Ref: EMB/27/17/04



Final Basic Assessment Report

Proposed Hospital Development on Portion 1 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 **July 2017**



File Reference Number: Application Number: Date Received:

Basic assessment report in terms of the Environmental Impact Assessment Regulations, 2014, promulgated in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended.

Kindly note that:

- This basic assessment report is a standard report that may be required by a competent authority in terms of the EIA Regulations, 2014 and is meant to streamline applications. Please make sure that it is the report used by the particular competent authority for the activity that is being applied for.
- This report format is current as of 08 December 2014. It is the responsibility of the applicant to ascertain whether subsequent versions of the form have been published or produced by the competent authority
- 3. The report must be typed within the spaces provided in the form. The size of the spaces provided is not necessarily indicative of the amount of information to be provided. The report is in the form of a table that can extend itself as each space is filled with typing.
- 4. Where applicable **tick** the boxes that are applicable in the report.
- 5. An incomplete report may be returned to the applicant for revision.
- 6. The use of "not applicable" in the report must be done with circumspection because if it is used in respect of material information that is required by the competent authority for assessing the application, it may result in the rejection of the application as provided for in the regulations.
- 7. This report must be handed in at offices of the relevant competent authority as determined by each authority.
- 8. No faxed or e-mailed reports will be accepted.
- 9. The signature of the EAP on the report must be an original signature.
- 10. The report must be compiled by an independent environmental assessment practitioner.
- 11. Unless protected by law, all information in the report will become public information on receipt by the competent authority. Any interested and affected party should be provided with the information contained in this report on request, during any stage of the application process.
- 12. A competent authority may require that for specified types of activities in defined situations only parts of this report need to be completed.

1

- 13. Should a specialist report or report on a specialised process be submitted at any stage for any part of this application, the terms of reference for such report must also be submitted.
- 14. Two (2) colour hard copies and one (1) electronic copy of the report must be submitted to the competent authority.
- 15. Shape files (.shp) for maps must be included in the electronic copy of the report submitted to the competent authority.

SECTION A: ACTIVITY INFORMATION

Has a specialist been consulted to assist with the completion of this section? YES ✓ NO

If YES, please complete the form entitled "Details of specialist and declaration of interest" for the specialist appointed and attach in Appendix I.

1. PROJECT DESCRIPTION

a) Describe the project associated with the listed activities applied for

The applicant, namely MPC Developers, propose to develop a hospital on Portion 1 of Erf 22011, Bloemfontein. The site is located adjacent to and to the north of the Bible House on Nelson Mandela Drive, near the N1 western bypass and is currently vacant. The property is zoned "Public Buildings", which allows for a hospital and therefore no rezoning applications are applicable. The property is however indicated green (MOSS) on the Mangaung Metro Municipality's Micro Framework Map of 2016.

The proposed development consists of an acute and sub-acute day hospital with associated ancillary functions, accommodating approximately 120 beds.

It should be noted that the development of a Heritage Lifestyle Centre is planned on the adjacent property, namely the Remainder of Erf 22011. The proposed hospital development forms part of this development, but is dealt with separately in terms of the EIA, as the property is already zoned for a hospital and therefore doesn't need to undergo the rezoning process that the Remainder of Erf 22011 needs to undertake.

b) Provide a detailed description of the listed activities associated with the project as applied for

Listed activity as described in GN 983,984 and 985	Description of project activity
Example: GN 983 Item xx xx): The construction of a bridge where such construction occurs within a watercourse or within 32 metres of a watercourse, measured from the edge of a watercourse, excluding where such construction will occur behind the development setback line.	A bridge measuring 5 m in height and 10m in length, no wider than 8 meters will be built over the Orange river
R983 of 4 December 2014 Activity 27: "The clearance of an area of 1 hectare or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for – (i) the undertaking of a linear activity; or (ii) maintenance purposes undertaken in	The clearance of 3.5539ha of indigenous vegetation to develop a hospital and associated infrastructure.

accordance with a maintenance management plan."	
R985 of 4 December 2014 Activity 4 (a) iii (bb): "The development of a road wider than 4 metres with a reserve less than 13.5 metres. In the Free State, in urban areas: Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority or zoned for conservation purpose."	Development of access and internal roads.
or zoned for conservation purpose."	

2. FEASIBLE AND REASONABLE ALTERNATIVES

"alternatives", in relation to a proposed activity, means different means of meeting the general purpose and requirements of the activity, which may include alternatives to—

- (a) the property on which or location where it is proposed to undertake the activity;
- (b) the type of activity to be undertaken;
- (c) the design or layout of the activity;
- (d) the technology to be used in the activity;
- (e) the operational aspects of the activity; and
- (f) the option of not implementing the activity.

Describe alternatives that are considered in this application as required by Appendix 1 (3)(h) of GN 982, Regulation 2014. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity (NOT PROJECT) could be accomplished in the specific instance taking account of the interest of the applicant in the activity. The no-go alternative must in all cases be included in the assessment phase as the baseline against which the impacts of the other alternatives are assessed.

The determination of whether site or activity (including different processes, etc.) or both is appropriate needs to be informed by the specific circumstances of the activity and its environment. After receipt of this report the, competent authority may also request the applicant to assess additional alternatives that could possibly accomplish the purpose and need of the proposed activity if it is clear that realistic alternatives have not been considered to a reasonable extent.

The identification of alternatives should be in line with the Integrated Environmental Assessment Guideline Series 11, published by the DEA in 2004. Should the alternatives include different locations and lay-outs, the co-ordinates of the different alternatives must be provided. The co-ordinates should be in degrees, minutes and seconds. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

a) Site alternatives

Alternative 1 (preferred altern	ative)	
Description	Lat (DDMMSS)	Long (DDMMSS)
Portion 1 of Erf 22011, Bloemfontein	29°05' 35.05" S	26°10' 32.01" E
Alternative 2		
Description	Lat (DDMMSS)	Long (DDMMSS)
Alternative 3		
Description	Lat (DDMMSS)	Long (DDMMSS)

In the case of linear activities:

Alternative:	Latitude (S):	Longitude (E):	
Alternative S1 (preferred)			
 Starting point of the activity 			
 Middle/Additional point of the activity 			
 End point of the activity 			
Alternative S2 (if any)		•	
 Starting point of the activity 			
 Middle/Additional point of the activity 			
 End point of the activity 			
Alternative S3 (if any)		•	
 Starting point of the activity 			
 Middle/Additional point of the activity 			
 End point of the activity 			

For route alternatives that are longer than 500m, please provide an addendum with co-ordinates taken every 250 meters along the route for each alternative alignment.

In the case of an area being under application, please provide the co-ordinates of the corners of the site as indicated on the lay-out map provided in Appendix A of this form.

b) Lay-out alternatives

Alternative 1 (preferred alternative	ive)	
Description	Lat (DDMMSS)	Long (DDMMSS)
Refer to Appendix C.	29°05' 35.05" S	26°10' 32.01" E
Alternative 2		
Description	Lat (DDMMSS)	Long (DDMMSS)
Alternative 3		
Description	Lat (DDMMSS)	Long (DDMMSS)

c) **Technology alternatives**

Alternative 1 (preferred alternative)			
Not applicable			
	Alternative 2		
	Alternative 3		

d) Other alternatives (e.g. scheduling, demand, input, scale and design alternatives)

Alternative 1 (preferred alternative)		
Bulk services to link to proposed Heritage Lifestyle Development's infrastructure.		
Alternative 2		
Bulk services to link to existing municipal infrastructure.		
Alternative 3		

e) No-go alternative

The no-go alternative involves keeping the *status quo*, i.e. not developing the site. The site will remain vacant. The vegetation at the site is currently degraded and building rubble and the building remains are presently on site. There would be no value in keeping the site vacant and undeveloped and the risk of dumping and squatters may arise. The development of the site is also not expected to negatively impact on the heritage sites and monuments of the adjacent property (Remainder of Erf 22011).

Paragraphs 3 – 13 below should be completed for each alternative.

3. PHYSICAL SIZE OF THE ACTIVITY

Indicate the physical size of the preferred activity/technology as well as alternative a) activities/technologies (footprints):

Alternative:

Alternative A1¹ (preferred activity alternative) Alternative A2 (if any)

Alternative A3 (if any)

Size of the activity:

34 317 m ²
m ²
m^2

or, for linear activities:

6

¹ "Alternative A.." refer to activity, process, technology or other alternatives.

Alternative:

Alternative A1 (preferred activity alternative)

Alternative A2 (if any)

Alternative A3 (if any)

Length of the activity:

 	J .	 _	 _	 	
		•			m
					m
					m

b) Indicate the size of the alternative sites or servitudes (within which the above footprints will occur):

Alternative:

Alternative A1 (preferred activity alternative) Alternative A2 (if any)

Alternative A3 (if any)

Size	of	the	site	ser	vituc	le

35 539 m ²
m ²
m ²

4. SITE ACCESS

Does ready access to the site exist?

If NO, what is the distance over which a new access road will be built

YES	NO ✓
	±150 m

Describe the type of access road planned:

Access to the site is planned from Nelson Mandela Drive, just south of the Bible House and site. The proposed access will also form part the proposed Heritage Lifestyle Centre development.

Include the position of the access road on the site plan and required map, as well as an indication of the road in relation to the site.

5. LOCALITY MAP

An A3 locality map must be attached to the back of this document, as Appendix A. The scale of the locality map must be relevant to the size of the development (at least 1:50 000. For linear activities of more than 25 kilometres, a smaller scale e.g. 1:250 000 can be used. The scale must be indicated on the map.). The map must indicate the following:

- an accurate indication of the project site position as well as the positions of the alternative sites, if any
- indication of all the alternatives identified;
- closest town(s;)
- road access from all major roads in the area;
- road names or numbers of all major roads as well as the roads that provide access to the site(s);
- all roads within a 1km radius of the site or alternative sites; and
- a north arrow;
- a legend; and
- locality GPS co-ordinates (Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in degrees and decimal

minutes. The minutes should have at least three decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

6. LAYOUT/ROUTE PLAN

A detailed site or route plan(s) must be prepared for each alternative site or alternative activity. It must be attached as Appendix A to this document.

The site or route plans must indicate the following:

- the property boundaries and numbers of all the properties within 50 metres of the site;
- the current land use as well as the land use zoning of the site;
- the current land use as well as the land use zoning each of the properties adjoining the site or sites:
- the exact position of each listed activity applied for (including alternatives);
- servitude(s) indicating the purpose of the servitude;
- a legend; and
- a north arrow.

7. SENSITIVITY MAP

The layout/route plan as indicated above must be overlain with a sensitivity map that indicates all the sensitive areas associated with the site, including, but not limited to:

- watercourses;
- the 1:100 year flood line (where available or where it is required by DWS);
- ridges;
- cultural and historical features:
- areas with indigenous vegetation (even if it is degraded or infested with alien species); and
- critical biodiversity areas.

The sensitivity map must also cover areas within 100m of the site and must be attached in Appendix A.

8. SITE PHOTOGRAPHS

Colour photographs from the centre of the site must be taken in at least the eight major compass directions with a description of each photograph. Photographs must be attached under Appendix B to this report. It must be supplemented with additional photographs of relevant features on the site, if applicable.

9. FACILITY ILLUSTRATION

A detailed illustration of the activity must be provided at a scale of at least 1:200 as Appendix C for activities that include structures. The illustrations must be to scale and must represent a realistic image of the planned activity. The illustration must give a representative view of the activity.

10. ACTIVITY MOTIVATION

Motivate and explain the need and desirability of the activity (including demand for the activity):

1. Is the activity permitted in terms of the property's existing land use rights?	YES ✓	NO	Please explain		
The property is zoned "Public Buildings", allowing for a the developmen	it of a hos	spital.			
2. Will the activity be in line with the following?					
(a) Provincial Spatial Development Framework (PSDF)	YES ✓	NO	Please explain		
(b) Urban edge / Edge of Built environment for the area	YES ✓	NO	Please explain		
The site is located within the urban edge of Bloemfontein.					
(c) Integrated Development Plan (IDP) and Spatial Development Framework (SDF) of the Local Municipality (e.g. would the approval of this application compromise the integrity of the existing approved and credible municipal IDP and SDF?).		NO √	Please explain		
The site is currently indicated green (MOSS) in terms of the Mangaung Framework Map (2016).	Metro M	unicipal	lity's Micro		
(d) Approved Structure Plan of the Municipality	YES ✓	NO	Please explain		
(e) An Environmental Management Framework (EMF) adopted by the Department (e.g. Would the approval of this application compromise the integrity of the existing environmental management priorities for the area and if so, can it be justified in terms of sustainability considerations?)	VES	NO	Please explain		
An EMF has been compiled for the Mangaung Metro Municipality, but has to date not yet been adopted as policy or available to the public. The Municipality's inputs with regard to development of the site are therefore required in this regard.					
(f) Any other Plans (e.g. Guide Plan)	YES	NO	Please explain		

3. Is the land use (associated with the activity being applied for) considered within the timeframe intended by the existing approved SDF agreed to by the relevant environmental authority (i.e. is the proposed development in line with the projects and programmes identified as priorities within the credible IDP)?	YES ✓	NO	Please explain
4. Does the community/area need the activity and the associated land use concerned (is it a societal priority)? (This refers to the strategic as well as local level (e.g. development is a national priority, but within a specific local context it could be inappropriate.)	YES ✓	NO	Please explain
Bloemfontein currently has a shortage of hospitals and the proposed ho a need of the community. The community therefore requires the service			
5. Are the necessary services with adequate capacity currently available (at the time of application), or must additional capacity be created to cater for the development? (Confirmation by the relevant Municipality in this regard must be attached to the final Basic Assessment Report as Appendix I.)	YES✓	NO	Please explain
The proposed hospital will form part of the Heritage Lifestyle Centre plan	nned on t	he adja	acent
property, namely the Remainder of Erf 22011, where bulk infrastructure	would be	upgra	ded to
accommodate the proposed development. Alternatively, the proposed h	ospital d	evelop	ment would
need to connect to existing Municipal infrastructure.			
6. Is this development provided for in the infrastructure planning of the municipality, and if not what will the implication be on the infrastructure planning of the municipality (priority and placement of services and opportunity costs)? (Comment by the relevant Municipality in this regard must be attached to the final Basic Assessment Report as Appendix I.)	YES✓	NO	Please explain
The site is already zoned for hospital use and therefore accommodated planning by the municipality.	with rega	ard to ir	nfrastructure
7. Is this project part of a national programme to address an issue of national concern or importance?	YES	NO ✓	Please explain
The need for hospitals can be considered of national importance, but the national programme.	s project	is not p	part of a

8. Do location factors favour this land use (associated with the			
activity applied for) at this place? (This relates to the contextualisation of the proposed land use on this site within its broader context.)	YES✓	NO	Please explain
Apart from the fact that the site is already zoned to allow for a hospital, i	t is ideally	/ locate	ed and easily
accessible to Bloemfontein residents as well as near to the N1 route.			
9. Is the development the best practicable environmental option for this land/site?	YES ✓	NO	Please explain
The site is currently vacant and keeping the status quo would not contrib	oute to an	y cons	servation of
vegetation (site highly degraded), nor preservation of heritage sites / mo	numents	on the	adjacent
property. More risks to conservation of the above are present with the s	ite remair	ning ur	ndeveloped
(dumping, invasion by squatters, etc.)			
10. Will the benefits of the proposed land use/development outweigh the negative impacts of it?	YES 🗸	NO	Please explain
See 9 above.			
11. Will the proposed land use/development set a precedent for similar activities in the area (local municipality)?	YES 🗸	NO	Please explain
The proposed development of a hospital may stimulate other compleme	nting acti	vities i	n the area.
12. Will any person's rights be negatively affected by the proposed activity/ies?	YES	NO ✓	Please explain
	•		
13. Will the proposed activity/ies compromise the "urban edge" as defined by the local municipality?	YES	NO ✓	Please explain
14. Will the proposed activity/ies contribute to any of the 17 Strategic Integrated Projects (SIPS)?	YES ✓	NO	Please explain
SIP 12 refers to the revitalisation of public hospitals and other health factorized development, although private, can be considered to be contributing tow			•
15. What will the benefits be to society in general and to communities?	the lo	cal	Please explain
Society will benefit from the services offered by a hospital.			
Jobs will also be created during the construction and operational phase construction and general work, as well as for health care professionals.	of the dev	velopm	ent through
The capital expenditure of the proposed development is also expected to Bloemfontein.	o boost th	ne ecor	nomy of

16. Any other need and desirability considerations related to the proposed activity?

Please explain

The site is easily accessible from Nelson Mandela Drive and also near to the N1 road.

There is currently a shortage of hospitals in Bloemfontein, with Medi Clinic experiencing a shortage of heds

17. How does the project fit into the National Development Plan for 2030?

Please explain

One of the primary challenges currently experienced is that the public health care system cannot meet the demand or sustain quality. Apart from contributing to health care, an enabling milestone would be an increase in employment.

18. Please describe how the general objectives of Integrated Environmental Management as set out in section 23 of NEMA have been taken into account.

The proposed development has, through this Basic Assessment Process, identified, predicted and evaluated actual and potential impacts on the environment. Public participation has also taken place and best suited modes of environmental management have been employed as far as possible.

19. Please describe how the principles of environmental management as set out in section 2 of NEMA have been taken into account.

NEMA Section 2 (2) states that environmental management must place people and their needs at the forefront of its concern. Although the proposed hospital development may have impacts on the environment, although assessed to be minimal, sustainable development is the main aim and it would be safe to say that the factors applicable to sustainable development, namely (4)(a)(ii), (iii), (iv) and (viii) of NEMA Section 2 are most relevant to the proposed development and the EIA process followed. Social, economic and environmental impacts have been considered and evaluated allowing the DESTEA to make an informed decision.

11. APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES

List all legislation, policies and/or guidelines of any sphere of government that are applicable to the application as contemplated in the EIA regulations, if applicable:

Title of legislation, policy or guideline	Applicability to the project	Administering authority	Date
National Environmental Management Act (Act 107 of 1998)	Legislation requiring Environmental Authorisation to be obtained for proposed development.	DESTEA	1998
National Environmental Management: Biodiversity Act (Act 10 of 2004): National list of ecosystems that are threatened and in need of protection	The site is vacant with indigenous vegetation and the proposed development involves the destruction thereof. Protected tree species are also present on site.	DESTEA	2004

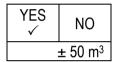
National Heritage Resources Act (Act 25 of 1999)	The site is located near to an Anglo-Boer War (1899-1902) concentration camp. There are also historical features on the adjacent property.	SAHRA	1999
National Water Act (Act 36 of 1998)	A drainage line is present at the north-eastern corner of the site and wetlands may be located within 500m from the site.	DWS	1998

12. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

a) Solid waste management

Will the activity produce solid construction waste during the construction/initiation phase?

If YES, what estimated quantity will be produced per month?



How will the construction solid waste be disposed of (describe)?

The contractor will be responsible for the disposal of waste during the construction phase.

Where will the construction solid waste be disposed of (describe)?

Most likely the Northern Waste Disposal site in Bloemfontein.

Will the activity produce solid waste during its operational phase?

If YES, what estimated quantity will be produced per month?

YES NO
Unknown at present m³

How will the solid waste be disposed of (describe)?

Solid waste produced during the operational phase with fall within the municipal waste stream.

If the solid waste will be disposed of into a municipal waste stream, indicate which registered landfill site will be used.

Unsure at present which landfill site in Bloemfontein the Municipality will use.

Where will the solid waste be disposed of if it does not feed into a municipal waste stream (describe)?

Medical waste will be disposed of by a certified medical waste disposal company.

If the solid waste (construction or operational phases) will not be disposed of in a registered landfill site or be taken up in a municipal waste stream, then the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

Medical waste medical waste	the solid waste be classified as hazardous in terms of the NEM:WA? is classified as hazardous, but will be disposed of by a certified disposal company.	YES √	NO
	ne competent authority and request a change to an application for scope waste permit in terms of the NEM:WA must also be submitted with	•	
If YES, then th necessary to ch	at is being applied for a solid waste handling or treatment facility? e applicant should consult with the competent authority to determine ange to an application for scoping and EIA. An application for a waste must also be submitted with this application.		
b) Liquid	effluent		
	produce effluent, other than normal sewage, that will be disposed of sewage system?	YES	NO ✓
	stimated quantity will be produced per month?		m³
•	produce any effluent that will be treated and/or disposed of on site?	YES	NO ✓
	plicant should consult with the competent authority to determine whether application for scoping and EIA.	er it is ne	cessary
facility?	produce effluent that will be treated and/or disposed of at another	YES	NO
Facility name:	he particulars of the facility: Not applicable		
Contact	Not applicable		
person:			
Postal			
address: Postal code:			
Telephone:	Cell:		
E-mail:	Fax:		
Describe the me	easures that will be taken to ensure the optimal reuse or recycling of wa	ıste wate	r, if any:
None at prese operational pha	nt. The reuse of waste water for irrigation of gardens can be investiguese.	gated du	ring the
c) Emissio	ons into the atmosphere		
	release emissions into the atmosphere other that exhaust emissions ated with construction phase activities?	YES	NO ✓
If YES, is it cont	rolled by any legislation of any sphere of government?	YES	NO
	cant must consult with the competent authority to determine whether i	t is nece	ssary to
•	plication for scoping and EIA. he emissions in terms of type and concentration:		
	and considered an iconsidered great considered and in		

Not applicable

d) Waste permit

Will any aspect of the activity produce waste that will require a waste permit in terms of the NEM:WA?

YES	NO ✓
-----	------

If YES, please submit evidence that an application for a waste permit has been submitted to the competent authority

e) Generation of noise

Will the activity generate noise?

YES NO ✓ YES NO ✓

If YES, is it controlled by any legislation of any sphere of government?

Describe the noise in terms of type and level:

Noise during the construction phase is anticipated. This will be temporary of nature and limited to working hours.

There will be a degree of noise generated during the operational phase of the proposed hospital development due to day to day activities and increase in vehicular traffic. The site is currently vacant with minimal activity surrounding it and the area experiences minimal noise. The site is however not within a residential area and noise is not expected to have an impact.

13. WATER USE

Please indicate the source(s) of water that will be used for the activity by ticking the appropriate box(es):

Municipal ✓	Water board	Groundwater	River, stream, dam or lake	Other	The activity will not use water	
-------------	-------------	-------------	-------------------------------	-------	---------------------------------	--

If water is to be extracted from groundwater, river, stream, dam, lake or any other natural feature, please indicate the volume that will be extracted per month:

Does the activity require a water use authorisation (general authorisation or water use license) from the Department of Water Affairs?

YES NO

A Water Use Licence may be required for activities within 500m from a watercourse.

If YES, please provide proof that the application has been submitted to the Department of Water Affairs

14. ENERGY EFFICIENCY

Describe the design measures, if any, which have been taken to ensure that the activity is energy efficient:

15

The proposed development aims to incorporate sustainable design principles and ensure that the building is 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.

Describe how alternative energy sources have been taken into account or been built into the design of the activity, if any:

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.

SECTION B: SITE/AREA/PROPERTY DESCRIPTION

Important notes:

1. For linear activities (pipelines, etc) as well as activities that cover very large sites, it may be necessary to complete this section for each part of the site that has a significantly different environment. In such cases please complete copies of Section B and indicate the area, which is covered by each copy No. on the Site Plan.

Section B Copy No. (e.g. A):

- 2. Paragraphs 1 6 below must be completed for each alternative.
- 3. Has a specialist been consulted to assist with the completion of this section?

YES NO

If YES, please complete the form entitled "Details of specialist and declaration of interest" for each specialist thus appointed and attach it in Appendix I. All specialist reports must be contained in Appendix D.

Property description/physical address:

F	
Province	Free State
District	Motheo District Municipality
Municipality	
Local Municipality	Mangaung Metro Municipality
Ward Number(s)	48
Farm name and	Erf 22011
number	
Portion number	1
SG Code	F00300030002201100001

Where a large number of properties are involved (e.g. linear activities), please attach a full list to this application including the same information as indicated above.

Current land-use zoning as per local municipality IDP/records:

"Public Buildings"			

In instances where there is more than one current land-use zoning, please attach a list of current land use zonings that also indicate which portions each use pertains to, to this application.

Is a change of land-use or a consent use application required?

YES	NO ✓

1. GRADIENT OF THE SITE

Indicate the general gradient of the site.

Alternative S1:

Flat	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5
Alternative S2	(if any):					
Flat	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5
Alternative S3	(if any):					-
Flat	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5

2. LOCATION IN LANDSCAPE

Indicate the landform(s) that best describes the site:

	i			
2.1 Ridgeline	2.4 Closed valley		2.7 Undulating plain / low hills	
2.2 Plateau	2.5 Open valley		2.8 Dune	
2.3 Side slope of hill/mountain	2.6 Plain	\checkmark	2.9 Seafront	
2.10 At sea				

3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

Is the site(s) located on any of the following?

Shallow water table (less than 1.5m deep)

Dolomite, sinkhole or doline areas

Seasonally wet soils (often close to water bodies)

Unstable rocky slopes or steep slopes with loose soil

Dispersive soils (soils that dissolve in water)

Soils with high clay content (clay fraction more than 40%)

Any other unstable soil or geological feature

An area sensitive to erosion

A	lterr	nati	ve	S1	:

NO ✓
NO ✓

Alternative S2 (if any):

(v)/.	
YES	NO

Alternative S3 (if any):

YES	NO
YES	NO

If you are unsure about any of the above or if you are concerned that any of the above aspects may be an issue of concern in the application, an appropriate specialist should be appointed to assist in the completion of this section. Information in respect of the above will often be available as part of the project information or at the planning sections of local authorities. Where it exists, the 1:50 000 scale Regional Geotechnical Maps prepared by the Council for Geo Science may also be consulted.

4. GROUNDCOVER

Indicate the types of groundcover present on the site. The location of all identified rare or endangered species or other elements should be accurately indicated on the site plan(s).

Natural veld - good condition ^E	Natural veld with scattered aliens ^E ✓	Natural veld with heavy alien infestation ^E	Veld dominated by alien species ^E	Gardens
Sport field	Cultivated land	Paved surface	Building or other structure	Bare soil

If any of the boxes marked with an "E "is ticked, please consult an appropriate specialist to assist in the completion of this section if the environmental assessment practitioner doesn't have the necessary expertise.

5. SURFACE WATER

Indicate the surface water present on and or adjacent to the site and alternative sites?

Perennial River	YES	NO ✓	UNSURE
Non-Perennial River	YES	NO ✓	UNSURE
Permanent Wetland	YES	NO ✓	UNSURE
Seasonal Wetland	YES ✓	NO	UNSURE
Artificial Wetland	YES ✓	NO	UNSURE
Estuarine / Lagoonal wetland	YES	NO ✓	UNSURE

If any of the boxes marked YES or UNSURE is ticked, please provide a description of the relevant watercourse.

The "Dam van Trane" is a dam, which can be classified as an artificial wetland. It is located on the adjacent property to the north west of the site.

A wetland area is also present in the north-eastern corner of the adjacent property.

The above-mentioned wetlands are located within 500m from the site.

The drainage line to the north east of the site is not considered significant with little / no wetland value.

6. LAND USE CHARACTER OF SURROUNDING AREA

Indicate land uses and/or prominent features that currently occur within a 500m radius of the site and give description of how this influences the application or may be impacted upon by the application:

Natural area ✓	Dam or reservoir ✓	Polo fields
Low density residential	Hospital/medical centre	Filling station ^H
Medium density residential	School	Landfill or waste treatment site
High density residential	Tertiary education facility	Plantation
Informal residential ^A	Church ✓ (Bible House)	Agriculture ✓
Retail commercial & warehousing	Old age home	River, stream or wetland ✓
Light industrial	Sewage treatment plant ^A	Nature conservation area
Medium industrial AN	Train station or shunting yard N	Mountain, koppie or ridge
Heavy industrial AN	Railway line N	Museum
Power station	Major road (4 lanes or more) N	Historical building
Office/consulting room	Airport N	Protected Area
Military or police	Harbour	Gravovard
base/station/compound ✓		Graveyard
Spoil heap or slimes dam ^A	Sport facilities	Archaeological site ✓
Quarry, sand or borrow pit	Golf course	Other land uses (describe)

If any of the boxes marked with an "N "are ticked, how will this impact / be impacted upon by the proposed activity? Specify and explain:

Not applicable

If any of the boxes marked with an " An " are ticked, how will this impact / be impacted upon by the proposed activity? Specify and explain:

Not applicable

If any of the boxes marked with an "H" are ticked, how will this impact / be impacted upon by the proposed activity? Specify and explain:

Not applicable

Does the proposed site (including any alternative sites) fall within any of the following:

Critical Biodiversity Area (as per provincial conservation plan)	YES	NO ✓
Core area of a protected area?	YES	NO ✓
Buffer area of a protected area?	YES	NO ✓
Planned expansion area of an existing protected area?	YES	NO ✓
Existing offset area associated with a previous Environmental Authorisation?	YES	NO ✓
Buffer area of the SKA?	YES	NO ✓

If the answer to any of these questions was YES, a map indicating the affected area must be included in Appendix A.

7. CULTURAL/HISTORICAL FEATURES

Are there any signs of culturally or historically significant elements, as defined in section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999), including Archaeological or paleontological sites, on or close (within 20m) to the site? If YES, explain:

YES✓	NO	
Uncertain		

The site is located near to an Anglo-Boer War (1899-1902) concentration camp. The "Dam van Trane" and "Bron van Herinnering" monument are located on the adjacent property (Remainder of Erf 22011).

If uncertain, conduct a specialist investigation by a recognised specialist in the field (archaeology or palaeontology) to establish whether there is such a feature(s) present on or close to the site. Briefly explain the findings of the specialist:

Heritage

The site (Portion 1 of Erf 22011) has been severely disturbed by the erection of the Oranje-Volkshuis during the 1960's when it was used for various Afrikaner festivals as well as used by the Tempe military base for various gatherings, and its subsequent demolition in the 1980's. It is recommended that this area be excluded from further cultural heritage studies.

Also refer to the Heritage Scoping Report for the proposed Hospital and Heritage Lifestyle Centre, Bloemfontein compiled by Loudine Philip (May 2017), attached in Appendix D.

<u>Palaeontology</u>

The proposed study area is underlain by potentially fossil-bearing sedimentary 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 both alluvial or spring deposits. It is however recommended that a professional palaeontologist monitor unweathered / fresh sedimentary bedrock when geotechnical sampling and large-scale excavations are done.

See the Palaeontological Desktop Assessment of Erf 1/22011 & Remainder of Erf 22011, Farm 654 Bloemfontein, FS Province compiled by Dr L. Rossouw (April 2017), attached in Appendix D.

Will any building or structure older than 60 years be affected in any way? Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?

YES	NO ✓
YES	NO ✓

If YES, please provide proof that this permit application has been submitted to SAHRA or the relevant provincial authority.

8. SOCIO-ECONOMIC CHARACTER

a) Local Municipality

Please provide details on the socio-economic character of the local municipality in which the proposed site(s) are situated.

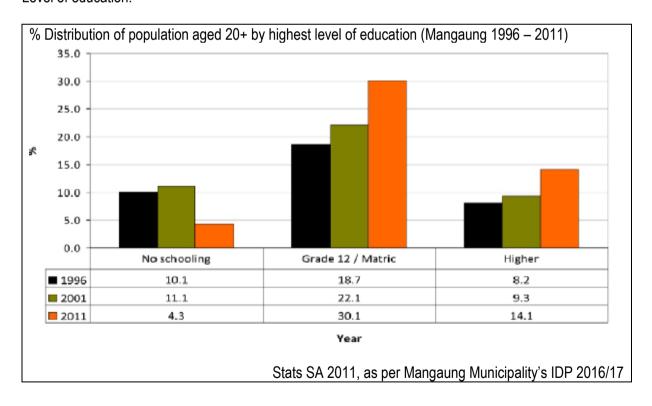
Level of unemployment:

According to Stats SA (2011 census), the unemployment rate within the Mangaung Metro Municipality's jurisdiction area is 27.7%, with a youth unemployment of 37.2%.

Economic profile of local municipality:

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.

Level of education:



b) Socio-economic value of the activity

R 500 million What is the expected capital value of the activity on completion? What is the expected yearly income that will be generated by or as a result of the R 36 million activity? Will the activity contribute to service infrastructure? YFS NO ✓ Is the activity a public amenity? YES ✓ NO How many new employment opportunities will be created in the development and ± 500 construction phase of the activity/ies? What is the expected value of the employment opportunities during the R 2.5 million development and construction phase? What percentage of this will accrue to previously disadvantaged individuals? 75 % How many permanent new employment opportunities will be created during the ± 150 operational phase of the activity? What is the expected current value of the employment opportunities during the R 264 million first 10 years? What percentage of this will accrue to previously disadvantaged individuals? 75 %

9. BIODIVERSITY

Please note: The Department may request specialist input/studies depending on the nature of the biodiversity occurring on the site and potential impact(s) of the proposed activity/ies. To assist with the identification of the biodiversity occurring on site and the ecosystem status consult http://bgis.sanbi.org or BGIShelp@sanbi.org. Information is also available on compact disc (cd) from the Biodiversity-GIS Unit, Ph (021) 799 8698. This information may be updated from time to time and it is the applicant/ EAP's responsibility to ensure that the latest version is used. A map of the relevant biodiversity information (including an indication of the habitat conditions as per (b) below) and must be provided as an overlay map to the property/site plan as Appendix D to this report.

a) Indicate the applicable biodiversity planning categories of all areas on site and indicate the reason(s) provided in the biodiversity plan for the selection of the specific area as part of the specific category)

Systematic Biodiversity Planning Category			Category	If CBA or ESA, indicate the reason(s) for its selection in biodiversity plan
Critical Biodiversity Area (CBA)	Ecological Support Area (ESA)	Other Natural Area (ONA) ✓	No Natural Area Remaining (NNR)	

Indicate and describe the habitat condition on site b)

Habitat Condition	Percentage of habitat condition class (adding up to 100%)	Description and additional Comments and Observations (including additional insight into condition, e.g. poor land management practises, presence of quarries, grazing, harvesting regimes etc).
Natural	%	
Near Natural (includes areas with low to moderate level of alien invasive plants)	10 %	
Degraded (includes areas heavily invaded by alien plants)	90 %	The site is currently utilized as grazing and has notably been degraded by past uses and small dilapidated buildings and rubble.
Transformed (includes cultivation, dams, urban, plantation, roads, etc)	%	

Complete the table to indicate: c)

- the type of vegetation, including its ecosystem status, present on the site; and whether an aquatic ecosystem is present on site.
- (ii)

Terrestrial Ecos	Aquatic Ecosystems							
Ecosystem threat	Critical		`	ding rivers,				
status as per the	Endangered		ons, channelled and leled wetlands, flats,		Estuary		Coastline	
National Environmental	Vulnerable			pans, and artificial		LStuary		uiiie
Management:	Least	'	wetland					
Biodiversity Act (Act No. 10 of 2004)	Threatened	YES	NO ✓	UNSURE	YES	NO ✓	YES	NO ✓

d) Please provide a description of the vegetation type and/or aquatic ecosystem present on site, including any important biodiversity features/information identified on site (e.g. threatened species and special habitats)

According to Mucina & Rutherford (2006), the area's vegetation consists of Winburg Grassy Shrubland (Gh7), which is currently listed as being of Least Concern (LC) under the National List of Threatened Ecosystems. The site contains natural vegetation, but is heavily degraded, with a well-defined low grass layer with scattered trees. There are a few protected Wild Olive (*Olea eurpaea* subsp. *africana*) occurring on site, but not of a significant age or size. Permits are required to remove them from site.

A small drainage line is also situated on site, but is poorly defined and does not contain any riparian vegetation.

Refer to the Report on biodiversity and ecological assessment compiled by Darius van Rensburg of Eko Environmental (November 2016) for more detail (Appendix D).

SECTION C: PUBLIC PARTICIPATION

1. ADVERTISEMENT AND NOTICE

Publication name	Die Volksblad & Bloemfontein Courant			
Date published	16 November 2016 & 17 November 2016			
Site notice position	Latitude	Longitude		
	29° 5' 35.05" S	26° 10' 32.01" E		
	29° 5' 35.12" S	26° 10' 30.40" E		
Date placed	17 November 2016			

Include proof of the placement of the relevant advertisements and notices in Appendix E1.

2. DETERMINATION OF APPROPRIATE MEASURES

Provide details of the measures taken to include all potential I&APs as required by Regulation 41(2)(e) and 41(6) of GN 982

Key stakeholders (other than organs of state) identified in terms of Regulation 41(2)(b) of GN 982

Title, Name and Surname	Affiliation/ key stakeholder	Contact details (tel number or
	status	e-mail address)
Mrs Cecilia Kruger	Heritage Foundation	bd@vtm.org.za
Prof Barry Frey	Rapportryers	27834621963@vodamail.co.za
Mrs Karin Botha	Dameskring	karnbotha@hotmail.com
Dr Chris Verwoerd	Bloemfonteinse Afrikaner Kultuurraad	chris.verwoerd@gmail.com
Dr Chris Verwoerd	Koördinerende Afrikaner Kultuurraad	chris.verwoerd@gmail.com
Prof Piet Strauss	Nasional Vrouemonument Kommissie	straussp@ufs.ac.za
Mr Gert Theart	Vriende van die Oorlogsmuseum	gert.theart@vodamail.co.za
Mr Willie Engelbrecht	Vriende van die Bron van Herinnering	willie7@vodamail.co.za
Mr Willie Engelbrecht	Die Voortrekkers	willie7@vodamail.co.za
Mr Lambertus van Rensburg	Historiese Vereeniging van die Ou Presidensie	vanrensburglbj@gmail.com
Mr Mike Jacobs	Die Volkspele Vereeniging	tralie@internext.co.za
Mr Johan van Zyl	The War Museum	jvanzyl@anglo-boer.co.za

Include proof that the key stakeholder received written notification of the proposed activities as Appendix E2. This proof may include any of the following:

- e-mail delivery reports;
- registered mail receipts;

- courier waybills;
- signed acknowledgements of receipt; and/or
- or any other proof as agreed upon by the competent authority.

3. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

Summary of main issues raised by I&APs	Summary of response from EAP
None to date.	

4. COMMENTS AND RESPONSE REPORT

The practitioner must record all comments received from I&APs and respond to each comment before the Draft BAR is submitted. The comments and responses must be captured in a comments and response report as prescribed in the EIA regulations and be attached to the Final BAR as Appendix E3.

5. AUTHORITY PARTICIPATION

Authorities and organs of state identified as key stakeholders:

Authority/Organ of State	Contact person (Title, Name and	Tel No	Fax No	e-mail	Postal address
	Surname)				
SANDF (surrounding landowner)	Brig-General S. Moyo / Lt.col van Niekerk	051 4021000		worksunitfs@gmail. com	Private Bag X20599 Bfn 9300
Mangaung Metro Municipality (surrounding landowner)	Nelson Mofokeng	051 4058854		nelson.mofokeng@ mangaung.co.za	
Mangaung Metro Municipality: Environmental Management	Mpolokeng Kolobe / Motheo Pooe	051 4058577		mpolokeng.kolobe@ mangaung.co.za	
Department of Water and Sanitation	Willem Grobler / Dakalo Ramuhovhi	051 4059000		ramuhovhid@dws. gov.za	
SAHRA	Online submission				
FS Provincial Heritage Agency	Ms Mbatha	051 4104750		mbatha.npz@sacr.fs. gov.za	
Ward Councillor (Ward 48)	Cllr Johan Pretorius	072 2260222		xgrafies@gmail.com	

Include proof that the Authorities and Organs of State received written notification of the proposed activities as appendix E4.

In the case of renewable energy projects, Eskom and the SKA Project Office must be included in the list of Organs of State.

6. CONSULTATION WITH OTHER STAKEHOLDERS

Note that, for any activities (linear or other) where deviation from the public participation requirements may be appropriate, the person conducting the public participation process may deviate from the requirements of that sub-regulation to the extent and in the manner as may be agreed to by the competent authority.

Proof of any such agreement must be provided, where applicable. Application for any deviation from the regulations relating to the public participation process must be submitted prior to the commencement of the public participation process.

A list of registered I&APs must be included as appendix E5.

Copies of any correspondence and minutes of any meetings held must be included in Appendix E6.

SECTION D: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2014 and should take applicable official guidelines into account. The issues raised by interested and affected parties should also be addressed in the assessment of impacts.

1. IMPACTS THAT MAY RESULT FROM THE PLANNING AND DESIGN, CONSTRUCTION, OPERATIONAL, DECOMMISSIONING AND CLOSURE PHASES AS WELL AS PROPOSED MANAGEMENT OF IDENTIFIED IMPACTS AND PROPOSED MITIGATION MEASURES

Provide a summary and anticipated significance of the potential direct, indirect and cumulative impacts that are likely to occur as a result of the planning and design phase, construction phase, operational phase, decommissioning and closure phase, including impacts relating to the choice of site/activity/technology alternatives as well as the mitigation measures that may eliminate or reduce the potential impacts listed. This impact assessment must be applied to all the identified alternatives to the activities identified in Section A(2) of this report.

Activity	Impact summary	Significance	Proposed mitigation
Alternative 1	1 (preferred alternative)		
	Direct impacts:• Vegetation destruction	Low	 Permits are required for the removal of the protected Wild Olive trees on site. Alien weeds and invaders should be removed.
	Visual impact	Low	 Construction sites to be kept neat and tidy. All construction rubble must be removed. Landscaping will be implemented post construction.
	Indirect impacts: • Impact on wetlands	Low	A Water Use Licence may need to be obtained for wetlands within 500m from site.
	Impact on heritage resources	Low	 A Palaeontologist must be present during geotechnical sampling. Any historical or archaeological artefacts must be

Activity	Impact summary	Significance	Proposed mitigation
			reported to the ECO
			and Archaeologist.
	Cumulative impacts:		
	Direct impacts:		
	Indirect impacts:		
	Cumulative impacts:		
Alternative 2)		
Alternative	Direct impacts:		
	Indirect impacts:		
	Cumulative impacts:		
	Direct impacts:		
	Indirect impacts:		
	Cumulative impacts:		
Alternative 3	<u> </u>		
	Direct impacts:		
	Indirect impacts:		
	Cumulative impacts:		
	Direct impacts:		
	Indirect impacts:		
	Cumulative impacts:		
No-go optio	 n		
- '	Direct impacts:		
	No job creation	High	
	No health care facility	Medium	
	Indirect impacts:		
	Cumulative impacts:		

A complete impact assessment in terms of Regulation 19(3) of GN 982 must be included as Appendix F.

2. ENVIRONMENTAL IMPACT STATEMENT

Taking the assessment of potential impacts into account, please provide an environmental impact statement that summarises the impact that the proposed activity and its alternatives may have on the environment <u>after</u> the management and mitigation of impacts have been taken into account, with specific reference to types of impact, duration of impacts, likelihood of potential impacts actually occurring and the significance of impacts.

Alternative A (preferred alternative)

The benefits of the proposed development of a hospital on Portion 1 of Erf 22011, Bloemfontein far outweigh the negative impacts. The site was assessed and was found to be in a degraded state in terms of vegetation and, even though the site is located near to Anglo-Boer War (1899-1902) features, the site is severely disturbed and it is the specialist's recommendation to allow for the development. The socio-economic benefits, in terms of job creation (construction and operational phase) and access for society to hospital facilities, are significant.

The site is already zoned to allow for a hospital and even though the site is currently included in the Metropolitan Open Space System of the Mangaung Metro Municipality, the site assessment found no reason for this site to be left undeveloped.

Alternative B

Alternative C

No-go alternative (compulsory)

The no-go alternative means leaving the site as is, i.e. undeveloped. This is not recommended as the site will ultimately become a dumping site or area for squatters. The site was also found to not have any conservation value left vacant.

SECTION E. RECOMMENDATION OF PRACTITIONER

Is the ir	nformation	contained i	n this	report	and	the d	ocument	ation	attached	hereto
sufficier	nt to make	a decision i	n resp	ect of	the a	ctivity	applied	for (ir	the view	of the
environ	mental ass	essment pra	actitio	ner)?						

YES✓	NO
------	----

If "NO", indicate the aspects that should be assessed further as part of a Scoping and EIA process before a decision can be made (list the aspects that require further assessment).

Not applicable

If "YES", please list any recommended conditions, including mitigation measures that should be considered for inclusion in any authorisation that may be granted by the competent authority in respect of the application.

- Permits for the removal of the protected Wild Olive trees (Olea europaea subsp. africana) need to be obtained.
- A Palaeontologist should be present for geotechnical sampling.
- The ECO and Archaeologist must be notified of any historical and archaeological artefacts.

Refer to the EMPr for more mitigation measures during construction.

Is an EMPr attached?

YES ✓ NO

The EMPr must be attached as Appendix G.

The details of the EAP who compiled the BAR and the expertise of the EAP to perform the Basic Assessment process must be included as Appendix H.

If any specialist reports were used during the compilation of this BAR, please attach the declaration of interest for each specialist in Appendix I.

Any other information relevant to this application and not previously included must be attached in Appendix J.

NAME OF EAP	
SIGNATURE OF EAP	DATE

SECTION F: APPENDIXES

The following appendixes must be attached:

Appendix A: Maps

Appendix B: Photographs

Appendix C: Facility illustration(s)

Appendix D: Specialist reports (including terms of reference)

Appendix E: Public Participation

Appendix F: Impact Assessment

Appendix G: Environmental Management Programme (EMPr)

Appendix H: Details of EAP and expertise

Appendix I: Specialist's declaration of interest

Appendix J: Additional Information