DRAFT BASIC ASSESSMENT REPORT

Proposed Eye Hospital at 5 Alan Paton Avenue, Scottsville (Portion 5 of Erf 752 Pietermaritzburg), Msunduzi Municipality, KZN

REF: DC22/0015/2014

PREPARED FOR: Chantily Properties (Pty) Ltd.

DATE: September 2014

JEC Environmental Services

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Economic Development, Tourism and Environmental Affairs
PROVINCE OF KWAZULU-NATAL

	(For official use only)
EIA File Reference Number:	DC/
NEAS Reference Number:	KZN/EIA/
Waste Management Licence Number: (if applicable)	
Date Received:	

BASIC ASSESSMENT REPORT

Submitted in terms of the Environmental Impact Assessment Regulations, 2010 promulgated in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998)

This template may be used for the following applications:

- **Environmental Authorization** subject to basic assessment for an activity that is listed in Listing Notices 1or 3, 2010 (Government Notices No. R 544 or No. R 546 dated 18 June 2010); or
- **Waste Management Licence** for an activity that is listed in terms of section 20(b) of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) for which a basic assessment process as stipulated in the EIA Regulations must be conducted as part of the application (refer to the schedule of waste management activities in Category A of Government Notice No. 718 dated 03 July 2009).

Kindly note that:

1. This **basic assessment report** meets the requirements of the EIA Regulations, 2010 and is meant to streamline applications. This report is the format prescribed by the KZN Department of Economic Development, Tourism & Environmental Affairs. Please make sure that this is the latest version.
2. The report must be typed within the spaces provided in the form. The size of the spaces provided is not 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 text.
3. Where required, place a cross in the box you select.
4. An incomplete report will be returned to the applicant for revision.
5. 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 will result in the rejection of the application as provided for in the regulations.
6. No faxed or e-mailed reports will be accepted.
7. The report must be compiled by an independent environmental assessment practitioner ("EAP").
8. 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.
9. The KZN Department of Economic Development, Tourism & Environmental Affairs may require that for specified types of activities in defined situations only parts of this report need to be completed.
10. The EAP must submit this basic assessment report for comment to all relevant State departments that administer a law relating to a matter affecting the environment. This provision is in accordance with Section 24 O (2) of the National Environmental Management Act 1998 (Act 107 of 1998) and such comments must be submitted within 40 days of such a request.
11. Please note that this report must be handed in or posted to the District Office of the KZN Department of Economic Development, Tourism & Environmental Affairs to which the application has been allocated (please refer to the details provided in the letter of acknowledgement for this application).

DEPARTMENTAL REFERENCE NUMBER(S)

File reference number (EIA):	**DC22/0015/2014**
File reference number (Waste Management Licence):	**N/A**

SECTION A: DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER AND SPECIALISTS

1. NAME AND CONTACT DETAILS OF ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP)

Name and contact details of the EAP who prepared this report:

Business name of EAP:	**JEC Environmental Services (JEC)**		
Physical address:	**Salvo Farm, District Road D245, Table Mountain, Wartburg, 3233**		
Postal address:	**PO Box 239, Pietermaritzburg**		
Postal code:	**3200**	**Cell:**	**082 828 7953**
Telephone:	**033 940 0450**	**Fax:**	**086 219 9059**
E-mail:	**janet@jecenviro.co.za**		

2. NAMES AND EXPERTISE OF REPRESENTATIVES OF THE EAP

Names and details of the expertise of each representative of the EAP involved in the preparation of this report:

Name of representative of the EAP	Education qualifications	Professional affiliations	Experience at environmental assessments (yrs)
Janet Edmonds	**BSc Agric (Hons) Zoology, Wildlife Science**	**IAIAsa, IWMSA**	**12 years**

3. NAMES AND EXPERTISE OF SPECIALISTS

Names and details of the expertise of each specialist that has contributed to this report:

Name of specialist	Education qualifications	Field of expertise	Section/ s contributed to in this basic assessment report	Title of specialist report/ s as attached in Appendix D
Damian Walters	**BTech Nature Conservation, M.Sc**	**Wetland Ecologist**	**Section C**	**WETLAND AND RIPARIAN DELINEATION, ALLAN WILSON BOWLING CLUB, NO. 5 ALAN PATON ROAD, PIETERMARITZBURG, SOUTH AFRICA (Appendix D1)**
Stan	**PrTech (Eng),**	**Traffic**	**Section C**	**TRAFFIC IMPACT**

Walden	**MCom (Transp Econ)**	**Consultant/ Engineer**		**ASSESSMENT: PROPOSED EYE HOSPITAL ON PROPOSED SUB 1 OF PMB/752/5 (ALAN WILSON MOTHS) (Appendix D2)**
Ernest Oakes	**M Sc (Hydrology)**	**Hydrologist**	**Section C**	**EYE HOSPITAL DEVELOPMENTSITE STORMWATER MANAGEMENT PLAN (Appendix D3)**
Jaco Olivier	**B Eng (Civil)**	**Geotechnical Engineer**	**Section C**	**GEOTECHNICAL INVESTIGATION FOR THE PROPOSED PIETERMARITZBURG SURGICAL UNIT, 5 ALAN PATON DRIVE, SCOTTSVILLE (Appendix D4)**
Ernest Oakes	**M Sc (Hydrology)**	**Hydrologist**	**Section C**	**CHANTILY PROPERTIES DEVELOPMENT SITE: FLOODLINE DELINEATION REPORT (Appendix D5)**
Frans Prins	**M A (Archaeology)**	**Heritage Specialist**	**Section C**	**CULTURAL HERITAGE IMPACT ASSESSMENT OF THE PROPOSED EYE HOSPITAL AT 5 ALAN PATON AVENUE, PIETERMARITZBURG (Appendix D6)**
Lindsay Napier	**PrArch PGDip MIA**	**Built Heritage Specialist**	**Section C**	**PHASE 2 HERITAGE IMPACT ASSESSMENT Of PORTION 5 OF ERF 752, 5 ALAN PATON AVENUE (FORMERLY DURBAN ROAD), PIETERMARITZBURG, KZN (Appendix D7)**

SECTION B: ACTIVITY INFORMATION

1. PROJECT TITLE

Describe the project title as provided on the application form for environmental authorization:

PROPOSED EYE HOSPITAL AT 5 ALAN PATON AVENUE, SCOTTSVILLE, (PORTION 5 OF ERF 752, PIETERMARITZBURG), MSUNDUZI MUNICIPALITY, KZN

2. PROJECT DESCRIPTION

Provide a detailed description of the project:

The Applicant, Chantily Properties (Pty) Ltd., comprises a consortium of ophthalmologists (eye surgeons). Their intention is to establish a day hospital for specialist eye examinations and surgery at 5 Alan Paton Avenue in Scottsville, Pietermaritzburg.

The property on which the eye hospital is proposed is Portion 5 of Erf 752 Pietermaritzburg, and is more commonly known as the Allan Wilson Shellhole and Bowling Club. The site is bordered on the south by Alan Paton Avenue, and the Foxhill Spruit on the eastern boundary. The Memorable Order of the Tin Hats (MOTH) Society Hall and Sasol Garage are located to the north west of the site, with the YMCA Sports Hall to the north. The site for the proposed eye hospital currently comprises two bowling greens and a clubhouse which have not been in use for the past three years, due to dwindling membership and high maintenance costs which the MOTHs can no longer afford.

A Planning and Development Act (PDA) Application has been submitted to subdivide and rezone the property from "Private Open Space" to" Institutional". The proposed eye hospital will comprise a two storey building with a footprint of approximately 1100m^2. This is to be located on the northern portion of the site. A generator / compressor room is proposed on the north western boundary, and a total of 93 parking bays are proposed on the remainder of the site. The existing clubhouse would be demolished.

The specialist eye care facility is proposed to be operated as a day hospital, i.e. no overnight patients and no visiting hours, as is the case with a normal general hospital.

JEC Environmental Services (JEC) has been appointed by Chantily Properties (Pty) Ltd. to act as the Environmental Assessment Practitioner (EAP) and conduct the necessary Basic Assessment (BA) Process for the proposed eye hospital.

Sewage:
It is proposed that sewage will be disposed to the Municipal sewer infrastructure. There is a Municipal sewer connection point located on the northern boundary of the property.

Stormwater:
Stormwater is to be directed to the Municipal stormwater infrastructure. A Stormwater Management Plan has been compiled by Jeffares and Green (dated 28 May 2014) and is attached in Appendix D3.

Electricity:
It is proposed that electricity would be supplied by Msunduzi Electricity. The demand is estimated at approx 80KVA.

Water:
It is proposed to supply the development with water from the Msunduzi Municipality via the Umgungundlovu District Municipality. The demand is expected to be approx 175 KL / month.

Medical Waste:
Medical Waste is proposed to be collected by a medical waste contractor and disposed of at a registered medical waste facility. The volume of medical waste is estimated to be approximately 290 kg / month.

Wetland Delineation:
A Wetland Delineation Report has been compiled by Ikwhane Wetland Science (dated 01 February 2014) and is attached in Appendix D1. No wetlands are present on the proposed development site.

Traffic:
An assessment of the proposed access point and a Traffic Impact Assessment (TIA) have been completed by Asanta Sana (dated 26 September 2013 and 05 December 2013 respectively). Both are attached in Appendix D2. The results and recommendations are discussed in Section 7 below and the studies indicate that the proposed eye hospital will not have a significant contribution to traffic volumes in the area.

Geotechnical Investigation:
A Geotechnical Investigation Report has been compiled by Terratest (dated 09 May 2014) and is attached in Appendix D4. The Geotechnical Report concludes that the site is suitable for development, provided the recommendations regarding foundations and re-compacting are complied with.

Floodline Delineation:
A Floodline Delineation Report has been compiled by Jeffares and Green (dated 18 March 2014) and is attached in Appendix D5. The Floodline Report revealed that the proposed development site is not impacted by either the 1:50 year or 1:100 year floodlines.

Phase 1 Cultural Heritage Assessment:
Due to the site's proximity to historical military memorabilia (in the adjacent MOTH Hall), a Heritage Impact Assessment Report (dated 18 July 2014) was compiled by Active Heritage and is included in Appendix D6. This revealed that the military memorabilia (tank and cannon) would need to be moved to positions at least 50m from the development site, to ensure their continued protection.

Phase 2 Built Heritage Assessment:
Due to the site featuring a building that may be older than 60 years (existing bowling clubhouse), a Phase 2 Built Heritage Assessment Report was compiled by Lindsay Napier (dated 22 August 2014) and is included in Appendix D7. It was found that the building and associated bowling greens are older than 60 years. In this regard, a Demolition Application was submitted to Amafa Heritage KZN. Amafa has accepted and approved the application for demolition, subject to consultation with neighbours (see Amafa Receipt and Amafa Plans Review Committee Decision in Appendix D7). The consultation with neighbours is currently underway.

3. ACTIVITY DESCRIPTION

Describe each listed activity in Listing Notice 1 (GNR 544, 18 June2010), Listing Notice 3 (GNR 546, 18 June 2010) or Category A of GN 718, 3 July 2009 (Waste Management Activities) which is being applied for as per the project description:

Item	Activity	Description
11	*The construction of …* (i) *Building exceeding 50 square metres in size; or* (ii) *Infrastructure or structures covering 50 square metres or more* *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.*	The proposed eye hospital will cover an area larger than 50 square metres and it is proposed within 32 metres of the edge of a watercourse (Foxhill Spruit).
24	*The transformation of land bigger than 1000 square metres in size, to … institutional use, where, at the time of coming into effect of this Schedule such land was zoned open space, conservation or had an equivalent zoning.*	The proposed eye hospital will involve the transformation of an area larger than 1000 square metres, from "*private open space*" to "*institutional*" use, as a medical eye care facility.

4. 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 report. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity 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.

PLEASE NOTE:
An alternative site (S2) has not been considered, as the Applicant has signed a Sale Agreement with the MOTHs for the preferred site. This site satisfies the needs of the eye hospital in terms of location, pedestrian and vehicular access, and features flat, previously-transformed land to develop.

An alternative layout (A2) for the proposed eye hospital was considered earlier in the process. The alternative layout entailed positioning the proposed eye hospital building on the western boundary of the site with the parking area located to the east, closer to the Foxhill Spruit. This would require splitting the hospital building into two, to accommodate an access point to the parking area.

This alternative layout was not pursued further, for the following reasons:
- **It would not be practical to operate an eye hospital within two separate buildings, as the specialist equipment needs to be centrally located and accessible within a single building, for both the doctors' convenience and patients comfort; and**
- **The hospital would be closer to the road and therefore closer to the high noise levels of the traffic and Sasol garage.**

Sections B 5 – 15 below should be completed for each alternative.

5. ACTIVITY POSITION

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, minutes and seconds. List alternative sites were applicable.

Alternative:	**Latitude (S):**			**Longitude (E):**		
Alternative S1[1] (preferred or only site alternative)	**Eye hospital**	29°	36 '	47.3 "	30°	23 '	22.3 "
Alternative S2 (if any)		[redacted]					
Alternative S3 (if any)		[redacted]					

In the case of linear activities:

Alternative:	**Latitude (S):**	**Longitude (E):**
Alternative S1 (preferred or only route alternative)		
• Starting point of the activity	[redacted]	
• Middle point of the activity		
• End point of the activity		
Alternative S2 (if any)		
• Starting point of the activity		
• Middle point of the activity		
• End point of the activity		
Alternative S3 (if any)		
• Starting point of the activity		

[1] "Alternative S.." refer to site alternatives.

- Middle point of the activity
- End point of the activity

o	‘	“	o	‘	“
o	‘	“	o	‘	“

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

6. PHYSICAL SIZE OF THE ACTIVITY

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

Alternative:	**Size of the activity:**
Alternative A1[2] (preferred activity alternative)	5191 m^2
Alternative A2 (if any)	m^2
Alternative A3 (if any)	m^2

or, for linear activities:

Alternative:	**Length of the activity:**
Alternative A1 (preferred activity alternative)	m
Alternative A2 (if any)	m
Alternative A3 (if any)	m

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

Alternative:	**Size of the site/servitude:**
Alternative A1 (preferred activity alternative)	m^2
Alternative A2 (if any)	m^2
Alternative A3 (if any)	m^2

7. SITE ACCESS

Does ready access to the site exist?	YES
If NO, what is the distance over which a new access road will be built	m

Describe the type of access road planned:

The TIA (dated 05 December 2013) and a report on the access to the site (dated 26 September 2013) are both attached in Appendix D2. The following conclusions can be drawn from this investigation:

<u>General:</u>

i) During the morning peak the city-bound flows are heaviest on the Alan Paton east approach and the Alexandra Road approach;
ii) Queues on these approaches were excessive at times being greater than 20 vehicles;
iii) The north approach i.e. the approach from the gym and the petrol filling station is clearly the smallest approach flow;
iv) With the exception of the Alexandra Road approach the left slip flows on the other approaches are very small;
v) The left slip flow on the Gym/PFS approach is very small. (This is the lane proposed to be used for the access to the Eye Hospital). Existing traffic flow on the eastbound slip

[2] “Alternative A..” refer to activity, process, technology or other alternatives.

lane is of small proportions and, traffic which does use it easily gains entrance to Alan Paton Avenue due to the upstream traffic signals which provides ample gap opportunities.

Access:

Three options for consideration are identified as described below.

i) Shared Access with Alan Wilson – The location of the Alan Wilson access is too close to the Sasol PFS forecourt for the increased usage as a shared access. Traffic leaving the petrol filling station proceeds directly in front of the Alan Wilson access irrespective of whether this traffic proceeds towards the Alexandra Road intersection or along the slip lane. Similarly, the conflicts will increase even further when traffic leaving the gym proceeds eastwards along the slip lane.

ii) Small Diameter Roundabout – A small diameter roundabout was investigated to incorporate the Alan Wilson access, the site access and the slip lane but no suitable geometric arrangement could be configured.

iii) A Dedicated Left-in, Left-out Access – A separate left-in, left-out access off the slip lane to exclusively serve the proposed hospital would be the preferred alternative for the following reasons:

- **The access would not interfere with the traffic movements associated with either the Alan Wilson access or with traffic leaving the Sasol petrol filling station;**
- **The access would not impede the small traffic usage of the left slip lane;**

The left-in, left-out operation means that the outgoing traffic would not contribute additional traffic to the Alan Paton Avenue / Alexandra Road signalized intersection

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.

8. SITE OR 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 report.

The site or route plans must indicate the following:

8.1. the scale of the plan which must be at least a scale of 1:500;
8.2. the property boundaries and numbers/ erf/ farm numbers of all adjoining properties of the site;
8.3. the current land use as well as the land use zoning of each of the properties adjoining the site or sites;
8.4. the exact position of each element of the application as well as any other structures on the site;
8.5. the position of services, including electricity supply cables (indicate above or underground), water supply pipelines, boreholes, street lights, sewage pipelines, storm water infrastructure and telecommunication infrastructure;
8.6. walls and fencing including details of the height and construction material;
8.7. servitudes indicating the purpose of the servitude;
8.8. sensitive environmental elements within 100 metres of the site or sites including (but not limited thereto):
   - rivers, streams, drainage lines or wetlands;
   - the 1:100 year flood line (where available or where it is required by DWA);

- ridges;
- cultural and historical features;
- areas with indigenous vegetation including protected plant species (even if it is degraded or infested with alien species);

8.9. for gentle slopes the 1 metre contour intervals must be indicated on the plan and whenever the slope of the site exceeds 1:10, the 500mm contours must be indicated on the plan; and

8.10. the positions from where photographs of the site were taken.

9. 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.

10. FACILITY ILLUSTRATION

A detailed illustration of the facility must be provided at a scale of 1:200 and attached to this report as Appendix C. The illustrations must be to scale and must represent a realistic image of the planned activity/ies.

11. ACTIVITY MOTIVATION

11.1. Socio-economic value of the activity

What is the expected capital value of the activity on completion?	R30 million
What is the expected yearly income that will be generated by or as a result of the activity?	R15 million per year
Will the activity contribute to service infrastructure?	~~YES~~
Is the activity a public amenity?	~~YES~~
How many new employment opportunities will be created in the development phase of the activity?	Approx 250
What is the expected value of the employment opportunities during the development phase?	Impossible to predict
What percentage of this will accrue to previously disadvantaged individuals?	Approx 95 %
How many permanent new employment opportunities will be created during the operational phase of the activity?	Approx 30
What is the expected current value of the employment opportunities during the first 10 years?	Approx R26 million
What percentage of this will accrue to previously disadvantaged individuals?	Approx 75 %

11.2. Need and desirability of the activity

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

- A need for a specialist medical facility was recognised by the group of eye surgeons.
- The site is desirable as it has good vehicular and pedestrian access for public via Alan Paton Avenue.
- The site is located conveniently close to other hospitals and medical care facilities and

is also close to the Pietermaritzburg CBD.
- The site is desirable due to level ground on site.
- The site is desirable as it is previously transformed and no longer in use by its owners.

Indicate any benefits that the activity will have for society in general:

- Provide specialist medical care to the public; and
- Provide a separate, specialist day hospital for eye surgery in close proximity to other established medical facilities.

Indicate any benefits that the activity will have for the local communities where the activity will be located:

- Jobs will be created;
- Economic activity in the Scottsville area will increase as a result of the influx of people to the area to visit the specialist hospital; and
- General improvement to Scottsville in terms of adding a specialised medical facility to the area.
- Provision of specialist eye care facilities to the Pietermaritzburg public.

12. APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES

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

Title of legislation, policy or guideline:	Administering authority:	Date:
National Environmental Management Act (Act 107 of 1998) – for its potential to cause degradation of the environment (Section 28).	Department of Environmental Affairs	1998
National Water Act (Act 36 of 1998) – for potential to cause pollution of water resources defined under the Act (Section 19).	Department of Water and Sanitation	1998
The National Heritage Resources Act (Act No 25 of 1999 as amended) – for the identification and preservation of items of heritage importance.	Department of Arts and Culture (Amafa KwaZulu-Natal)	1999
Guideline 4: Public Participation in support of the EIA Regulations (2005)	Department of Environmental Affairs	2005
Guideline 7: Detailed Guide to Implementation of the Environmental Impact Assessment Regulations (2006)	Department of Environmental Affairs	2006

13. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

13.1. Solid waste management

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

If yes, what estimated quantity will be produced per month? Approx 10m^3

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

It will be transported to the New England Road Landfill Site in Pietermaritzburg.

Where will the construction solid waste be disposed of? (provide details of landfill site)

It will be transported to the New England Road Landfill site in Pietermaritzburg.

Will the activity produce solid waste during its operational phase?	**YES**	
If yes, what estimated quantity will be produced per month?	Approx 5 m^3	

How will the solid waste be disposed of? (provide details of landfill site)

Domestic waste to be collected by the Msunduzi Municipality and transported to New England Road Landfill Site.

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

Medical waste will be stored on site and will be collected on a regular basis by an approved medical wast contractor, for disposal at an approved facility. The volume of medical waste is estimated to be approx 290 kg / month.

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 the further requirements of the application.

Can any part of the solid waste be classified as hazardous in terms of the relevant legislation?	**YES**	

Medical waste is considered to be hazardous however only small amounts will be stored on site.

If yes, contact the KZN Department of Economic Development, Tourism & Environmental Affairs to obtain clarity regarding the process requirements for your application.

Is the activity that is being applied for a solid waste handling or treatment facility?		**NO**

If yes, contact the KZN Department of Economic Development, Tourism & Environmental Affairs to obtain clarity regarding the process requirements for your application.

13.2. Liquid effluent

Will the activity produce effluent, other than normal sewage, that will be disposed of in a municipal sewage system?		**NO**
If yes, what estimated quantity will be produced per month?	N/A m^3	
Will the activity produce any effluent that will be treated and/or disposed of on site?		**NO**

If yes, contact the KZN Department of Economic Development, Tourism & Environmental Affairs to obtain clarity regarding the process requirements for your application.

Will the activity produce effluent that will be treated and/or disposed of at another facility?		**NO**

If yes, provide the particulars of the facility:

Facility name:	N/A		
Contact person:			
Postal address:			
Postal code:			
Telephone:		Cell:	
E-mail:		Fax:	

Describe the measures that will be taken to ensure the optimal reuse or recycling of waste water, if any:

N/A

13.3. Emissions into the atmosphere

Will the activity release emissions into the atmosphere?	NO
If yes, is it controlled by any legislation of any sphere of government?	NO

If yes, contact the KZN Department of Economic Development, Tourism & Environmental Affairs to obtain clarity regarding the process requirements for your application.

If no, describe the emissions in terms of type and concentration:

N/A

13.4. Generation of noise

Will the activity generate noise?	YES
If yes, is it controlled by any legislation of any sphere of government?	NO

If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

If no, describe the noise in terms of type and level:

Noise would be generated during the Construction Phase, though the use of heavy machinery, vehicles and the presence of the construction workforce on the site. This would be a short term impact.

During the Operational Phase, noise would be generated by vehicles entering and leaving the facility and by the staff and patients of the eye hospital. These would be long-term impacts, however are not considered to be significant due to existing surrounding noise levels from high volumes of traffic near the site.

14. 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
X					

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:	N/A litres
Does the activity require a water use permit from the Department of Water Affairs?	YES

If YES, please submit the necessary application to the Department of Water Affairs and attach proof thereof to this report.

A Water Use Licence Application may be required, due to the close proximity of the proposed development to natural water resources (Foxhill Spruit). Further clarity will be sought from the Department of Water and Sanitation following their review of this Report.

15. ENERGY EFFICIENCY

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

Architects will consider all applicable tools or measures as outlined in the Green Building Convention South Africa (GBCSA) categories to raise awareness of green building benefits and reduce the environmental impact of development. These categories include: management; indoor environment quality; energy; transport; water; materials; land use and ecology; emissions and innovation.

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

A generator is proposed at the facility, to provide a back-up power supply in the event of a power cut or load shedding.

SECTION C: SITE/ AREA/ PROPERTY DESCRIPTION

Important notes:

- 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 C and indicate the area, which is covered by each copy No. on the Site Plan.

Section C Copy No. (e.g. A): [ ]

- Subsections 1 - 6 below must be completed for each alternative.

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 **(Please cross the appropriate box)**.

Alternative S1 (preferred site):

Ridgeline	Plateau	Side slope of hill/mountain	Closed valley	~~**Open valley**~~	Plain	Undulating plain/low hills	Dune	Sea-front

Alternative S2 (if any):

Ridgeline	Plateau	Side slope of hill/mountain	Closed valley	Open valley	Plain	Undulating plain/low hills	Dune	Sea-front

Alternative S3 (if any):

Ridgeline	Plateau	Side slope of hill/mountain	Closed valley	Open valley	Plain	Undulating plain/low hills	Dune	Sea-front

3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

Has a specialist been consulted for the completion of this section?	~~**YES**~~	

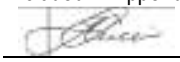
If YES, please complete the following:

Name of the specialist:	Jaco Olivier		
Qualification(s) of the specialist:	Geotechnical Engineer – B Eng (Civil)		
Postal address:	P. O Box 794, Hilton		
Postal code:	3245		
Telephone:	033 343 6700	Cell:	-
E-mail:	olivierj@jgi.co.za	Fax:	033 343 6788

Are there any rare or endangered flora or fauna species (including red data species) present on any of the alternative sites?		~~**NO**~~
If YES, specify and explain:	N/A	

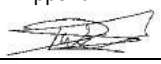
Are their any special or sensitive habitats or other natural features present on any of the alternative sites?		NO
If YES, specify and explain:	N/A	
Are any further specialist studies recommended by the specialist?		NO
If YES, specify:	N/A	
If YES, is such a report(s) attached in Appendix D?	YES	

A Geotechnical Report is included in Appendix D.

Signature of specialist:  Date: September 2014

Has a specialist been consulted for the completion of this section?			YES	
If YES, please complete the following:				
Name of the specialist:	Damian Walters			
Qualification(s) of the specialist:	Wetland Ecologist – B Tech Nature Conservation, M.Sc			
Postal address:	PO Box 493 Merrivale			
Postal code:	3291			
Telephone:	033 330 5831	Cell:	083 684 8000	
E-mail:	walters@ikhwane.co.za	Fax:	-	
Are there any rare or endangered flora or fauna species (including red data species) present on any of the alternative sites?				NO
If YES, specify and explain:	N/A			
Are their any special or sensitive habitats or other natural features present on any of the alternative sites?			YES	
If YES, specify and explain:	A riparian area associated with the Foxhill Spruit is located outside the site, on the eastern boundary.			
Are any further specialist studies recommended by the specialist?				NO
If YES, specify:	N/A			
If YES, is such a report(s) attached in Appendix D?				NO

A Wetland report is included in Appendix D.

Signature of specialist:  Date: September 2014

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

	Alternative S1:		Alternative S2 (if any):		Alternative S3 (if any):	
Shallow water table (less than 1.5m deep)		NO	YES	NO	YES	NO
Dolomite, sinkhole or doline areas		NO	YES	NO	YES	NO
Seasonally wet soils (often close to water bodies)		NO	YES	NO	YES	NO
Unstable rocky slopes or steep slopes with loose soil		NO	YES	NO	YES	NO
Dispersive soils (soils that dissolve in water)		NO	YES	NO	YES	NO
Soils with high clay content (clay fraction more than 40%)		NO	YES	NO	YES	NO
Any other unstable soil or geological feature		NO	YES	NO	YES	NO

An area sensitive to erosion		NO	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

Has a specialist been consulted for the completion of this section?				NO
If YES, please complete the following:				
Name of the specialist:	N/A			
Qualification(s) of the specialist:				
Postal address:				
Postal code:				
Telephone:		Cell:		
E-mail:		Fax:		
Are there any rare or endangered flora or fauna species (including red data species) present on any of the alternative sites?				NO
If YES, specify and explain:	N/A			
Are their any special or sensitive habitats or other natural features present on any of the alternative sites?			YES	
If YES, specify and explain:	A riparian area associated with the Foxhill Spruit is located outside the site on the eastern boundary.			
Are any further specialist studies recommended by the specialist?				NO
If YES, specify:	N/A			
If YES, is such a report(s) attached in Appendix D?			YES	NO

Signature of specialist: _____ Date:

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. LAND USE CHARACTER OF SURROUNDING AREA

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

Land use character			Description
Natural area	YES		The riparian area associated with the Foxhill Spruit is located just outside the site, on eastern boundary of the property. Msunduzi River 200m to north west.
Low density residential		NO	
Medium density residential	YES		200m to west
High density residential	YES		80m to the south west and 140m to south east
Informal residential		NO	
Retail commercial & warehousing	YES		Steers, Avis Van Rental and Midlands Caravans 75m to south, and 350m to north west in Albert Luthuli Street
Light industrial		NO	
Medium industrial		NO	
Heavy industrial		NO	
Power station		NO	
Office/consulting room	YES		YMCA offices 100m to north west. Youth for Christ Offices 135m to north west.
Military or police base/station/compound	YES		Natal Carbineers 350m to the north west. Alexandra Police Station 470m to the south.
Spoil heap or slimes dam		NO	
Quarry, sand or borrow pit		NO	
Dam or reservoir		NO	
Hospital/medical centre	YES		Mediclinic 330m to north
School / creche	YES		Alexandra High School 340m to south. Merchiston Primary School 500m to north.
Tertiary education facility		NO	
Church	YES		St Alpheges Anglican Church 475m to south west. Hosanna Ministries 490m to north east.
Old age home		NO	
Sewage treatment plant		NO	
Train station or shunting yard		NO	
Railway line		NO	
Major road (4 lanes or more)		NO	
Airport		NO	
Harbour		NO	
Sport facilities	YES		YMCA Sports Hall 75m to north. Woodburn Rugby Stadium 115m to north east. Alexandra Park Swimming Pool 135m to west. Kershaw Park tennis courts 300m to north west. Alexandra Park Bowling Club 250m to south west. Harry Gwala Stadium 460m to south west. Scottsville Racecourse 485m to east. Collegians Bowling Club 490m to north east.
Golf course		NO	
Polo fields		NO	

Filling station	YES		Sasol Garage 55m to north west. Shell Garage 70m to south.
Landfill or waste treatment site		NO	
Plantation		NO	
Agriculture		NO	
River, stream or wetland	YES		Foxhill Spruit on eastern boundary of the property. Msunduzi River 200m to north west.
Nature conservation area		NO	
Mountain, hill or ridge		NO	
Museum	YES		MOTH Hall 20m to north west. MOTH Garden of Remembrance 200m to south east.
Historical building	YES		Alexandra Park Swimming Pool 135m to west.
Protected Area		NO	
Graveyard		NO	
Archaeological site		NO	
Other land uses (describe)		NO	

6. 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 palaeontological sites, on or within 20m of the site?	YES	

''archaeological'' means - (d) features, structures and artefacts associated with military history which are older than 75 years and the sites on which they are found.

The MOTH Hall is located 20m to the north west of the site and contains military memorabilia including items older than 75 years. A military tank and cannon are located in the grounds surrounding the MOTH Hall and these are within 15m of the proposed site.

If YES, contact a specialist recommended by AMAFA to conduct a heritage impact assessment. The heritage impact assessment must be attached as an appendix to this report.

Briefly explain the recommendations of the specialist:	**A Phase 1 Heritage Assessment was compiled by Active Heritage (see Appendix D6). The military tank and cannon should be moved to a distance of at least 50m from the proposed development site. The age of the existing clubhouse could not be confirmed, thus a Phase 2 Heritage Assessment by a Built Heritage Specialist was recommended.**

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

If YES, please submit the necessary application to AMAFA and attach proof thereof to this report.

A Phase 2 Heritage Assessment was conducted by Lindsay Napier, a Built Heritage Specialist (see Appendix D7). She has concluded that the clubhouse and bowling greens are older than 60 years but have little architectural, historical or cultural significance. The clubhouse is of a different architectural language style and construction material when compared to the MOTH Hall, which will remain on site. In this regard, a Permit Application for Demolition was submitted to Amafa. Amafa's acknowledgement of the Demolition Permit Application, and the decision form Amafa, indicating their approval for demolition, are included in Appendix D7.

SECTION D: PUBLIC PARTICIPATION

1. ADVERTISEMENT

The person conducting a public participation process must take into account any guidelines applicable to public participation as contemplated in section 24J of the Act and must give notice to all potential interested and affected parties of the application which is subjected to public participation by—

(a) fixing a notice board (of a size at least 60cm by 42cm; and must display the required information in lettering and in a format as may be determined by the competent authority) at a place conspicuous to the public at the boundary or on the fence of—
  (i) the site where the activity to which the application relates is or is to be undertaken; and
  (ii) any alternative site mentioned in the application;
(b) giving written notice to—
  (i) the owner or person in control of that land if the applicant is not the owner or person in control of the land;
  (ii) the occupiers of the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;
  (iii) owners and occupiers of land adjacent to the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;
  (iv) the municipal councillor of the ward in which the site or alternative site is situated and any organisation of ratepayers that represent the community in the area;
  (v) the local and district municipality which has jurisdiction in the area;
  (vi) any organ of state having jurisdiction in respect of any aspect of the activity (as identified in the application form for the environmental authorization of this project); and
  (vii) any other party as required by the competent authority;
(c) placing an advertisement in—
  (i) one local newspaper; or
  (ii) any official *Gazette* that is published specifically for the purpose of providing public notice of applications or other submissions made in terms of these Regulations;
(d) placing an advertisement in at least one provincial newspaper or national newspaper, if the activity has or may have an impact that extends beyond the boundaries of the metropolitan or district municipality in which it is or will be undertaken: Provided that this paragraph need not be complied with if an advertisement has been placed in an official *Gazette* referred to in subregulation 54(c)(ii); and
(e) using reasonable alternative methods, as agreed to by the competent authority, in those instances where a person is desiring of but unable to participate in the process due to—
  (i) illiteracy;
  (ii) disability; or
  (iii) any other disadvantage.

2. CONTENT OF ADVERTISEMENTS AND NOTICES

A notice board, advertisement or notices must:

(a) indicate the details of the application which is subjected to public participation; and
(b) state—
  (i) that an application for environmental authorization has been submitted to the KZN Department of Economic Development, Tourism & Environmental Affairs in terms of the EIA Regulations, 2010;(ii)
  (iii) a brief project description that includes the nature and location of the activity to which the application relates;
  (iv) where further information on the application can be obtained; and
  (iv) the manner in which and the person to whom representations in respect of the application may be made.

3. PLACEMENT OF ADVERTISEMENTS AND NOTICES

Where the proposed activity may have impacts that extend beyond the municipal area where it is located, a notice must be placed in at least one provincial newspaper or national newspaper, indicating that an application will be submitted to the competent authority in terms of these regulations, the nature and location of the activity, where further information on the proposed activity can be obtained and the manner in which representations in respect of the application can be made, unless a notice has been placed in any *Gazette* that is published specifically for the purpose of providing notice to the public of applications made in terms of the EIA regulations.

Advertisements and notices must make provision for all alternatives.

4. DETERMINATION OF APPROPRIATE PROCESS

The EAP must ensure that the public participation process is according to that prescribed in regulation 54 of the EIA Regulations, 2010, but may deviate from the requirements of subregulation 54(2) in the manner agreed by the KZN Department of Economic Development, Tourism & Environmental Affairs as appropriate for this application. Special attention should be given to the involvement of local community structures such as Ward Committees, ratepayers associations and traditional authorities where appropriate.
Please note that public concerns that emerge at a later stage that should have been addressed may cause the competent authority to withdraw any authorisation it may have issued if it becomes apparent that the public participation process was inadequate.

5. COMMENTS AND RESPONSE REPORT

The practitioner must record all comments and respond to each comment of the public before this application is submitted. The comments and responses must be captured in a comments and response report as prescribed in the EIA regulations (regulation 57 in the EIA Regulations, 2010) and be attached as Appendix E to this report.

6. PARTICIPATION BY DISTRICT, LOCAL AND TRADITIONAL AUTHORITIES

District, local and traditional authorities (where applicable) are all key interested and affected parties in each application and no decision on any application will be made before the relevant local authority is provided with the opportunity to give input. The planning and the

environmental sections of the local authority must be informed of this application and provided with an opportunity to comment.

Has any comment been received from the district municipality? NO

If "YES", briefly describe the feedback below (also attach any correspondence to and from this authority with regard to this application):

N/A

Has any comment been received from the local municipality? YES

If "YES", briefly describe the feedback below (also attach any correspondence to and from this authority with regard to this application):

RESPONSES TO THE BELOW COMMENTS ARE INCLUDED IN THE COMMENTS AND RESPONSES REPORT IN APPENDIX E.

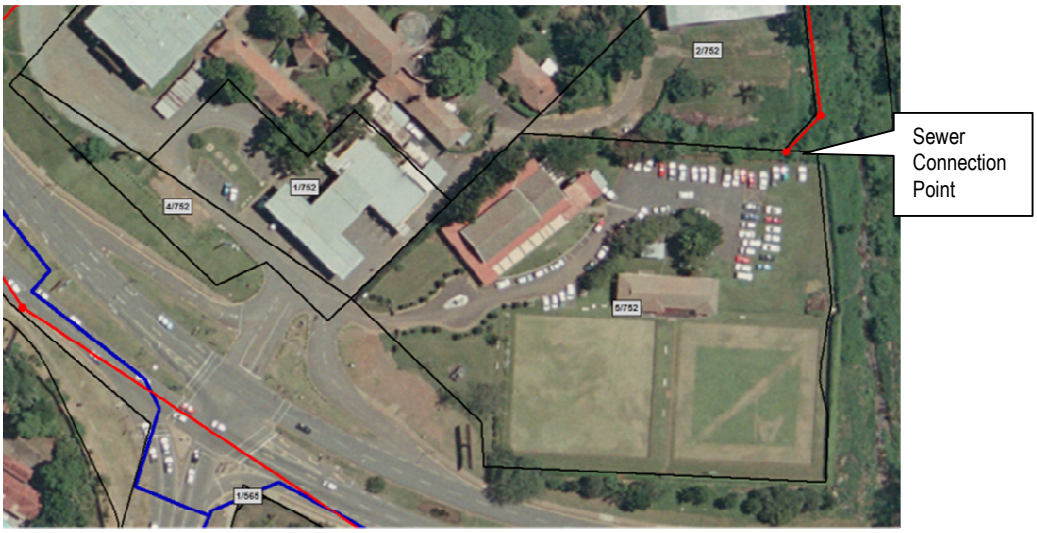
Gerald Naicker 09 May 2014

Administration Officer / GIS Technician
Environmental Management Unit
Msunduzi Municipality

- Please register the Msunduzi Municipality Environmental Management Unit as an I&AP for the Eye Hospital at 5 Alan Paton Ave. please forward all relevant documents to me. Should you require any assistance from this department, please feel free to contact me.

Dhamendra Ragoonandan 15 May 2014

Water & Sanitation
Manager : Planning & Design
Environmental Management Unit
Msunduzi Municipality



- No objection to development.
- Sewer connection point is available on northern boundary of property. No medical waste to be disposed of into the sewer main.

Has any comment been received from a traditional authority? NO

If "YES", briefly describe the feedback below (also attach any correspondence to and from this authority with regard to this application):

N/A

7. CONSULTATION WITH OTHER STAKEHOLDERS

Any stakeholder that has a direct interest in the site or property, such as servitude holders and service providers, should be informed of the application and be provided with the opportunity to comment.

Has any comment been received from stakeholders? YES

If "YES", briefly describe the feedback below (also attach copies of any correspondence to and from the stakeholders to this application):

Rolize Erasmus **21 May 2014**

Department of Health

- The email below is acknowledged.
- Please note that your query is herewith redirected to the private licensing unit (copied herein) for attention.

SECTION E: IMPACT ASSESSMENT

The assessment of impacts must adhere to the requirements in the EIA Regulations, 2010, 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. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

List the main issues raised by interested and affected parties.

- Increased traffic volumes
- Increased noise levels
- Disposal of medical waste
- Loss of green / open space
- No objections

PLEASE SEE APPENDIX E FOR A DETAILED TABLE OF COMMENTS RECEIVED AND THE RESPONSES FROM THE EAP.

Response from the practitioner to the issues raised by the interested and affected parties (A full response must be given in the Comments and Response Report that must be attached as Appendix E to this report):

PLEASE SEE APPENDIX E FOR A DETAILED TABLE OF COMMENTS RECEIVED AND THE RESPONSES FROM THE EAP.

2. 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

2.1. IMPACTS THAT MAY RESULT FROM THE PLANNING AND DESIGN PHASE

a. Site alternatives

List the potential impacts associated with site alternatives that are likely to occur during the planning and design phase:

Alternative S1 (preferred alternative)

Direct impacts:
• Recognition of concerns raised by IAPs.
• Specialist Studies will be conducted to inform the developers and project team as to the specific conditions of the site.
Indirect impacts:
• Skilled jobs will be created during the Planning and Design Phase such as engineers, architects etc.
Cumulative impacts:
• None

No-go alternative (compulsory)

Direct impacts:
• There will be no change to the existing conditions on site.
Indirect impacts:
• No jobs will be created in any sector
Cumulative impacts:

• None.

Indicate mitigation measures to manage the potential impacts listed above:

Alternative S1

- Due measures must be taken to mitigate concerns raised by the IAPs.
- All necessary Specialist Studies must be identified and carried out to inform the project team and developers as to any specific conditions on the site that need to be mitigated.

b. Process, technology, layout or other alternatives

List the impacts associated with any process, technology, layout or other alternatives that are likely to occur during the planning and design phase (please list impacts associated with each alternative separately):

Alternative A1 (preferred alternative)

Direct impacts:

- If not properly considered, stormwater run-off from the proposed development could cause erosion and foundation instability.
- If a proper geotechnical assessment was not conducted as part of the Design Phase, the proposed buildings could collapse.

Indirect impacts:

- Jobs will be created for highly skilled personnel (consulting engineers).

Cumulative impacts:

- None.

No-go alternative (compulsory)

Direct impacts:

- Stormwater runoff will not be altered.

Indirect impacts:

- Jobs will not be created for highly skilled personnel (consulting engineers).

Cumulative impacts:

- None

Indicate mitigation measures to manage the potential impacts listed above:

Alternative A1:

- It must be ensured that the design of the proposed structures feature appropriate surface water / stormwater management structures to attenuate and discharge the stormwater runoff in such a way that erosion does not occur. All recommendations made by the engineer must be strictly adhered to.
- A Geotechnical Assessment has been conducted for the development. All findings and recommendations of this assessment must be strictly adhered to.

2.2. IMPACTS THAT MAY RESULT FROM THE CONSTRUCTION PHASE

a. Site alternatives

List the potential impacts associated with site alternatives that are likely to occur during the construction phase:

Alternative S1 (preferred site)

Direct impacts:

- There is potential for the site and surrounding areas to become polluted if construction activities are not properly managed (e.g. oil spills from machinery, litter from personnel on site, sewage from ablutions and packaging from materials).
- The additional hardened surfaces created during construction will increase the amount of stormwater runoff, which has the potential to cause erosion.
- Dust and noise will be created during the Construction Phase.
- Visual disturbance to surrounding residents.
- Slow-moving construction vehicles on the surrounding roads may cause congestion and / or accidents.
- The location of the material storage area could cause damage to sensitive areas.
- Spillages of hazardous waste could cause contamination of soil, groundwater and surface water.

Indirect impacts:

- Provision of temporary job opportunities during construction (for engineers, labourers etc).
- Revenue for local businesses supplying the contractors (i.e. construction materials).
- Increased use of the surrounding businesses.
- If the workers are not trained in environmental issues, there is potential for sensitive areas to be damaged.

Cumulative impacts:

- Downstream pollution due to spillages and erosion on construction site.

No-go alternative (compulsory)

Direct impacts:

- The potential for pollution of surrounding areas from construction activities is removed.
- Stormwater run-off will not be altered, and thus the erosion rates will not be altered.
- Construction workers will not be present to potentially trespass onto neighbouring properties.
- Additional dust and noise will not be generated.
- Traffic on the surrounding roads will not be affected.

Indirect impacts:

- No specialised eye hospital in the area.
- No additional revenue for local, surrounding businesses.
- Local jobs will not be created thus unemployed people in the area will not benefit.

Cumulative impacts:

- No impacts on downstream water users.

Indicate mitigation measures to manage the potential impacts listed above:

Alternative S1

- The EMPr in Appendix F must be implemented and monitored by an Environmental Control Officer (ECO).
- Site personnel must undergo Environmental Training and be educated on keeping any vegetation disturbance to a minimum and on the separation and correct disposal of different types of waste.
- During demolition of the clubhouse, all waste material should be stacked separately and responsibly disposed on or sold / donated to needy communities.
- All construction machinery and equipment must be regularly serviced and maintained to keep noise, dust and possible leaks to a minimum.
- Construction hours should be limited to normal working hours.
- An appropriate number of toilets (1 toilet for every 20 workers) must be provided for labourers during the Construction Phase. These must be maintained in a satisfactory condition and a minimum of 100m away from any water resources.
- All waste generated on site during operation must be adequately managed. Separation and recycling of different waste materials must be implemented.
- Any leftover material must be appropriately disposed of (i.e. at a permitted landfill site, recycled, used by the community).
- Appropriate stormwater / surface water management measures must be put in place before construction

commences and maintained throughout the lifetime of the development.
- If or when necessary, erosion control measures must be installed during construction.
- The area surrounding the structures must be regularly checked for signs of erosion. If erosion is evident, corrective action must be taken.
- Local people should be employed where possible and construction workers should be employed / appointed from an off-site location, to prevent criminals posing as job seekers on the site.
- Appropriate temporary traffic control and warning signage must be erected and implemented on all affected roads in the vicinity.
- Hazardous substances e.g. fuel must be appropriately stored in bunded areas and/or access controlled areas on impermeable surfaces. Emergency contact numbers should be kept on site in case of spillages.
- The site should be fenced and screened where practical and possible. This will prevent uncontrolled access to neighbouring properties.

b. Process, technology, layout or other alternatives

List the impacts associated with process, technology, layout or other alternatives that are likely to occur during the construction phase (please list impacts associated with each alternative separately):

Alternative A1 (preferred alternative)

Direct impacts:
- Stormwater run-off from the proposed development could cause erosion and foundation instability.
- Slow-moving construction traffic on surrounding access roads may cause traffic congestion.
- Construction activities near the Foxhill Spruit could cause pollution and adverse impacts for aquatic biota and downstream users.
- Construction activities and workforce could hinder access and disturb activities at the MOTH Hall.

Indirect impacts:
- Jobs will be created for semi-skilled and unskilled personnel (construction workforce).
- Revenue for surrounding businesses due to presence of construction workforce.

Cumulative impacts:
- None

No-go alternative (compulsory)

Direct impacts:
- The potential for pollution of surrounding areas from construction activities is removed.
- Stormwater run-off will not be altered, and thus the erosion rates will not be altered.
- Construction workers will not be present to potentially trespass onto neighbouring properties and disturb local landowners.
- Additional dust and noise will not be generated.
- Traffic on the surrounding roads will not be affected.

Indirect impacts:
- No specialised eye hospital in the area.
- No additional revenue for local, surrounding businesses.
- Local jobs will not be created thus unemployed people in the area will not benefit.

Cumulative impacts:
- No impacts on downstream water users.

Indicate mitigation measures to manage the potential impacts listed above:

Alternative A1:

- The EMPr in Appendix F must be implemented and monitored by an Environmental Control Officer (ECO).
- Site personnel must undergo Environmental Training and be educated on keeping any vegetation

disturbance to a minimum and on the separation and correct disposal of different types of waste.
- All construction machinery and equipment must be regularly serviced and maintained to keep noise, dust and possible leaks to a minimum.
- Construction hours should be limited to normal working hours.
- An appropriate number of toilets (1 toilet for every 20 workers) must be provided for labourers during the Construction Phase. These must be maintained in a satisfactory condition and a minimum of 100m away from any water resources.
- All waste generated on site during operation must be adequately managed. Separation and recycling of different waste materials must be implemented.
- Any leftover material must be appropriately disposed of (i.e. at a permitted landfill site, recycled, used by the community).
- Appropriate stormwater / surface water management measures must be put in place before construction commences and maintained throughout the lifetime of the development.
- If or when necessary, erosion control measures must be installed during construction.
- The area surrounding the structures must be regularly checked for signs of erosion. If erosion is evident, corrective action must be taken.
- Local people should be employed where possible and construction workers should be employed / appointed from an off-site location, to prevent criminals posing as job seekers on the site.
- Appropriate temporary traffic control and warning signage must be erected and implemented on all affected roads in the vicinity.
- Hazardous waste must be appropriately stored in bunded areas and/or access controlled areas on impermeable surfaces. Emergency contact numbers should be kept on site in case of spillages.
- The site should be fenced and screened where practical and possible. This will prevent uncontrolled access to neighbouring properties.

2.3. IMPACTS THAT MAY RESULT FROM THE OPERATIONAL PHASE

a. Site alternatives

List the potential impacts associated with site alternatives that are likely to occur during the operational phase:

Alternative S1 (preferred alternative)

Direct impacts:
- The operation of an eye hospital at this location will be easily accessible to prospective patients.
- Additional vehicles travelling to and from the site may cause congestion on the surrounding roads.
- If not properly managed, the runoff created by the additional hardened surfaces of the development will increase the amount of stormwater runoff, which has the potential to alter stream flows in Foxhill Spruit and cause erosion.
- If the sewage system is not properly maintained, leaks may occur and contaminate Foxhill Spruit.
- If not correctly managed and disposed of, medical waste could pose a threat to the environment.
- Increased activity in the area could increase existing noise levels in Scottsville.
- Loss of open space.

Indirect impacts:
- Local businesses in Scottsville (e.g. service station, convenience stores) are likely to benefit from the increased activity in the area.
- Jobs will be made available for receptionists, cleaners, security personnel etc.

Cumulative impacts:
- Residents of Pietermaritzburg and further afield will have access to a well-equipped specialist eye care facility.
- Improved economy for Pietermaritzburg due to people travelling from outside of Pietermaritzburg to receive specialist eye care.

No-go alternative (compulsory)

Direct impacts:

- Traffic on the surrounding roads will not be affected.
- Stormwater runoff from the site will not be altered.
- Foxhill Spruit will not be affected by potential sewage leaks, pollution and altered stream flow.
- No loss of open space.

Indirect impacts:

- No jobs will be created.
- Local businesses will not experience an increase in economic activity.

Cumulative impacts:

- Society will not have access to a specialised eye hospital and medical facility in the area.
- No improvement to Pietermaritzburg's economy.

Indicate mitigation measures to manage the potential impacts listed above:

Alternative S1

- Appropriate traffic signage must be installed to alert road users to the vehicles turning into the eye hospital.
- Stormwater attenuation and erosion control measures must be implemented and maintained throughout the lifetime of the facility.
- The area surrounding the structures, as well as Foxhill Spruit, must be regularly checked for signs of erosion. If erosion is evident, corrective action must be taken.
- In the event of a spill, the following steps must be taken:
  - Stop the source of the spill;
  - Contain the spill;
  - All significant spills must be reported to the Department of Water and Sanitation (DWS) and uMsunduzi Water and Sanitation Department;
  - Remove the spilled product for treatment or authorised disposal;
  - Determine if there is any soil, groundwater or other environmental impact;
  - If necessary, remedial actions must be taken in consultation with this Department;
  - The incident must be documented; and
  - The responsibilities and conditions stated in the EMPr must be strictly adhered to as well as the recommendation of the Environmental Practitioner.
- All waste generated on site during operation must be adequately managed. Separation and recycling of different waste materials must be implemented.
- Medical waste needs to be regularly collected from site and disposed of correctly at a registered waste facility.
- The Applicant must manage the section of the Foxhill Spruit on the eastern boundary an ongoing basis, in lieu of loss of open space. This could include removal of litter, control of alien plants and planting of suitable indigenous trees.

b. Process, technology, layout or other alternatives

List the impacts associated with process, technology, layout or other alternatives that are likely to occur during the operational phase (please list impacts associated with each alternative separately):

Alternative A1 (preferred alternative)

Direct impacts:

- Additional vehicles travelling to and from the site may cause congestion on the surrounding roads.
- If not properly managed, the runoff created by the additional hardened surfaces of the development will increase the amount of stormwater runoff, which has the potential to alter stream flows in Foxhill

Spruit and cause erosion.
• If the sewage system is not properly maintained, leaks may occur and contaminate Foxhill Spruit.
• If not correctly managed and disposed of, medical waste could pose a threat to the environment.
• Increased activity in the area could increase existing noise levels in Scottsville.

Indirect impacts:

• Local businesses (e.g. service station, convenience stores) are likely to benefit from the increased economic activity.

Cumulative impacts:

• Society will benefit from a specialised eye hospital in the area.

No-go alternative (compulsory)

Direct impacts:

• Traffic on the surrounding roads will not be affected.
• Stormwater runoff from the site will not be altered.
• The Foxhill Spruit will not be affected by potential sewage leaks, pollution and altered stream flow.
• Economic activity in the Scottsville area will not be altered.
• Medical waste will not be created and thus pose no threat to the environment.

Indirect impacts:

• No jobs will be created.
• Local businesses will not experience an increase in economic activity.

Cumulative impacts:

• Society will not have access to a specialised eye hospital and medical facility in the area.

Indicate mitigation measures to manage the potential impacts listed above:

Alternative A1

- Appropriate traffic signage must be installed to alert road users to the vehicles turning into the eye hospital.
- Stormwater attenuation and erosion control measures must be implemented and maintained throughout the lifetime of the facility.
- The area surrounding the structures, as well as Foxhill Spruit, must be regularly checked for signs of erosion. If erosion is evident, corrective action must be taken.
- Medical waste must be disposed of at a registered waste facility.
- The section of the Foxhill Spruit must be managed for conservation purposes. This could include collection of litter and planting of indigenous trees.

2.4. IMPACTS THAT MAY RESULT FROM THE DECOMISSIONING OR CLOSURE PHASE

a. Site alternatives

List the potential impacts associated with site alternatives that are likely to occur during the decommissioning or closure phase:

Alternative S1 (preferred alternative)

Direct impacts:

- If not appropriately dismantled and cleared, rubble and waste generated by the dismantling of the building may pollute Foxhill Spruit and the surrounding area.
- Dust and disturbance during demolition of buildings and infrastructure would have adverse impacts for neighbouring landowners.
- Any spillages from sumps could cause contamination of the adjacent stream.

Indirect impacts:

- Local businesses will experience a decrease in economic activity.

- Traffic flows on the surrounding roads will be reduced.

Cumulative impacts:

- No provision of a specialist eye hospital to Pietermaritzburg and beyond.

No-go alternative (compulsory)

Direct impacts:

- No waste and rubble would be created by the dismantling of the building or be able to pollute the Foxhill Spruit.
- No dust and disturbance for neighbouring landowners.
- No threat of spillages to the stream during decommissioning of sumps etc.

Indirect impacts:

- Local businesses will not experience a decrease in economic activity.
- Traffic flows on the surrounding roads will not be reduced.

Cumulative impacts:

- Continued provision of a specialist eye hospital to the general public.

Indicate mitigation measures to manage the potential impacts listed above:

Alternative S1

- All waste generated on site during decommissioning must be adequately managed. Separation and recycling of different waste materials must be implemented.
- Any leftover material must be appropriately disposed of (i.e. at a permitted landfill site, recycled, used by a local community).
- Only decommission the building if it is no longer structurally sound (i.e. if the structure has been condemned), or if the hospital is required to be replaced by improved infrastructure.

b. Process, technology, layout or other alternatives

List the impacts associated with process, technology, layout or other alternatives that are likely to occur during the decommissioning or closure phase (please list impacts associated with each alternative separately):

Alternative A1 (preferred alternative)

Direct impacts:

• If not properly dismantled, leftover materials could cause pollution or accelerate erosion within nearby watercourses and surrounding areas.

- Any spillages could cause contamination of the surrounding area.

Indirect impacts:

• Local businesses will not experience a decrease in economic activity.
• Traffic flows on the surrounding roads will not be reduced.

Cumulative impacts:

• Loss of availability of specialist eye care facility for Pietermaritzburg's public.

No-go alternative (compulsory)

Direct impacts:

• No waste would be generated through a dismantling process.

- No threat of spillages and subsequent contamination.

Indirect impacts:

• Local businesses will not experience a decrease in economic activity.
• Traffic flows on the surrounding roads will not be reduced.

Cumulative impacts:

• Retention of specialist eye care facility for Pietermaritzburg's public.

Indicate mitigation measures to manage the potential impacts listed above:

Alternative A1

- When decommissioning, all materials must be appropriately disposed of (i.e. at a registered landfill site, or recycled).
- The landscape should be shaped to represent the natural landscape prior to development.
- The site would need to be appropriately re-vegetated using an indigenous grass seed mix, and watered, if necessary to ensure establishment of the plants.

2.5. PROPOSED MONITORING AND AUDITING

For each phase of the project and for each alternative, please indicate how identified impacts and mitigation will be monitored and/or audited.

Alternative S1 (preferred site)

- An Environmental Management Programme (EMPr) has been compiled and is attached to this report (see Appendix F). This document should form part of the contractor's tender documents.
- External EMPr monitoring should take place by an independent Environmental Control Officer (ECO) on a regular basis for the basis of the construction phase to alert the developer, contractors and authorities of any non-compliance with the EMPr.
- Records related to the disposal of medical waste need to be maintained by the Applicant and must be produced on request, to show that it is being taken to a registered facility.
- The water quality and stream condition of Foxhill Spruit must be monitored upstream and downstream of the development for signs degradation or contamination, before and after construction. If any signs of degradation or pollution are found, remedial action must be taken immediately.

Alternative A1 (preferred alternative)

- An EMPr has been compiled and is attached to this report (see Appendix F). This document should form part of the contractor's tender documents.
- External EMPr monitoring should take place by an independent ECO on a weekly basis to alert the , developer, contractors and authorities of any non-compliance with the EMPr
- Records related to the disposal of medical waste needs to be maintained by the Applicant and must be produced on request, to show that it is being taken to a registered facility.
- The water quality and stream condition of Foxhill Spruit must be monitored upstream and downstream of the development for signs degradation or contamination, before and after construction. If any signs of degradation or pollution are found, remedial action must be taken immediately.

3. 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 after 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 S1 (preferred site)

The site is considered to be appropriate for the proposed development of a specialist eye hospital, as it is previously transformed (bowling greens), flat, easily accessible by vehicles and pedestrians, and is not likely to cause any adverse impacts to the adjacent Foxhill Spruit, provided the EMPr is implemented and regularly monitored.

- Only one site alternative is being considered for the hospital as the Applicant has signed a Sale

Agreement with the MOTH Society and the property is in the process of being rezoned from "*private open space*" to "*institutional*".

- The MOTH society has not made use of the clubhouse and bowling greens for the past three years, due to dwindling membership and escalating costs of maintenance.
- A Wetland Delineation Report has been conducted which reveals that no wetland or riparian zone was found within the site (Appendix D1).
- A Traffic Impact Assessment has been conducted which provides an assessment of current traffic conditions and the mitigation of forecast increases in traffic volumes (Appendix D2). It shows that with its own access, the proposed eye hospital will have little impact on the operation of surrounding access routes and traffic volumes during peak hours.
- A Stormwater Management Plan has been compiled and provides recommendations for the effective management of stormwater which will feed directly into the municipal stormwater system (Appendix D3).
- A Geotechnical Assessment has determined that the site will be suitable for the proposed development (Appendix D4), provided the founding and compacting recommendations are implemented.
- A Floodline Delineation Report has determined that the development site is not impacted upon by either the 1:50 or 1:100 year flood events (Appendix D5).
- A Phase 1 Cultural Heritage Assessment (Appendix D6) revealed that the site features protected military memorabilia within 15m of the site (military tank and cannon) and further historical memorabilia in the adjacent MOTH Hall. The tank and cannon will need to be moved to alternative locations at least 50m from the proposed development site, according to the recommendations in the Cultural Heritage Report.
- A Phase 2 Built Heritage Assessment was undertaken (Appendix D7) to accurately determine the age of the clubhouse building and bowling greens. These were found to be older than 60 years, however have little historical, cultural or architectural significance and are not linked to any other features on adjacent properties, in terms of style and material. A Permit Application for Demolition was submitted to Amafa and has been approved (see Appendix D7).
- Economic activity in Scottsville area is likely to increase as a result of such a facility being established.
- An EMPr has been compiled and must be used to monitor the construction of the eye hospital to ensure that the mitigation of potential impacts is effected, e.g. construction noise, visual disturbance, pollution of soil and ground/surface water from spillages and environmental training of the workforce.

Alternative A1 (preferred alternative)

The proposed layout is considered to be appropriate for the proposed development on this site as it positions the eye hospital on the northern extent of the proposed site, so that the building is set back from the road. This will contribute to improving patients' comfort in terms of noise from traffic in Alan Paton Avenue. The layout will also enable to doctors to work efficiently from a single building. The proposed layout is not likely to cause any adverse impacts to the adjacent Foxhill Spruit, provided the EMPr is implemented and regularly monitored.

- Only one layout alternative is being considered for the hospital as the building is to be positioned as far back from Alan Paton Avenue as possible. An alternative layout was considered at the outset of the process, whereby the building was positioned on the western portion of the site. This would require the bulidng to be split into two separate buildings to allow access to the parking area, and this arrangement is not practical to botht he doctors and prospective patients.
- A Wetland Delineation Report has been conducted which reveals that no wetland or riparian zone was found within the site. (Appendix D1).
- A Traffic Impact Assessment has been conducted, which provides and assessment of current traffic conditions and the mitigation of forecast increases in traffic volumes (Appendix D2). It shows that with its own access, the proposed eye hospital will have little impact on the operation of surrounding access routes and traffic volumes during peak hours.
- A Stormwater Management Plan has been compiled which provides recommendations for the effective management of stormwater, which will feed directly into the municipal stormwater system (Appendix D3).

- A Geotechnical Assessment has determined that the site will be suitable for the proposed development. (Appendix D4).
- A Floodline Delineation Report has determined that the development site is not impacted upon by the 1:50 and 1:100 year flood events. (Appendix D5).
- A Phase 1 Cultural Heritage Assessment (Appendix D6) revealed that the site features protected military memorabilia within 15m of the site (military tank and cannon) and further historical memorabilia in the adjacent MOTH Hall. The tank and cannon will need to be moved to alternative locations at least 50m from the proposed development site, according to the recommendations in the Cultural Heritage Report.
- A Phase 2 Built Heritage Assessment was undertaken (Appendix D7) to accurately determine the age of the clubhouse building and bowling greens. These were found to be older than 60 years, however have little historical, cultural or architectural significance and are not linked to any other features on adjacent properties, in terms of style and material. A Permit Application for Demolition was submitted to Amafa and has been approved (see Appendix D7).
- Economic activity in Scottsville area is likely to increase as a result of such a facility being established.
- An EMPr has been compiled and must be used to monitor the construction of the hospital to ensure that the mitigation of potential impacts is affected, e.g. construction noise, visual disturbance, pollution of soil and ground/surface water from spillages and environmental training of the workforce.

No-go alternative (compulsory)

- Economic activity in the Scottsville area will remain the same.
- There will be no change to existing traffic volumes.
- The Allan Wilson bowling club, comprising two bowling greens and a clubhouse, will remain unused and their maintenance requirements will increase over time, with little opportunity for such maintenance to be implemented, due to reduced membership and income to the MOTH society.
- The city's residents will not benefit from a specialised medical institution for eye surgery.

SECTION F. RECOMMENDATION OF EAP

Is the information contained in this report and the documentation attached hereto in the view of the EAP sufficient to make a decision in respect of this report? If "NO", please contact the KZN Department of Economic Development, Tourism & Environmental Affairs regarding the further requirements for your report.	**YES**	

If "YES", please attach the draft EMPr as Appendix F to this report and 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:

- The section of the Foxhill Spruit bordering the proposed development site on the east must be maintained by the Applicant in lieu of loss of open space, e.g. clearing of litter, removal of alien plants, planting of indigenous trees etc.
- The water quality and stream condition of the Foxhill Spruit must be monitored upstream and downstream of the development for signs of degradation or contamination, before and after construction. If any signs of degradation or pollution are found, remedial action must be taken immediately.
- All aspects of the EMPr must be implemented on site for all phases of the development.
- The Applicant must appoint an Environmental Control Officer (ECO) to undertake regular monitoring of the construction activities. The ECO must compile environmental compliance reports for submission to the DEDTEA's Compliance, Monitoring and Enforcement Division.
- Site personnel must undergo Environmental Training and be educated on the sensitivities of the site, the existence of the EMPr and the role of the ECO.
- The recommendations of all Specialist Studies contained in Appendix D of this report must be implemented, i.e. the Geotechnical Report, Stormwater Management Plan, Floodline Report, Wetland Report, the two Traffic Reports and the Phase 1 and Phase 2 Heritage Reports.

SECTION G: APPENDIXES

The following appendixes must be attached as appropriate:

Appendix A: Site plan(s)

Appendix B: Photographs

Appendix C: Facility illustration(s)

Appendix D: Specialist reports:
- Appendix D1: Wetland Report
- Appendix D2: Traffic Access Report
  - Traffic Impact Assessment Report
- Appendix D3: Stormwater Management Plan
- Appendix D4: Geotechnical Report
- Appendix D5: Floodline Report
- Appendix D6: Phase 1 Cultural Heritage Impact Assessment
- Appendix D7: Phase 2 Built Heritage Impact Assessment;
  - Permit Application Acknowledgement from Amafa; and
  - Amafa Plans Review Committee Decision (Approval)

Appendix E: Comments and Responses Report

Appendix F: Draft Environmental Management Programme (EMPr)

Appendix G: Other information
- Application for Environmental Authorisation

Appendix A: Site locality plan

Appendix B: Photographs of Site

Appendix C: Facility illustration (Site Layout Plan)

Appendix D: Specialist Reports:
Appendix D1: Wetland Report

Appendix D2: Traffic Access Report
Traffic Impact Assessment Report

Appendix D3: Stormwater Management Plan

Appendix D4: Geotechnical Report

Appendix D5: Floodline Report

Appendix D6: Phase 1 Cultural Heritage Impact Assessment

Appendix D7: Phase 2 Built Heritage Impact Assessment; Permit Application Acknowledgement from Amafa; Amafa Plans Review Committee Decision (Approval)

Appendix E: Comments and Responses Report

Appendix F: Draft Environmental Management Programme (EMPr)

Appendix G: Other information

Application for Environmental Authorisation

Landowner Notification