses behind them. The entrance to the area has two tall straight, flat pillars with an inverted arch on the outside [Bron v Herinnering Pamphlet].

8.10 Contemporary Social History of the proposed development area

The Bron van Herinnering and general area is still visited by various cultural organisations such as Voortrekkers and Landsdiens groups. Part of the yearly combined Thanksgiving and Day of the Covenant celebrations in Bloemfontein is held at this monument as well as the War Museum in December every year.

8.11 Nearby Identified heritage sites

There are no identified heritage sites within a 500m radius of the proposed development area. The closest site is the old Garrison Hospital situated within the boundaries of the Tempe military base and currently utilised as museum. This building dates to the Anglo-Boer War and is accordingly also associated with the concentration camps. It is situated \pm 750 m north-east of the subject properties.

8.12 Associated heritage sites in the broader region

There are several heritage sites within Bloemfontein associated with the Bloemfontein concentration camp. Unfortunately the black concentration camp which was situated on the eastern side of the railway line (close to Waaihoek indicated in fig. 20 on p.37) no longer exists as it is now part of a residential area. The remainder are listed below:

1. Tempe military area that still contains a few structures, including the aforementioned Garrison hospital, dating to the Anglo-Boer War.
2. People from the concentration camps, as well as soldiers, who died during the ABW were buried in the President Brand Cemetery at the corner of Church and President Streets as well as the Waverley Road Cemetery opposite the Anglo-Boer War Museum.
3. The Anglo-Boer War Museum, officially opened on 30 September 1931, and has the largest collection of Anglo-Boer War related objects and memorabilia in the world. Through its exhibitions (inside as well as outside) and dioramas it tells the full story of this war, including life in concentration camps.
4. On the same premises is the National Women's Memorial unveiled on 13 December 1913. The ashes of Emily Hobhouse, who ceaselessly campaigned for the welfare of women and children in the concentration camps, were placed in a niche at the base of the obelisk on 27 October 1926.



Figure 25: The two development areas are indicated in red, the 'concentration camp' area surveyed in 1950 in black, and the black 'location' surveyed in 1910 in blue

9. Results/Findings of Survey and the Assigned Significance Field-rating:

9.1 Description of Identified Heritage Resources:

ERF 22011

All the identified heritage resources as listed below are located within the development footprint of Erf 22011.

- the artificial water body known as the Dam van Trane that was constructed during the period of the ABW;
- the water pump that forms the centre of the Bron van Herinnering monument dating to the ABW;
- the monument itself which comprises the brick and marble platform in the shape of the Castle of Good Hope around the pump, the statue of a woman and two children, a plaque on a separate stand that explains the symbolism of the monument, the two brick entrance arches and the planted trees forming a curved lane towards the monument and a circle around the monument area;
- a smaller monument made with small rocks collected from the Bethulie concentration camp with a plaque commemorating the suffering of women and children during the ABW is situated at the northern border of the development area, between the Dam van Trane and Bron van Herinnering;
- eight foundations presumably dating to WW1;
- one brick ruin of $\pm 2,5 \times 3$ m dating to either the ABW or the period thereafter, including WW1;
- surface scatters of small finds including ceramic and glass sherds, pieces of metal and tin, military items such as a bullet and one British tunic button, pieces of slate board – of which the few diagnostic pieces found could be placed in any period from the ABW up to the 1st World War; (Indicative, however, is that there are definitely repeated finds post-dating the ABW period);
- six animal water troughs dating from the period between the ABW and WW1 and one unidentified associated structure – possible a sunken feeder.
- Erf 22011 was apparently where camp B concentration camp started but soon moved to higher ground and very likely served as area for the WW1 refugee camp for German women and children.

9.2 Discussion of finds/heritage resources:

9.2.1 Artificial constructions: Dam van Trane

This manmade dam is situated at the North-western corner of Erf 22011. On account of the exceptionally low visibility in this area, no other manmade features or finds were identified in the area surrounding the dam. There are, however, scatters of small finds under the nearby trees.

[Refer to the Figure 64 on pg 70 for its position within the development area.]



Figure 26: Dam van Trane situated at the north-western corner of Erf 22011 - orientation Northwest [Photograph sourced from EAP]



Figure 27: View from the dam wall of the remainder of the Dam van Trane section bounded by the R64 (Nelson Mandela Dr) in the West, the northern boundary of the development area in the North, and a windbreaker row of Eucalyptus trees on the eastern side running from West to North. [Photograph sourced from EAP]

9.2.2. Monuments/memorials:

'Bron van Herinnering' Monument:

This monument complex is situated in the north-eastern corner of Erf 22011. Construction took place over a period of a couple of years and was started in 1974 with the erection of the five pointed platform of black and white granite around the tube pump which was sunk during the ABW for the purpose of providing water for the concentration camp and/or nearby camp hospital. The opening of the well in the middle is covered with a thick square-shaped metal sheet. The platform is situated within a courtyard in the shape of the Castle of Good Hope and also contains a flagpole.

Each of the five points is covered with a marble slab inscribed with five different words in Afrikaans, one at each point, namely 'geloof' (faith), 'moed' (courage), 'vaderlandsliefde' (patriotism), 'volharding' (perseverance), and 'vernuf' (acumen), which, as per the information explanatory plaque, together symbolise the five imperishable characteristics revealed by the women in the camp which eventually turned their suffering into celebration and spiritual victory.



Figure 28: Five pointed courtyard with the historic tube well at its centre



Figure 29: Raised centre platform of marble on a base of bricks (29° 5'21.48"S; 26°10'45.64"E)



Figure 30: One of the five points of the courtyard



Figure 31: Statue of women and children with enlarged inset of inscribed marble plaque – positioned south of the centre platform at 29° 5'22.18"S; 26°10'45.34"E



Figure 32: Information on symbolism of Bron van Herinnering afixed to a brick podium situated north of the centre platform at



**Figure 33: Small headstone at 29° 5'21.23"S;
26°10'45.29"E**

The main area of the monument is encircled with a double row of thorn trees that is part of the symbolism of the monument. The central courtyard, statue with a woman and children as well as the information podium in the figure below are all situated in the inner section of the double row of trees [Refer to Fig. 34 on p47].

In the corridor created between the inner and outer circle of trees, is the small marble headstone (.30 x .30 m) in figure 33. This is the burial place of a beloved dove of Mr Lothar Sittig who was the brainchild behind the idea of the Bron van Herinnering complex [pers.com. Mrs Greyvensteyn]. In honour of his gift of insight, this marble stone is viewed as part of the monument complex.

The monument complex was completed with the addition of an entrance constructed of a curved brick pillar on each side of the entrance to the curved road flanked by a row of

thorn trees on both sides that leads to the inner circle of the central area. The monument complex was inaugurated on 10 October 1996.



Figure 34: Pillared entrance to the monument complex (29° 5'19.66"S; 26°10'41.40"E)



Figure 35: Aerial view of monument complex – red line indicates the north-eastern corner of Erf 22011

'Vrouekomitee' memorial:



Figure 36: Small memorial at 29° 5'22.4"S; 26°10'29.2"E



Figure 37: Plaque affixed to memorial

A small conical-shaped memorial (diameter at base .75 m x height .75m) built of stones and mortar with a plaque embedded in a large stone inscribed with the words as can be seen in the figure 37.

[Translation: We commemorate the suffering of women and children 1899-1902. Deaths in Bfn Camp : 1695. Women's committee. Oct 2001 'Volkskomitee'. Donated by AVBOB.]

9.2.3. Built Environment:

Foundations 1 - 8: (A-H in Fig 64 on p70)

The remains of eight similar foundations spaced \pm 22 m apart, are situated inside the development area. Three are close to the northern boundary, four close to the southern boundary, and one on the western end of the red square in Fig 22 on P41.



Figure 38: Severely eroded foundation

Dimensions: 2.3 x 8.4 m

Orientation: Varies according to position on site.

Features:

- Material: 5 X slabs of coarse aggregated concrete topped by a thin layer of screed which is still visible in some sections of the foundation

- Drain: Drain at long side positioned 1.10 m from short end (outer dimensions 80 x 80 cm / inner dimensions 50 x 50 cm)
- Threaded bolts:
 - Thread diameter 1.25 cm
 - Material: iron
 - Embedded in concrete extending on average 10 cm above the surface
 - Five screws at each long end and one screw in the middle of each short end of the concrete base
 - Positioned between 15 -20 cm from edges
- Shallow ditch:
 - Positioned at and attached to the the opposite long end than the one with the drain; approximately 5 cm lower than the surface of the foundation
 - Dimension: 0.35 x 8.4 m (i.e. length of foundation)
 - Indented in the middle to form a long, narrow channel

All eight foundations are of the same dimensions (2.3 x 8.4 m) and spaced at an equal distance of 22 m apart from the next one.



Figure 39: Floor plan of foundation with ditch and drain (not to scale)



Figure 40: Threaded bolt embedded in concrete foundation



Figure 41: Drain hole

Interpretation of evidence:

- The foundations served as base for top structures made of corrugated iron (or asbestos, depending on its period of construction), that were anchored to the foundation by means of the screws.
- The drain implies an underground system of drainage pipes.
- The cement ditch on only one side could be an indication of a roof sloping to one side only rather than a pitched roof as it was likely intended to channel run-of water away from the foundation.
- These foundations are situated on the fringes of what is presumed to be a WW1 camp erected for German refugee women and children and could have been communal bathrooms.

Brick Ruin:



Figure 42: Historic brick ruin at 29° 5'22.15"S; 26°10'42.74"E

The remains of a building $\pm 2.5 \times 3$ m in size with no discernible entrance. The height of the walls varies from one row of bricks to five rows. The positions of all four walls are visible with the highest section the western wall – five layers above surface level.

Bricklaying method is English bond. With this method of construction alternate courses of header and stretcher faces are laid down with a header face lying directly over the centre of the stretcher face below.

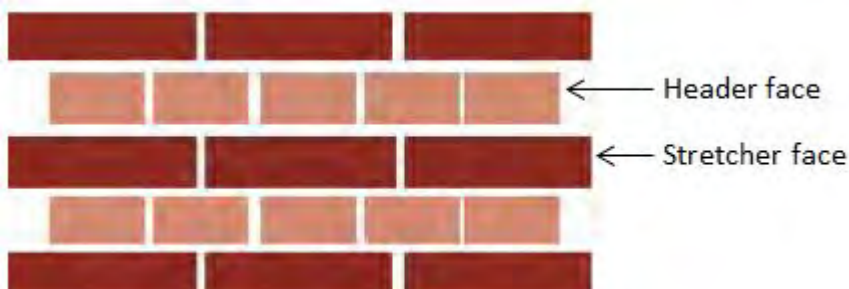


Figure 43: English bond bricklaying pattern



Figure 44: Bricklaying method clearly visible

Material: The structure was constructed with hand-moulded bricks that were fired at a low temperature judged by the weathering patterns and colour. The initial mortar was quite coarse and several places show signs of repairs by the addition of a finer mortar to sections where the original mortar has disintegrated.

Interpretation: This building method is the earliest brick laying method in the Free State for houses and other utilitarian buildings. Historically, English bond was the standard brick bond for English buildings (in Britain) and structures beginning in the late Middle Ages. It continued to be the bond of choice for utilitarian structures and secondary walls from the mid-17th century on, but was

supplanted in the 19th century by the more decorative Flemish bond for primary elevations. In the Free State examples of the Flemish bricklaying method appear from early 20th century. Prior to this, however, examples of the Dutch bond (or old English Cross Bond) building method, a modification of the English bond, can also be found. It is very likely that

this structure dates to approximately 1900-1910. There is no indication of the possible purpose of the building.

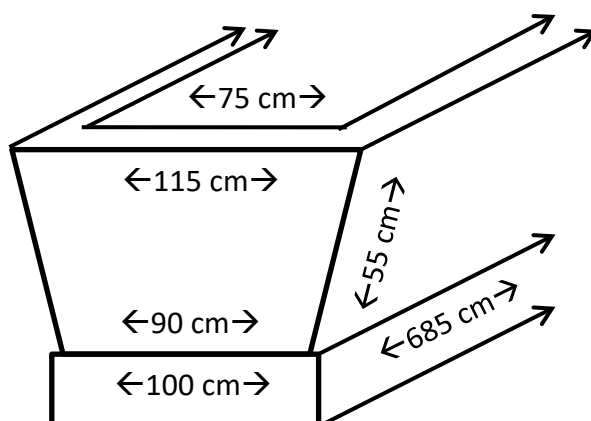
Water Troughs and associated structures:

[Positions: WT 1: 29° 5'25.23"S; 26°10'45.63"E; WT 2: 29° 5'26.00"S; 26°10'45.90"E; WT 3: 29° 5'27.45"S; 26°10'46.52"E; WT 4: 29° 5'28.24"S; 26°10'46.78"E; WT 5: 29° 5'29.75"S; 26°10'46.95"E; WT6: 29° 5'27.82"S; 26°10'48.58"E]

Six water troughs (WT) and the outline of one sunken rectangular feature (RF) were found. All, except for one water trough, are situated at the western side of the line of blue gum trees with the short ends facing west and east. The remainder water trough is situated on the eastern side of the row of trees and its orientation is with the short sides facing north and south. All water troughs are of a similar size, material and construction method with a paving of flat stones embedded in cement on the two long sides.



Figure 45: Water trough on eastern side of the row of blue gum trees



Dimensions:

The outer dimensions are as indicated in the sketch on the left with the height of the plinth 26 cm and the thickness of the walls of the upper trough walls and bottom 20 cm. The troughs are 35 cm deep on the inside.

Figure 46: Trough dimensions (sketch not to scale)



Figure 47: Close-up view of the missing moulding with the thin layer of cement clearly visible on the inside.

wider sections only.

Each trough is fitted with a metal outlet pipe that leads the water from the trough and exits at the short end of the trough a couple of centimetres above the surface. On the inside the outlet is fitted with a brass basin waste. [Refer to Figures 48 and 49 on the following page].

Building material and method of construction:

The troughs appear to have been constructed in two phases with first the building of a plinth of dressed dolorite blocks set with cement. The upper section is constructed of a medium-sized aggregate concrete and on account of the consistency of the wall thickness as well as the bottom section (deducted from the measurement of the inner depth) seems to have been pre-moulded before placement on the plinth. The edges are rounded and appear to have been added after the moulding of the body. At the same time the body was also covered in a thin layer of cement. Refer to figure 48 where the upper layer has cracked off.

Traces of stone paving around the troughs are evident at all troughs to a lesser or greater extent. Build-up of soil around the troughs has over the years covered some of paving. The historical photograph of the troughs in Figure 50 on pg 62 indicates that the paving is wider at the long sides than what it is at the short sides. At the majority of the troughs parts of paving is visible in the



Figure 48: Picture of brass basin waste- trough was filled with water at the time



Figure 49: Metal outlet pipe

Interpretation:

The troughs potentially date to the ABW or the period immediately after the ABW when returning soldiers meant an increase of horses at the military base (Tempe) and this area was used as additional grazing camp for horses (i.e. apart from the horse camps east of Tempe). It is possible that the blue gum trees that formed a square around the tube well



Figure 50: Photograph from the Free State Archives (VAB 8055) of the water troughs. Note the paving around the water troughs as well as the manhole on the right hand side of the photograph.

(around which the Bron van Herinring was constructed) and subsequently removed and replaced with the current thorn trees, as well as the windbreaker row of blue gums that are still next to the troughs were planted during the ABW. Fig 50 indicates that there were originally more troughs than

what can be found today.

Associated structure:

(29° 5'25.18"S;
26°10'45.28"E)

At the northern end of the row of troughs on the western side of the trees is a rectangular cement outline. It is assumed that the walls extend downwards beneath the surface.



Dimensions:

Outer dimensions: 745 x 140
cm

Inner dimensions: 715 x 110

Width of edges: 15 cm

The edges are rounded similar
to that of the troughs.

Interpretation:

The building material and method of construction matches that of the troughs and was presumably constructed at the same time as the latter. It might have been a shallow feeder for e.g. barley in addition to the grass that was freely available.

Figure 51: Unidentified associated structure

9.2.4. Surface scatters:

On account of the poor visibility at ground level, less surface small finds were located than anticipated. Surface coverage of vegetation, grass in particular, is 85-90% (pers.com Ecologist, Darius). In patches where visibility was reasonable, the artefact density (A/m²) is exceptionally low. In addition very few diagnostic pieces that could be dated were discovered. Finds include the following categories:

Ceramic:



**Figure 52: Manufacturer's stamp:
JOHNSON BROS / ENGLAND (crown)
Printed in green Date: ca. 1913**



**Figure 53: Unidentified mark: Most likely
early 20th century**

The majority of ceramic sherds found are whiteware with no distinguishing marks or characteristics. Very few diagnostic sherds were found and although one or two date to late 19th to 20th century and could also be linked to the concentration camp period, several scatters contained porcelain sherds that date to the early 20th century such as in Figure 55 on page 65 and accordingly confirms a second occupation period of the development area.



Figure 54: Sponge decorated whiteware from three different locations, dating late 19th century to early 20th century

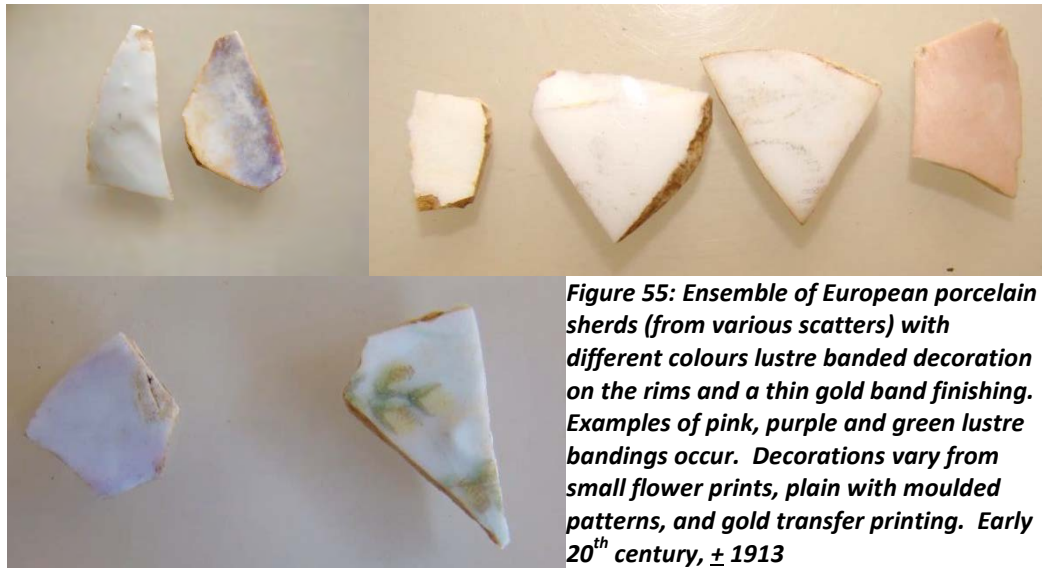


Figure 55: Ensemble of European porcelain sherds (from various scatters) with different colours lustre banded decoration on the rims and a thin gold band finishing. Examples of pink, purple and green lustre bandings occur. Decorations vary from small flower prints, plain with moulded patterns, and gold transfer printing. Early 20th century, ± 1913

Female presence:

The delicate porcelain, decorated in pastel colours and floral designs as can be seen above in Fig 55 and the lack of any finds that can be linked to men exclusively, strengthens the deduction from the archival records that this area served as site for the German women and children refugee camp during WW1. Apart from the fragments of perfume bottles, a rusted lid of a hair pins tin was discovered in a scatter that overlay the paved area at water trough 5 and its deposition potentially post-date the period of the ABW camp.



Figure 56: Lid of hair pins tin



Figure 57: Variety of coloured glass from one scatter alone includes dark olive green, light green, light blue, purple, pink, cobalt blue, brown and aqua (bottom)

Glass:

Glass sherds are typical of bottles dating to the late 19th and early 20th centuries. All Codd-patented soda bottles (bottom row of sherds) are aqua coloured up to the 1920s. Cobalt blue glass was often used for medicine bottles, whereas disinfectants could be found in brown bottles. Brown bottles were, however, also used for food items such as, e.g., Bovril. Antique perfume bottles are often purple.

Presence of children:

Several scatters contained small fragments of slate board used by school children during the 1800s and early 1900s. All fragments have lines or at least one line visible, whereas slate board fragments from older sites are usually either blank or have crudely applied lines.

The slate board pieces in Figure 58 as well as the porcelain doll's limb were found next to water trough 5, on top of the cobbled area which indicates a post-ABW deposition period.



Figure 58: One sherd from Scatter 37 - lined on both sides



Figure :59 Porcelain doll's limb (arm)



Figure 60: Two lined sherds of slate board

*Military presence:**Bullet cases:*

1. U 45

VII

.303 calibre manufactured by South African Mint, Pretoria, South Africa;
date 1945

2. A 78

7.62 L R1M2

7.62 calibre (calibre used in the battle rifle known in South Africa as the R1) manufactured by Armscor, Pretoria, South Africa; date 1978. The L reference a blank.

Buttons:

Two British military uniform buttons were found which could date to either the ABW or WW1 period

Interpretation:

Apart from these military items, no other finds that could be linked exclusively to men have been found. This piece of townlands have been utilised by the military since the establishment of Tempe in 1900 and is it not unusual to find bullets dating to a later period.

Conclusion:

The nature and date (where ascertained) of the small finds indicate that most of it could belong to either one of the two camps (i.e. ABW concentration camp or WWI German refugee camp). The short period between the occupation periods (+/- 14 years) increases the likelihood of a similarity in tableware and glass items. The presence of certain ceramic ware post-dating the ABW, however, confirms the second period of occupation.

Both of these camps were for women and children. The presence of women and children can be confirmed, and the absence of any items that could be indicative of male presence (other than military) supports the theory of the second camp being that of the WWI German refugee camp for women and children. The latter was occupied for a longer period (1916-1919) whereas this particular concentration camp was occupied for a very short time before it was moved (pers.com Prof Raath).

The provenience of at least one scatter indicates an occupation after the erection of the water troughs as it was found in a layer of soil covering the paving area around the trough.

Not only is it an indication that the troughs were erected in the period from the ABW up to WWI, but is also an indication of belonging to the second occupation period. It could, however, also have washed onto the paving during a heavy bout of rain.

Prof AWG Raath, ABW concentration camp expert and author of several books on the ABW camps, is, however of the opinion that none of the two ABW concentration camps fell within the proposed development area although Camp B possibly originally started off in this area, but was soon afterwards moved to higher grounds (pers.com 5/10/2017).

The likelihood of the current surface scatters belonging to the WW1 period is very high on account of the following:

1. The majority of scatters contain at least some material that indicates a post-ABW period.
2. The placement of the scatters coincides with the placement of the tents¹ and structures of the 1941 aerial photograph.

ERF 1/22011 (For record purposes only)

On account of an accidental fire in this area that cleared a large portion of the vegetation in the process, visibility during the field survey was reasonably good. No small finds surface material was found and also no historic structures. The area is, however, littered with building material belonging to the Oranje-Feeshuis main structure, as well as the small ablution block at the southern boundary of the property.



Figure 61: Erf 1/22011 cleared of vegetation on account of an accidental fire

¹ It should be noted that the round circles in the 1941 aerial photograph are more likely to have been caused by huts than tents.



Figure 62: Remains of presumably the Oranje Feeshuis



Figure 63: Reinforced concrete remains

Conclusion:

The absence of any cultural material other than building rubble strengthens the assumption made based on the desktop analysis that Erf 1/22011 most likely did not form part of any inhabited area older than 100 years. Judged by the impressions of tents/huts? and foundations still visible on the 1941 aerial photograph, the second camp was also situated outside this area.

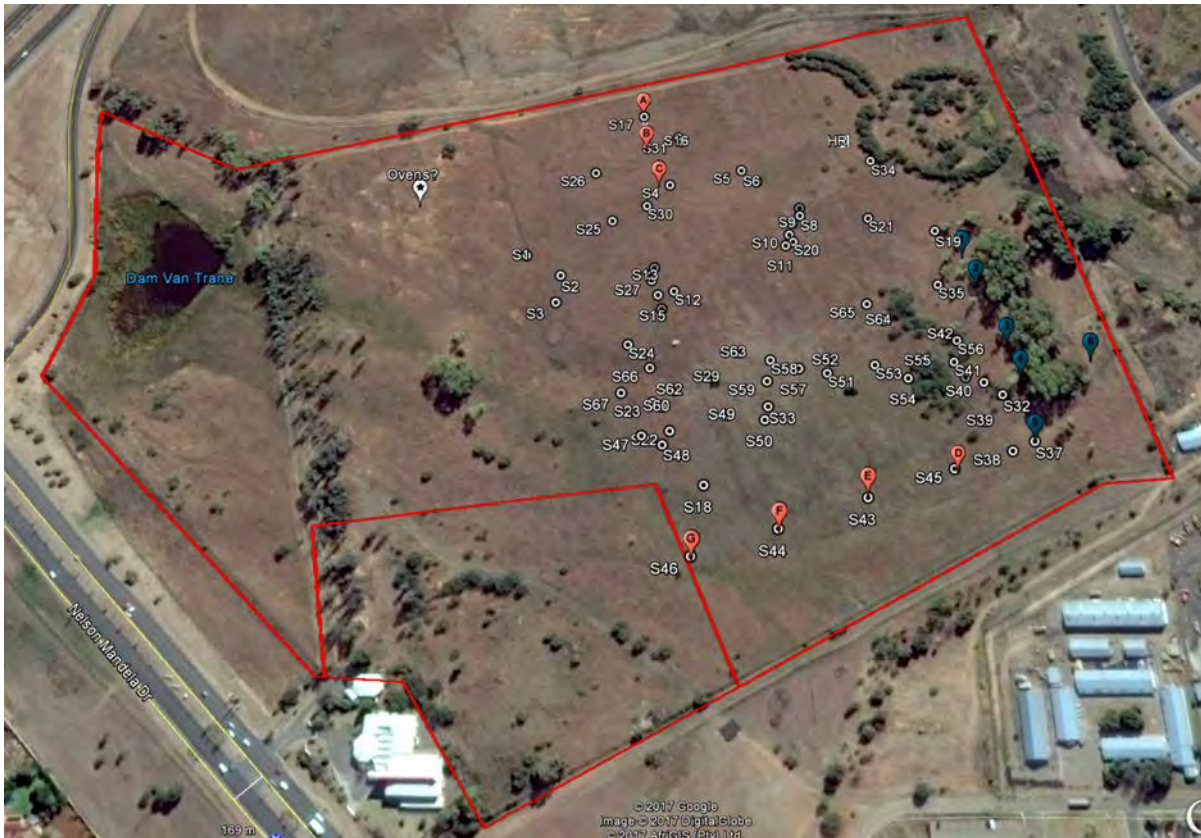


Figure 64: Map of scatters(s), foundations (red balloons), historic ruin (HR) and water troughs (blue balloon)

9.2.5. Geotechnical Sampling:

After completion of the field survey, geotechnical sampling took place on the 7th and 8th of September. This was necessary to include the palaeontological assessment in the final HIA. It also provided a further opportunity for discovering surface material. A palaeontologist and archaeologist were present to monitor the process.

Each marked area, as well as the lay-down area for excavated soil, was first investigated by the archaeologist for surface finds before a thin surface layer was removed and sifted for any potential subsurface finds. The palaeontologist monitored the remainder of the process.

Of the 15 test pits excavated (refer to Fig. 65 on pg 71), only numbers 14 and 16 contained cultural material – both surface material. No 14 contained a green glass bottle stopper and No 16 an L-shaped bent iron pipe. None of the test pit areas contained any sub-surface finds.

No palaeontological heritage was unearthed and the palaeontological assessment indicates that the proposed study area is underlain by sedimentary strata of the Later

Permian Adelaide considered to be of low palaeontological sensitivity and is no further palaeontological assessment recommended.



Figure 65: Map of the test pits on the development area

9.3 Cultural Significance / Field Rating:

Heritage	Cultural Significance	Field Rating	Rationale
Bron van Herinnering	High	High	Its strong association with a particular cultural group for social, cultural and spiritual reasons
Dam van Trane	High	High	Its strong association with a particular cultural group for social, cultural and spiritual reasons
Small monument	High	High	Its strong association with a particular cultural group for social, cultural and spiritual reasons
Water troughs	High	Medium	Important in terms of military history but few

			are in a good condition. Most likely also related to the concentration camps.
Sunken structure ('feeder')	Medium	Low	Important in that it might shed light on the function of the water troughs
Foundations	Medium	Low	Very poor condition.
Historic ruin	Medium	Low	Not sufficient material left to make an assessment as to its purpose.
ABW camp	High	Low-medium	Integrity compromised by the WWI camp
WW1 camp	High	Low-medium	The camp was demolished and only surface scatters remain. Mitigation of the surface material would enable further research to shed more light on the occupants thereof.

11. Impact Assessment:

Assessment: Impact on archaeological, historical and palaeontological resources						
Nature	The development area contains the following key heritage aspects that would be impacted upon by the development: The Dam van Trane (ABW related), the Bron van Herinnering monument (linked to the ABW), a small stone-packed memorial (linked to the ABW), six water troughs (ABW related), a brick ruin (possibly ABW related) and surface scatters of cultural material that can potentially be linked to the WW1 internment camp for German women and children.					
	Extent	Duration	Intensity	Probability	Significance	Status
Without mitigation	Site	Permanent	Very high	Highly probable	High Impact	Negative
With mitigation	Site	Medium term for all except the internment camp which is short-term	Medium	Possible	Medium Impact	Positive

(*Refer to the methodology for this assessment as set out on pages 16-18)

Planning phase

The “Dam van Trane” and “Bron van Herinnering” are incorporated in the development plans and will not be demolished. Recommendations should be followed on the inclusion of the troughs and the small conical shaped stone and mortar memorial.

Construction phase

- The sensitive historical areas, i.e. the “Dam van Trane” and “Bron van Herinnering” should be clearly demarcated prior to construction to ensure no damage is caused by construction activities.
- The relocation of the water troughs and small memorial must be done in consultation with the Heritage Specialist.
- Permits from SAHRA are required before any excavations/surface collections or relocation of objects can take place.
- A professional Palaeontologist should be present to monitor unweathered / fresh sedimentary bedrock when geotechnical sampling and large-scale excavations are undertaken.
- 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.
- 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.
- If the newly discovered heritage resource is considered significant a Phase 2 assessment may be required. A permit from the responsible heritage authority will be needed.
- The Chance Finds Procedures as per Attachment C must be included in the Environmental Awareness Plan.

Post Construction phase

- A CMP for The “Dam van Trane”, “Bron van Herinnering”, remaining water troughs, and small conical shaped memorial must be put in place to ensure the heritage components at the developed site are protected and maintained.

12. Conclusions, Recommendations and Reasoned Opinion

Conclusion:

Development at a known heritage sensitive site – in particular with regards to its intangible heritage – can be a contentious issue. The area of Erf 22011 is a portion of an ABW concentration camp site and also potentially the site of a WW1 internment camp. It is, however, the latter that has had a severe impact on the integrity of the tangible heritage of the former. Since the erection of the Bron van Herinnering monument complex, the site has gained more awareness of the concentration camp within the local community. It is, however, not accessible without prior arrangement and accordingly not freely accessible to the general public. On the other hand it protected the site from looting as so many other concentration camps have suffered from and thus still offers some opportunity for further research as an extension of the Tempe military landscape.

It is, however, clear that there are various degrees of heritage value within the development area where those of high importance were, according to the agreement between the landowner and the developer, in any case intended to be incorporated within the development plans. Mitigation of the lower ranked heritage effects could result in its preservation which might otherwise not have been saved in the long run.

Sensitive development of the area, as has been approved by the landowner, would be beneficial to the existing higher grade heritage effects as it will ensure that it is maintained as part of the heritage landscape of the intended Heritage Lifestyle Centre. It will also make the sites more accessible to the general public and, together with the intended on-site museum, will form an important link with the War Museum which is a favourite destination for tourists despite being off the proverbial beaten track in Bloemfontein.

Impact Assessment:

Site Name	Short Description	Location in relation to closest development components	Significance /field rating	Impact rating before mitigation	Impact rating after mitigation	Recommended mitigation measures
Dam van Trane	An artificial body of water created during the ABW for Concentration Camp B	Within project boundary	High/Grade II	Medium/High	Low	To be incorporated in development plans and preserved as heritage area. Requires a CMP for long-term preservation. Ecologist to monitor events during the construction phase.
Bron van Herinnering	A monument complex	Within project boundary	High/Grade II	Medium	Low	To be incorporated in development plans and

complex	consisting of various components to form a symbolic whole					preserved as monument and heritage area. Requires a CMP for long-term preservation.
Small memorial		Within project boundary	High/Grade IIIB	High	Low	To be relocated to one of the two above heritage areas, incorporated in development plans and preserved as memorial. To be included in CMP for maintenance.
Water troughs	6 x concrete water troughs on a stand of dressed dolomite 'bricks'	Within project boundary	High/ Grade IIIB	Very High	Low	Two representative examples to be relocated to the War Museum for curation
Sunken structure ('feeder')	Rectangular shaped sunken structure	Within project boundary	Low/ Grade IIC	Medium	Low	Should be opened up to determine nature of the structure and purpose. Can be demolished after sufficiently recorded.
Foundations	7 foundations	Within project boundary	Low/Grade IIIC	Low	Low	Sufficiently recorded – no further mitigation required. Can be demolished.
Brick Ruin	Brick and mortar ruin	Within project boundary	Low/Grade IIIC	Medium	Low	Archaeologist to inspect the ruin and immediate surrounds for any evidence as to the purpose of the structure after vegetation has been cleared during the pre-construction phase. All information to be recorded, any cultural material collected and reported to SAHRA as part of mitigation measures. Can be destroyed after sufficiently recorded.
ABW Concentration	The entire Erf 22011 forms part of	Within project boundary	Medium/ Grade IIIB	High	Low	Archaeologist to do a systematic reconnaissance of the

Camp/ WW1 refugee camp	Bloemfontein Concentration Camp B (ABW)				area after clearance of vegetation and systematically collect and record any further finds that could shed light on the occupation period of this site as part of a Phase II heritage report.
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Recommendations:

1. Mitigation measures for identified heritage effects that will be relocated and/or destroyed:

a. *Small monument at northern boundary of Erf 22011:* 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:

- i. This cone-shaped monument is small (1 m wide at its base and standing 1 m 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 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.
- ii. Before moving the monument it should first be stabilised 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.
- iii. The receiving site should first be levelled 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.
- iv. Once the cement base has fully cured, the upper casing can be cut away.

- b. *Water troughs*: 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 :-
 - 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.

 - c. *Historic brick ruin, remainder area of Erf 22011 and sunken structure*: 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.
2. A *Conservation Management Plan (CMP)* is a prerequisite for the two proposed Grade II heritage areas that will remain *in situ* within the boundaries of the development area, namely the Dam van Trane and the Bron van Herinnering, and must include the following:
- a. The sites must be protected from building activities starting from the site clearance phase right up to the completion of the project by cordoning off these areas as no-go zones for the duration of the development phase.
 - b. Various suitably qualified professionals should be appointed to keep a watching brief during particular phases of the development and continuous monitoring of the effect of building activities, such as blasting, etc., on existing cultural and natural heritage, .

- c. Site managers should be briefed by both the heritage and ecologist prior to the beginning of construction.
 - d. A suitably qualified heritage practitioner that could be an ecologist in case of the Dam van Trane, or an architect for the Bron van Herinneringe should be appointed to keep a watching brief in particular during the site clearance and blasting phases to ensure that the *in situ* heritage areas remain unaffected by the development process.
 - e. A suitably qualified archaeologist should be appointed to monitor the effect of the construction phase of the development on the heritage components on a regular basis and should be present during the site clearance phase.
3. The *Archaeological & Palaeontological Chance Finds Procedures* as per Attachment C must be included in the Environmental Awareness Plan and it should be ensured that all site managers are familiar with the content and have a copy on-site for the duration of the development.

It is recommended that the development be approved pending the acceptance of SAHRA of the proposed mitigation measures as set out above.

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With additional acknowledgement to verbal communication with:

Prof AWG Raath – author of several books on the concentration camps in South Africa

Gerda Coetzee (National Museum) on ceramics of the 18th and 19th century found on her research sites in the Eastern Cape and Free State provinces

Attachment A

Architect's rendition of development



Heritage

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MAY 2017

PERSPECTIVE VIEW





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Attachment B

Public Notices

Die geskiedenis op Bultfontein-baan

baansyfer – op aan verdien ook lding. Dawie en iet op Bultfontein-skiedenis get die klub se ope gewen en sy pa, or titel. Fransa oekampioen. **at ons bereik het:** (IS): B. Rens 37, Surtie 35, S. van

(BBS): J. Oelofsen 48, S. Sykes en N. ur en T. Wolmarans Marx 44. F. Uys 41, O. oberts 40, R. Smit

39. **Klubkampioenskap (slagspel oor 36 putjies):** A-afd: T. Nel 143, W. Niemand 143, JP Strydom 144; B-afd: S. Milton 165, L. Maritz 165, A. Reyneke 166; C-afd: H. Engelbrecht 180, D. Cronje 183, JD van Wyk 184. **Netto:** A-afd: H. Linde 137, C. Linde 138; B-afd: A. Burger 143, A. Reyneke 144; C-afd: E. Rohrbeck 148, C. van der Blink 149. **Vroue:** Bruto: R. Badenhorst 173, M. Vorster 185, H. Streicher 214. **Netto:** M. Cawood 143, H. Jordaan 144, L. van Viegen 158. **BOTHAVILLE (IS):** T. Lombard 40, R. Avenant 39, J. Coetzee 37. **CLOCOLAN (IS):** J. Eksteen 39, P.

Haggard 36, C. Eksteen 35, L. van Rooyen 35. **FICKSBURG (IS):** T. van Rensburg 37, P. Rousseau 36, A. Roux 35. **HARRISMITH (slagspel):** A-afd: P. Cronjé 70; B-afd: H. Beukes 70; C-afd: T. Els 67. **Netto:** G. Willemse 65. **HOOPSTAD (IS):** J. Warren 36, J. Malherbe 35, LeR. Coetzer 34. **KOFFIEFONTEIN (IS):** Melissa Lof-tus 45, I. Jacobs 44, P. Ollewage 43, AJ Barkhuizen 43. **OPPENHEIMERPARK (IS):** J. Botha 43, DC Nel 43, G. Maree 41. **Vroue:** Marie Vermeulen 38, Marian Payne 38. **SCHOEMANPARK (Klubkampioen-skap):** **Mans:** A-afd: R. Maree 138;

B-afd: R. du Plessis 172; C-afd (IS): J. Shaw 69. **Vroue:** A-afd (slagspel): Lizel Pot-glieter 171; B-afd (slagspel): Karin van Zyl 204; C-Afd (IS): Welma de Sena 27. Senior kampioen: Dirk Krieger 158; Junior kampioen: Llewellyn Booysen 151; beroepskampioen: Alex Haindl (slagspel) 136. **TEMPE (BBS):** J. van der Westhui-zen en J. Beukes 49. **VILJOENSKROON (IS):** S. Erasmus 37, L. Fourie 36, G. Allem 34. **WESSELSBRON (IS):** G. Nel 38, J. Pretorius 34, A. Smit 34. **ZASTRON (IS):** M. Dippenaar 44, B. Smith 43, G. Landman 42, B. Dorn-mehl 42.



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Notice is given in terms of Section 41(2)(c) of Regulations No. R. 982 published in Government Notice No. 38282 of 4 December 2014 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 Heritage Lifestyle Centre development on the Remainder of Erf 22011, Bloemfontein.

Extent: Commercial, business, retail, hotel and residential components are planned.

Locality: The site located at the 'Dam van Trane', adjacent to and to the north-west of the Tempe grounds and to the north east of the Bible House on Nelson Mandela Drive.

Projek: Voorgestelde Erfenis Leefstylisentrum ontwikkeling op die Restant van Erf 22011, Bloemfontein.

Omvang: Kommersele, besigheds-, kleinhandel-, hotel- en residensle komponente word beplan.

Ligging: Die terrein is geleë by die 'Dam van Trane', aangrensend aan en noordwes van die Tempe-terreine en noordoos van die Bybelhuis in Nelson Mandelarylaan.

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 **25 April 2017**.

Indien u enige navraag het, kommentaar wil lewer of as 'n belangstellende party wil registreer, kontak ons asb. teen **25 April 2017**.

SPATIAL SOLUTIONS INC
 Property Valuers and Environmental Consultants
 PO Box 28046, DANHOF 9310
 Contact person: Marguerite Cronje
 Tel. 082 702 0547 • E-mail: margueritecronje@gmail.com

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- Project:** Proposed Heritage Lifestyle Centre development on the Remainder of Erf22011, Bloemfontein.
- Extent:** Commercial, business, retail, hotel and residential components are planned.
- Locality:** The site located at the "Dam van Trane", adjacent to and to the north west of the Tempe grounds and to the north east of the Bible House on Nelson Mandela Drive.
- Projek:** Voorgestelde Erfenis Leefstylsentrum ontwikkeling op die Restant van Erf22011, Bloemfontein.
- Omvang:** Komersiële, besigheid, kleinhandel, hotel en residensiële komponente word beplan.
- Ligging:** Die terrein is geleë by die "Dam van Trane", aangrensend aan en noordwes van die Tempe gronde en noordoos van die Bybelhuis op Nelson Mandelarylaan.

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 25 April 2017.

Indien u enige navrae, kommentaar wil ewer of as 'n belangstellende party wil registreer, kontak ons asb teen 25 April 2017.

SPATIAL SOLUTIONS INC
Property Valuers and Environmental Consultants

Contact person: Marguerite Cronje
Tel: 082 7020547 Email: margueritecronje@gmail.com

P.O. Box 28046 DANHOF 9310

On-site Notices



Photo A: View of on-site notice placed at the entrance to the site.



Photo B: Close-up of notice.



Photo C: On-site notice placed near to site entrance along Nelson Mandela Drive.

Background Information Document

BACKGROUND INFORMATION DOCUMENT (BID)

EIA: PROPOSED HERITAGE LIFESTYLE DEVELOPMENT ON THE REMAINDER OF ERF 22011, BLOEMFONTEIN

MARCH 2017

Introduction & Background

MPC Developers propose to develop a Heritage Lifestyle Centre on the Remainder of Erf 22011, Bloemfontein. The site is 23.6664ha in size and located adjacent to and to the north west of the Tempe grounds and to the north east of the Bible House on Nelson Mandela Drive. (refer to Fig. 2 on next page).

The “Dam van Trane” and “Bron van Herinnering” are located on site. The proposed development plans to incorporate and enhance historical features on site.

Proposed Development

The following components are planned as part of the Heritage Lifestyle Centre:

- Commercial
- Business
- Retail
- Hotel
- Residential

A hospital is also planned on Subdivision 1 of Erf 22011, for which the EIA is already in process.



EIA Process

The Environmental Impact Assessment (EIA) for the proposed development is undertaken in terms of the National Environmental Management Act (Act 107 of 1998) (NEMA) EIA Regulations (Reg. No. 982 of 14 December 2014).

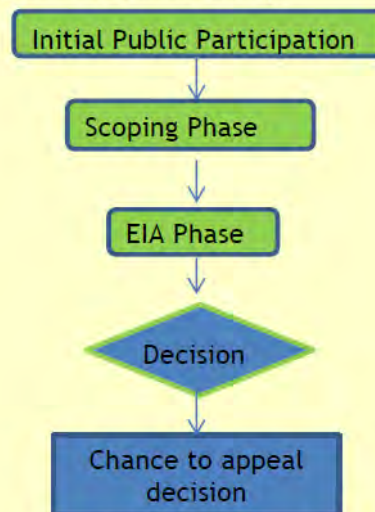


Fig. 1 EIA Process (simplified)

A full EIA process has commenced and an Application for Environmental Authorisation will be submitted to the Free State Department of Economic, Small Business Development, Tourism and Environmental Affairs (DESTEA). The public are encouraged to register as interested and affected parties (I&AP's) in order to have an opportunity to review and comment on the draft Scoping Report (identifies possible impacts) and the draft EIA Report (includes specialist input and ways of addressing impacts).

Locality Plan



Fig. 2: Locality Plan of the proposed development site on the Remainder of Erf 22011, Bloemfontein

SPATIAL SOLUTIONS INC

Property Valuers and Environmental Consultants

P O Box 28046

DANHOF

9310

*Contact: Marguerite Cronje
(Environmental Assessment Practitioner)*

Tel: 082 7020547

E-mail: margueritecronje@gmail.com

List of Interested & Affected Parties

- 1. South African National Defence Force (Surrounding Landowner)**
General Officer Commanding
ASB Bloemfontein
Private Bag X20599
Bloemfontein
9300
Contact person: Brigadier General S. Moyo / Lt. Col. Van Niekerk
Tel: 051 402 1000 / 074 8073671
Fax: 051 4021003
Email: worksunitfs@gmail.com
- 2. Mangaung Metropolitan Municipality (Surrounding Landowner)**
P.O Box 3704
BLOEMFONTEIN
9300
Nelson Mofokeng / Nomonde Malaku (PA to Mr. Nelson Mofokeng)
Tel: 051 405 8854
Email: nelson.mofokeng@mangaung.co.za
- 3. Mangaung Metro Municipality: Environmental Management**
Contact persons: Motheo Poee / Mpolokeng Kolobe
Tel: 051 4058577
E-mail: mpolokeng.kolobe@mangaung.co.za
- 4. Mangaung Metro Municipality: Water & Sanitation**
Contact person: Mosiuoa Tsomela
Tel: 051 4106764
E-mail: mosiuoa.tsomela@mangaung.co.za & thembelihle.mbotya@mangaung.co.za
- 5. Mangaung Metro Municipality: Roads & Stormwater**
Contact person: Jeff Letsie
Tel: 051 4106763
E-mail: jeff.letsie@mangaung.co.za
- 6. Ward Councillor (Ward 48)**
Clr Johan Pretorius
Tel: 072 2260222
E-mail: xgrafies@gmail.com
- 7. Department of Water Affairs**
Sanlam Plaza Building
Cnr East Burger and Maitland Streets
P.O. Box 528
BLOEMFONTEIN
9300
Contact persons: Dakalo Ramuhovhi / Willem Grobler
Tel: 051 4059000
Email: ramuhovhid@dws.gov.za
- 8. South African Heritage Resources Agency (SAHRA)**
SAHRIS online submission.
- 9. Free State Provincial Heritage Resources Authority
Department of Sports, Arts, Culture and Recreation**
Tel: 051 4104750
E-mail: mbatha.npz@sacr.fs.gov.za
- 10. Bible Society of South Africa**
Tel: 051 4445980
Email: harmse@biblesociety.co.za
- 11. Leads 2 Business**
Contact person: Bianca Torre
Tel: 086 0836337
Email: biancat@l2b.co.za
- 12. Heritage Foundation**
Contact person: Cecilia Kruger
Email: bd@vtm.org.za
- 13. Rapportryers**
Contact person: Prof Barry Frey
Email: 27834621963@vodamail.co.za
- 14. Dameskring**
Contact person: Karin Botha
Email: karnbotha@hotmail.com

- 15. Bloemfonteinse Afrikaner Kultuurraad**
Contact persons: Dr Chris Verwoerd & Lewis Strauss
Email: chris.verwoerd@gmail.com & ljstrauss@lantic.net
- 16. Nasionale Vrouemonument Kommissie**
Contact person: Prof Piet Strauss
Email: straussp@ufs.ac.za
- 17. Vriende van die Oorlogsmuseum**
Contact person Gert Theart
Email: gert.theart@vodamail.co.za
- 18. Vriende van die Bron van Herinnering**
Contact person: Willie Engelbrecht
Email: willie7@iburts.co.za
- 19. Die Voortrekkers**
Contact person: Willie Engelbrecht
Email: willie7@iburst.co.za
- 20. Historiese Vereniging van die Ou Presidensie**
Contact person: Lambertus van Rensburg
Email: vanrensburgljb@gmail.com
- 21. Die Volkspede Vereniging**
Contact person Mike Jacobs
Email: tralie@internext.co.za
- 22. The War Museum**
Contact person: Johan van Zyl
Email: jvanzyl@anglo-boer.co.za
- 23. Afriforum**
Contact persons: Joseph Renaud & Simoné Harms
Email: joseph@afriforum .co.za & simoneharms3@gmail.com

Meeting

6/20/2017

Gmail - Heritage stakeholder meeting (Heritage Lifestyle Centre & Hospital development)



Marguerite Cronje <margueritecronje@gmail.com>

Heritage stakeholder meeting (Heritage Lifestyle Centre & Hospital development)

Loudine Philip <loudine.philip@nasmus.co.za>

7 June 2017 at 14:54

To: "Besturende Direkteur (VTM)" <bd@vtm.org.za>, Johan VAN ZYL <jvanzyl@anglo-boer.co.za>, tralie@internext.co.za, LBJ Van Rensburg <vanrensburlbj@gmail.com>, Willie Engelbrecht <willie7@iburst.co.za>, gert.theart@vodamail.co.za, straussp@ufs.ac.za, chris.verwoerd@gmail.com, kambotha@hotmail.com, Barry Frey <27834621963@vodamail.co.za>, Bianca Torre <biancat@l2b.co.za>, harmse@biblesociety.co.za, "Ramuhovhi Dakalo (BFN)" <RamuhovhiD@dws.gov.za>, xgrafies@gmail.com, jeff.letsie@mangaung.co.za, thembelihle.mbotya@mangaung.co.za, mosiuoa.tsomela@mangaung.co.za, nelson.mofokeng@mangaung.co.za, Mpolokeng Kolobe <mpolokeng.kolobe@mangaung.co.za>
Cc: Marguerite Cronje <margueritecronje@gmail.com>

Dear stakeholders

You are hereby invited to attend a Q&A/discussion meeting on the heritage component of the Heritage Lifestyle Centre and Hospital Development.

Date: Wednesday, 14 June

Time: 11 am

Venue: Nienkemper Group office complex, cnr 2nd Avenue and Reid Street, Westdene, Bloemfontein.

(The entrance gate with an intercom button is in 2nd Avenue, next to the New York Restaurant – there is usually enough parking space in 2nd Avenue)

Kindly RSVP with either myself or Marguerite Cronje (also copied on this) by Monday.

Regards

Loudine Philip

0784489307

MINUTES OF MEETING

Environmental Impact Assessment (EIA) for the proposed Heritage Lifestyle Centre, Bloemfontein

Heritage meeting held on Wednesday 14 June 2017, 11:00 at the Nienkemper Group boardroom, Bloemfontein

Attended by:

See attached attendance register.

Apologies:

Major Sennanyane (Tempe)
Prof Andries Raath

No.	Person	Description
1.	Loudine Philip	Welcome and introductions
2.	Marguerite Cronje	Presentation on EIA process
2.1		The full EIA and Basic Assessment processes are explained for the proposed Heritage Lifestyle Centre and hospital developments respectively.
3.	Loudine Philip	Heritage Impact Assessment
3.1		Opens the floor and invites meeting attendees to provide inputs on the heritage of the site.
3.2	Johan Pretorius	Asks if there are any heritage monuments on the hospital site.
3.3	Loudine Philip	Gives summary of Oranje-Volkshuis that used to be on the hospital site, but that there are currently no remaining heritage effects.
3.4	Christo Nienkemper	Shows on a locality and site plan where the monuments are situated and how they are planned to be incorporated into the development of the Heritage Lifestyle Centre. Architect's images of proposed development are also shown.
3.5	Loudine Philip	The gradings of the monuments are described. The <i>Bron van Herinneringe</i> is already protected by heritage legislation and the proposed grading as per the heritage desktop report will ensure the <i>Dam van Trane</i> will also be afforded official protection as a declared monument.
3.6	Willie Engelbrecht	Raises the concern about the trees around the <i>Bron van Herinneringe</i> that should remain.
3.7	Christo Nienkemper	Confirms that the trees will be incorporated in landscaping plans.
3.8	Willie Engelbrecht	The <i>Dam van Trane's</i> antiquity should be maintained and not transformed by fountains etc.
3.9	Christo Nienkemper	No radical changes will be made to the dam, but the consistency of the dam will need to be maintained by means of canals to regulate overflow and explains the

		aesthetic value of the dam for the adjacent hotel.
3.10	Willie Engelbrecht	Enquires about the accessibility of the monuments and asks whether the history of the site will be portrayed.
3.11	Christo Nienkemper	The monuments will be accessible to the public, more so than what is currently the case. A museum exhibiting the history of the site is also planned. The example of electronic interactive boards is given.
3.12	Lewis Strauss	Gives background of his great-grandmother that died in the concentration camp and thereby has a personal connection with the site. Would like to discuss a more suitable name for the development.
3.13	Christo Nienkemper	Says that he is open to options regarding a name.
3.14	Joseph Renaud	Will an archaeologist be involved in excavations?
3.15	Loudine Philip	Yes, a Palaeontologist who is also an archaeologist will be present with excavations. In addition to this she will also do site visits during the excavation period.
3.16	Willie Engelbrecht	Enquires about the water troughs on the eastern side of site. What will happen to them?
3.17	Loudine Philip	More information on the troughs will be included after the field survey has been undertaken (only desktop has been completed to date). The troughs are an important part of the history of the site and will be preserved; some incorporated into the landscaping of the intended development, with the remainder relocated to the Anglo-Boer War Museum as part of mitigation measures.
3.18	Willie Engelbrecht	With regards to the museum, cultural organisations would like to give inputs on the Afrikaner history and the context thereof must be upheld.
3.19	Louine Philip	Agrees that the museum will aim to preserve the 'sense of place' of the site and that cultural organisations would be welcome to provide any input, but the aim would be for the Anglo-Boer War, as specialist museum in this field, to be the primary responsible organisation for the nature and manner of displays in this museum.
3.20	Lewis Strauss	States that the statue at the <i>Bron van Herinneringe</i> should remain where it is. The <i>Dam van Trane</i> should also maintain its value, i.e. not transformed to such an extent that it loses its historic context.
3.21	Loudine Philip	Explains that these two heritage components will remain <i>in situ</i> and that major changes can't be done.
3.22	Christo Nienkemper	The landscape architect will keep the historical context within the planning.
3.23	Willie Engelbrecht	Acknowledges that the development can be seen in a positive light.
3.24	Simone Harms	Asks about hotel development using the zoo hotel as an example.
3.25	Christo Nienkemper	Explains need for hotel to complement rest of development and that it is the more appropriate type of development to have next to the <i>Dam van Trane</i> .
3.26	Willie Engelbrecht	Who will the tenants be?
3.27	Christo Nienkemper	The type of development will respect the contract with the










		landowner (Dutch Reformed Church), e.g. a casino won't be allowed.
3.28	Lewis Strauss	Requests to see contract the developer has with the church.
3.29	Christo Nienkemper	Will provide contract.
3.30	Loudine Philip	Mentions that in terms of the historical nature of the zoo, the erection of a hotel on the premises should not have been allowed without following the necessary processes required in such a case – e.g. similar to the current development
3.31	Loudine Philip	Explains her dual roles as member of Heritage Free State and as a consultant. In the current development SAHRA (the South African Heritage Resources Authority) in Cape Town will be the statutory consenting authority, and not Heritage Free State so there is no conflict of interest.
3.32	Johan Pretorius	Says that he is excited about the development, but was initially concerned about the heritage of the site, as well as the construction phase.
3.33	Marguerite Cronje	Gives short indication of timeframes of the hospital Basic Assessment and the rest of the development's full EIA process and comments period.
3.34	Willie Engelbrecht	Points out an additional little monument on the site which is not mentioned in the desktop as there are no written references to this. There is very little information on the small monument on site. It was built by Bertie de Lange with rocks obtained from the Bethulie concentration camp site.
3.35	Lewis Strauss	Mentions that Lucille v/d Berg (deceased) also compiled a document on the small monument.
3.36	Loudine	Enquires whether Lambertus van Rensburg has anything to add to the meeting discussion.
3.37	Lambertus van Rensburg	States that at the moment they are content.
3.38	Loudine Philip	Explains that responsible development is often better for <i>in situ</i> conservation of existing heritage and refers to an example of a site where the discovery a massive historic graveyard did not deter its excavation and removal to a different site to accommodate the development project.
3.39	Joseph Renaud	On behalf of Afriforum he is positive about the development and says that more information on the heritage of the site and area will be available to the general public with the development than is currently the case.
3.40	Johan Pretorius	Warns that the developer should not be negatively influenced regarding landuses on site.
4.	Loudine Philip	Closure
		Thanks everyone for their inputs and attendance.
		Meeting adjourns at 12:20.

ATTENDANCE REGISTER

Proposed Heritage Lifestyle Centre Development – Heritage Meeting

Nienkemper Group Boardroom

Wednesday, 14 June 2017 @ 11am

Name	Affiliation	Telephone number	Email address	Signature
Joseph Renaud	Afforum	0824510538	joseph@afforum	
Simone Harms	Afforum	083 488 9886	simoneharms3@gmail.com	
Johan Pretorius	Wys Raadslid	0722260222	xgrafies@gmail.com	
Lambertus v Rensburg	Ou Pavo Hist Ver	0724188665	ransens@j@gmail.com	
Wilke Engelbrecht	Vriende van die Bron van Herinnering	0827281489	willie7@vodanet.co.za	
Lewis Strauss	Bfa Afrikaans Kultuurraad	076 061 0129	lstrauss@latic.net	
Marguerite Cronje	EAP	0827020547	margueritecronje@gmail.com	
Christo Nienkemper	MPC - Dev.	0825122444	christo@nicalcompgrp.co.za	
LEUDINE PHILIP	HERITAGE CONSULTANT (ARCHAEOLOGIST)	0784489307	leudine.philip@nasmus.co.za	

Comments on draft Scoping Report



Marguerite Cronje <margueritecronje@gmail.com>

EIA: Heritage Lifestyle Centre - Draft Scoping Report

Johan Pretorius <xgrafies@gmail.com>
To: Marguerite Cronje <margueritecronje@gmail.com>
Cc: christo@nienkempergroup.co.za

1 June 2017 at 11:54

Hi Marguerite

Thank you for the information. Firstly i must say I am very excited about this development.

Please ensure that you get approval from Centlec for the electricity connection and the developer need to work hand in hand with mangaug to ensure the services like drain and stormwater need to be installed on this erf for this kind of development.

The developer must also please make sure that all the heritage sites and monuments are kept intact and maintained if the development is done.

Please keep me informed of the progress and if there is any public participation meetings in the future.

I thank you in advance!

regards
Cllr Johan Pretorius
Ward 48
0722260222

On Wed, May 17, 2017 at 11:06 AM, Marguerite Cronje <margueritecronje@gmail.com> wrote:
Dear Interested and Affected Party

With reference to the Environmental Impact Assessment (EIA) for the proposed Heritage Lifestyle Centre development planned at the "Dam van Trane" in Bloemfontein, the following:

Please find attached the draft Scoping Report (site development also attached separately for easy reference). Should you have any comments, please send them to me by **Monday 19 June 2017**.

Please note that the draft EIA Report, which includes more detail of the project, as well as the specialist studies undertaken, will also be sent to you in due course.

If you require any additional information, please do not hesitate to contact me.

Kind regards

Marguerite Cronje
Environmental Assessment Practitioner
Tel: 082 7020547

Attachment C

Archaeological/palaeontological chance finds procedures

(please note these procedures are site specific)


 <p>NATIONAL MUSEUM BLOEMFONTEIN</p> <p>an agency of the Department of Arts and Culture</p>	<p>Department of Anthropology and Archaeology</p> <p>National Museum, Bloemfontein, Free State, South Africa</p> <p>36 Aliwal Street</p>
	<p>ARCHAEOLOGICAL/PALAEONTOLOGICAL CHANCE FIND PROCEDURE (CFP)</p>
<p>Prepared for:</p>	
<p>Developer: MPC Developers (Pty) Ltd</p> <p>Development project: Hospital and Heritage Lifestyle Centre, at erven 22011 and 1/22011, Bloemfontein</p>	

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1. SUMMARY
2. POTENTIAL IMPACT ACTIVITIES
3. RELEVANT LEGISLATION
4. RESPONSIBILITIES
5. EXECUTION

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 archaeology and cultural heritage in South Africa. These 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. It is recommended that due to the moderate to high archaeological potential of some areas within the project area, all on site personnel and contractors be informed of the Archaeological Chance Find Procedure and have access to a copy while on 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; [Please note that this development is on a site associated with military history.]

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 development Sections 35, 36 and 37 of the NHRA are applicable of which only 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 re-interment of the contents of such grave or, in the absence of such person or community, make any such arrangements as it deems fit.

Section 37: (Public monuments and memorials)

Public monuments and memorials must, without the need to publish a notice to this effect, be protected in the same manner as places which are entered in a heritage register referred to in section 30.

[The development site contains both a memorial and a monument and care should be taken to avoid accidental damage to either one.]

4. CHANCE FIND PROCEDURE EXECUTION

- 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.
- The project archaeologist and Archaeology Branch must be contacted.
- 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 project 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, if the remains are assessed to be archaeological, then the Graves and Burial unit of SAHRA will be consulted to determine how to handle them. Options could include avoidance or respectful removal and reburial.
- If human remains are encountered and they are not archaeological, then the South African Police will be contacted immediately.

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.

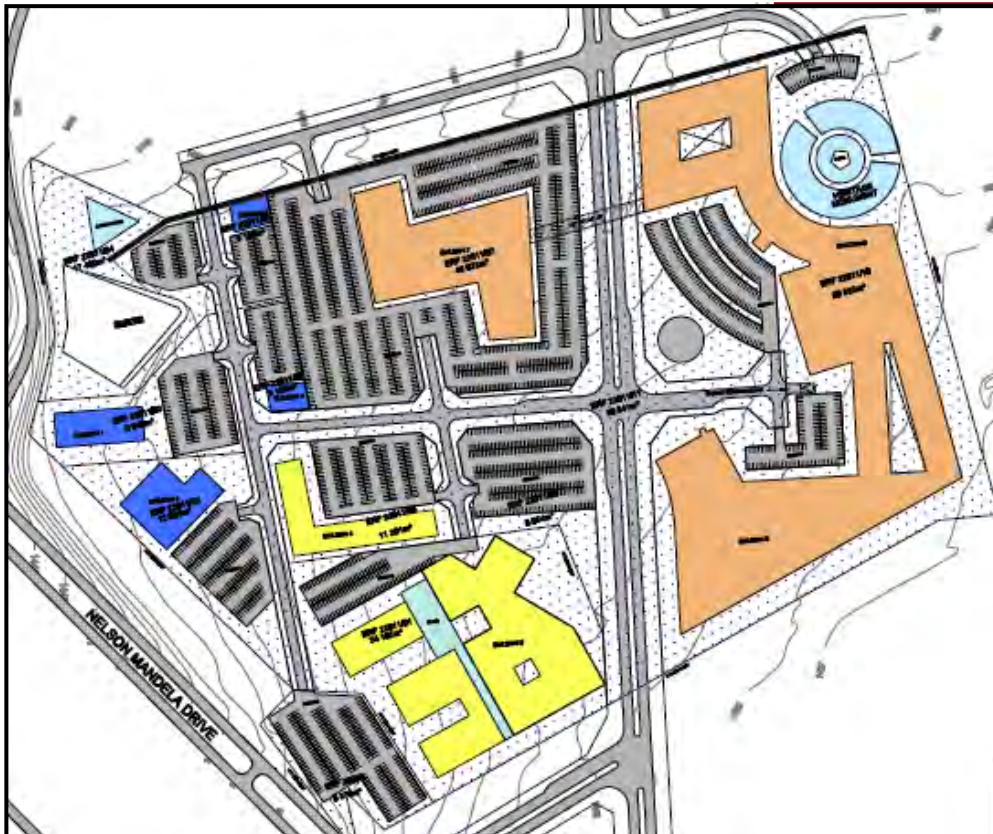
Attachment D

Draft EIA



Draft EIA Report

Proposed Heritage Lifestyle Centre development on the
Remainder of Erf 22011, Bloemfontein



Compiled by:

**SPATIAL SOLUTIONS
INC**

Property Valuers and Environmental
Consultants

P O Box 28046
DANHOF
9310

Contact person: Marguerite Cronje
Tel: 082 7020547
Email: margueritecronje@gmail.com

August 2017

EXECUTIVE SUMMARY

The applicant, namely MPC Developers, proposes to develop the Remainder of Erf 22011, Bloemfontein (the site). The proposed development site is located at the “Dam van Trane”, adjacent to and to the north west of the Tempe military grounds and to the north east of the Bible House in Nelson Mandela Drive. The site measures 23.6664 ha and is currently zoned “Undetermined”.

The proposed development entails subdividing and rezoning the site to allow for a motor car dealer, a hotel, a private open-air theatre at the “Dam van Trane”, offices, retail, and doctors’ rooms (to complement the proposed hospital development planned on the adjacent Subdivision 1 of Erf 22011). Associated roads and civil and electrical infrastructure are also required.

The overall terms of reference for this assessment exercise are to:

- Conduct an in-depth investigation into biophysical and socio-economic aspects, focusing on key issues;
- Address the issues that were identified during the scoping process and investigation, which are associated with this planned project;
- Advise the applicant on the potential impacts (positive and negative impacts) of their planned development, as well as the implications for the design, construction and operational phases of the project;
- Facilitate public input on environmental and social matters;
- Identify possible measures to mitigate the potential impacts of the planned project;
- Address the cumulative impact of all aspects of the planned development as well as recommend possible mitigating measures.

The following potential issues were identified during the scoping phase:

- Impact on heritage, historical and palaeontological resources
- Destruction of natural vegetation
- Impact on wetlands
- Soil suitability
- Bulk service infrastructure, which includes:
 - Water provision

- Electrical infrastructure
- Roads
- Sanitation
- Solid waste disposal
- Visual impact
- Increase in traffic
- Socio-economic impact

Specialist studies undertaken include:

- Heritage Impact Assessment
- Palaeontological Desktop Assessment
- Ecological Assessment
- Bulk Civil Services Report
- Electrical Services Report
- Traffic Impact Study

The no-go alternative, i.e. keeping the site in its current state and not proceeding with the proposed development, is only recommended if the development can't be accommodated in terms of bulk civil and road infrastructure. The sensitive areas and historical features on the site would further deteriorate if left as is. The preservation, enhancement and access to the historical Anglo-Boer War features on site is seen as a positive impact of the proposed development.

An Environmental Management Programme (EMPr) is required to minimize the possible negative impacts during the different phases of the development, especially the construction phase. The EMPr is included in Annexure F.

There is no obvious environmental reason for Environmental Authorisation to be denied. It is however essential that a service agreement is in place between the Applicant and the Municipality for the provision and upgrading of bulk civil infrastructure.

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Annexure E4: Civil Services Report

Annexure E5: Electrical Services Report

Annexure E6: Traffic Impact Study

Annexure F: Draft Environmental Management Programme

1. INTRODUCTION

1.1. PROJECT BACKGROUND

The applicant, namely MPC Developers, proposes to develop the Remainder of Erf 22011, Bloemfontein (the site). A long-term lease agreement is in place between the developer and the landowner, namely *Die Nederduitse Gereformeerde Kerk in die Oranje Vrystaat*.

The development site is located at the “Dam van Tane”, 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 development entails subdividing and rezoning the site to allow for a motor car dealer, a hotel, a private open-air theatre at the “Dam van Trane”, offices, retail, and doctors’ rooms (to complement the proposed hospital development planned on the adjacent Subdivision 1 of Erf 22011). Associated civil and electrical service and road infrastructure also forms part of the development.

The site forms part of an Anglo-Boer War (1899-1902) concentration camp. Two historically significant features, namely the “Dam van Trane” and the “Bron van Herinnering” monument are located on site. The developer plans to incorporate and enhance these cultural features.

A hospital is planned on the adjacent Subdivision 1 of Erf 22011, which will form part of proposed Heritage Lifestyle Centre and is included on the site development plans. This site has already been zoned to allow for a hospital. A Basic Assessment process is currently underway to obtain Environmental Authorisation for the proposed hospital development.

1.2 OBJECTIVES OF THE EIA PROCESS

The objectives of the EIA Process are described in Appendix 3 of the National Environmental Management Act (Act 107 of 1998) (NEMA): Environmental Impact Assessment Regulations, as amended (No. 326 of 7 April 2017):

- Determine the policy and legislative context within which the activity is located and document how the proposed activity complies with and responds to the policy and legislative context;
- Describe the need and desirability of the proposed activity, including the need and desirability of the activity in the context of the preferred location;
- Identify the location of the development footprint within the preferred site based on an impact and risk assessment process inclusive of cumulative impacts and a ranking process of all the identified development footprint alternatives focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects of the environment;
- Determine the –
 - nature, significance, extent, duration and probability of the impacts occurring to inform identified preferred alternatives; and
 - degree to which these impacts –
 - can be reversed;
 - may cause irreplaceable loss of resources, and
 - can be avoided, managed or mitigated;
- Identify the most ideal location for the activity within the preferred site based on the lowest level of environmental sensitivity identified during the assessment;
- Identify, assess, and rank the impacts the activity will impose on the preferred location through the life of the activity;
- Identify suitable measures to avoid, manage or mitigate identified impacts; and
- Identify residual risks that need to be managed and monitored.

1.3 APPLICABLE LEGISLATION AND GUIDELINES

This process has been conducted in terms of the relevant legislative requirements, namely:

- National Environmental Management Act (Act No 107 of 1999)
- National Biodiversity Act (Act No 10 of 2004)
- National Heritage Resources Act (Act No 25 of 1999)
- National Water Act (Act 36 of 1998)

The NEMA 2014 Environmental Impact Assessment Regulations, as amended (Government Notices No. R. 324, 325, 326 and 327 of 7 April 2017) determine the Environmental Impact Assessment (EIA) process that should be followed for certain listed activities, which may have a detrimental effect on the environment.

The proposed development includes certain listed activities that require environmental authorization prior to commencement.

The relevant activities are listed below:

NEMA 2014 Regulations, as amended (No. 327 of 7 April 2017) (Listing Notice 1):

Activity 11:

“The development of facilities or infrastructure for the transmission and distribution of electricity –

- (i) outside urban areas or industrial complexes with a capacity of more than 33 but less than 275 kilovolts; or*
- (ii) inside urban areas or industrial complexes with a capacity of 275 kilovolts or more.”***

Excluding the development of bypass infrastructure for the transmission and distribution of electricity where such bypass infrastructure is –

- (a) temporarily required to allow for maintenance of existing infrastructure;*
- (b) 2 kilometres or shorter in length;*
- (c) within an existing transmission line servitude; and*
- (d) will be removed within 18 months of the commencement of development.*

Activity 28:

“Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture, game farming, equestrian purposes or afforestation on or after 01 April 1998 and where such development:

- (i) will occur inside an urban area, where the total land to be developed is bigger than 5 hectares; or***
- (ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare;***

excluding where such land has already been developed for residential, mixed, retail, commercial, industrial or institutional purposes.”

NEMA 2014 Regulations, as amended (No. 325 of 7 April 2017) (Listing Notice 2):Activity 15:

“The clearance of an area of 20 hectares or more of indigenous vegetation, excluding where such clearance of indigenous vegetation is required for-

- (i) the undertaking of a linear activity; or***
- (ii) maintenance purposes undertaken in accordance with a maintenance management plan.”***

NEMA Regulations No. R. 324 of 7 April 2017 (Listing Notice 3):Activity 4

“The development of a road wider than 4 metres with a reserve less than 13.5 metres.

- (b)(ii) In urban areas:***
- (bb) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority or zoned for a conservation purpose.”***

Activity 6

“The development of resorts, lodges, hotels and tourism and hospitality facilities that sleep 15 people or more.

- (b)(ii) In urban areas:***
- (bb) Areas designated or conservation use in Spatial Development Frameworks adopted by the competent authority or zoned or a conservation purpose.”***

Activity 8

“The development and related operation of above ground cableways and funiculars.

- (b)(ii) In urban areas:***
- (bb) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority or zoned for conservation purpose.”***

Activity 14

“The development of-

(ii) infrastructure or structures with a physical footprint of 10 square metres or more; where such development occurs –

(a) within a watercourse;

(b)(ii) In urban areas:

(bb) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority, zoned for a conservation purpose.”

Application for Scoping and EIA has therefore been made to the Free State Department of Economic, Small Business Development, Tourism and Environmental Affairs (DESTEA).

2. ENVIRONMENTAL ASSESSMENT PRACTITIONER

2.1 DETAILS OF ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP) WHO PREPARED THE REPORT

Spatial Solutions Inc
Marguerite Cronje
P.O. Box 28046
Danhof
9310
Tel: 082 7020547
Email: margueritecronje@gmail.com

2.2 EXPERTISE OF THE EAP TO CARRY OUT THE SCOPING PROCEDURES

Me. Marguerite Cronje

Key qualifications:

- Key competencies and experience include environmental impact assessment, environmental management and monitoring (>10years).

Education:

- B.Sc. (Zoology), University of the Free State, SA, 2002
- B.Sc. Honours (Zoology), University of the Free State, SA, 2003
- M.Sc. Diploma (Equine Science), University of Edinburgh, UK, 2005
- Masters in Environmental Management, University of the Free State, SA, 2008.

Conferences:

- 10 years of Environmental Impact Assessments in South Africa – Somerset West (2008)
- Free State Provincial Waste Summit – Bloemfontein (2010)
- IAIA Conference – Thaba Nchu (2013)
- IAIA Conference – Port Elizabeth (2016)

3. PROJECT INFORMATION

3.1 PARTICULARS OF APPLICANT

MPC Developers

P.O. Box 27196

Erhlich Park

Boemfontein

9312

Contact person: Christo Nienkemper

Tel: 082 5522444

E-mail: christo@nienkempergroup.co.za

3.2 SITE DETAILS

The proposed development site is located at the “Dam van Trane”, adjacent to and to the north west of the Tempe military grounds and to the north east of the Bible House in Nelson Mandela Drive. The site measures 23.6664 ha and is located on the Remainder of Erf 22011, Bloemfontein, which is currently zoned “Undetermined”. The details of the relevant property are listed below:

Table 1: Property details

Property Name	Size of Erf	SG 21 digit code
Remainder of Erf 22011, Bloemfontein	23.6664 ha	F00300030002201100000

3.3 DESCRIPTION OF THE PROPOSED DEVELOPMENT

The proposed development entails subdividing and rezoning the site to allow for commercial, business, healthcare and heritage zones. Associated roads and civil and electrical infrastructure are also required. A site development plan is shown in Figure 1 below.

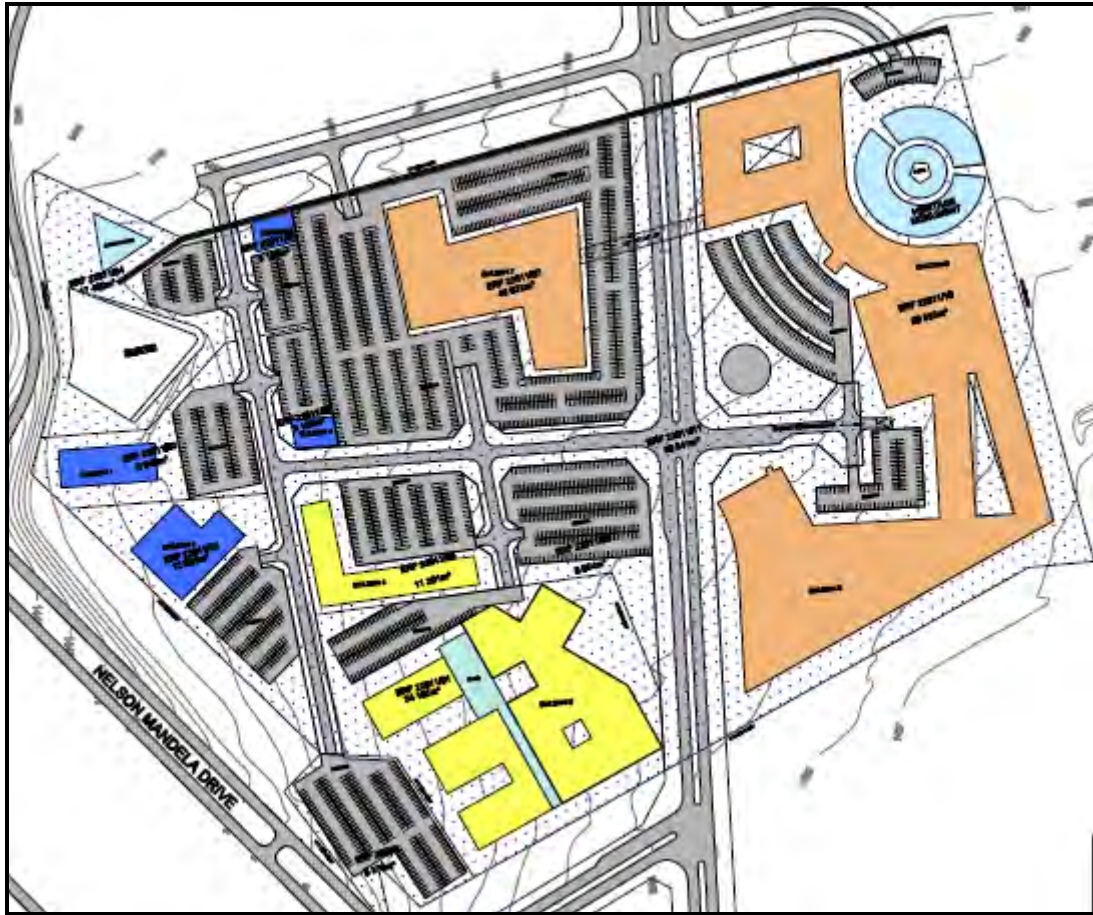


Figure 1: Site development plan of proposed development (refer to Annexure B for a larger image).

Table 2 below gives a description of the proposed subdivisions and rezoning of the site.

Table 2: Site / Building Areas

Proposed Erf	Description	Site Area (m ²)
Erf 22011/02	Motor Car Dealer	12 664
Erf 22011/03	Hotel	9 948
Erf 22011/04	Private Open-Air Theatre	17 400
Erf 22011/05	Office	3 160
Erf 22011/06	Office	3 155
Erf 22011/07	Retail 1	42 672
Erf 22011/08	Doctor's Rooms	11 201
Erf 22011/09	Parking	8 854
Erf 22011/10	Retail 2	88 525
Erf 22011/11	Street	39 541

Access to the proposed development is planned from Nelson Mandela Drive, from the south of the development, between the Bible House entrance and the Jac van Rhyn intersection. Additional accesses are planned once the “Tempe Arterial” is implemented. The section running east of the N1 through the site and connecting Nelson Mandela Drive with the proposed Reynecke Avenue extension to Frans Kleynhans / Lucas Steyn will be paramount for the proposed development.

Subdivision 1 of Erf 22011 is already zoned “Institutional”, allowing for the development of a hospital. This proposed hospital development is included on the site development for the Heritage Lifestyle Centre, but has been submitted as a separate EIA Application to the DESTEA to obtain Environmental Authorisation through the shorter, Basic Assessment process.

The proposed development site is located within the urban edge of the Mangaung Spatial Development Framework (SDF). The area is however indicated as green, part of the Mangaung Open Space System (MOSS). Refer to Figure 2 below.

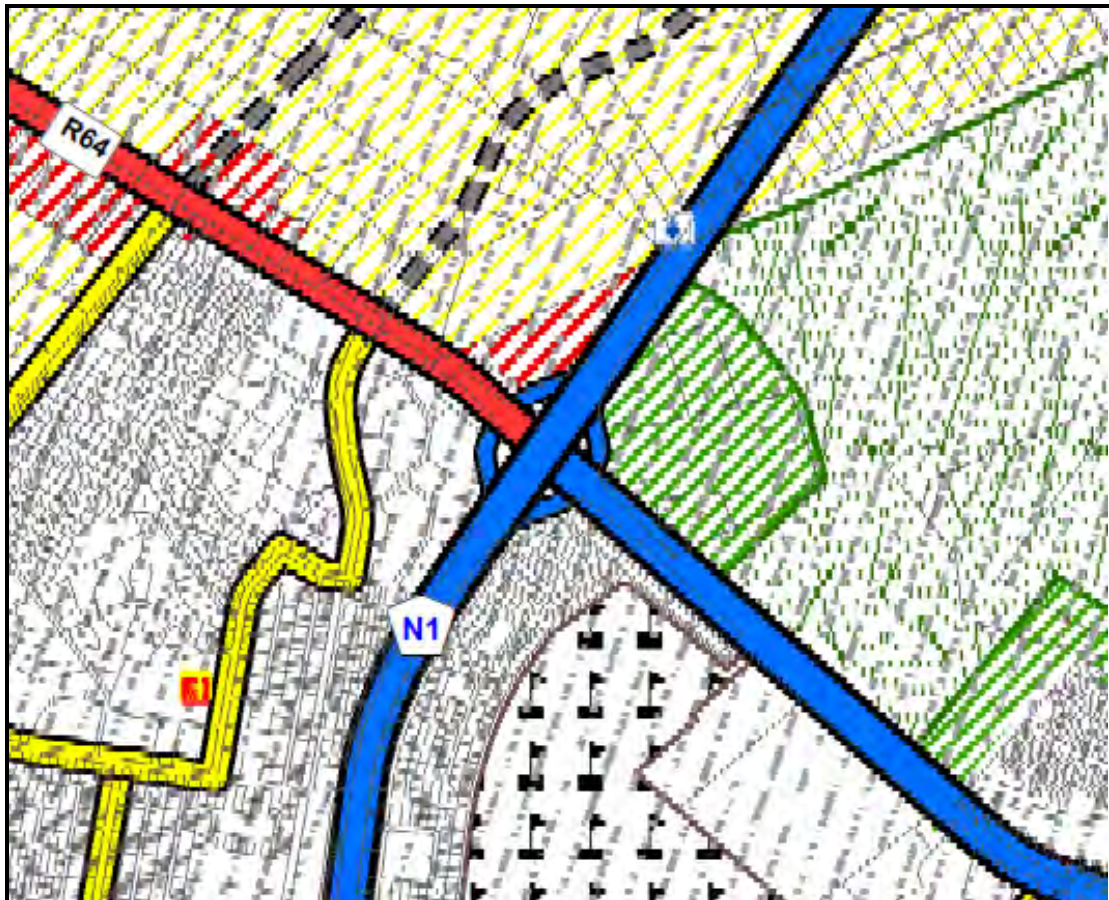


Figure 2: Extract of Mangaung Metro Municipality Micro Framework Map 2016 showing the proposed development site area, currently green.

3.4 ENERGY EFFICIENCY

The proposed development aims to incorporate sustainable design principles and ensure that the buildings are designed to address the specific conditions of the local climate. Buildings will be orientated in such a way as to minimize the need for active temperature regulation and lighting systems, in so doing lowering the energy consumption of the building. This will be accomplished by adapting the building to varying sun angles throughout winter and summer, and also by designing the envelope of the building in such a way that will facilitate natural ventilation and prevent excessive heat gain/loss.

The use of renewable energy sources such as solar energy will be investigated during the design process. Additionally, equipment and infrastructure to be installed in the building will be evaluated in terms of its energy efficiency. Furthermore, materials will be sourced locally where possible, to minimize the energy cost associated with transport.

(Information obtained from HDG Architects)

3.5 NEED AND DESIRABILITY

The property has been vacant for a long time now. The developer, together with the owners of the land, want to develop this to allow for retail, offices and hotel.

This site has a lot of heritage to it, but with this development, the heritage component will be more available to the public. Currently the access to the property is through a gate which is locked to the general public. Therefore, the site is currently not available to the public at all. The heritage components will be left on the site and will form part of the development and will also be accessible to the public at all times.

The locality of the site is perfect for any development taking into consideration that it is located on the corner of the N1 and Nelson Mandela drive. It is visible from the N1 as well as from Nelson Mandela drive. It is in close proximity of the University of

the Free State and the Tempe military base. The most important factor for a development of this nature is locality, locality, locality (LLL) and therefore this site is perfect for this type of development.

This development will be in the interest of the public as it will provide employment opportunities during the construction phase of the development as well as after completion of the development. The application is furthermore in the public interest in that it provides access to a heritage site that was not really accessible in the past to the general public.

(Extract from Town Planning Motivation by SEED, 2017)

3.6 DESCRIPTION OF FEASIBLE AND REASONABLE ALTERNATIVES

3.6.1 Site alternatives: The developer has a lease agreement with the landowner and would therefore like to develop the particular site, site alternatives are therefore not applicable for this project.

3.6.2 Activity alternatives: The proposed activity was identified by the developer to consist of a commercial, business, retail and hotel components. The option of not proceeding with the development is the only activity alternative assessed. No other activities were considered for the site due to the assessed need and feasibility of the proposed activity / development.

3.6.3 Design alternatives: Various layout and design alternatives were considered by the applicant, architects and town planners, taking terrain and environmental constraints identified during the planning phase into account, with the preferred site development plan being the result. Refer to Annexure B for the preferred design option.

3.6.4 No-go option: The no-go option means keeping the status quo, i.e. not transforming the site for the proposed development. The only reason for this alternative to be recommended would be if bulk civil and road infrastructure required for development could not be provided. This would also not be a permanent option. No other issues were identified that should

motivate the no-go option as being the preferred alternative. The sensitive areas and historical features on the site would further deteriorate if left as is.

4. PUBLIC PARTICIPATION

4.1 INTRODUCTION AND OBJECTIVES

As an important component of the EIA process, the public participation process involves public inputs from Interested and Affected Parties (I & APs) according to Chapter 6 of the NEMA 2014 EIA Regulations, as amended (No. 326 of 7 April 2017). I & APs may comment during the EIA of the proposed project.

The key objectives of the public participation process are to:

- Identify a broad range of I & APs, and inform them about the proposed project.
- Understand and clearly document all issues, underlying concerns and suggestions raised by the I & APs, and
- Identify areas that require further specialist investigation.

4.2 METHODOLOGY

4.2.1 Identification of key I & AP's

Key I & AP's, are the following types of organizations:

- Surrounding landowners
- Environmental organizations
- Authorities
- GOs
- NGOs
- Business and civic organizations

See **Annexure D** for a list of I & AP's.

4.2.2 Notification of potential I & AP's of EIA:

i) Newspaper advertisements: (Annexure D)

<i>Die Volksblad</i>	22 March 2017
<i>Bloemfontein Courant</i>	23 March 2017

ii) **On site notices:** On site notices were also placed at prominent places at and near to the site on 22 March 2017 allowing 30 days for public response (**Annexure D**).

4.2.3 Public comments

The draft Scoping Report was circulated for comment from 17 May 2017 to 19 June 2017. Comments received are included in **Annexure D**. The draft EIA Report is currently being circulated for a 30-day comment period.

4.2.4 Meeting

A meeting was held on 14 June 2017 to discuss the impact on the heritage resources on site. More information on the meeting is included in **Annexure D**.

4.3 SUMMARY OF KEY ISSUES RAISED / COMMENTS BY THE I & AP's

- Centlec approval for electricity connection needs to be obtained.
- The developer needs to work together with the Municipality to ensure that civil services are installed.
- All heritage sites and monuments should be kept intact and maintained.

Refer to comments received on the draft Scoping Report included in **Annexure D**.

5. ENVIRONMENTAL ASPECTS

5.1 DESCRIPTION OF THE ENVIRONMENT

5.1.1 Biophysical Environment

The topography of the site consists of a plain sloping gently from east to west. The altitude of the site varies from approximately 1443 to 1433 m.a.s.l.

5.1.1.1 Climate

The area lies within a summer rainfall region with an average annual rainfall of 500 mm. There is a large difference between summer and winter average temperatures with frost regularly occurring in winter.

5.1.1.2 Geology of area

The site is situated within the Beaufort Group, Adelaide Subgroup (Karoo Supergroup) primarily represented by late Permian, Balfour formation sedimentary rocks, which are made up of alternating and potentially fossil-bearing sandstone and mudstone layers.

5.1.1.3 Terrain forms & habitats

Table 3: Terrain form and habitats area on site

Terrain form		Habitat types	
Hill top		Grassland	X
Hill side		Karoo	
Flat	X	Karroid	
Valley		Natural forest	
River bank		Plantations	
Drainage line	X	Ploughed or fallow fields	
Foot slope		Riparian	
		Savanna	
		Shrub	

		Wetland	X
		Other	

5.1.1.4 Soils of area

The soils at the site have not yet been evaluated, pending permission from the South African Heritage Resources Agency (SAHRA).

A geotechnical investigation will be undertaken, as soon as the necessary approvals therefore are in place. This investigation is required to assist in the architectural designs of the buildings and will only be done at a later stage.

5.1.1.5 Vegetation of area

The study area falls within the Grassland Biome (Mucina & Rutherford, 2006) and the vegetation type on site is the Winburg Grassy Shrubland (Gh7).

A biodiversity and ecological assessment of the site has been undertaken and is included in Annexure E3.

5.1.1.6 Animals (moths, butterflies, reptiles, fish, birds & mammals) of the area

Due to the degraded condition of the site, as well as the nearby urban area, it is unlikely that any species of concern will occur on site. The biodiversity and ecological assessment undertaken includes a list of red data species that could be found in the area. This report is included in Annexure E3.

5.1.1.7 Aquatic systems

The "Dam van Trane" is an artificial water body situated in the north-western corner of the site. It does not drain into any defined watercourse, but seeps from the dam in an eastern direction. There are also wetland conditions associated with the origin of the Bloemspruit in the north-eastern corner of the site.

The wetland areas have been mapped and assessed as part of the biodiversity and ecological assessment, which is included in Annexure E3.

5.1.2 Socio-economic Environment

The Mangaung Local Municipality is comprised of Bloemfontein, Botshabelo and Thaba Nchu, of which Bloemfontein is the economical hub of the municipal area. According to the Mangaung Local Municipality's Integrated Development Plan (IDP) of 2016/2017, based on the 2011 census, the population of Mangaung is 747 431, and that of Bloemfontein being 256 534. Bloemfontein is considered the sixth largest city in South Africa and is also the judicial capital. 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. The economy of the city is strongly driven by community services, trade, finance and transport.

5.1.2.1 Surrounding land uses

The Tempe military base is located to the south and east of the site. Nelson Mandela Drive and the Bible House are along the western boundary. Also refer to the locality plan in Annexure A.

5.1.2.2 Historical, archaeological or cultural sites

Although Erf 22011 originally formed part of an area designated by the Bloemfontein Municipality in 1950 as 'concentration camp area' [subdivision 72 of the farm (townlands) Bloemfontein 654] dating to the Anglo-Boer War (1899-1902), this description fell away with the subsequent subdivision of the aforementioned erf and incorporation of a section thereof with the current Erf 22011 in 1962, prior to the implementation of the National Heritage Resource Act, no 25 of 1999. It is, however, generally accepted that the development area could have formed part of the concentration camp, but subsequent alternate uses of this area might have obliterated any evidence of the former. There are two heritage areas on Erf 22011 (both connected to the Anglo-Boer War period) that are viewed as being of undisputed importance, namely the "Dam van Trane" that was constructed during the Anglo-Boer War and the subsequent erection of the "Bron van

Herinnering” memorial inaugurated in 1994 around a water pump that purportedly also dates from the same period. As a monument, the latter is protected under Section 37 of the National Heritage Resources Act, no 25 of 1999, but both features, however, will be incorporated into the proposed development and accordingly preserved as heritage features.

A heritage impact assessment was done and is included in Annexure E1.

5.2 SUMMARY OF FINDINGS AND RECOMMENDATIONS OS SPECIALIST STUDIES

The necessary specialised studies and specialised processes will be performed according to Appendix 6 of the NEMA 2014 Regulations, as amended (No. 326 of 7 April 2017). Specialised studies relevant to the project include:

5.2.1 Heritage Impact Assessment

An assessment to evaluate the palaeontological, heritage and historical significance of the site and evaluate the impact the proposed development will have on these features.

Loudine Philip

National Museum

P.O. Box 266

Bloemfontein

9300

Tel: 051 4479606

Email : loudine.philip@nasmus.co.za

Area of expertise: Museum Scientist / Archaeologist

Findings

- The site contains successive layers of human occupation and use starting from the Anglo-Boer War (ABW), during which time it most likely formed part of Camp B of the white Bloemfontein concentration camps.
- The two key elements from the ABW that survived are the ‘Dam van Trane’ and a borehole that subsequently formed the centre of a monument, the ‘Bron van Herinnering’. Both these elements will be incorporated into the design of the proposed development.

- Subsequent uses of the area include the forming of a black labour camp at the end of the ABW and during World War I, this area was used by the cavalry division.
- No plans could however be found to indicate the specific boundaries of the concentration camp or the cavalry area occupied by the cavalry division other than being approximately in the area.

Recommendations

- The “Bron van Herinnering” monument must be preserved and maintained *in situ*. Protective measures should be in place during the construction phase. The layout of the development should enhance the monument and not obscure it.
- The “Dam van Trane” must remain in situ and a conservation management plan for this dam should be implemented. Protective measures should be in place during the construction phase and the design of the development should not compromise the historic authenticity of the dam. A plaque should be erected explaining the dam’s historical connection to the Anglo-Boer War Bloemfontein concentration camp. The proposed on-site museum should also be constructed near to the dam to form a holistic whole.
- The animal water troughs on site should be preserved, but can be moved to a different place on site and incorporated into the landscaping. At least two of the best preserved troughs should be relocated to the War Museum for curation and display.
- The small informal memorial, which was erected in 2001 by the Vroukomitee / Volkskomitee commemorating the suffering of women and children during the Anglo-Boer War must be preserved, but carefully relocated to the same area as the “Dam van Trane” and on-site museum.
- The ruins of a small brick building can be demolished once it has been fully recorded by an archaeologist and the surrounding area investigated for any associated finds.
- An archaeologist should be present during geotechnical sampling to retrieve any cultural material.

- Should any middens (waste sites) of the concentration camp be found, construction activities should cease temporarily until the archaeologist has assessed the find.

5.2.2 Palaeontological Assessment

A desktop assessment of the potentially fossil-bearing strata of the proposed development site and the palaeontological impact the proposed development may have.

Dr Lloyd Rossouw

National Museum

P.O. Box 266

Bloemfontein

9300

Tel: 051 4479606

Email : lloyd@nasmus.co.za

Area of expertise: Archaeologist and Palaeontological Specialist

Findings

- The site is underlain by potentially fossil-bearing strata of the Late Permian Adelaide that are capped by superficial deposits of low to very low palaeontological sensitivity.
- The impact area is not situated within or near pan alluvial or spring deposits.
- It will be difficult to determine the potentially adverse effect of excavations into potentially fossil-bearing bedrock sediments underlying the area other than to emphasize that such impacts on fossil heritage are generally irreversible.
- The recovery of new fossils can however also be considered a positive impact.

Recommendations

- A professional palaeontologist should monitor unweathered / fresh sedimentary bedrock when geotechnical sampling is to be conducted and where large-scale excavations into unweathered / fresh sedimentary bedrock are to be conducted during the construction phase.

- The palaeontologist must apply for a valid collection / removal permit from SAHRA if fossil material is found.

5.2.3 Ecological Assessment

A report on the biodiversity and ecology of the site to assess the impact of the proposed development.

Eko Environmental

Darius van Rensburg
Suite 158
Private Bag X01
Brandhof
Bloemfontein
9324
Tel: 051 4444700
Email : darius@ekogroup.co.za

Area of expertise: Biodiversity / Ecological Specialist

Findings

- According to Mucina & Rutherford (2006), the area consists of Winburg Grassy Shrubland (Gh7). This vegetation type is currently listed as being of Least Concern (LC) under the National List of Threatened Ecosystems (Notice 1477 of 2009) (National Environmental Management Biodiversity Act, 2004).
- The site consists predominantly of natural vegetation, although in a significantly degraded condition.
- The vegetation on site consists of a well-defined low grass layer with a few scattered trees.
- Several exotic tree species are also present on the site, altering the vegetation structure to some extent. This also includes two windrows consisting of exotic *Eucalyptus camaldulensis* (Bluegum).
- Three protected tree species occur on site, namely the *Olea europaea* subsp. *africana* (Wild Olive / Olienhout), *Brunsvigia radulosa* (Candelabra Lilly / Kandelaar Lelie) and the *Eucomis autumnalis* (Pineapple Flower / Wildepynappel).
- The Dam van Trane is an artificial impoundment associated with an artificial wetland community.

- A wetland area forming part of the origin of the Bloemspruit is located in the north-eastern corner of the site. Its conservation in terms of ecology is low although the services it provides are essential.
- A small drainage line / area transects the site from east to west.

Recommendations

- The protected Wild Olive (*Olea europaea* subsp. *africana*) occurring on the site is not of significant size or age and therefore not considered of conservation significance. However, permits still have to be obtained to remove them from the site.
- Two protected bulb species on the site, *Brunvigia radulosa* and *Eucomis autumnalis*, transplant easily and are of some aesthetic value and they should therefore be transplanted and utilised in the landscaping of the development. Permits also need to be obtained to transplant these and a designated nursery area should be created on the site where these can be temporarily cultivated until they can be placed in landscaping areas.
- The process of transplanting protected species should be undertaken and overseen by a suitably qualified person, preferably a botanist or ecologist.
- The Dam van Trane and associated wetland should be excluded from the development.
- The wetland area occurring in the north-eastern corner of the site is highly degraded although it still provides several services to the urban area. It should be excluded from the development.
- The small drainage line on site forms part of the canalised Bloemspruit system. It should be accommodated within the development in terms of storm water management.
- As stipulated by the National Water Act, 1998 (Act 36 of 1998), any construction taking place within 100m of a watercourse or within 500m of a wetland area requires authorisation from the Department of Water and Sanitation (DWS). This is specifically relevant to the

Dam van Trane and the wetland area to the north-east corner of the site.

- Alien weeds and invaders occurring on site should be removed and monitored for re-establishment.
- The hunting, capturing and trapping of fauna should be prevented by making this a punishable offence during the construction phase.
- After construction has ceased, all construction materials should be removed from the area.

5.2.4 Geotechnical Report

Permits from SAHRA are required for geotechnical excavations on site because of the site's heritage value. As this study is not required for the rezoning of the erf, but merely to guide the architectural design of buildings, it was decided to only undertake the geotechnical investigation at a later stage, when approvals and permits are already in place. The Geotechnical investigation will be undertaken by:

WSP

Eddie Goosen
P.O. Box 100872
Brandhof
Bloemfontein
9324
Tel: 051 4471586
Email: eddie.goosen@WSPGroup.co.za

Area of expertise: Civil & structural engineers

The Geotechnical Report is therefore not included in the EIA Report.

5.2.5 Bulk Civil Services Report

A report on the bulk civil services to demonstrate the provision of infrastructure required for the proposed development.

WSP

Martin Goosen
P.O. Box 100872
Brandhof
Bloemfontein
9324
Tel: 051 4471586
Email: martin.goosen@WSPGroup.co.za

Area of expertise: Civil & structural engineers

Findings & Recommendations

Water

- The closest water connection ($\pm 120\text{m}$ from the southernmost point of the erf) is available on the 110 \emptyset Universitas Ridge water network, which will require crossing Nelson Mandela Drive.
- Alternatively, a connection might be possible into the existing 700 \emptyset water pipe at the Jac van Rhyn Road / Nelson Mandela Drive junction, $\pm 615\text{m}$ in a south easterly direction along the erf boundary, then crossing Nelson Mandela Drive.
- Another alternative is that a connection might be possible onto the 150 \emptyset existing water network along the eastern border of the proposed development on Military property, for which permission will need to be obtained.
- The average daily demand was calculated as 363.919K ℓ /day or 4.21 ℓ /s for the development.
- The peak daily demand of the development is estimated at 16.85 ℓ /s.
- The existing municipal water network in the Tempe / Universitas area receives water from the Welbedacht reservoir, which has insufficient storage capacity for the theoretical *status quo* and additional water demand is therefore required.
- As the development cannot be provided with potable water from the 110 \emptyset Universitas Ridge municipal line, an option for the proposed development to connect to existing infrastructure will be a 150mm \emptyset connection to the 700 \emptyset pipeline. Nelson Mandela Drive will have to be crossed by means of pipe jacking.
- Currently there is no infrastructure with fire hydrants in the vicinity of the proposed development.

Sewage Disposal

- Sewer from the Bible House is pumped across Nelson Mandela Drive to connect to the Universitas Ridge sewer network.
- The existing 160mm \varnothing Universitas Ridge sewer network runs along the northern borders of the erven. A 200 \varnothing line starts in Jac van Rhyn Road.
- A 215m long, 160 \varnothing pipe will be required to connect to the existing 200 \varnothing pipe crossing Nelson Mandela Drive.
- Alternatively, 280m long pipe connection, can be made onto the existing 160 \varnothing sewer network on Military property. Permission will have to be obtained to connect to this network.
- The estimated average dry weather flow for the development is 4180506K ℓ /day or 4.84 ℓ /s.
- The peak sewage runoff was calculated as being 14.04 ℓ /s.
- The existing 160mm \varnothing sewer network in Universitas Ridge can accommodate the additional flow, but the downstream network will be overloaded.

Stormwater Network

- The site has approximately 2% fall towards the south-eastern corner of the site.
- The run-off for the development is 2.345m³/s for the 1:5 year flood and 4.514m³/s for the 1:25 year flood.
- The runoff for the erf before the development is 0.694m³/s for the 1:5 year flood.
- The additional runoff is therefore 3.82m³/s (difference between the 1:25 year post development and 1:5 year pre development floods. A total of 531m³ will therefore be required.
- An open stormwater channel will have to be constructed on the northern side of the site to act as a cut-off drain to allow the storm water to drain towards the existing spruit on the eastern side of the site.

5.2.6 Electrical Services Report

A report on the electrical services to demonstrate the capacity demand and provision of electricity required for the proposed development.

FCE Consulting Engineers

Coenie van der Merwe
P.O. Box 43232
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Bloemfontein
9332
Tel: 051 4038596
Email : coenie@fceconsultingengineers.co.za

Area of expertise: Electrical engineers

Findings

- The area falls within the electricity supply area of Centlec.
- There are two primary 11KV medium voltage cables crossing the proposed site. The cables are fed from the Tempe Distribution Centre situated approximately 320m to the north-western side of the proposed development. These cables must be re-routed and coupled to the new Primary Substations.
- Currently there is approximately 8MVA available at the Tempe Distribution Centre.
- The estimated load of the development will be in the order of 23MVA.
- Centlec will supply medium voltage cables from the Tempe Distribution Centre to a primary substation on the northern side of the development.
- Due to the electrical load of the development, a further four more primary substations must be built for the development. The positions will only be determined after detail design has been done.
- Miniature substations will be placed between the primary substations at strategic positions throughout the development.
- Servitudes for primary substations and for miniature substations must be registered in favor of Centlec.

- The electrical networks will be designed according to Centlec's specifications and after inspection and commissioning it will be taken over by Centlec.

5.2.7 **Traffic Impact Study**

An assessment to determine the traffic impact of the proposed development.

WSP Group Africa

Richard Raven
P.O. Box 100872
Brandhof
Bloemfontein
9324
Tel: 051 4471586
Email: richard.raven@wspgroup.co.za

Area of expertise: Consulting traffic engineers

Findings & Recommendations

- The planning and implementation of the "Tempe Arterial" together with the proposed Reynecke Avenue extension will be paramount to the development of the site and the proposed development.
- It is expected that the proposed development will generate a maximum total vehicular trips of 1 517 and 3 545 for the weekday AM and PM peak hours respectively, and 5 329 during the Saturday peak hour.
- A background growth rate of 1% was assumed.
- The anticipated new Tempe Arterial and Reynecke Avenue extension is predicted to divert 40% of existing and latent demand from Lucas Steyn and Frans Kleynhans Roads to Nelson Mandela Drive.
- A number of existing intersection upgrades and new road construction are proposed in the Traffic Impact Study. Refer to Annexure E6 for more detail.
- From the VISSIM simulation, the general impression is that the network within the study area will operate within acceptable traffic operational conditions, with even a fair measure of spare capacity throughout.

6. IMPACT ASSESSMENT

6.1 METHODOLOGY

Impact assessment must take into account the nature, scale and duration of effects on the environment and whether such effects are positive (beneficial) or negative (detrimental). Each issue / impact is also assessed according to the project stages from planning, through construction and operation to the decommissioning phase (if applicable). Where necessary, the proposal for mitigation or optimisation of an impact is noted. A brief discussion of the impact and the rationale behind the assessment of its significance has also been included.

A rating system is applied to the potential impact on the receiving environment and includes an objective evaluation of the mitigation of the impact. In assessing the significance of each issue the following criteria is used:

Table 4: Impact rating criteria

Nature	A brief description of the environmental aspect being impacted upon by a particular action or activity is presented.								
Extent (Scale)	<p>Considering the area over which the impact will be expressed. Typically, the severity and significance of an impact have different scales and as such bracketing ranges are often required. This is often useful during the detailed assessment phase of a project in terms of further defining the determined significance or intensity of an impact.</p> <table> <tr> <td>Site</td> <td>Within the construction site</td> </tr> <tr> <td>Local</td> <td>Within a radius of 2 km of the construction site</td> </tr> <tr> <td>Regional</td> <td>Between 2 and 30 km from the site</td> </tr> <tr> <td>National</td> <td>The whole of South Africa</td> </tr> </table>	Site	Within the construction site	Local	Within a radius of 2 km of the construction site	Regional	Between 2 and 30 km from the site	National	The whole of South Africa
Site	Within the construction site								
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Regional	Between 2 and 30 km from the site								
National	The whole of South Africa								
Duration	<p>Indicates what the lifetime of the impact will be.</p> <table> <tr> <td>Short-term</td> <td>The impact will either disappear with mitigation or will be mitigated through natural processes in a span shorter than the construction phase</td> </tr> <tr> <td>Medium-term</td> <td>The impact will last for the period of the construction phase, where after it will be entirely negated</td> </tr> <tr> <td>Long-term</td> <td>The impact will continue or last for the entire operational life of the development, but will be mitigated by direct human action or by natural processes thereafter</td> </tr> <tr> <td>Permanent</td> <td>The only class of impact which will be non-transitory. Mitigation either by man or natural process will not occur in such a way or in such a time span that the impact can be considered transient</td> </tr> </table>	Short-term	The impact will either disappear with mitigation or will be mitigated through natural processes in a span shorter than the construction phase	Medium-term	The impact will last for the period of the construction phase, where after it will be entirely negated	Long-term	The impact will continue or last for the entire operational life of the development, but will be mitigated by direct human action or by natural processes thereafter	Permanent	The only class of impact which will be non-transitory. Mitigation either by man or natural process will not occur in such a way or in such a time span that the impact can be considered transient
Short-term	The impact will either disappear with mitigation or will be mitigated through natural processes in a span shorter than the construction phase								
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Long-term	The impact will continue or last for the entire operational life of the development, but will be mitigated by direct human action or by natural processes thereafter								
Permanent	The only class of impact which will be non-transitory. Mitigation either by man or natural process will not occur in such a way or in such a time span that the impact can be considered transient								
Intensity	<p>Describes whether an impact is destructive or benign.</p> <table> <tr> <td>Low</td> <td>Impact affects the environment in such a way that natural, cultural and social functions and processes are not affected.</td> </tr> <tr> <td>Medium</td> <td>Effected environment is altered, but natural, cultural and social functions and processes continue albeit in a modified way.</td> </tr> </table>	Low	Impact affects the environment in such a way that natural, cultural and social functions and processes are not affected.	Medium	Effected environment is altered, but natural, cultural and social functions and processes continue albeit in a modified way.				
Low	Impact affects the environment in such a way that natural, cultural and social functions and processes are not affected.								
Medium	Effected environment is altered, but natural, cultural and social functions and processes continue albeit in a modified way.								

	<p>High Natural, cultural and social functions and processes are altered to extent that they temporarily cease.</p> <p>Very high Natural, cultural and social functions and processes are altered to extent that they permanently cease.</p>
Probability	<p>Describes the likelihood of an impact actually occurring.</p> <p>Improbable Likelihood of the impact materializing is very low. Possible The impact may occur. Highly probable Most likely that the impact will occur. Definite Impact will certainly occur.</p>
Significance	<p>Significance is determined through a synthesis of impact characteristics. It is an indication of the importance of the impact in terms of both physical extent and time scale, and therefore indicates the level of mitigation required.</p> <p>Low impact No permanent impact of significance. Mitigatory measures are feasible and are readily instituted as part of a standing design, construction or operating procedure. Medium impact Mitigation is possible with additional design and construction inputs. High impact The design of the site may be affected. Mitigation and possible remediation are needed during the construction and/or operational phases. The effects of the impact may affect the broader environment. Very high impact The design of the site may be affected. Intensive remediation as needed during construction and/or operational phases. Any activity which results in a “very high impact” (negative) is likely to be a fatal flaw.</p>
Status	<p>Denotes the perceived effect of the impact on the affected area.</p> <p>Positive (+) Beneficial impact Negative (-) Deleterious or adverse impact Neutral Impact is neither beneficial nor adverse.</p> <p>It is important to note that the status of an impact is assigned based on the <i>status quo</i> – i.e. should the project not proceed. Therefore not all negative impacts are equally significant.</p>

6.2 IMPACT ON HERITAGE, HISTORICAL AND PALAEOLOGICAL RESOURCES

Assessment: Impact on Heritage, historical & palaeontological resources						
Nature	Due to the historical significance of the site dating back to the Anglo-Boer War with two key elements, namely the “Dam van Trane” and “Bron van Herinnering” located on site. Potentially fossil-bearing sedimentary strata of the Late Permian Adelaide also underlies the site.					
	Extent	Duration	Intensity	Probability	Significance	Status
Without Mitigation	Site	Permanent	Very high	Possible	High	Negative
With Mitigation	Site	Medium term	Medium	Highly probable	Medium	Positive

Mitigation Recommendations

See specialist report recommendations in Section 5.2.1 and 5.2.2.

Planning phase

- The “Dam van Trane” and “Bron van Herinnering” are incorporated within the development and will not be demolished.

Construction phase

- The sensitive historical areas, i.e. the “Dam van Trane” and “Bron van Herinnering” should be clearly demarcated prior to construction to ensure no damage is caused by construction activities.
- The relocation of the water troughs and small memorial must be done in consultation with the Heritage Specialist.
- Permits from SAHRA are required before any excavations can take place.
- A professional Palaeontologist should be present to monitor unweathered / fresh sedimentary bedrock when geotechnical sampling and large-scale excavations are undertaken.
- Any artefacts found should be brought to the attention of the Heritage Specialist.

Post Construction phase

- The “Dam van Trane” and “Bron van Herinnering” should be maintained and protected at all times.

6.3 VEGETATION DESTRUCTION

Assessment: Vegetation Destruction						
Nature	Most of the natural vegetation on the site will be transformed by the development and subsidiary infrastructure, thereby resulting in loss of animal life too.					
	Extent	Duration	Intensity	Probability	Significance	Status
Without Mitigation	Local	Long term	High	Highly probable	Medium	Negative
With Mitigation	Site	Long term	Medium	Highly probable	Low	Negative

Mitigation Recommendations

See specialist report recommendations in Section 5.2.3.

Planning phase

- Permits need to be obtained for the removal of the protected Wild Olive (*Olea europaea* subsp. *africana*) occurring on site.
- Permits need to be obtained to transplant the two protected bulb species on site, namely the *Brunsvigia radulosa* and *Eucomis autumnalis*.
- The process of transplanting protected plant species should be undertaken and overseen by a suitably qualified Botanist or Ecologist.
- The search and rescue exercise, to remove and transplant those protected plant specimens that will be destroyed during the construction phase, must be conducted before construction commences.

Construction phase

- No hunting, capturing and trapping of fauna will be allowed.
- Alien weed invaders occurring on site should be removed and monitored for re-establishment.
- All human movement and activities must be contained within designated construction areas in order to prevent peripheral impacts on surrounding natural habitat.
- No fire-wood may be collected in the veld.

Post Construction phase

- All construction materials should be removed from the area.
- The transplanted *Brunsvigia radulosa* and *Eucomis autumnalis* plants can be utilized in the landscaping of the development.

6.4 IMPACT ON WETLANDS

The “Dam van Trane” is an artificial impoundment with significant historical value. There are also wetland areas to the north east of the site, which forms part of the origin of the Bloemspruit and a small drainage line, which transects the site from east to west.

Assessment: Wetlands						
Nature	Possible destruction of / damage to wetland areas due to development / construction activities.					
	Extent	Duration	Intensity	Probability	Significance	Status
Without Mitigation	Regional	Long term	High	Highly probable	High	Negative
With Mitigation	Site	Medium term	Medium	Possible	Low	Negative

Mitigation Recommendations

Planning phase

- The “Dam van Trane” will be incorporated within the development.
- Necessary Water Use Licenses and specialist input is required for the parking area and monument planned within the wetland area in the north-eastern corner of the site.
- Any construction taking place within 100m of a watercourse or within 500m from a wetland area requires authorization from the Department of Water and Sanitation. This is specifically relevant to the “Dam van Trane” and wetland area in the north-eastern corner of the site.
- The small drainage line that transects the site is not considered of vital importance and should be accommodated within the development in terms of storm water management.

Construction phase

- Sensitive wetland areas should be demarcated to ensure construction activities do not unnecessarily impact thereon.

Post Construction phase

- Construction materials should be removed from site.
- No dumping of building waste or spoil material should take place.
- Weed control measures must be applied to eradicate the noxious weeds in wetland areas and drainage lines.

6.5 SOIL SUITABILITY

Mitigation Recommendations

Planning phase

- Geotechnical investigations will be undertaken once permits from SAHRA have been obtained.
- The Geotechnical Report will assist in the design of the buildings.

Construction phase

- A professional Palaeontologist should be present during excavations.

Post Construction phase

- Erosion should be prevented as far as possible and attended to, where necessary.

6.6 BULK INFRASTRUCTURE

The proposed development will include the following infrastructure that could have possible impacts on the environment. These include:

- Water provision
- Storm water drainage
- Electrical infrastructure
- Roads
- Sanitation
- Solid waste disposal

Bulk civil services and electrical services reports for the proposed development have been compiled and are included in Annexures E4 and E5.

Assessment: Bulk Infrastructure						
Nature	Increase in load on the available bulk services.					
	Extent	Duration	Intensity	Probability	Significance	Status
Without Mitigation	Regional	Permanent	High	Definite	Very high	Negative
With Mitigation	Regional	Long term	Medium	Possible	Medium	Neutral / Positive

Mitigation Recommendations

Planning phase

- The existing water infrastructure does not have sufficient capacity for the proposed development and therefore a service agreement between the Municipality and the Applicant needs to be in place to allow for upgrading the bulk water supply.
- There is currently no infrastructure with fire hydrants in the vicinity of the proposed development. This needs to be attended to.
- The existing sewer reticulation has sufficient capacity to facilitate the proposed development, but the downstream network will be overloaded. A service agreement between the Municipality and the Applicant needs to be in place to accommodate the necessary upgradings to bulk infrastructure.
- Centlec will supply medium voltage cables from the Tempe Distribution Centre to a primary substation on the northern side of the proposed development.
- Servitudes need to be registered and permissions from all land owners and other service institutions for electrical infrastructure need to be in place.
- Construction within 500m from watercourses require a Water Use Licence prior to commencing.

Construction phase

- Care should be taken to limit destruction of the natural vegetation unnecessarily.
- All human movement and activities must be contained within designated construction areas in order to prevent peripheral impacts on surrounding natural habitat.
- Topsoil should be removed where trenches are to be excavated and used for rehabilitation once services have been installed.
- Erosion must be prevented at all times.

Post Construction phase

- Weed eradication is required until vegetation has established, where applicable.
- Erosion should be prevented as far as possible.

6.7 VISUAL IMPACT

The visual impact of the proposed development in the landscape is the function of several factors of which the viewing distance, visual absorption capacity and landform are measurable. Other factors are difficult to categorize because they are subjective viewpoints.

The visual impact for the proposed development is largely due to:

- The extent of the proposed development.
- Distance from roads.
- The visual absorption capacity of the surrounding landscape.

The critical viewpoints for this development would be Nelson Mandela Drive, the N1 road, some areas on the Tempe Military grounds, as well as nearby residences of Universitas Ridge.

A visual impact assessment was not deemed necessary as the proposed development is within the urban edge of Bloemfontein, the low-lying locality of the site and the proposed development has been designed to be aesthetically pleasing.

Assessment: Visual Impact						
Nature	The landscape will be altered by the development.					
	Extent	Duration	Intensity	Probability	Significance	Status
Without Mitigation	Regional	Long term	Medium	Definite	High	Negative
With Mitigation	Regional	Long term	Medium	Highly probable	Low	Neutral

Mitigation Recommendations

Planning phase

- Aesthetically pleasing designs and visual integrity principles have been incorporated into the site development plan.

Construction phase

- Construction sites must be kept neat and tidy at all times.
- All human movement and activities must be contained within designated construction areas.
- No dumping of construction debris is allowed.

Post Construction phase

- A landscaping plan needs to be implemented.

6.8 TRAFFIC IMPACT

Due to the extent of, and the increase of trips anticipated as a result of the proposed development, a traffic impact study has been undertaken. This study has been undertaken and is included in Annexure E6.

Assessment: Traffic Impact						
Nature	Increase in traffic on surrounding roads.					
	Extent	Duration	Intensity	Probability	Significance	Status
Without Mitigation	Regional	Permanent	High	Definite	Very high	Negative
With Mitigation	Local	Long term	Medium	Possible	Medium	Negative / Neutral

Mitigation Recommendations

See specialist report recommendations in Section 5.2.7.

Planning phase

- The implementation of the “Tempe Arterial” together with the Reynecke Avenue extension are required for the proposed development.
- Various existing intersection upgrades and construction of new roads are also required.

Construction phase

- Not applicable.

Post Construction phase

- Not applicable.

6.9 SOCIO-ECONOMIC IMPACT

The proposed development will have an effect on different levels of economic activity in the area and benefit the economy by creating jobs, generating business sales, improving quality of life and increasing disposable income. Although a separate study was not undertaken to assess the socio-economic impact the proposed development will have on Bloemfontein, approximately 1 800 jobs are estimated during the construction phase and approximately 800 permanent employment opportunities during the operational phase.

Assessment: Socio-economic impact						
Nature	Effects on the level of economic activity in the area due to a new development and infrastructure.					
	Extent	Duration	Intensity	Probability	Significance	Status
	National	Long term	Medium	Highly probable	High	Positive

7. ENVIRONMENTAL IMPACT STATEMENT

7.1 SUMMARY OF KEY FINDINGS

- Sensitive areas and historical features were identified and are incorporated in the site development plan.
- The proposed development will enhance the historical features on site (mainly Anglo-Boer War) with the inclusion of a museum and amphitheatre and making these places accessible to the public.
- The site is underlain by potentially fossil-bearing bedrock sediments.
- Protected plant species occur on site.
- Wetland areas on site include the “Dam van Trane”, an area in the north-eastern corner of the site that forms part of the origins of the Bloemspuit, and a small drainage line that transects the site from east to west.
- A geotechnical assessment, to assist in the design of buildings and foundations, will only be undertaken once SAHRA permits for excavations have been obtained.
- The existing water infrastructure currently does not have sufficient capacity for the proposed development.
- The existing sewer network in Universitas Ridge can accommodate the proposed development, but the downstream network will then be overloaded.
- Centlec will be able to supply electricity to the proposed development.
- In terms of traffic impact, the planning and implementation of the “Tempe Arterial” as well as the propose Reynecke Avenue extension will be paramount to development of the site.
- Job creation ($\pm 1\ 800$ jobs during construction and ± 800 permanent employment opportunities during the operational phase), new business sales, GDP growth and locally generated income are anticipated.

7.2 SUMMARY OF POSITIVE & NEGATIVE IMPACTS

Table 5: List of positive and negative impacts

Positive	Negative
Socio-economic boost to the region.	Destruction of natural vegetation within the development footprint.
Upgrade of bulk services (pending service agreement).	Possible damage to wetland areas due to construction activities.
Upgrading of surrounding road network.	Possible secondary impacts like erosion if soil type is not suited to development and installation of services.
Enhancement and public access to historical features on site.	Increase in load on available bulk services.
	Visual impact due to landscape being altered.
	Increase in traffic if road networks aren't upgraded.

Refer to the draft EMPr in Annexure F for recommended mitigation measures.

7.3 ASSUMPTIONS AND LIMITATIONS

7.3.1 Assumptions

The information obtained from all the specialist studies is accurate.

7.3.2 Limitations

- Vegetation cover at the site may have limited a complete inspection of the ground for surface remnants of archaeological or historical material.
- Geotechnical findings have not been included in this report.
- Only the site (Remainder of Erf 22011, Bloemfontein) was assessed and forms part of this EIA process. Additional roads and infrastructure, not on this site but that may be required for the proposed development, are not included in this assessment / report.

8. CONCLUSION & EAP DECLARATION

The proposed development is planned on a 23.6664 ha site on the Remainder of Erf 22011, Bloemfontein, located at the “Dam van Trane”, adjacent to and to the north west of the Tempe grounds and to the north east of the Bible House on Nelson Mandela Drive. It consists of a commercial, business, retail, hotel and residential components, with a hospital development planned on the adjacent site (Subdivision 1 of Erf 22011, separate EIA Application).

The following potential impacts were identified during the scoping phase:

- Impact on heritage, historical and palaeontological resources
- Destruction of natural vegetation
- Impact on wetlands
- Soil suitability
- Bulk service infrastructure, which includes:
 - Water provision
 - Electrical infrastructure
 - Roads
 - Sanitation
 - Solid waste disposal
- Visual impact
- Socio-economic impact

Most specialist input was obtained during the planning phase of the development and was incorporated into the site development plan. Sensitive and historical areas will be conserved and enhanced by the development. The no-go alternative, i.e. keeping the site in its current state and not proceeding with the proposed development, is only recommended if bulk civil services and road infrastructure can't be accommodated. This would then also only be temporary of nature. It is expected that the natural areas and historical features on the site would further deteriorate if left as is.

An Environmental Management Programme (EMPr) is required for the activity to minimize any negative impacts during the different phases of the development, especially the construction phase. The EMPr contains guidelines and recommendations for minimizing the impacts identified during the EIA as well as address the rehabilitation of disturbed areas. A Draft EMPr is included in Annexure F of this report. With responsible construction and rehabilitation practices, most negative impacts anticipated can be mitigated.

A well planned and very professionally designed development is proposed for a site which already lies within the urban edge of Bloemfontein. The proposed development's expected economic boost to the area will be beneficial to Bloemfontein. The preservation, enhancement and access to the historical Anglo-Boer War features on site is also seen as a positive impact of the proposed development.

In light of the above and in the view of the Environmental Assessment Practitioner (EAP), the information contained in this report and the documentation attached hereto is sufficient to make a decision in respect of the activity applied for. There is no obvious environmental reason for Environmental Authorisation to be denied. It is however essential that a service agreement is in place between the Applicant and the Municipality for the provision and upgrading of bulk civil infrastructure.

The EAP declares that the EIA process was conducted objectively and the information provided in this report is correct. All comments and inputs from I&AP's received to date have been included. Specialist input and recommendations have been included.

Marguerite Cronje

Date

9. REFERENCES

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