



Draft BAR and EMPr:

**Proposed Development of the Harry Gwala
District Municipality Administrative Complex
on Portion 2 of ERF 2226, Ellerton
(Umngeni Farm)**

(DC43/0010/2014)

**KWAZULU-NATAL: Fairway Green, 3 Abrey Road, Kloof, DURBAN | PO Box 2221, Everton 3625
Tel: +27 31 764 6449 | Fax: +27 31 764 4907**

**65/67 Davenport Centre, 89 Helen Joseph Rd, Glenwood, DURBAN
Tel: +27 31 827 6426**

**WESTERN CAPE : The Southern Right, Streenbras Street, Brenton on Sea, KNYSNA | PO Box 2984, Knysna 6570
Tel: +27 44 381 0712 | Fax: +27 86 569 5554**

SOUTH AFRICA

info@futureworks.co.za | www.futureworks.co.za

KZN

PO Box 2221, Everton, 3625
Gardenia House, Fairway Green,
3 Abrey Road, Kloof
Tel: 031 764 6449, Fax: 031 764 4907

CAPE REGION

PO Box 2984, Knysna, 6570
Southern Right, 632 Steenbras Street, Knysna
Tel: 044 381 0712, Fax: 086 569 5554

AUTHOR & QUALITY CONTROL INFORMATION:

Report Authors: Nicci Diederichs Mander (CEAPSA; Pr Sci Nat)
Michael Van Niekerk (CEAPSA)

Report Release Date: Draft Report for comment: 05 September 2014
Final Draft Report to DAEA:
Final Report:

PROJECT APPLICANT:



Harry Gwala District Municipality
Private Bag X501
Ixopo
3276

TABLE OF CONTENTS

SECTION A: DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER AND SPECIALISTS.....	1
1. NAME AND CONTACT DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP)	1
2. NAMES AND EXPERTISE OF REPRESENTATIVES OF THE EAP.....	1
3. NAMES AND EXPERTISE OF THE SPECIALISTS.....	1
SECTION B: ACTIVITY INFORMATION.....	2
1. PROJECT TITLE.....	2
2. PROJECT DESCRIPTION.....	2
3. ACTIVITY DESCRIPTION	3
4. FEASIBLE AND REASONABLE ALTERNATIVES.....	4
5. ACTIVITY POSITION.....	4
6. PHYSICAL SIZE OF ACTIVITY	5
7. SITE ACCESS.....	6
8. SITE OR ROUTE PLAN.....	6
9. SITE PHOTOGRAPHS.....	7
10. FACILITY ILLUSTRATION	7
11. ACTIVITY MOTIVATION	7
11.1 Socio-economic value of the activity.....	7
11.2 Need and desirability of the activity.....	7
12. APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES.....	8
13. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT.....	8
13.1 Solid waste management	8
13.2 Liquid effluent	9
13.3 Emissions into the atmosphere.....	10
13.4 Generation of noise	10
14. WATER USE.....	10
15. ENERGY EFFICIENCY.....	10
SECTION C: SITE/AREA/PROPERTY DESCRIPTION	11
1. GRADIENT OF THE SITE	11
2. GROUNDWATER, SOIL, AND GEOLOGICAL STABILITY OF THE SITE	11
3. GROUND COVER.....	12
4. LAND USE CHARACTER OF SURROUNDING AREA.....	13
5. CULTURAL / HISTORICAL FEATURES.....	15
SECTION D: PUBLIC PARTICIPATION	15
1. ADVERTISEMENT	15
2. CONTENT OF ADVERTISEMENTS AND NOTICES.....	16
3. PLACEMENT OF ADVERTISEMENTS AND NOTICES.....	16
4. DETERMINATION OF APPROPRIATE PROCESS.....	17
5. COMMENTS AND RESPONSE REPORT.....	17

6. PARTICIPATION BY DISTRICT, LOCAL AND TRADITIONAL AUTHORITIES	17
7. CONSULTATION WITH OTHER STAKEHOLDERS.....	17
SECTION E: IMPACT ASSESSMENT	18
1. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES	18
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.....	18
2.1 Alternative S1 and A1 (Preferred site and layout alternatives).....	18
2.2 Alternative A2.....	28
2.3 No Go Alternative.....	30
3. ENVIRONMENTAL IMPACT STATEMENT.....	31
3.1 Alternative S1 and A1 (Preferred site and layout alternatives).....	32
3.2 Alternative A2.....	33
3.3 No-Go Alternative (Compulsory).....	33
SECTION G: APPENDICES.....	36



agriculture, environmental affairs
& rural development

Department:
Agriculture, Environmental Affairs
& Rural Development
PROVINCE OF KWAZULU-NATAL



(For official use only)

EIA File Reference Number:
NEAS Reference Number:
Waste Management Licence Number:
(if applicable)
Date Received:

DC/
KZN/EIA/

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 1 or 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 Agriculture, Environmental Affairs & Rural Development. 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 Agriculture, Environmental Affairs & Rural Development 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 Agriculture, Environmental Affairs & Rural Development 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):	
File reference number (Waste Management Licence):	

SECTION A: DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER AND SPECIALISTS

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

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

Business name of EAP:	FutureWorks		
Physical address:	8 Gardenia House, Fairway Green, 3 Abrey Road, Kloof		
Postal address:	P.O. Box 2221, Everton		
Postal code:	3625	Cell:	086-569-5554
Telephone:	031-764 6449		
E-mail:	nicci@futureworks.co.za michael@futureworks.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)
Nicci Diederichs:	BSc (Hons.) Environmental Science	Pr Sci Nat Certified EAP	16
Michael Van Niekerk	MSc Environmental Management	Certified EAP	6

3. NAMES AND EXPERTISE OF THE 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

SECTION B: ACTIVITY INFORMATION

1. PROJECT TITLE

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

Proposed Development of the Harry Gwala District Municipality Administrative Complex on Portion 2 of ERF 2226, Ellerton (Umngeni Farm), located within the Harry Gwala District Municipality

2. PROJECT DESCRIPTION

Provide a detailed description of the project:

Harry Gwala District Municipality proposes to establish a new administrative complex to accommodate council and senior management on Portion 2 of ERF 2226, Ellerton (Umngeni Farm) – see **Figure 1**. The property is currently zoned as Agriculture and would need to be rezoned to allow for the proposed institutional use. This process will begin once the Application for Environmental Authorisation process is complete.

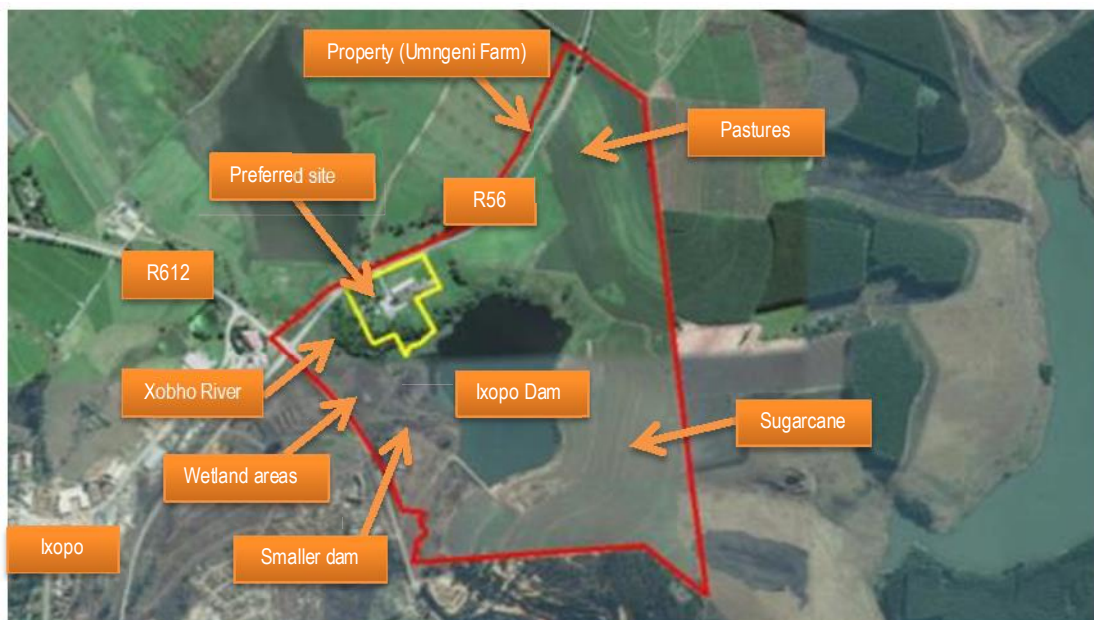


Figure 1: Locality map

The western boundary of the property abuts the R56 and the southern boundary the R612. Access to the property is currently from the R56. The main land use to the north and north-east of the property is dairy farming. To the east and south-east of the property, the main land use is sugar cane farming and forestry. There is a quarry to the south of the property. There is a mix of commercial and residential (formal and informal) land uses to the south-west of the property.

The total area of the property 119 ha, of which only 5.5 ha is proposed to be developed for the new administration complex (hereafter, this 5.5 ha portion will be referred to as the 'site'). It is proposed that the administrative complex will be located in the north-west corner of the property in an existing area of disturbance. This area is currently used by the Municipality for storage and temporary offices (see Photographs in **Appendix B**). There is also one small business which currently operates out of the old farm buildings adjacent the Municipality's temporary offices. This business, which leases the buildings from the Municipality, manufactures steel products, such as burglar bars. The remainder of the property is currently used for agriculture, with large areas under pasture and sugar cane. These areas are also leased from the Municipality.

The property is located in the upper reaches of the Mkomazi River Catchment. The Xobho River which flows

Basic Assessment Report

through the property is a tributary of the Nhlavini River, which ultimately feeds into the Mkomazi River approximately 50 km downstream of the property. There is a large artificial dam, namely Ixopo Dam, located in the centre of the property which is fed by the Xobho River. This dam was previously used to abstract water for irrigation, but is no longer used for this purpose. Where the Xobho River enters the property in the south-west corner, there is another smaller dam. This portion of property forms part of a large valley bottom wetland system which extends upstream onto the adjacent property. This wetland system is dominated almost exclusively by *Phragmites australis*.

The site of the proposed administrative complex has a very gentle gradient which generally slopes towards the large central dam and adjacent smaller dam. The site does however drop off steeply down to the level of the dams approximately 30 m to 40 m from the edge of the two dams.

The site falls within an area designated as CBA 1 (Critical Biodiversity Area 1) in the KwaZulu-Natal Terrestrial Systematic Conservation Plan and Vulnerable in the National List of Ecosystems that are Threatened and in Need of Protection (GN R1002, 2011). Interrogation of this classification reveals that grasslands occurring in this area are classified as Ixopo Surrounds which form part of the Midlands Mistbelt Grasslands. These grasslands are important from a conservation perspective as they provide habitat for 8 threatened or endemic plant and animal species, and in particular the Blue Swallow, which is classified as Critically Endangered.

However, the site has limited biodiversity value having already been transformed from a natural state to a dairy farm. It had also been previously developed to *Eragrostis* pasture and used intensively for grazing. The steeper areas closer to the dam are dominated by feral *Saligna Gum* and *Black Wattle*.

The proposed administrative complex for the Harry Gwala Municipality makes provision for:

- Office buildings (total footprint approximately 1 ha).
- Gate house.
- Internal roads and parking.
- Piped services (including electricity, water and sewerage).

The site will be accessed via the existing access road off the R56.

3. ACTIVITY DESCRIPTION

Describe each listed activity in Listing Notice 1 (GNR 544, 18 June 2010), 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:

GN R544, Activities 9(i) and 9(ii):

"The construction of facilities or infrastructure exceeding 1000 metres in length for the bulk transportation of water, sewage or storm water -

- (i) with an internal diameter of 0,36 metres or more; or*
- (ii) with a peak throughput of 120 litres per second or more"*

The proposed development is located outside an urban area. The proposed sewer pipeline to connect proposed development to the Ixopo Wastewater Treatment Plant will be approximately 1,800 m in length with an internal diameter of 0.36 m or more.

GN R544, Activities 11(vi):

"The construction of:

- (vi) bulk storm water outlet structures;*

where such construction occurs within a watercourse or within 32 metres of a watercourse, measured from the

Basic Assessment Report

edge of a watercourse, excluding where such construction will occur behind the development setback line"

The proposed development will require the construction of bulk stormwater outlet structures within 32 m of the Xobho River, dams or wetland areas below the site. The sewer pipeline connecting to the Ixopo WWTW may also be within a distance of 32m of a watercourse in some places.

GN R544, Activity 23(ii):

"The transformation of undeveloped, vacant or derelict land to –

(ii) residential, retail, commercial, recreational, industrial or institutional use, outside an urban area and where the total area to be transformed is bigger than 1 hectare but less than 20 hectares"

The proposed development, which is located outside an urban area, will require the transformation of more than 1 ha of undeveloped land to institutional use.

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.

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.

Basic Assessment Report

	Latitude (S):		Longitude (E):		
Alternative: Alternative S1 ¹ (Site of administrative complex)	30°	08'	37.23"	30°	04'
Alternative S2 (if any)	0	'	"	0	'
Alternative S3 (if any)	0	'	"	0	'

In the case of linear activities:

	Latitude (S):		Longitude (E):		
Alternative: Alternative S1 (Routing of sewer pipeline between administrative complex and Ixopo WWTW around Ixopo Dam)	30°	08'	37.23"	30°	04'
• Starting point of the activity	30°	08'	47.30"	30°	04'
• Middle point of the activity	30°	09'	08.71"	30°	04'
• End point of the activity	"	"	"	"	"

Alternative S2 (Routing of sewer pipeline between administrative complex and Ixopo WWTW within road reserves of R56 and R612)	30°	08'	37.23"	30°	04'
• Starting point of the activity	30°	08'	43.57"	30°	04'
• Middle point of the activity	30°	09'	08.71"	30°	04'
• End point of the activity	"	"	"	"	"

Alternative S3 (if any)	0	'	"	0	'
• Starting point of the activity	0	'	"	0	'
• Middle point of the activity	0	'	"	0	'
• End point of the activity	0	'	"	0	'

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 ACTIVITY

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

	Size of the activity:
Alternative: Alternative A1 ² (Site of administrative complex)	5,500 m ²
Alternative A2 (if any)	m ²
Alternative A3 (if any)	m ²

or, for linear activities:

	Length of the activity:
Alternative: Alternative A1 (Routing of sewer pipeline between administrative complex and Ixopo WWTW around Ixopo Dam)	1,800 m
Alternative A2 (Routing of sewer pipeline between administrative complex and Ixopo WWTW within road reserves of R56 and R612)	1,300 m
Alternative A3 (if any)	m

¹ %Alternative S.+refer to site alternatives.

² %Alternative A.+refer to activity, process, technology or other alternatives.

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	NO
-----	----

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

	m
--	---

Describe the type of access road planned:

--

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:

- 1.1. the scale of the plan which must be at least a scale of 1:500;
- 1.2. the property boundaries and numbers/ erf/ farm numbers of all adjoining properties of the site;
- 1.3. the current land use as well as the land use zoning of each of the properties adjoining the site or sites;
- 1.4. the exact position of each element of the application as well as any other structures on the site;
- 1.5. 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;
- 1.6. walls and fencing including details of the height and construction material;
- 1.7. servitudes indicating the purpose of the servitude;
- 1.8. 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);
- 1.9. 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
- 1.10. 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?	R 40 million	
What is the expected yearly income that will be generated by or as a result of the activity?	N/A	
Will the activity contribute to service infrastructure?	YES	NO
Is the activity a public amenity? <i>Municipal offices for senior management and councillors.</i>	YES	NO
How many new employment opportunities will be created in the development phase of the activity?	70	
What is the expected value of the employment opportunities during the development phase?	R 800,000	
What percentage of this will accrue to previously disadvantaged individuals?	80%	
How many permanent new employment opportunities will be created during the operational phase of the activity?	10	
What is the expected current value of the employment opportunities during the first 10 years?	R 600,000	
What percentage of this will accrue to previously disadvantaged individuals?	100%	

11.2 Need and desirability of the activity

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

There is a need for a new administrative complex to accommodate the council and senior management of the Harry Gwala District Municipality as the current administration complex, located at 40 Main Street in Ixopo, does not have sufficient office space. The current complex also does not have a council chamber. Furthermore, there is no land available at the site of the current administration complex to extend or expand the existing buildings to create additional office space or a council chamber. As a result, the councillors and senior management are currently housed in rented offices in Ixopo.

A number of site alternatives in and around Ixopo were considered for the proposed administrative complex, with this site being selected as the preferred alternative. The property was then purchased by the Harry Gwala Municipality for this purpose. The site is located in close proximity to the existing administrative complex in Ixopo, approximately 1 km by road, to allow for easy movement of councillors and municipal officials between the two complexes. The site is also located on the R56 in close proximity to the intersection with R112, which provides easy access to the two main district roads.

Furthermore, a precinct plan was developed in 2013 by Uddi Environmental Planning and Development

Basic Assessment Report

Consultants to guide the future development of the entire 119 ha property (see **Appendix A**). The proposed administrative complex is the first of two nodes to be developed on the property. The second node, which is approximately 17 ha in extent, comprises mainly residential and active and passive open space land uses. Note that this second node does not form part of this Application for Environmental Authorisation. The remainder of the property will be maintained as a conservation area.

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

The administrative complex will benefit society in general by accommodating the district council which is mandated to represent the needs of the people residing in the district. Furthermore, the administrative complex will accommodate senior managers who are responsible for service provision.

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

A limited number of people from the local community may benefit directly from the proposed development through the creation of temporary employment opportunities during the construction phase and purchasing of construction materials from local businesses. Local communities may however benefit indirectly through improved service delivery.

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:

Title of legislation, policy or guideline:	Administering authority:	Date:
The Constitution (108 of 1996)		1996
National Environmental Management Act (107 of 1998) and amendments thereto.	DEA	1998
National Water Act (36 of 1998)	DWA	1998
GN 543, 544, and 546 (2010)	DEA	2010
Conservation of Agricultural Resources Act (43 of 1983)	DAFF	1983
National Environmental Management: Biodiversity Act (10 of 2004)	DEA	2004
GN 506, 507, 508, and 509 (2013)	DEA	2013
National Heritage Resources Act (25 of 1999)	SAHRA	1999
KZN Heritage Resources Act (10 of 1997)	AMAFA	1997
Development Facilitation Act (no. 67 of 1995)	Development and Planning Commission	1995

13. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

13.1 Solid waste management

Will the activity produce solid construction waste during the YES NO

Basic Assessment Report

construction/initiation phase?

> 100 m ³	

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

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

As far as possible, solid waste from the demolition of the existing farm buildings will be reused or recycled.

Solid waste which cannot be reused, will be disposed of at the Umzimkhulu Landfill Site as there is no landfill site in Ixopo.

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

Umzimkhulu Landfill Site, located in the town of uMzimkhulu, approximately 25 km south-west of the site.

Will the activity produce solid waste during its operational phase?

YES	NO
< 100 m ³	

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

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

The waste will feed into the municipal waste stream, which is disposed of at the Umzimkhulu Landfill Site.

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

N/A

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	NO
-----	----

If yes, contact the KZN Department of Agriculture, Environmental Affairs & Rural Development 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?

YES	NO
-----	----

If yes, contact the KZN Department of Agriculture, Environmental Affairs & Rural Development 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?

YES	NO
-----	----

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

m ³	
----------------	--

Will the activity produce any effluent that will be treated and/or disposed of on site?

YES	NO
-----	----

If yes, contact the KZN Department of Agriculture, Environmental Affairs & Rural Development 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?

YES	NO
-----	----

If yes, provide the particulars of the facility:

Facility name: Ixopo Wastewater Treatment Works

Contact person: Harry Gwala District Municipality

Basic Assessment Report

Postal address:	Private Bag X501 Ixopo		
Postal code:	3276		
Telephone:	039-834 8700	Cell:	
E-mail:	N/A	Fax:	039-834 1701

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

Water conservation measures will include only low-flush toilets to be fitted in bathrooms. Only low-flow taps to be fitted in bathroom sinks. No grey or black water recycling is proposed for this facility. Connection of rainwater harvesting tanks to roof downpipes will be encouraged.

13.3 Emissions into the atmosphere

Will the activity release emissions into the atmosphere?

YES	NO
YES	NO

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

If yes, contact the KZN Department of Agriculture, Environmental Affairs & Rural Development 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	NO
YES	NO

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

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:

N/A

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
-----------	-------------	-------------	----------------------------	-------	---------------------------------

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:

litres	
YES	NO

Does the activity require a water use permit from the Department of Water Affairs?

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

15. ENERGY EFFICIENCY

Basic Assessment Report

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

All new buildings to comply with national standard for energy efficiency in buildings (SANS 204, 10400-XA).

All internal and external lighting to be energy efficient.

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

Use of solar water heaters where appropriate.

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
------	-------------	-------------	-------------	--------------	-------------	------------------

1. 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
-----------	---------	-----------------------------	---------------	-------------	-------	----------------------------	------	-----------

2. GROUNDWATER, SOIL, AND GEOLOGICAL STABILITY OF THE SITE

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

YES NO

If YES, please complete the following:

TOGETHER WE HAVE MADE KZN A BETTER PROVINCE TO LIVE IN.

Basic Assessment Report

Name of the specialist: _____
 Qualification(s) of the specialist: _____
 Postal address: _____
 Postal code: _____
 Telephone: _____ Cell: _____
 E-mail: _____ Fax: _____

Are any further specialist studies recommended by the specialist? YES NO

If YES, specify: N/A

If YES, is such a report(s) attached in Appendix D? YES NO

Signature of specialist: _____ Date: _____

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

	Alternative S1:		Alternative S2 (if any):		Alternative S3 (if any):	
	YES	NO	YES	NO	YES	NO
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						

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).

3. GROUNDCOVER

Has a specialist been consulted for the completion of this section? YES NO

If YES, please complete the following:

Name of the specialist: _____
 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? YES NO

If YES, specify and explain: N/A

Are there any special or sensitive habitats or other natural features present on any of the alternative sites? YES NO

Basic Assessment Report

If YES, specify and explain: N/A

Are any further specialist studies recommended by the specialist? YES 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 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.

Note that no specialist has been consulted as the site has been transformed for agricultural purposes and the EAP has sufficient expertise to assess the condition of the transformed farm lands from an ecological perspective.

4. 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	YES	NO	Description
Natural area	YES	NO	Xobho River and wetland areas below the site. May be impacted upon by accelerated stormwater runoff, soil erosion, and deposition during both the construction and operational phases. Water quality in the dam may also be negatively affected by contaminated runoff from the site.
Low density residential	YES	NO	
Medium density residential	YES	NO	
High density residential	YES	NO	
Informal residential	YES	NO	Low density, informal residential to the south of the site. Potential visual impact with the transformation of land use from agriculture to institutional use.
Retail commercial & warehousing	YES	NO	Several retailers within Ixopo to the south-west of the site. No influence.
Light industrial	YES	NO	Several automotive repair shops within Ixopo to the south-west of the site. No influence.

Basic Assessment Report

Medium industrial	YES	NO	
Heavy industrial	YES	NO	
Power station	YES	NO	
Office/consulting room	YES	NO	
Military or police base/station/compound	YES	NO	
Spoil heap or slimes dam	YES	NO	
Quarry, sand or borrow pit	YES	NO	
Dam or reservoir	YES	NO	<p>Ixopo Dam and smaller second dam below the site.</p> <p>The dams may be impacted upon by accelerated stormwater runoff, soil erosion, and deposition, during both the construction and operational phases. Water quality in the dams may also be negatively affected by contaminated runoff from the site.</p>
Hospital/medical centre	YES	NO	
School / crèche	YES	NO	
Tertiary education facility	YES	NO	
Church	YES	NO	
Old age home	YES	NO	
Sewage treatment plant	YES	NO	
Train station or shunting yard	YES	NO	
Railway line	YES	NO	
Major road (4 lanes or more)	YES	NO	
Airport	YES	NO	
Harbour	YES	NO	
Sport facilities	YES	NO	
Golf course	YES	NO	
Polo fields	YES	NO	
Filling station	YES	NO	<p>Filling station within Ixopo to the south-west of the site.</p> <p>No influence.</p>
Landfill or waste treatment site	YES	NO	
Plantation	YES	NO	
Agriculture	YES	NO	<p>Large scale dairy farming to the west and north of the site, and sugar cane farming to the east of the site. Small-scale vegetable cultivation to the south of the site.</p> <p>No direct influence. The development of the site contributes to the cumulative loss of agricultural land, and sets the precedent for the further development of the remainder of the property.</p>
River, stream or wetland	YES	NO	<p>Xobho River and adjacent wetland areas to the south of the site.</p> <p>These natural areas may be impacted upon by accelerated stormwater runoff, soil erosion and deposition, during both the construction and operational phases. Water quality in river and wetlands may also be negatively affected by contaminated runoff from the site.</p>
Nature conservation area	YES	NO	
Mountain, hill or ridge	YES	NO	
Museum	YES	NO	
Historical building	YES	NO	
Protected Area	YES	NO	

Basic Assessment Report

Graveyard	YES	NO	
Archaeological site	YES	NO	
Other land uses (describe)	YES	NO	

5. CULTURAL / HISTORICAL FEATURES

With the exception of the old farm buildings, the age of which is still to be confirmed, there do not appear to be any signs of culturally or historically significant elements onsite, particularly given that the site has been previously earthworked and transformed from natural state to a dairy farm. However, the Applicant will appoint a specialist to conduct a Heritage Impact Assessment if required by AMAFA.

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	NO
-----	----

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:

--

Will any building or structure older than 60 years be affected in any way?

YES	NO
-----	----

Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?

YES	NO
-----	----

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

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;

Basic Assessment Report

- (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 Agriculture, Environmental Affairs & Rural Development 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 Agriculture, Environmental Affairs & Rural Development 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?

YES NO

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

Note that the District Municipality is the Applicant.

Has any comment been received from the local municipality?

YES NO

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

Has any comment been received from a traditional authority?

YES NO

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

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 NO

TOGETHER WE HAVE MADE KZN A BETTER PROVINCE TO LIVE IN.

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

See Appendix E: Comments & Responses Report

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.

- 1) Concerns regarding the current entrance off R56 due to short sight distances. Increase risk to people entering and leaving the site, as well as users of R56.

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):

- 1) Concerns regarding the current entrance off R56 due to short sight distances. Increase risk to people entering and leaving the site, as well as users of R56.

There are currently two access roads to the site off the R56. The southern access road which provides access to the temporary municipal offices. This access road is located on a bend of the R56 and therefore has relatively short sight distances. The northern access road which provides access to the old farm buildings in the north. It is proposed that access to the new administrative complex will be via the northern access road as it located on a relatively straight section of the R56 where there are relatively good sight distances.

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 Alternative S1 and A1 (Preferred site and layout alternatives)

List the potential direct, indirect and cumulative impacts that may result from the planning and design, construction, operational decommissioning and closure phases of the preferred site and layout alternatives, as well as proposed management of identified impacts and proposed mitigation measures.

The preferred site and layout alternative is the proposed development of the new administrative complex, comprising office buildings, gate house, internal roads and parking area, and piped services (including electricity, water and sewerage), in the north-west portion of the property, as well as the sewer pipeline around the Ixopo Dam to connect the proposed administrative complex to the Ixopo Wastewater Treatment Works (WWTW).

Direct Impacts:

A. Planning and Design Phase

The potential direct impacts associated with the planning phase include:

1. Identification and selection of the location of the new administrative complex.

2. Identification and selection of sewer pipeline routing.

1. Identification and selection of the location of the new administrative complex.

Description of impact

The identification and selection of the location of the new administrative complex has been an important process as its location to a large extent determines the significance of potential biophysical, social and economic impacts (see **Figure 2**). The preferred site was primarily chosen for the following reasons:

- It is largely transformed having previously been developed to farm buildings and *Eragrostis* pasture. As a result, the loss of indigenous vegetation and habitat functionality as a direct impact of the proposal development will be minimal.
- It has a relatively gentle gradient. As a result, minimal earthworks will be required.
- It is near to, but more than 32 m from the bank of the nearest watercourse. As a result, the potential impact on sensitive aquatic ecosystems can be more easily managed.
- It is elevated well above the nearest watercourse. As a result, it is not at risk of flooding.
- It is easily accessible with an existing access road off the R56. As a result, there is no need to construct a new access or temporary roads.



Figure 2: Preferred site

Furthermore, the identification and selection of the location of the new administrative complex was guided by the Umngeni Precinct Plan which has taken into account not only the current proposed development, but also the future development of the remainder of the site (see **Figure 3**).



Figure 3: Umngeni Farm Precinct Plan

The selection of the preferred site for the new administrative complex is therefore considered to have been undertaken in a manner that was considerate of potential biophysical, economic and social impacts, with disturbance to sensitive aquatic ecosystems, being a key concern.

Duration of impact	Likelihood of occurrence	Significance without mitigation	Significance with mitigation
Long	Low	Low (-)	Low (-)
Recommended mitigation measures:			
N/A			

2. Identification and selection of sewer pipeline routing

Description of impact

The new administrative complex will be serviced by the existing Ixopo Wastewater Treatment Works (WWTW) approximately 500 m to the south of the site. It is proposed the sewer pipeline connecting the administrative complex to the WWTW will follow the contours around Ixopo Dam, before dropping down the slope, under the R112, to connect to the treatment plant (see **Figure 4**). While a number of alignment of options for the sewer pipeline were considered, the preferred routing was primarily chosen for the following reasons:

- Raw sewage can be gravity fed down to the WWTW. As a result, no sewer pumpstation - which are generally energy intensive and pose the risk of failure and spillage - is required.
- No watercourses or wetlands have to be crossed. As a result, there will be no or limited disturbance to sensitive aquatic environments during construction of the sewer pipeline. Furthermore, the risk associated with the pipeline breakage and spilling raw sewage directly into sensitive aquatic environments is greatly reduced.
- The pipeline could be used, subject to it being adequately sized, to service the proposed future development on the remainder of the property. As a result, the potential impacts associated with the installation of a new pipeline to service future development of the property would be avoided. Furthermore, the burden of needing to maintain two separate pipelines would also have been avoided.



Figure 4: Proposed routing of sewer pipeline between administrative complex and Ixopo WWTW

The selection of the preferred alignment of the proposed sewer pipeline connecting the new administrative complex to the existing Ixopo Sewage Treatment Plant is therefore considered to have been undertaken in a manner that was considerate of potential biophysical, economic and social impacts, with disturbance to sensitive aquatic ecosystems, being a key concern.

Duration of impact	Likelihood of occurrence	Significance without mitigation	Significance with mitigation
Long	Low	Low (-)	Low (-)
Recommended mitigation measures:			
1) The proposed sewer pipeline may not be located closer than 32 m of the edge of the dam, wetlands or bank of the watercourse.			

B. Construction Phase

The potential direct impacts associated with the construction phase include:

1. Noise.
2. Dust.
3. Stormwater runoff, soil erosion and sedimentation.
4. Loss of agricultural land.
5. Job creation.

1. Noise

Description of impact

During earthworks and construction of the office buildings, internal roads and parking areas, and piped services, noise will be generated by construction machinery and workers. Those that will be most affected will be:

- Adjacent farm owners / tenants;
- Users of adjacent R56;
- Residents in nearby informal settlements; and
- Businesses in Ixopo.

The distance between the site and closest house is more than 300 m, and as such any potential noise impacts during construction will be mitigated to some extent on these stakeholders by the distance. The EMPr for the construction phase will, however, need to include controls for the working hours of the construction activities to minimise construction noise at night and over weekends. Furthermore, the EMPr will need to include controls for ensuring that construction machinery and workers do not make excessive noise.

Duration of impact	Likelihood of occurrence	Significance without	Significance with
--------------------	--------------------------	----------------------	-------------------

Basic Assessment Report

		mitigation	mitigation
Short	High	Low (-)	Low (-)
Recommended mitigation measures:			
1) EMPr to include controls to restrict construction activities to working hours (08h00 to 17h00) during week days.			
2) EMPr to include controls to ensure construction machinery and workers do not make excessive noise.			

2. Dust

Description of impact			
<p>During earthworks and construction of the office buildings, internal roads and parking areas, and piped services, dust will be generated from exposed surfaces. Those that will be most affected will be:</p> <ul style="list-style-type: none"> o Adjacent farm owners / tenants; o Users of adjacent R56; o Residents in nearby informal settlements; and o Businesses in Ixopo. <p>In order to prevent possible health and safety impacts on the above stakeholders, dust suppression will need to be properly addressed during the construction phase, particularly earthworks, through the implementation of an Environmental Management Programme (EMPr). If this is done correctly, dust impacts associated with construction will be of limited significance. It should be noted that all residential homes and some distance (minimum 300 m) from the site, and as such any potential dust impacts during construction will be mitigated to some extent on these stakeholders by the distance. Furthermore, the feral Saligna gum and Black Wattle should act as a natural screen to trap wind-blown dust.</p>			
Duration of impact	Likelihood of occurrence	Significance without mitigation	Significance with mitigation
Short	High	Moderate (-)	Low (-)
Recommended mitigation measures:			
1) EMPr to include conditions to control dust during construction phase.			
2) Feral Saligna gum and Black Wattle may only be cleared at the end of the construction phase.			

3. Stormwater runoff, soil erosion and sedimentation

Description of impact			
<p>The site has a relatively gentle gradient which drops off steeply down to the edge of the dams and wetland areas. The existing buildings are generally located on the flatter portions of the site with the areas surrounding these buildings relatively well vegetated having previously planted to pasture. As a result, stormwater runoff from the site currently is likely to be minimal.</p> <p>During construction, unchannelled flow resulting from clearing of vegetation and earthworks can result in additional stormwater runoff and soil erosion, with eroded material potentially being deposited in the Xobho River, dams and wetland areas below the site. This could be relatively significant given the sensitivity of the receiving environment and potential impact of increased sedimentation and turbidity on surface water quality and biodiversity.</p> <p>In order to prevent unchannelled flow and resulting soil erosion and deposition, stormwater runoff resulting from construction activities will need to be estimated and a stormwater management system designed accordingly. This system will need to be designed by a suitably qualified engineer. Furthermore, the EMPr should include measures to strictly control the clearing of vegetation on site, management of stormwater runoff, and prevention of soil erosion.</p> <p>With the implementation of the above-mentioned mitigation measures, the significance of this impact is likely to be moderate.</p>			
Duration of impact	Likelihood of occurrence	Significance without mitigation	Significance with mitigation
Short	Moderate	High (-)	Moderate (-)
Recommended mitigation measures:			

Basic Assessment Report

- 1) Stormwater management system should be designed by a suitably qualified engineer and implemented to manage stormwater runoff during construction phase.
- 2) EMPr to include measures to strictly control the clearing of vegetation on site, management of stormwater runoff, and prevention of soil erosion.

4. Loss of agricultural land

Description of impact

The site of the proposed administration complex is zoned for agriculture and was previously used for dairy farming. Since the Harry Gwala District Municipality purchased the property two years ago, the site has not been used for this purpose. Currently, the site is primarily used as a storage area and temporary offices for the Municipality. There is one small business which leases the old farm buildings from the Municipality. This business manufactures steel products, such as burglar bars.

With the development of the site, the existing farm buildings will be demolished and areas under pasture will be cleared. This will result in a loss of more than 5 ha of land available for dairy farming. However, loss of this area is unlikely to negatively affect the local dairy industry given the relatively small size of the area to be developed. Furthermore, the site is currently not used for this purpose and is therefore not currently contributing to the local dairy industry.

The proposed sewer pipeline which follows the contours around Ixopo dam and down to the Ixopo WWTW is generally located within areas of the property under pasture (previously) and sugarcane. As a result, there will be little or no loss of indigenous vegetation and habitat functionality. However, there will be a loss of agricultural land with the construction of the pipeline and maintenance of servitude over the pipeline (approximately 15 m in width). Due to the limited area of agricultural land that will be lost, the significance of this impact is likely to be low.

Duration of impact	Likelihood of occurrence	Significance without mitigation	Significance with mitigation
Long	High	Low (-)	Low (-)

Recommended mitigation measures:

- 1) Zone the property for various forms of agricultural use – cultivable lands to be located outside of service infrastructure servitudes; grazing areas may extend over pipeline servitudes.

5. Job Creation

Description of impact

The construction of the administrative complex will result in a number of short-term jobs being created as a result of the construction of the office buildings, internal roads, parking areas, and piped services. This could be as much as 50 unskilled workers and 20 skilled workers for a period of about 6 – 8 months. In terms of an injection into the local economy, the development would create business and income generation opportunities for local construction companies, and local families.

The socio-economic impact of the development from the construction expenditure would however be small considering the scale and intensity of the proposed development.

Duration of impact	Likelihood of occurrence	Significance without mitigation	Significance with mitigation
Short	High	Low (+)	Low (+)

Recommended mitigation measures:

- 2) Construction materials should be sourced from local businesses where possible.
- 3) Local contractors should be used where possible.
- 4) Local labour should be used, and upskilled, where possible.

C. Operational Phase

The potential direct impacts associated with the operational phase include:

1. Visual impacts.

2. Road safety and congestion.
3. Stormwater runoff, soil erosion and sedimentation.
4. Job creation.

1. Visual Impacts

Description of impact

The clearing of the site (including the feral Saligna gum and Black wattle) and construction of the administrative complex will result in a change in the visual amenity and landscape character of the property (see **Figure 5**). Those affected would include:

- Residents in nearby residential areas to the south of the property;
- Visitors to the Ixopo Fresh Produce Market / Tourism Centre;
- Users of R612.



Figure 5: Looking onto site from Ixopo Fresh Produce Market / Tourism Centre

The change in landscape character would result from the transformation of largely rural setting with farm buildings, areas under pasture, and stands of Saligna gum and Black wattle to a largely urban setting with office buildings, parking areas and driveways. It should be noted that there are very few areas which look directly onto the site and these areas are some distance (minimum 300 m) from the site, and as such any potential impacts resulting from the change in landscape character will be mitigated to some extent on these stakeholders by the distance. Provided that the administrative complex is landscaped using fast growing, locally indigenous trees and shrubs to break the hard lines of the built infrastructure, the impact of the change in landscape character is likely to be moderate.

In terms of the change in visual amenity, the impact of the clearing of the site and construction of the administrative complex could be both positive and negative. The site is currently not well maintained with old dilapidated farm buildings and invasive alien plant infestations. The demolition of these buildings and clearing of invasive alien plants, in particular the feral Saligna gum and Black wattle could result in positive impact on the visual amenity of the property. The proposed development could also result in a negative impact on the visual amenity with the construction of office buildings, parking areas and driveways, with hard lines, in a largely rural setting. The impact of the change in visual amenity can be mitigated to some extent through the rehabilitation of the buffer area between the administrative complex and environmentally sensitive areas to indigenous grassland. This will not only screen portions of the proposed development, but also provide an attractive green belt around the edge of the dam.

Duration of impact	Likelihood of occurrence	Significance without mitigation	Significance with mitigation
Long	High	High (-)	Moderate (-)

Recommended mitigation measures:

- 1) Landscaping of administrative complex using fast growing, locally indigenous trees and shrubs to soften hard lines.
- 2) Rehabilitation of buffer area between administrative complex and environmentally sensitive areas to indigenous grassland.

2. Road safety and congestion.

Description of impact

The administrative complex is likely to generate moderate concentrations of traffic when people are travelling to work in the mornings and leaving work in the afternoons. Given that the R56 is a major regional distributor, this increase in concentrations of traffic is unlikely to be significant. Furthermore, provided that the administrative complex has sufficient internal parking for senior management and councillors, the proposed development is unlikely to result in traffic congestion at and around the site such that road safety issues emerge.

It is proposed that the administrative complex will be accessed from the original access road off the R56, which is located on a relatively long straight, as this will address the issue of potential road safety for vehicles entering and exiting the site (see **Figure 6**). There is a secondary access road off the R56 which is currently used to gain access to the temporary municipal offices and storage areas. As this secondary access road is located on a bend of the R56, the line of sight is generally poor, which poses a risk to vehicles entering and exiting the site. It is for this reason that this secondary access road will not be used.



Figure 6: Existing access roads to site

Duration of impact	Likelihood of occurrence	Significance without mitigation	Significance with mitigation
Short	Low	Low (-)	Low (-)
Recommended mitigation measures:			
1) Only the original access road is to be used to gain access to the administrative complex. The secondary access road must be closed. 2) There must be sufficient parking onsite for senior management, councillors, and visitors to the site. No vehicles may be parked outside the site and on the verge of the R56.			

3. Stormwater runoff, soil erosion and sedimentation.

Description of impact

The proposed administrative complex will generate additional stormwater runoff as a result of an increase in hardened surfaces. If this stormwater runoff is not properly managed, it can result in soil erosion and sedimentation of the Xobho River, dams, and wetland areas below the site (see **Figure 7**). These areas are considered to be sensitive environmental areas which could be severely impacted upon by unattenuated stormwater runoff and resulting soil erosion and deposition.

Provided that a stormwater management plan is implemented to ensure that no unattenuated stormwater runoff leaves the site, and that post-development peak stormwater runoff does not exceed pre-development peak stormwater runoff, then it is unlikely that the proposed development of the site will result in significant impact on the receiving environment.



Figure 7: Development buffer and sensitive environmental areas

Duration of impact	Likelihood of occurrence	Significance without mitigation	Significance with mitigation
Long	Low	Moderate (-)	Low (-)
Recommended mitigation measures:			
1) Stormwater management plan is prepared by suitably qualified specialist and implemented. This plan must ensure that no unattenuated stormwater runoff leaves the site and post-development peak stormwater runoff does not exceed pre-development peak levels. 2) Where possible, runoff from roofs should be collected in rainwater harvesting tanks and used for irrigating the landscaped areas. 3) Where possible, permeable materials, such as dusi gravel, should be used for parking areas and driveways to reduce extent of hardened surfaces.			

4. Job creation

Description of impact			
The proposed administrative complex will create a number of permanent jobs in the operational phase. This includes for example security guards, cleaners, and administrative staff. The exact number is not known at this stage as some staff may be transferred across from the existing administrative complex in Ixopo. The additional jobs are much needed in Ixopo, but the numbers are not significant in the greater context.			
Duration of impact	Likelihood of occurrence	Significance without mitigation	Significance with mitigation
Long	High	Low (+)	Low (+)
Recommended mitigation measures:			
1) Local labour to be sourced for all maintenance and other general worker positions where possible.			

D. Decommissioning / Closure Phase

There is no planned decommissioning or closure phase.

Indirect Impacts

A. Planning and Design Phase

B. Construction Phase

C. Operational Phase

D. Decommissioning / Closure Phase

Cumulative Impacts

A. Planning and Design Phase

The potential cumulative impacts associated with the planning and design phase include:

1. Set precedent for future development of the remainder of the property.
2. Contribution to the loss of agricultural land.
3. Contribution to urban sprawl.

1. Set precedent for future development of the remainder of the property

Description of impact			
<p>The proposed administrative complex is the first phase of the phased development of the property, which is guided by the Umngeni Precinct Plan prepared by Udidi (dated June 2013). While the first phase is only 5.5 ha in extent, the second phase is more than 17 ha in extent. In the short to medium term, the proposed development will seem out of place in the currently rural landscape, but in the medium to long term the development would be appropriate in the landscape as part of a larger institutional / residential area.</p> <p>Thus, the proposed development may set a precedent for the future development of the remainder of the property and will contribute to a change in the local landscape character.</p>			
Duration of impact	Likelihood of occurrence	Significance without mitigation	Significance with mitigation
Long	High	Moderate (-)	Low (-)
Recommended mitigation measures:			
<p>1) The planning and design of the proposed administrative complex must be sensitive to the current rural landscape, and should set a precedent for the future development of the property which is also sensitive to the surrounding landscape.</p>			

2. Contribution to the loss of agricultural land

Description of impact			
<p>The proposed development of the administrative complex will result in a loss of agricultural land, which will contribute to decrease in total area under cultivation in the region and nationally. At a national level, the loss of agricultural land is an issue of concern as it impacts negatively on food security. Note however that this loss is unlikely to be significant given the limited size of the site (5.5 ha). Furthermore, the site is not currently used for this purpose.</p>			
Duration of impact	Likelihood of occurrence	Significance without mitigation	Significance with mitigation
Long	High	Low (-)	Low (-)
Recommended mitigation measures:			

3. Contribution to urban sprawl

Description of impact			
<p>The proposed administrative complex is a green fields development located outside of the town of Ixopo. The development of this site contradicts the principles of Development Facilitation Act (No. 67 of 1995) which advocates the compaction of towns to prevent urban sprawl. Furthermore, the new administrative complex is relatively disconnected from the existing complex, requiring municipal officials to travel by public transport or private vehicles between the two complexes.</p>			

Basic Assessment Report

Ideally, the new administrative complex should have been located within Ixopo in close proximity to the existing complex to prevent urban sprawl and to allow municipal officials to move easily between the two complexes. However, given there is limited open space available within Ixopo and in particular close proximity to the existing complex, and the property (i.e. Umngeni Farm) was purchased specifically by the Municipality for the development of the new administrative complex, the contribution of proposed development to urban sprawl is not considered to be significant.

Duration of impact	Likelihood of occurrence	Significance without mitigation	Significance with mitigation
Long	High	Low (-)	Low (-)
Recommended mitigation measures:			
1)			

B. Construction Phase

C. Operational Phase

D. Decommissioning / Closure Phase

2.2 Alternative A2

List the potential direct, indirect and cumulative impacts that may result from the planning and design, construction, operational decommissioning and closure phases of Alternative S2, as well as proposed management of identified impacts and proposed mitigation measures.

Alternative A2 involves the construction of a sewer pipeline from the administrative complex to the Ixopo WWTW within the road reserves of the R56 and R612, as well as a sewer pumpstation located near the intersection between R56 and R612 (see **Figure 8**).



Figure 8: Proposed alternative routing of sewer pipeline between administrative complex and Ixopo WWTW

Direct Impacts:

A. Planning and Design Phase

1. The need to run the sewer pipeline through neighbouring properties. This includes the road reserves of the R56 and R612, which are under the jurisdiction of the KZN Department of Transport, and possibly

Basic Assessment Report

Portion 1 of ERF 2226. This option is less desirable than the preferred alternative were almost the entire length of the pipeline is located on the property, with the only exception being where it crosses below the R612 to connect to the Ixopo WWTW. As a result, this impact is negative and of moderate significance.

2. The need for the sewer pipeline to cross the Xobho River in two separate locations, namely where the R56 crosses the river upstream of Ixopo Dam, and where the R612 crosses the river immediately downstream of Ixopo Dam. While the sewer pipeline is unlikely to result in direct disturbance of the Xobho River as it will be tied to the existing bridges, there is increased risk to the aquatic ecosystems in the event of pipe breakage as raw sewage will be discharged directly into the river. This option is less desirable than the preferred alternative which does not require the crossing of rivers. As the risk of pipe breakage is limited, this impact is negative and of low significance.
3. The need for a sewer pumpstation to be constructed and operated to pump the raw sewage from near the intersection between the R56 and R612 up to the Ixopo WWTW, resulting in increased energy usage and increased risk of environmental contamination from pumpstation failure. It would be undesirable for the development to operate a pumpstation when an alternative exists to gravity feed the treated sewage effluent off the property. The impact is negative and of moderate significance.
4. With this layout alternative, the opportunity to use the proposed sewer pipeline for Phase 1 to service Phase 2 of the development of the Umngeni Farm Precinct will not be realised. Given that the size of the pumpstation would need to be increased significantly to accommodate the additional raw sewage from Phase 2, it is likely that for Phase 2 a sewer pipeline such as the one proposed as the preferred alternative will be constructed.

B. Construction Phase

1. Stormwater runoff, soil erosion and sedimentation. The road reserves along the R56 and R612 are relatively narrow and drop off steeply down to the Xobho River and associated wetland areas. During construction, unchannelled flow resulting from clearing of vegetation and trenching can result in additional stormwater runoff and soil erosion, with eroded material potentially being deposited in the Xobho River and associated wetland areas below the construction areas. This could be relatively significant given the sensitivity of the receiving environment and potential impact of increased sedimentation and turbidity on surface water quality and biodiversity. It would be undesirable to construct the sewer pipeline and pumpstation in close proximity to the Xobho River and associated wetland areas (10 - 15 m) when an alternative exists to construct the pipeline further away from these sensitive environmental areas (> 30m). The impact is negative and of moderate significance.
2. Visual impacts resulting from construction of the sewer pipeline and pumpstation within the road reserves of the R56 and R612. Those affected would include:
 - Residents in nearby residential areas to the south of the property.
 - Visitors to the Ixopo Fresh Produce Market / Tourism Centre.
 - Users of R56 and R612.

This option is less desirable than the preferred alternative as the construction areas, and resulting visual impacts, are more visible to local residents and users of the R56 and R612 than would be the case with the preferred alternative. The impact is negative and of moderate significance.

C. Operational Phase

1. This layout alternative requires a relatively large sewer pumpstation to pump raw sewage from near the intersection between the R56 and R612 up to the Ixopo WWTW. In the event that this pump fails, the impact can be significant, as it may result in the pumpstation overflowing, spilling down into the Xobho River and associated wetland areas below the pumpstation. To mitigate this impact, a standby pump should be fitted, as well as a backup power source. As mentioned previously, it would be undesirable for the development to operate a pumpstation when an alternative exists to gravity feed the treated sewage effluent off the property. This impact is negative of moderate significance.

D. Decommissioning / Closure Phase

Indirect Impacts

A. Planning and Design Phase

B. Construction Phase

C. Operational Phase

D. Decommissioning / Closure Phase

Cumulative Impacts

A. Planning and Design Phase

B. Construction Phase

C. Operational Phase

D. Decommissioning / Closure Phase

2.3 No Go Alternative

The No-Go development alternative assumes that the new administrative complex is not established, and that the site continues to be used as temporary offices and storage areas by the Harry Gwala District Municipality.

Direct Impacts:

A. Planning and Design Phase

If the proposed development does not go ahead, the planning phase for the proposed new administrative complex (which is a public amenity which needs to be provided within the Ixopo area) will continue until such time as a suitable site is found for the establishment of an administrative complex.

The direct immediate impact of this would be additional costs for planning and feasibility studies that would be incurred by the Harry Gwala District Municipality. These costs could be substantial and owing to budgetary constraints could delay the establishment of new administrative complex by several years. Furthermore, the Municipality will continue to incur costs of hiring temporary offices in Ixopo for senior management and councillors.

If an argument were to be presented that the new administrative complex should not be developed as proposed, and that rather a process of identifying a site closer to Ixopo should be undertaken, the Harry Gwala District Municipality would argue that Umngeni Farm was purchased specifically for the development of the administrative complex as the Municipality does not own any other suitable sites in or near Ixopo. Furthermore, the Municipality would argue that should the new administrative complex not be developed at the preferred site, that it may jeopardise the future development of the remainder of the property which has been identified as key component of the regeneration of Ixopo.

All impacts pertaining to the potential future development posed by the development of the new administrative complex would however be avoided in the no-go scenario, and would create more time for strategic spatial planning to respond to the potential future needs for land use change in and around Ixopo.

B. Construction Phase

The potential direct biophysical, social and economic impacts associated with the construction phase that were identified include:

1. Noise.
2. Dust.
3. Stormwater runoff, soil erosion and sedimentation.
4. Loss of agricultural land.
5. Job creation.

Basic Assessment Report

None of these impacts were considered significant. However, all negative impacts associated with construction on the preferred site would be avoided, and the job creation benefits would not be realised.

C. Operational Phase

The potential direct biophysical, social and economic impacts associated with the operational phase that were identified include:

1. Visual impacts.
2. Road safety and congestion.
3. Stormwater runoff, soil erosion and sedimentation.
4. Job creation.

None of these impacts were considered significant. However, all negative impacts associated with operation of the preferred site would be avoided, and the job creation benefits would not be realised.

D. Decommissioning / Closure Phase

Indirect Impacts

A. Planning and Design Phase

B. Construction Phase

C. Operational Phase

D. Decommissioning / Closure Phase

Cumulative Impacts

A. Planning and Design Phase

The potential cumulative impacts, namely setting precedent for the future development of the remainder of the property, and contribution to loss of agricultural land and urban sprawl, would be avoided in the short-term. However given that the Harry Gwala District Municipality have identified the development of Umngeni Farm as key to the regeneration of Ixopo and have purchased the property for this purpose, the Municipality would likely still pursue the development of the site and remainder of the property in the medium to long term.

As it appears as if the site and remainder of the property will be developed at some stage, and that the proposed administrative complex poses limited risk to sensitive environmental areas on site, the no-go development scenario poses no particular advantages in respect of minimising potential cumulative impacts.

B. Construction Phase

C. Operational Phase

D. Decommissioning / Closure Phase

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.

3.1 Alternative S1 and A1 (Preferred site and layout alternatives)

The preferred site and layout alternative, with recommended mitigation measures in place, is associated with the following impacts:

Type of Impact	Duration	Likelihood of Impact Occurring	Significance of Impact with mitigation
Planning Phase – Direct Impacts			
Identification and selection of the location of the new administrative complex	Long	Low	Low (-)
Identification and selection of sewer pipeline routing	Long	Low	Low (-)
Planning Phase – Cumulative Impacts			
Set precedent for future development of remainder of the property	Long	High	Low (-)
Contribution to the loss of agricultural land	Long	High	Low (-)
Contribution to urban sprawl	Long	High	Low (-)
Construction Phase – Direct Impacts			
Noise	Short	High	Low (-)
Dust	Short	High	Low (-)
Stormwater runoff, soil erosion and sedimentation	Short	Moderate	Moderate (-)
Loss of agricultural land	Long	High	Low (-)
Job Creation	Short	High	Low (+)
Operational Phase – Direct Impacts			
Visual Impacts	Long	High	Moderate (-)
Road safety and congestion	Short	Low	Low (-)
Stormwater runoff, soil erosion and sedimentation	Long	Low	Low (-)
Job creation	Long	High	Low (+)

The proposed development is associated with a number of potentially negative biophysical, social, and economic impacts which, if properly managed and mitigated as recommended, will not be significant. The following factors are key considerations in this assessment:

1. The site of the proposed administrative complex, as well as routing of proposed sewer pipeline contain little or no indigenous vegetation having previously been transformed from a natural state to farm buildings, pastures, and sugarcane fields. The “receiving environment” is therefore far from being in a pristine state and presents a low functionality from an ecosystems perspective.
2. The site of the proposed administrative complex is not currently, nor has it for the last two years, been used for agriculture. There is therefore no loss in agricultural production with the development of the site as it is not currently used for this purpose. Furthermore, given the size of the site (5.5 ha), the agricultural production potential is relatively limited.
3. The site of the proposed administrative complex is relatively flat. Limited earthworks are therefore needed to construct the proposed development. Trenching will however be required for construction of the sewer pipeline connecting the administrative complex to the Ixopo WWTW.
4. The proposed administrative complex and sewer pipeline can be accommodated on site without needing to encroach into environmentally sensitive areas (i.e. Xobho River, dams and wetlands areas), as well as 32 m development buffer. There is therefore little or no direct impact on these sensitive areas.
5. The nearest house is some distance from the site (300m). The negative impacts of construction activities, such as noise and dust, on neighbours will therefore be limited due to the distance.
6. There are limited areas from which the site is visible and these areas are generally some distance away (300 m). Furthermore, the visual amenity of the site is currently low given the alien plant infestations and dilapidated buildings. The visual impacts are therefore low, particularly if the administrative complex is

Basic Assessment Report

landscaped using fast growing, locally indigenous trees and shrubs, and the development buffer is rehabilitated to riparian forest.

3.2 Alternative A2

Alternative A2, with recommended mitigation measures in place, is associated with the following impacts:

Type of Impact	Duration	Likelihood of Impact Occurring	Significance of Impact with mitigation
Planning Phase – Direct Impacts			
The need to run the sewer pipeline through neighbouring properties.	Long	Low	Moderate (-)
The need for the sewer pipeline to cross the Xobho River in two separate locations	Long	Low	Low (-)
The need for a sewer pumpstation to be constructed and operated to pump the raw sewage from near the intersection between the R56 and R612 up to the Ixopo WWTW	Long	Low	Moderate (-)
Opportunity to use the proposed sewer pipeline for Phase 1 to service Phase 2 of the development of the Umngeni Farm Precinct will not be realised	Long	Low	Moderate (-)
Construction Phase – Direct Impacts			
Stormwater runoff, soil erosion and sedimentation	Short	Moderate	Moderate (-)
Visual impacts	Short	Moderate	Moderate (-)
Operational Phase – Direct Impacts			
Sewer pumpstation to pump raw sewage from near the intersection between the R56 and R612 up to the Ixopo WWTW	Long	High	Moderate (-)

In accordance with the above assessment, and the considerations in this Basic Assessment Report, the proposed alternative routing of the sewer pipeline between the administrative complex and Ixopo WWTW (A2) is not recommended as the best option for approval, owing to the following key reasons:

1. The proposed routing of the pipeline poses greater risk to sensitive environmental areas, which includes the Xobho River, dams, and wetlands areas, in the event of pipe breakage due to the close proximity of the proposed pipeline to these areas (10 – 15m), as well as need to cross Xobho River in two separate locations.
2. A sewer pumpstation is required, resulting in increased energy usage and increased risk of environmental contamination from pumpstation failure.

As such, layout alternative A2 is not recommended as layout A1 presents a lower impact alternative.

3.3 No-Go Alternative (Compulsory)

The No-Go Alternative is associated with the following impacts:

Type of Impact	Duration	Likelihood of Impact Occurring	Significance of Impact with mitigation
Planning Phase – Direct Impacts			
Identification and selection of the location of the new administrative complex	Moderate	High	Moderate (-)
Identification and selection of routing of sewer	N/A	N/A	N/A

Basic Assessment Report

pipeline			
Planning Phase – Cumulative Impacts			
Set precedent for future development of remainder of the property	Moderate	High	Moderate (-)
Contribution to the loss of agricultural land	Long	High	Low (+)
Contribution to urban sprawl	Long	High	Low (+)
Construction Phase – Direct Impacts			
Noise	N/A	N/A	N/A
Dust	N/A	N/A	N/A
Stormwater runoff, soil erosion and sedimentation	N/A	N/A	N/A
Loss of agricultural land	N/A	N/A	N/A
Job Creation	Short	High	Low (-)
Operational Phase – Direct Impacts			
Visual Impacts	N/A	N/A	N/A
Road safety and congestion	N/A	N/A	N/A
Stormwater runoff, soil erosion and sedimentation	N/A	N/A	N/A
Job creation	Long	High	Low (-)

The No-Go Alternative presents the possibility of extending the planning and site identification phase by Harry Gwala District Municipality for the development of a new administrative complex. Inevitably, another site for the administrative complex would need to be found as the municipality needs additional office space to house senior management and councillors, as well as a council chamber.

While this may aid the process of thinking further about the implications of developing the site which is zoned for agriculture and located outside of the urban node, this would have significant implications for the municipality which has purchased the property primarily for the establishment of the complex. Furthermore, the development of the administrative complex is the first phase of a phased development of the remainder of the property which has been identified as key to the regeneration of Ixopo.

The costs of further investigations and feasibility studies for alternative sites, and possibly additional land purchases, may also not yield a significantly better option than the preferred site as presented here, considering that the site does not pose any serious environmental or social risks.

SECTION F. RECOMMENDATION OF EAP

Is the information contained in this report and the documentation attached hereto in the view of the EAPr sufficient to make a decision in respect of this report?

YES	NO

If “NO”, please contact the KZN Department of Agriculture, Environmental Affairs & Rural Development regarding the further requirements for your report.

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:

It is recommended that the proposed development of the new Administrative Complex for Harry Gwala District Municipality, at the preferred site, be authorised, subject to the following Conditions being met:

1. The proposed sewer pipeline may not be located within 32 m of the edge of the dam, wetlands or bank of the watercourse.
2. EMPr to include controls to restrict construction activities to working hours (08h00 to 17h00) during week days.
3. EMPr to include controls to ensure construction machinery and workers do not make excessive noise.

Basic Assessment Report

4. EMPr to include conditions to control dust during construction phase.
5. Feral Saligna gum and Black wattle may only be cleared at the end of the construction phase.
6. Stormwater management system should be designed by a suitably qualified engineer and implemented to manage stormwater runoff during construction phase.
7. EMPr to include measures to strictly control the clearing of vegetation on site, management of stormwater runoff, and prevention of soil erosion.
8. Property should be zoned for various forms of agricultural use – cultivable lands to be located outside of service infrastructure servitudes; grazing areas may extend over pipeline servitudes.
9. Construction materials should be sourced from local businesses where possible.
10. Local contractors should be used where possible.
11. Local labour should be used, and upskilled, where possible.
12. Landscaping of administrative complex using fast growing, locally indigenous trees and shrubs to soften hard lines.
13. Rehabilitation of buffer area between administrative complex and environmentally sensitive areas to indigenous grassland.
14. Only the original access road is to be used to gain access to the administrative complex. The secondary access road must be closed.
15. There must be sufficient parking onsite for senior management, councillors, and visitors to the site. No vehicles may be parked outside the site and on verge of the R56.
16. Stormwater management plan is prepared by suitably qualified specialist and implemented. This plan must ensure that no unattenuated stormwater runoff leaves the site and post-development stormwater runoff does not exceed pre-development levels.
17. Where possible, runoff from roofs should be collected in rainwater harvesting tanks and used for irrigating the landscaped areas.
18. Local labour to be sourced for all maintenance and other general worker positions where possible.
19. Where possible, permeable materials, such as dusi gravel, should be used for parking areas and driveways to reduce extent of hardened surfaces.
20. The planning and design of the proposed administrative complex must be sensitive to the current rural landscape, and should set a precedent for the future development of the property which is also sensitive to the surrounding landscape.

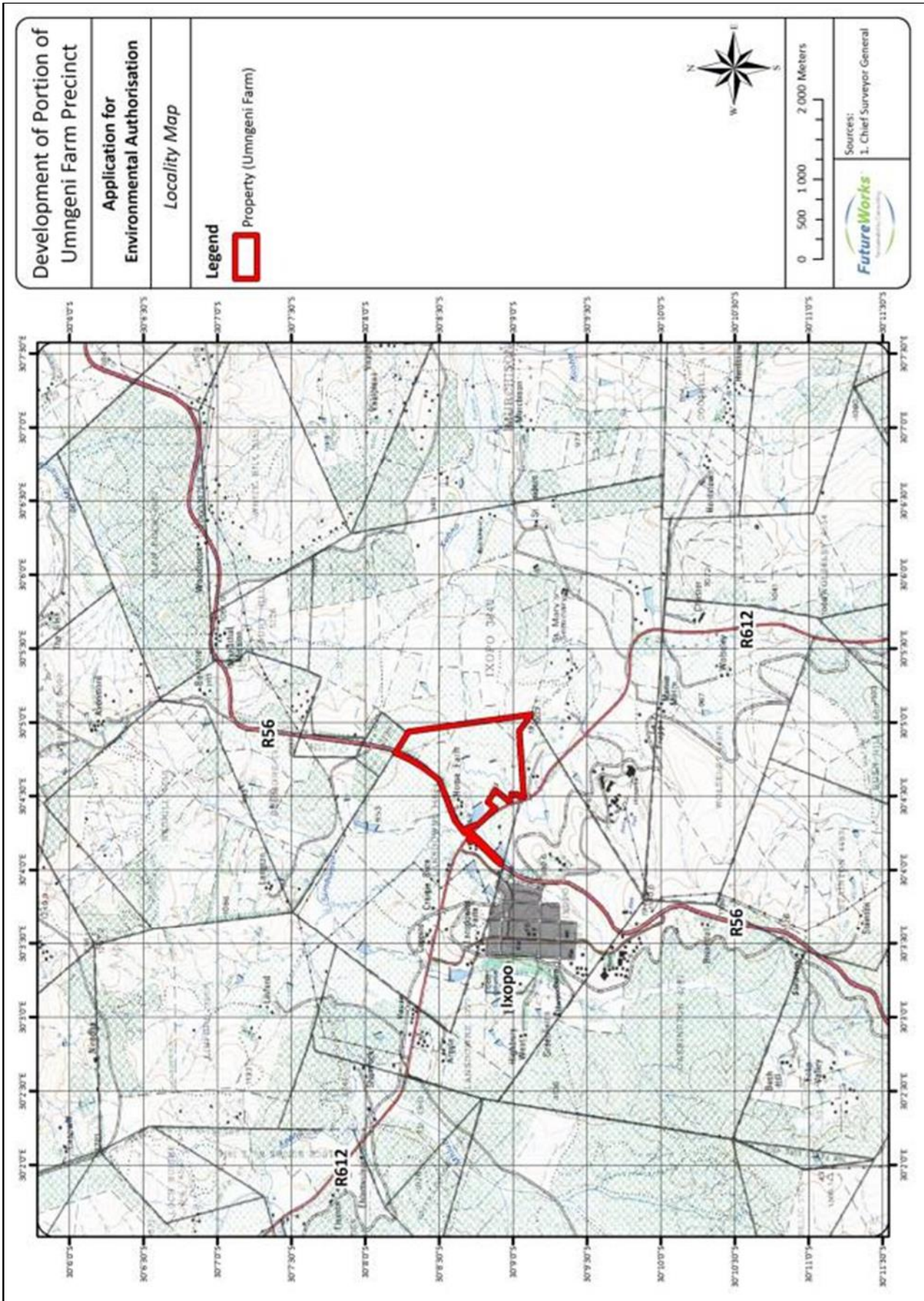
SECTION G: APPENDIXES

The following appendixes must be attached as appropriate:

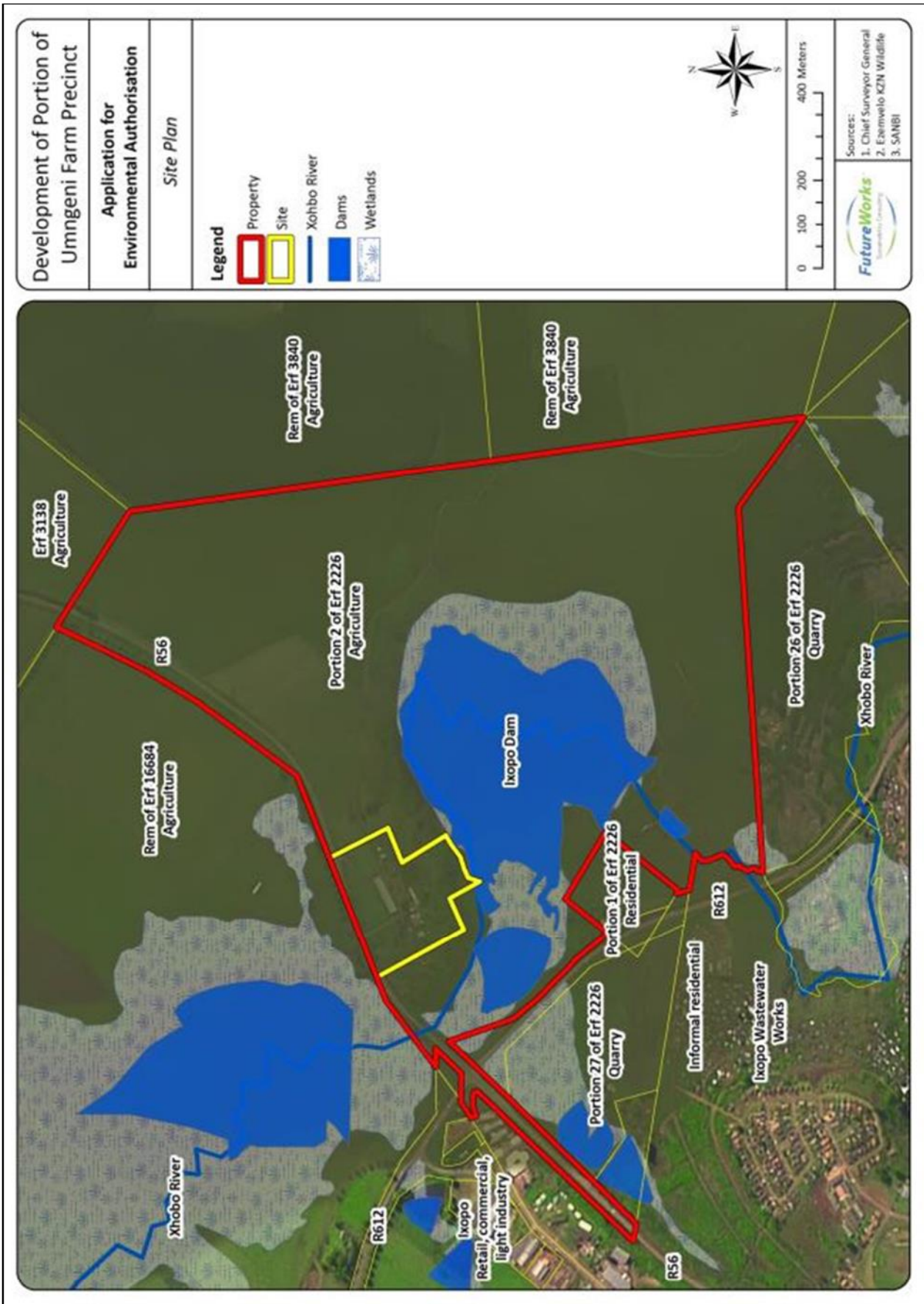
Appendix A: Site Plan(s)

Basic Assessment Report

A.1: Locality Map

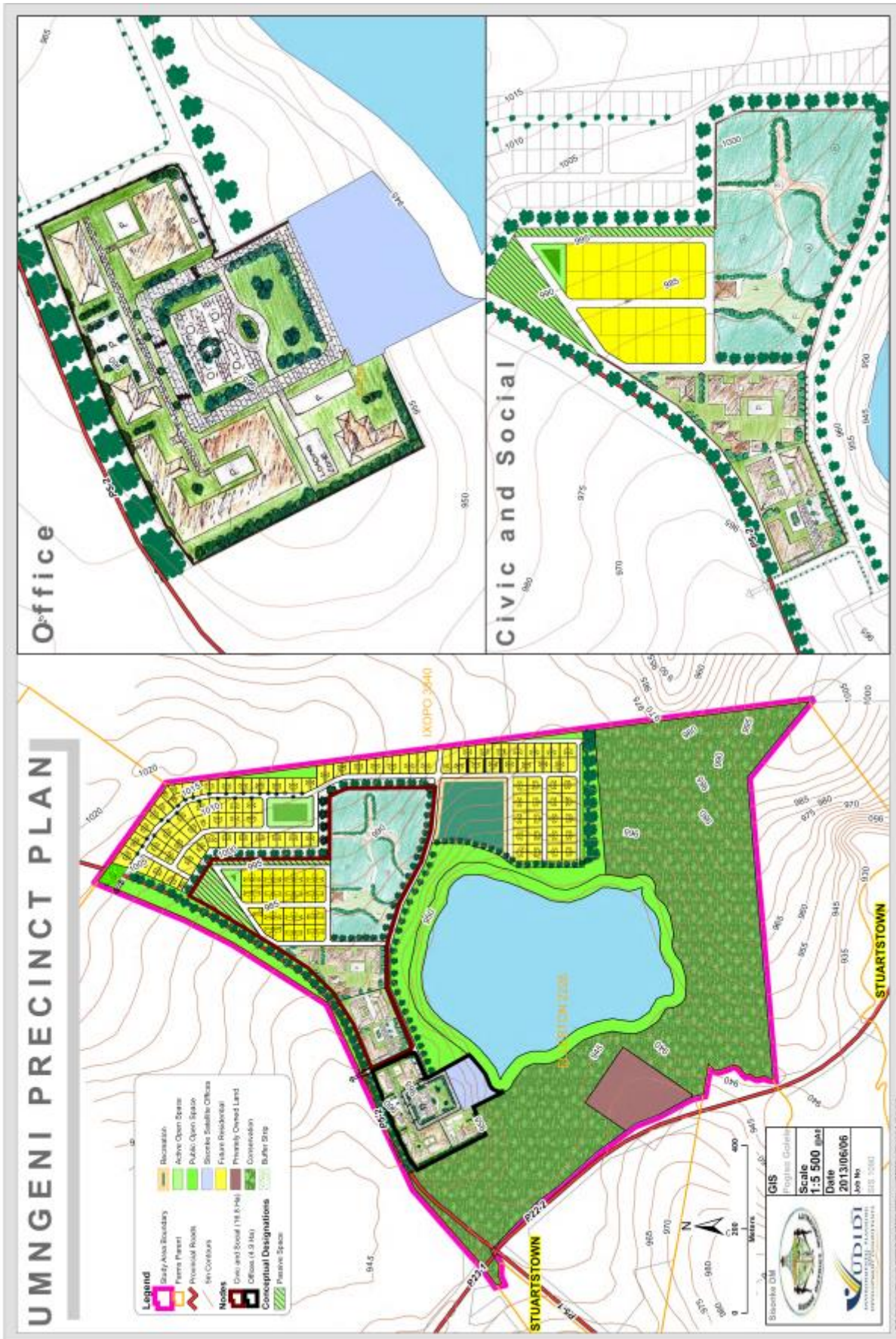


A.2: Site Map



Basic Assessment Report

A.3: Umngeni Precinct Plan



TOGETHER WE HAVE MADE KZN A BETTER PROVINCE TO LIVE IN.

Appendix B: Photographs

B.1: Map showing location and direction of photographs



Figure B.1: Positions from where photographs were taken

Basic Assessment Report



Photograph 1: Looking south towards Ixopo. Note the dairy farming on either side of the R56.



Photograph 2: Existing entrance off the R56 which is to be upgraded. Note the old farm buildings to be demolished.



Photograph 3: Looking north from temporary municipal offices. Note old farm buildings and pastures.

Basic Assessment Report



Photograph 4: Temporary municipal offices currently used by the Harry Gwala District Municipality



Photograph 5: Looking south towards Ixopo Dam from the temporary municipal offices. Note the old pastures in the foreground and feral Saligna gum and Black wattle forest in the background.



Photograph 6: Looking west from inside feral Saligna gum and Black wattle forest. Note steep embankment down to Ixopo Dam on the left.

Basic Assessment Report



Photograph 7: Looking across the second smaller dam wetland area from below the site. Note the dominance of *Phragmites australis*.



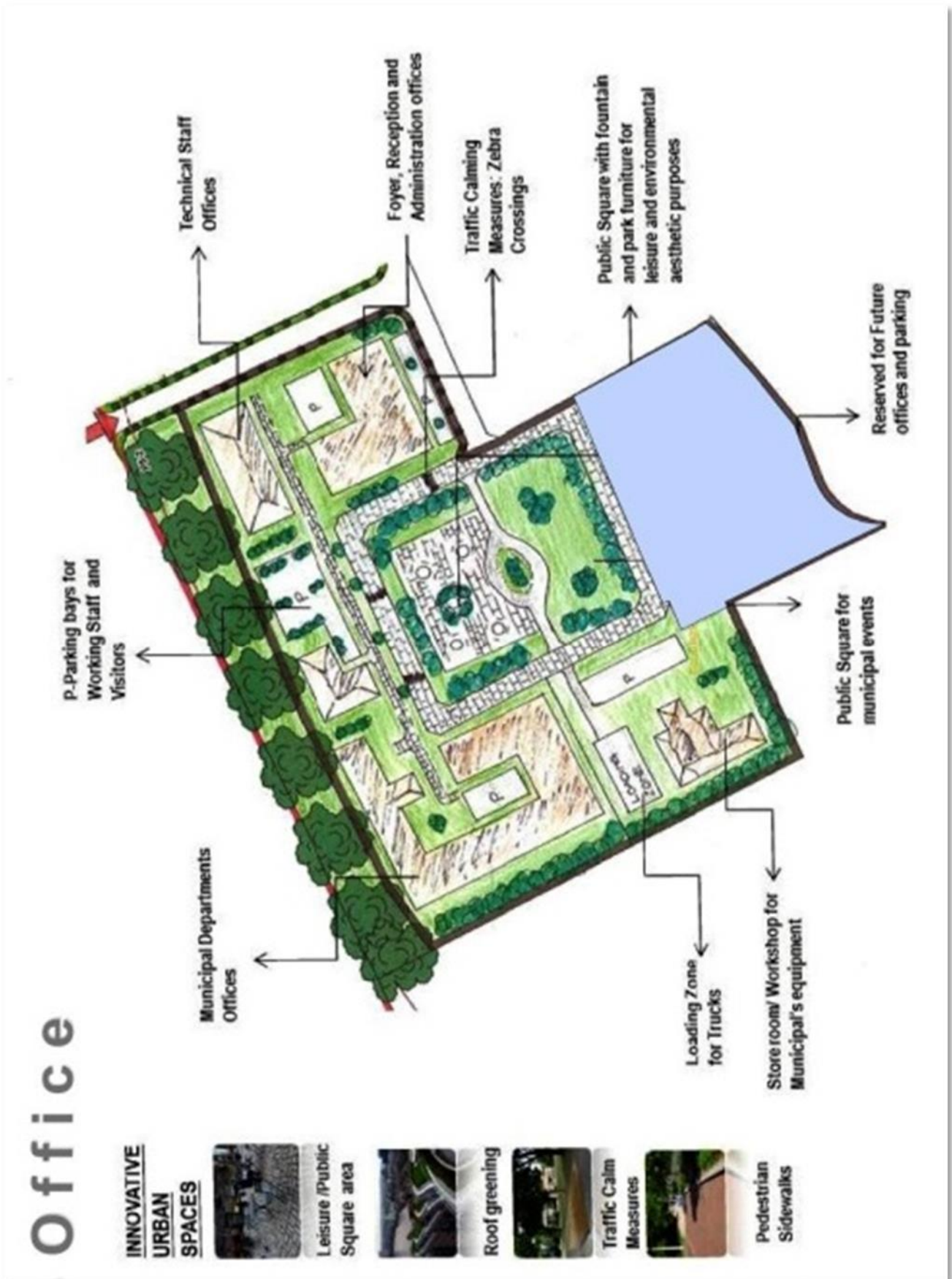
Photograph 8: Looking north from the western edge of the site. Note the old pastures with invasive alien plants.



Photograph 9: Looking north-east from bridge across the Xobho River towards the site. Note the relatively flat wetland areas in the foreground and relatively steep areas dominated by Saligna gum and Black wattle in the background.

Appendix C: Facility Illustration(s)

C.1: Site development plan



Appendix D: Specialist Reports

Appendix E: Comments and Responses Report

Basic Assessment Report

E.1: IAP Register

Note that the contact details below have intentionally been blanked out.

E.2: Comments and Responses - Notification of Process

Name	Organisation	Comments	Response
RK McKenzie	Craigie Burn Land Trust	<ul style="list-style-type: none"> No objection to proposed development. Request to be registered as IAP. Concerns regarding the current entrance off R56 due to short sight distances. Increase risk to people entering and leaving the site, as well as users of R56. 	<ul style="list-style-type: none"> Noted. Duly performed. There are currently two access roads to the site off the R56. The southern access road which provides access to the temporary municipal offices. This access road is located on a bend of the R56 and therefore has relatively short sight distances. The northern access road which provides access to the old farm buildings in the north. It is proposed that access to the new administrative complex will be via the northern access road as it located on a relatively straight section of the R56 where there are relatively good sight distances.
		•	•
		•	•
		•	•
		•	•
		•	•
		•	•
		•	•
		•	•
		•	•
		•	•
		•	•
		•	•
		•	•
		•	•
		•	•
		•	•
		•	•
		•	•
		•	•
		•	•
		•	•
		•	•
		•	•
		•	•
		•	•
		•	•
		•	•
		•	•

E.5: Copy of written notice given to adjacent landowners notifying them of application on 11 June 2014

**NOTICE OF APPLICATION FOR ENVIRONMENTAL AUTHORISATION,
SUBJECT TO BASIC ASSESSMENT, FOR THE PROPOSED DEVELOPMENT OF
THE HARRY GWALA DISTRICT MUNICIPALITY ADMINISTRATION COMPLEX
ON PORTION 2 OF ERF 2226, ELLERTON (UMNGENI FARM)**

In accordance with the requirements of the National Environmental Management Act (Act 107 of 1998) and Government Notices R543, R544 and R546 of 2010, an application for Environmental Authorisation has been submitted to the KZN Department of Agriculture and Environmental Affairs for the proposed development of the new Harry Gwala District Municipality administration complex on Umngeni Farm, Ixopo.

This Application requires a Basic Assessment process to be conducted, which will be undertaken by the appointed Independent Environmental Assessment Practitioner: FutureWorks.





You are hereby encouraged to participate in this assessment by registering as an Interested / Affected Party and submitting any preliminary comments or concerns that you may have concerning the proposed development before **Monday 23 June 2014** to:

Michael Van Niekerk
PO Box 2221,
Everton, 3625
Tel: 031 764 6449
Fax: 031 764 4907
michael@futureworks.co.za



E.7: Copy of advert that appeared in the Witness on 09 June 2014

The Witness		Classifieds 15
<h1>TICES</h1>		
 SISONKE DISTRICT MUNICIPALITY		
NOTICE OF APPLICATION FOR ENVIRONMENTAL AUTHORISATION, SUBJECT TO BASIC ASSESSMENT, FOR THE PROPOSED DEVELOPMENT OF THE HARRY GWALA DISTRICT MUNICIPALITY ADMINISTRATION COMPLEX ON PORTION 2 OF ERF 2226, ELLERTON (UMNGENI FARM)		
<p>In accordance with the requirements of the National Environmental Management Act (Act 107 of 1998) and Government Notices R543, R544 and R546 of 2010, an application for Environmental Authorisation has been submitted to the KZN Department of Agriculture and Environmental Affairs for the proposed development of the new Harry Gwala District Municipality administration complex on Umngeni Farm, Ixopo.</p> <p>This Application requires a Basic Assessment process to be conducted, which will be undertaken by the appointed Independent Environmental Assessment Practitioner: FutureWorks. You are hereby encouraged to participate in this assessment by registering as an Interested / Affected Party and submitting any preliminary comments or concerns that you may have concerning the proposed development before Tuesday, 24 June 2014 to:</p> <p>Michael Van Niekerk FutureWorks PO Box 2221, Everton 3625 Tel: 031 764 6449 Fax: 031 764 4907 michael@futureworks.co.za</p>		
		10 IS A SMALL NUMBER THAT CAN MAKE A BIG DIFFERENCE!
		Please consider the positive impact you can make by donating to COMMUNITY CHEST up to 10% of

E.8: Copy of advert that appeared in the Pondo News on 06 June 2014

**NOTICE OF APPLICATION FOR ENVIRONMENTAL
AUTHORISATION, SUBJECT TO BASIC
ASSESSMENT, FOR THE PROPOSED DEVELOPMENT
OF THE HARRY GWALA DISTRICT MUNICIPALITY
ADMINISTRATION COMPLEX ON PORTION 2 OF ERF
2226, ELLERTON (UMNGENI FARM)**

In accordance with the requirements of the National Environmental Management Act (Act 107 of 1998) and Government Notices R543, R544 and R546 of 2010, an application for Environmental Authorisation has been submitted to the KZN Department of Agriculture and Environmental Affairs for the proposed development of the new Harry Gwala District Municipality administration complex on Umngeni Farm, Ixopo.

This Application requires a Basic Assessment process to be conducted, which will be undertaken by the appointed Independent Environmental Assessment Practitioner: FutureWorks. You are hereby encouraged to participate in this assessment by registering as an Interested / Affected Party and submitting any preliminary comments or concerns that you may have concerning the proposed development **before Wednesday 24 June 2014** to:

**Michael Van Niekerk
FutureWorks**

PO Box 2221,
Everton, 3625
Tel: 031 764 6449
Fax: 031 764 4907
michael@futureworks.co.za



E.9: Copy of poster erected on site on 11 June 2014

**NOTICE OF APPLICATION FOR ENVIRONMENTAL AUTHORISATION,
SUBJECT TO BASIC ASSESSMENT, FOR THE PROPOSED DEVELOPMENT OF
THE HARRY GWALA DISTRICT MUNICIPALITY ADMINISTRATION COMPLEX
ON PORTION 2 OF ERF 2226, ELLERTON (UMNGENI FARM)**

In accordance with the requirements of the National Environmental Management Act (Act 107 of 1998) and Government Notices R543, R544 and R546 of 2010, an application for Environmental Authorisation has been submitted to the KZN Department of Agriculture and Environmental Affairs for the proposed development of the new Harry Gwala District Municipality administration complex on Umngeni Farm, Ixopo.

This Application requires a Basic Assessment process to be conducted, which will be undertaken by the appointed Independent Environmental Assessment Practitioner: FutureWorks.



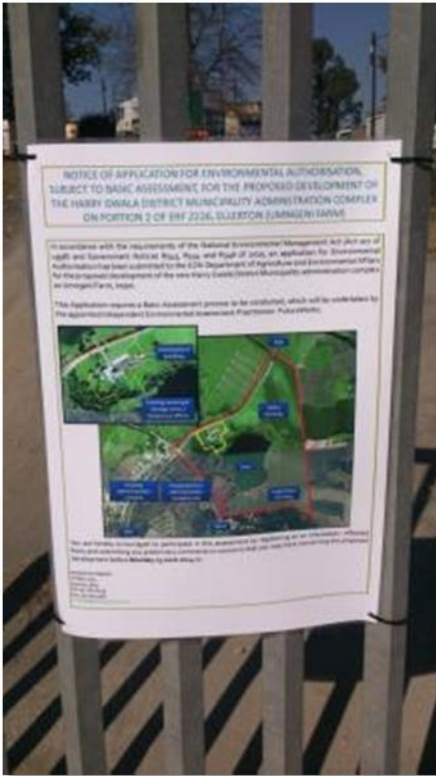
You are hereby encouraged to participate in this assessment by registering as an Interested / Affected Party and submitting any preliminary comments or concerns that you may have concerning the proposed development before **Monday 23 June 2014** to:

Michael Van Niekerk
PO Box 2221,
Everton, 3625
Tel: 031 764 6449
Fax: 031 764 4907
michael@futureworks.co.za



Basic Assessment Report

E.10: Photographs of posters erected on site



Basic Assessment Report

E.12: Copy of email sent to potential IAPs notifying them of availability of Draft BAR for comment

Basic Assessment Report

E.11: Copies of comments received

From: Craigieburn Dairy <[REDACTED]>
Sent: 13 June 2014 11:08 AM
To: michael@futureworks.co.za
Subject: Harry Gwala District Municipality Administration complex
Attachments: Correspondence.CBLT.Futureworks.13.06.14.doc

Importance: High

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Michael

Please find attached letter regarding registering as an interested / affected party.

Regards,

RK Mackenzie

Craigieburn Dairy (Pty) Ltd

Craigie Burn Land Trust
PO Box 93
Ixopo, 3276
Tel/Fax [REDACTED]

Michael van Niekerk
PO Box 2221
Everton
3625

Via email: michael@futureworks.co.za

13th June 2014

Dear Sir

The proposed development of the Harry Gwala District municipality administration complex on Portion 2 of ERF 2226, Ellerton (Umngeni Farm) refers.

Thank you for the opportunity to comment on the above, we adjoin the property on the North West side, the R56 road being the boundary.

We have no objection to the planned development. We are however concerned about the present access from the R56. It would be most inadvisable to have an increase in traffic at that point. It is at present a hazardous entrance, with limited visibility being situated on a bend in the road, and near the bridge on the Ixopo River. We would therefore like to register as an interested / affected party.

Yours faithfully,

RK MACKENZIE
Trustee
Craigie Burn Land Trust

Appendix F: Environmental Management Programme

Appendix G: Other Information