

# **GREEN DOOR environmental**

## **BASIC ASSESSMENT REPORT:**

**Waste Management License Application and Basic Assessment Process for the Proposed Establishment of a Feed Mill Facility located on Portion 4 of Greenfields 1834, Mooi River, KwaZulu-Natal**

Ref: To be provided

**PREPARED FOR: Jigawa Investments (Pty) Ltd**

**6 DECEMBER 2016**



**Residential  
Commercial  
Industrial  
Agriculture  
Linear  
Service**

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## EXECUTIVE SUMMARY

The Applicant, Jigawa Investments (Pty) Ltd, wish to obtain Environmental Approval and a Waste Management License (WML) for the Proposed Establishment of a Feed Mill Facility located on Portion 4 of Greenfields 1834, Mooi River, KwaZulu-Natal.

The project involves using waste foods (e.g. waste breakfast cereal etc) collected from food production and packaging enterprises to mix with animal feed. The feed is proposed to be used for pigs, horses, beef and dairy cattle.

The proposed development comprises two 4000m<sup>2</sup> buildings, which will house operations which will produce 480 000 tonnes of feed per annum. The 480 000 tonnes of feed will be made up of the following:

- Sunflower seeds 140 000 tons / annum;
- Soya 28 000 tons / annum;
- Chip mix 20 000 tons / annum;
- Cereals 12 000 tons / annum; and
- Wheat / maize 280 000 tons / annum.

The main issues raised following the circulation of the Background Information Document (BID), adverts, site posters and public information session included:

- Proximity to established Eskom power lines;
- The need to ensure that stockpiling of material etc. does not occur under any Eskom power lines;
- The need to comply with current Waste Management Norms and Standards, Classification and Labelling procedures and systems;
- Waste Management;
- Sewage and Wastewater Management;
- Spillages Management;
- Stormwater Management; and
- Erosion control measures.

A Phase 2 Heritage Impact Assessment (HIA) was conducted on the proposed development site, as a number of buildings older than 60 years are present on the site. The Phase 2 HIA identified the following farm structure, located within the main farmstead, which are over 60 years old, and are thus protected:

- Stable buildings 1893
- Farm House ("The Manors House") & outbuildings 1893
- Other farm buildings within the stone wall 1893-1900
- Stone boundary wall 1893-1900
- Cast iron gates & gate posts 1893-1900
- Dry stack stone wall ±1900

The other structures on the farm, which are not protected are:

- Farmhouse
- Outbuilding
- New roofs and workshops
- Grove of trees

The Phase 2 HIA recommended the following:

- The farmstead and farmhouse remains intact, within the original farm boundary walls.
- Dry stack walls should be retained where possible and not disturbed.
- Any new development of substantial area should be located at a distance away from the farmstead, so as not to overshadow or dominate the historic landscape.
- New types of industries that will involve heavy machinery or trucking should be considered on sites separate from the farmstead - there is clear evidence that the structures cannot withstand any disturbance, due to their age and construction.
- Major earthworks within the vicinity of the buildings are not recommended.
- The whole complex is in need of restoration and a suitable new use, i.e. no heavy machinery or heavy vehicles.
- New agricultural or industrial buildings are to be a minimum of 30 m away from any protected structure.
- Agriculture related activities and buildings are best suited to the immediate vicinity.
- Agriculture related industry sites should be determined by the following criteria:
  - a) The type of structure to be erected and the earthworks required for this
  - b) The generation of movement or vibration while operational
  - c) The generation of traffic and type of vehicles

The specialist assessed the three alternative sites using the above criteria. The specialist concluded that there would be no structures impacts if site A or B were developed. In the case of site C, the specialist stated that a minimum of 30 m is required between this development footprint and the existing farm building (which site C allows for), and that the Applicant would need to obtain permission from Amafa KZN for the old stone farm building to be demolished or relocated.

The Draft Basic Assessment Report and Environmental Management Programme (EMPr) are being circulated for 30 days to Interested & Affected Parties (I&APs) for review and comment.

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**APPENDIX M: Comment following the circulation of the DBAR - to be appended to Final BAR**

## 1. PROJECT & ACTIVITY DESCRIPTION

### 1.1 PROJECT TITLE

Environmental Approval and Waste Management License (WML) Application for the Proposed Establishment of a Feed Mill Facility located on Portion 4 of Greenfields 1834, Mooi River, KwaZulu-Natal.

### 1.2 LISTED ACTIVITIES

All the listed activities that make up this application are listed below:

| Indicate the number of the relevant Government Notice: | Activity No (s) (relevant notice): e.g. Listing notices 1, 2 or 3 | Describe each listed activity as per the wording in the listing notices as well as per the proposed activity:   |
|--|---|---|
| GNR 912  | Category A: Part 2  | The sorting, shredding, grinding, crushing, screening or bailing of general waste at a facility that has an operational area on excess of 1000m <sup>2</sup> .<br><b>The facility proposes to crush waste foods and mix it with traditional animal feed. The facility will exceed 1000m<sup>2</sup> in extent.</b>                                    |
| GNR 912  | Category A: Part 3  | The recycling of general waste at a facility that has an operational area in excess of 500m <sup>2</sup> , excluding ...<br><b>The facility proposes to crush waste foods and mix it with traditional animal feed. Waste food is classified as "general waste".</b>   |
| GNR 912  | Category C: Part 1  | The storage of general waste at a facility that has the capacity to store in excess of 100m <sup>3</sup> of general waste at any one time, excluding the storage of waste in lagoons or temporary storage of such waste.<br><b>The facility will be required to store more than 100m<sup>3</sup> of waste at one time.</b>                            |
| GNR 983  | Part 8  | The development and related operation of hatcheries or agri-industrial facilities outside industrial complexes where the development footprint covers an area of 2 000 square metres or more.<br><b>The proposed development site is not located within an established industrial complex, and will cover an area in excess of 2000m<sup>2</sup>.</b> |

Refer to Appendix B for the Application form.



### 1.3 LIST OF LEGISLATION, POLICIES AND/OR GUIDELINES THAT ARE RELEVANT TO THE APPLICATION

| Title of legislation, policy or guideline:  | Administering authority:   | Date:       |
|---|----------------------------|-------------|
| Integrated Development Programme (Draft)  | uMgungundlovu Municipality | 2016 / 2017 |
| Integrated Development Programme  | Mpofana Municipality       | 2014 / 2015 |
| National Environmental Management Act   | DEA                        | 1998        |
| Environmental Impact Assessment Regulations, section 24(5) of the National Environmental Management Act, 1998   | DEA                        | 2010        |
| Integrated Environmental Management Guideline Series: Companion to the EIA Regulations 2010 and Public Participation 2010.  | DEA                        | 2010        |
| The National Water Act (NWA), 1998 (36 of 1998)   | DWA                        | 1998        |
| National Water Act Regulations, 1999  | DWA                        | 1999        |
| The National Heritage Resources Act, 1999   | SAHRA                      | 1999        |
| KwaZulu Natal Heritage Resources Act 10 of 1997   | SAHRA                      | 1997        |
| National Environmental Management: Biodiversity Act, 2004   | DEA                        | 2004        |
| Conservation of Agricultural Resources Act 43 of 1983   | NDA                        | 1983        |
| The Constitution of South Africa 108 of 1996  | DOJCD                      | 1996        |
| National Roads Act 83 of 1996   | DOT                        | 1998        |
| Water Services Act 108 of 1997  | DWS                        | 1997        |
| EIA Guideline and Information Document Series. Western Cape Department of Environmental Affairs & Development Planning: Guideline on Alternatives,  | DEA&DP                     | 2011        |
| EIA Guideline and Information Document Series. Western Cape Department of Environmental Affairs & Development Planning: Guideline on Public Participation.                                      | DEA&DP                     | 2011        |
| EIA Guideline and Information Document Series. Western Cape Department of Environmental Affairs & Development Planning: Guideline on Need and Desirability.                                     | DEA&DP                     | 2011        |
| EIA Guideline and Information Document Series. Western Cape Department of Environmental Affairs & Development Planning: Guideline on Generic Terms of Reference for EAPs and Project Schedules. | DEA&DP                     | 2011        |

### 1.4 SG 21 DIGIT CODE(S) OF THE PROPERTIES

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| N | 0 | F | T | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 8 | 3 | 4 | 0 | 0 | 0 | 0 | 4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

### 1.5 PHYSICAL ADDRESS & FARM NAME

|                    |                  |
|--------------------|------------------|
| <b>Address</b>     | R 103            |
| <b>Farm Name</b>   | Greenfields Farm |
| <b>Town</b>        | Mooi River       |
| <b>Postal Code</b> | 3300             |

## 1.6 COORDINATES OF THE BOUNDARY OF THE PROPERTY

| Corner/Position       | Latitude (S)     | Longitude (E)    |
|-----------------------|------------------|------------------|
| Corner 1 (south)      | 29° 16' 44.18" S | 29° 59' 51.45" E |
| Corner 2 (south east) | 29° 15' 12.89" S | 30° 01' 10.63" E |
| Corner 3 (north east) | 29° 14' 46.93" S | 30° 01' 24.32" E |
| Corner 4 (north)      | 29° 13' 33.24" S | 30° 00' 05.52" E |
| Corner 5 (west)       | 29° 15' 36.19" S | 29° 59' 11.69" E |

## 1.7 COORDINATES OF THE PREFERRED DEVELOPMENT FOOTPRINT (SITE C)

| Corner/Position       | Latitude (S)     | Longitude (E)    |
|-----------------------|------------------|------------------|
| Corner 1 (south east) | 29° 14' 54.93" S | 30° 00' 06.93" E |
| Corner 2 (north east) | 29° 14' 51.68" S | 30° 00' 06.85" E |
| Corner 3 (north west) | 29° 14' 52.46" S | 30° 00' 02.78" E |
| Corner 4 (south west) | 29° 14' 55.36" S | 30° 00' 03.62" E |

## 1.8 DETAILED PROJECT DESCRIPTION OF THE ACTIVITIES TO BE UNDERTAKEN

A feed mill is proposed on Portion 4 of Greenfields 1834, Mooi River, KwaZulu-Natal. The area immediately surrounding the proposed development site is an established farm complex (refer to Figure 1). As part of this assessment a Phase 2 Architectural Heritage Impact Assessment (HIA) was commissioned (Appendix C). The HIA identified the following farm structures, located within the main farmstead, which are over 60 years old, and are thus protected:

- Stable buildings 1893;
- Farm House ("The Manors House") & outbuildings 1893;
- Other farm buildings within the stone wall 1893-1900;
- Stone boundary wall 1893-1900;
- Cast iron gates & gate posts 1893-1900; and
- Dry stack stone wall ±1900.

The other structures on the farm, which are not protected are:

- Farmhouse;
- Outbuilding;
- New roofs and workshops; and
- Grove of trees.

The HIA suggested three alternate locations to locate the feed mill (refer to Alternative Section for more information and Appendix C for the Phase 2 HIA) (refer to Figure 2). Although the HIA Specialist noted 'no structural impact' for sites A and B, and recommended a 30 m buffer on the south of the existing farmstead and the need to obtain permission from Amafa KZN for the

demolition and relocation of an old stone farm building, the preferred position of the facility is Site C. Reasons for this are provided in the Alternatives section of this report.

It is proposed that the feed mill will use waste foods (e.g. waste breakfast cereal etc.) collected from food production and packaging enterprises to mix with animal feed. The feed is proposed to be used for pigs, horses, beef and dairy cattle. The site is currently zoned as 'business' – as it had a butchery on it, however now it is used for agriculture. The proposed development triggers Listed Activities which require i) an Environmental Authorization (EA) in terms of the National Environmental Management Act – as the development is deemed an agri-industrial activity due to it involving the beneficiation of agricultural produce (mixing, bagging etc); and ii) an Waste Management License (WML) in terms of the National Environmental Management: Wastes Act, due to the product containing waste foods.

The proposed development comprises two 4000m<sup>2</sup> buildings, which will house operations which will produce 480 000 tonnes of feed per annum. The 480 000 tonnes of feed will be made up of the following:

- Sunflower seeds 140 000 tons / annum;
- Soya 28 000 tons / annum;
- Chip mix 20 000 tons / annum;
- Cereals 12 000 tons / annum; and
- Wheat / maize 280 000 tons / annum.

The proposed development comprises the following:

Two sheds (4000m<sup>2</sup> each); and

Additional formalised roadways.

Design concepts of the farm buildings are presented in Appendix D.

## **WATER**

There is an established water connection on site, however it must be noted that the proposed development does not use water as part of the process. As the proposed development will result in 300 additional jobs (150 of these will be on site), there will be an increase in demand in terms of ablution facilities. In the past the established farm complex has employed over 300 people at one time, thus there are established ablution facility on site to cater for the employment associated with the proposed development. The farm has sufficient water permits in place (refer to Appendix E).

## **WASTE WATER**

The farm is on a septic tank and soak away system and, to date, there has been no issues associated with the functioning of this system. However a recommendation of this report is that this system be periodically checked.

## **ACCESS**

The proposed development site is accessed by a well-maintained gravel road which links directly to the R103.

It is proposed that a total of 12 cars/bakkies/light utility vehicles, 14 trucks (30 tons) and 13 taxis will access the site on a daily basis. The breakdown is as following: employees / clients / management reps / contractors (e.g. maintenance personal) - 25 car/bakkies/taxis; waste food delivery in - 7 trucks, and product out - 7 trucks. The operation is proposed to be 24/7.

Unskilled and semiskilled staff who will come to work via taxi will be dropped off where the driveway meets the R 103. It is estimated that 13 taxi round-trips will be made per day. There is ample room for taxis to safely park and unload people. As the increase in traffic is not deemed significant, a Traffic Impact Assessment / Comment has not been commissioned.

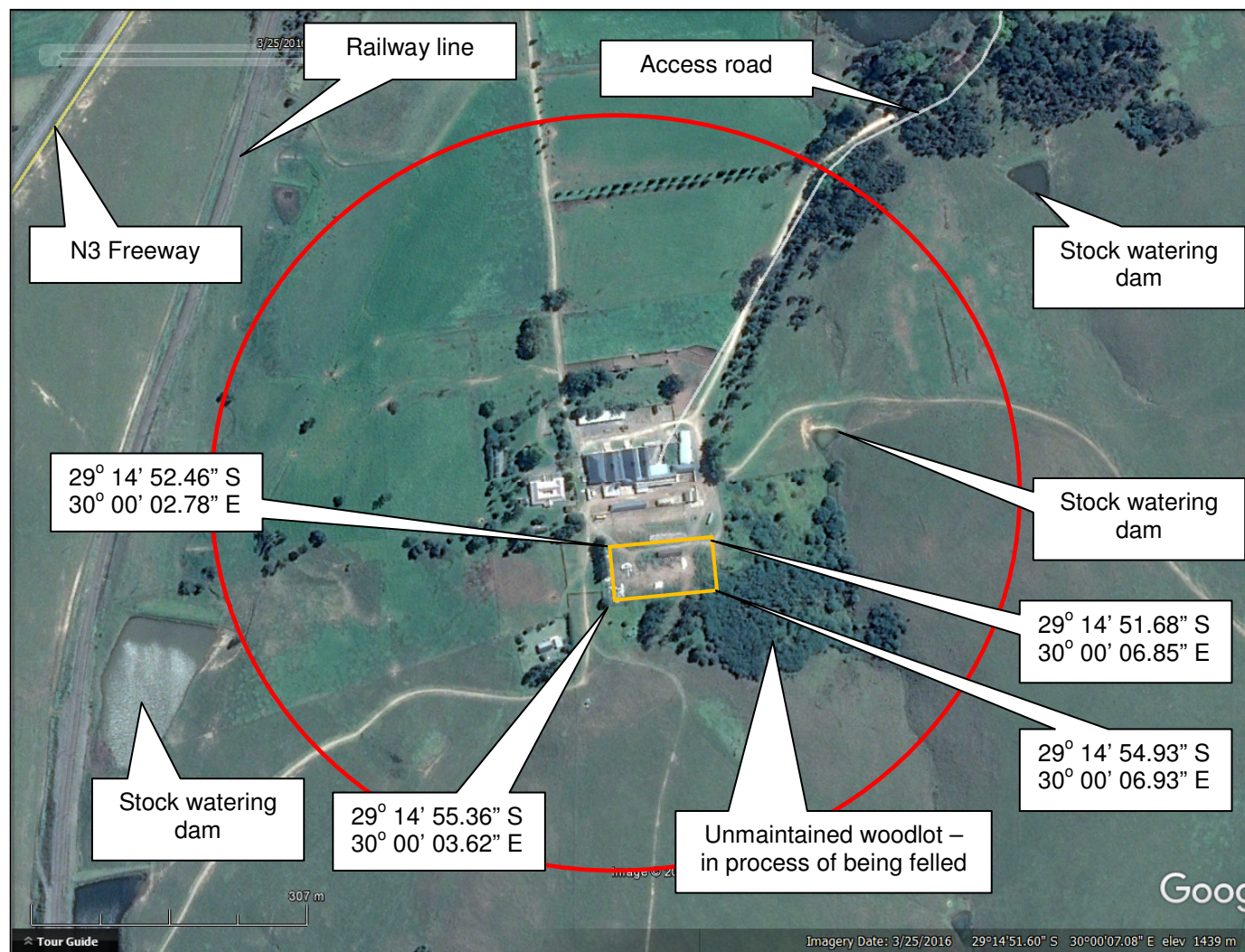
## **ELECTRICITY**

The site is connected to Eskom (150 KVA). The site also has a back-up diesel-powered generator (125 KVA). The Applicant has made application to Eskom to increase the power on site, as at full capacity the facility will require more than 150 KVA.

## **SOLID WASTE**

Any waste food material which spills during production will be returned back into the process. The process does not create waste food. Any waste food packaging, which is minimal, will be taken to the Mooi River landfill site either by a private contractor or by staff at the facility.

Figure 1 below shows the locality of the site. Plates 1 – 6 show photographs of the proposed development site.



**Figure 1:** Aerial map showing the established farm complex and GPS Coordinates of the corners of the proposed and preferred development site, along with surrounding land uses and sensitive areas (Google Earth). Red circle shows 500m boundary of centre of farming complex.





**Plate 1:** View towards established farm complex



**Plate 2:** View of old stone building



**Plate 3:** View towards established farm complex



**Plate 4:** View away from established farm complex



**Plate 5:** View towards established farm complex



**Plate 6:** View towards established farm complex

**Plates 1 – 6:** Photographs of the proposed development site.

## **2. NEED AND DESIRABILITY**

**Motivate and explain the need and desirability of the activity.**

The following section makes use of the Western Cape Department of Environmental Affairs and Development Planning (DEA&DP) Guideline on Need and Desirability (August 2011), as well as the DEA Basic Assessment template:

**1. Is the activity permitted in terms of the property's existing land use rights?**

No, the Applicant intends to make application to rezone the property from 'business' or obtain a user right for an agri-industrial activity, if or when a positive Environmental Authorisation is granted. To apply now would be pre-empting a positive Authorisation.

**2. Will the activity be in line with the Provincial Spatial Development Framework (PSDF)?**

Yes, the activity is in line with the Mpofana SDF. The SDF identifies Agriculture, tourism, industrial and other economic development as "development potentials" in the Municipality. Although the site falls outside of the Mooi River Town Planning Scheme, it is adjacent to an area zoned for agriculture in the SDF.

**3. Will the activity be in line with the Urban Edge / Edge of Built Environment for the area?**

Not applicable.

**4. Will the activity be in line with the Integrated Development Plan (IDP) and Spatial Development Framework (SDF) of the Local Municipality; would the approval of this application compromise the integrity of the existing approved and credible Municipal IDP and SDF?**

In terms of the uMgungundlovu Municipal IDP, Mooi River / Bruntville, New Hanover / Wartburg and Richmond are considered tertiary nodes. These are centres with lower potential for economic growth and a relatively high dependence on agriculture.

The Mpofana IDP / SDF have identified increased jobs through agro-processing industries as an opportunity in the Municipality.

The Mpofana Local Economic Development (LED) Strategic Plan, prepared in conjunction with uMgungundlovu District Municipality, states that the Mpofana Municipality must seize the opportunities in the agriculture and agri-process sector, nature based tourism and Box Four Farming with major training and retraining and mentoring opportunities in certain sectors, in order to increase economic growth. Special manufacturing and services opportunities, where advantages can be easily built, were identified as some of the key areas.

Thus the proposed development is in line with both the local and district IDPs.

**5. Will the activity be in line with an approved Structure Plan of the Municipality?**

Yes.

**6. Will the activity be in line with an Environmental Management Framework (EMF) adopted by the Department; would the approval of this application compromise the integrity of the existing environmental management priorities for the area and if so, can it be justified in terms of sustainability considerations?**

Not applicable.

**7. Will the activity be in line with any other plans (e.g. Guide Plan)?**

Not applicable.

**8. Is the land use (associated with the activity being applied for) considered within the timeframe intended by the existing approved SDF agreed to by the relevant environmental authority (i.e. is the proposed development in line with the projects and programmes identified as priorities within the credible IDP)?**

Yes, see above responses.

**9. Does the community/area need the activity and the associated land use concerned (is it a societal priority)? This refers to the strategic as well as local level (e.g. development is a national priority, but within a specific local context it could be inappropriate?).**

The feed mill will provide much needed employment to the surrounding community. The feed will be used for pigs, horses, beef and dairy cattle. The reuse and the adding of value to waste food is considered best practice. It is also a cost effective source of feed as it competes with any similar feed ration.

**10. Are the necessary services with adequate capacity currently available (at the time of application), or must additional capacity be created to cater for the development?**

All services are available onsite, however Eskom has been approached for additional power, as the facility requires more power when it is being operated at full capacity.

**11. Is this development provided for in the infrastructure planning of the Municipality, and if not, what will the implication be on the infrastructure planning of the municipality (priority and placement of services and opportunity costs)?**

Not applicable.

**12. Is this project part of a national programme to address an issue of national concern or**



**importance?**

The feed mill forms part of the Strategic Infrastructure Projects (SIPs) as described in the National Development Plan, 2011, which seeks to address agri-processing.

**13. Do location factors favour this land use (associated with the activity applied for) at this place? (This relates to the contextualisation of the proposed land use on this site within its broader context.)**

Yes, the feed mill is proposed to be located within an established farm complex.

**14. Is the development the best practicable environmental option for this land/site?**

Yes, please see above responses.

**15. Will the benefits of the proposed land use/development outweigh the negative impacts of it?**

Yes, provided the feed mill is operated in line with the conditions contained within the Environmental Authorisation and WML, the EMPr and the recommendation contained within this Report.

**16. Will the proposed land use/development set a precedent for similar activities in the area (local municipality)?**

No.

**17. Will any person's rights be negatively affected by the proposed activity/ies?**

Not applicable.

**18. Will the proposed activity/ies contribute to any of the 18 Strategic Integrated Projects (SIPS)?**

| <b>Strategic Integrated Projects</b>  | <b>X = yes</b> |
|---|----------------|
| Green economy + "Green" and energy-saving industries  |                |
| Infrastructure – electricity (generation, transmission & distribution)                            |                |
| Biofuels  |                |
| Basic services (local government) – electricity and electrification                               |                |
| Basic services (local government) – area lighting   |                |
| Infrastructure – transport (roads, land strips)   |                |
| Basic services (local government access roads)  |                |
| Basic services (local government) – public transport  |                |
| Infrastructure – water (bulk and reticulation)  |                |
| Basic services (local government) – sanitation  |                |
| Basic services (local government) – waste management  |                |
| Agricultural value chain + agro-processing (linked to food security and food pricing imperatives) | <b>X</b>       |
| Infrastructure – information and communication technology   |                |
| Tourism + strengthening linkages between cultural industries and tourism                          |                |
| Basic services (local government) – public open spaces and recreational facilities                |                |

**19. What will the benefits be to society in general and to the local communities?**

The new facility will provide 300 employment opportunities, which in turn will improve the quality of life

of the surrounding community. In Rural KZN one job supports seven dependents, thus as additional 7100 people will benefit from this facility.

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

It is proposed that waste foods will be used to make animal feed. This aids in the utilisation of waste food that would otherwise have been disposed of to landfill. In addition, it creates a cost effective feed source for the farming industry; farmers thereby benefit from this high calorific feed.

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

The facility addresses Point 1 of the National Development Plan for 2030, through the the creation of job opportunities.

|   |          |
|---|----------|
| <b>1. Unemployment</b>  | <b>X</b> |
| 2. The quality of school education for black people is poor           |          |
| 3. Infrastructure is poorly located, inadequate and under-maintained. |          |
| 4. Spatial divides hobble inclusive development.                      |          |
| 5. The economy is unsustainably resource intensive.                   |          |
| 6. The public health system cannot meet demand or sustain quality.    |          |
| 7. Public services are uneven and often of poor quality.              |          |
| 8. Corruption levels are high.  |          |
| 9. South Africa remains a divided society.                            |          |

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

This Basic Assessment Report covers all the objectives set out in Section 23 of NEMA. Refer to Section 8 of this Report.

### **3. ALTERNATIVES**

#### **3.1 “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 “do nothing” option of not implementing the activity:**

The new owners of the property have bought this property with the intention of expanding their feed mill activities, which are currently located in Merrivale. Due to the size of the property they rent at Merrivale, are unable to expand to meet the demand of their customers.

If the Applicant is not able to expand their facilities, the full potential of their operations will not be realised. There would be a lost opportunity for job creation and waste food recycling. Also, there is the possibility that if the Applicant cannot supply the quantity of food required, their clients may go elsewhere to larger feed stockists. This would result in job losses and possible closure if they cannot compete with larger feed mill supplies, who may be able to charge less for the feed, due to the scale of economics with running a larger operation.

**(b) The property on which or location where it is proposed to undertake the activity:**

As i) the Applicant owns the property on which the facility is proposed; ii) does not own any other properties in the area; and iii) their current site in Merrivale is rented and too small to cater for the expansion, the EAP is of the opinion that it would be a waste of resources to assess another property, as the costs involved with purchasing another property would make the venture economically unviable. In addition, as the EAP is of the opinion that the property on which they are proposing to establish the facility is well suited to the venture, not other properties have been investigated.

**(c) The type of activity to be undertaken:**

N/A. As the purpose of the Application is for the establishment of a feed mill – to meet demand.

**(d) The design or layout of the activity:**

Three sites have been suggested by the HIA Specialist for the proposed feed mill – refer to Figure 2 and Appendix C:

Site A – South west of existing buildings

Site B – South east of existing buildings

Site C – 30 m south of existing buildings

The Phase 2 HIA states that there would be no structural impacts with developing Site A or B. For Site C the specialist has positioned Site C 30m south of Farmstead. With this site the HIA has stated that the Applicant is required to obtain permission from Amafa KZN for the old stone farm building to be demolished or relocated.

Site A is not the preferred site, as the Applicant wishes to establish a new dairy on this site at a later date. For logistical reasons (i.e. positioning of dairy close to power source, there being sufficient natural gradient for parlour wash-down and slurry to feed into a lagoon, and access to existing paddocks) this is the preferred site for the establishment of a dairy, and not a feed mill, which does not need natural gradient. The other two sites (B and C) are further from the power supply, and do not have the gradient for a slurry lagoon.

Site B features gum trees what are currently in the process of being removed. This site is too steep for construction, and is also too far from the power supply.

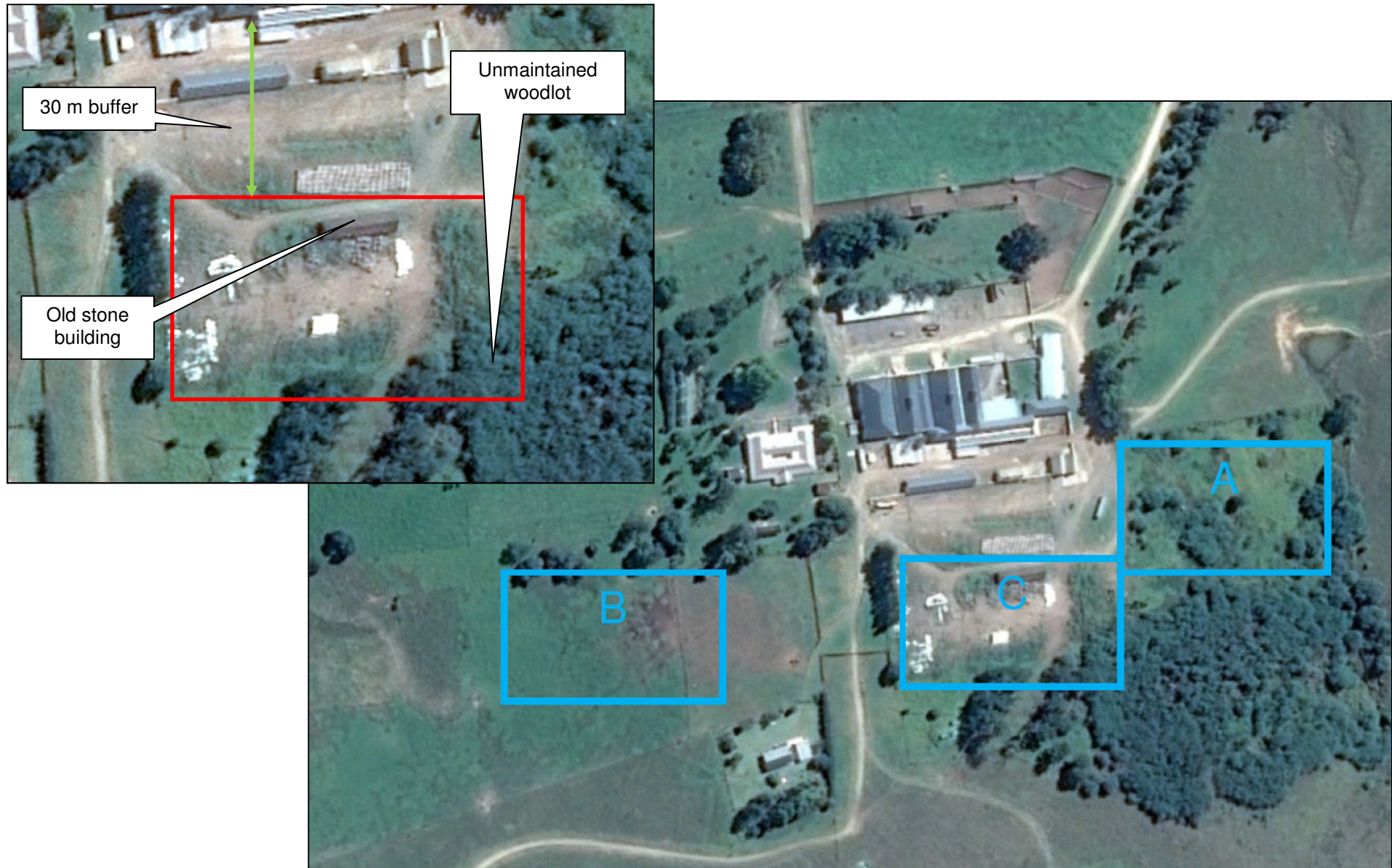
Thus, although Site C will require an application to Amafa KZN for the demolition and relocation of an old stone building, this is the preferred site for the facility. Although the use of this site does require an Amafa KZN Application, the site was suggested by the HIA Specialist, and thus is evidently supported by the specialist.

**(e) The technology to be used in the activity:**

N/A. The Applicant wishes to continue to use the existing tried and tested technology which they currently use at the Merrivale site – which is low tech, and comprises of sorting conveyors, mixers, bagging machines and silos.

**(f) The operational aspects of the activity:**

N/A. See above response (e).



**Figure 2:** Map showing alternative locations for the feed mill and zoom-in of preferred location – Site C.

## **4. PUBLIC PARTICIPATION PROCESS**

A Public Participation Process was undertaken according to Regulations 39 to 44 of the EIA Regulations as promulgated under the National Environmental Management Act (NEMA, Act 107 of 1998).

### **4.1 NOTIFICATION OF THE PROPOSED DEVELOPMENT**

An Application Form will be submitted to the Department of Economic Development, Tourism and Environmental Affairs (DEDTEA) with the Final Basic Assessment Report. The Waste Management Licence Application Form is included in Appendix B. The signed copy will be included in the Final Basic Assessment Report.

Notification of the Application was conducted through the publication of newspaper adverts (Appendix F) and placement of site notice boards (Appendix G). Adverts were published in the Witness and the Echo on 2 June 2016 to notify I&APs of the proposed development.

Notice boards were also placed on site to notify the local public of the development. Site Notice Boards (English and isiZulu) were placed on site and on access routes on 2 June 2016.

### **4.2 INTERESTED AND AFFECTED PARTIES**

A register of I&APs was compiled at the outset of the project. This includes names and contact details of Authorities, Government / Municipal Departments, NGOs, local interest groups and neighbouring landowners (Appendix H). The list of I&APs has been continually updated to include persons responding to the adverts and site notice boards.

### **4.3 BACKGROUND INFORMATION DOCUMENT**

Written notification in the form of Background Information Documents (BIDs) were circulated from 30 May 2016 (Appendix I). These BID's were circulated by e-mail, post, fax or hand delivery to relevant authorities.

Comments received following circulation of the BIDs, adverts in the newspapers and the displaying of site posters and are summarised and responded to in Table 1, below (Appendix J).

### **4.4 PUBLIC INFORMATION SESSION**

A Public Information Session was held as part of the process on 23<sup>rd</sup> August 2016. Documents relevant to this meeting are presented in Appendix K.

Comments received following this Public Information Session are also included in Table 1.

**Table 1:** Comments received following the newspaper adverts, placing of site notice boards, circulation of the BID and Public Information Session

| <b>I&amp;AP</b>                                | <b>COMMENT</b>  | <b>RESPONSE</b>  |
|--|---|--|
| Michelle Nicol<br>Eskom<br>31 May 2016         | <ul style="list-style-type: none"> <li>I have forwarded a copy of this to Mr Moore in Pietermaritzburg for input and assistance. One of us will send a reply in due course. As can be seen from the attached GIS:-</li> <li>There is a 11kV powerline running close to where your co -ordinates fall, so applicant may have to ask for and pay, to have the powerline moved.</li> <li>I need the building distances checked from where your proposed build ings will be, to where the edge of the servitude for the Colenso- Gowrie Line 1, is.</li> <li>Our further correspondence, will follow in due course.</li> </ul>  | <ul style="list-style-type: none"> <li>Noted.</li> <li>The preferred site is different to the site shown in the BID. The new site is further away from the 11kV powerline.</li> <li>See above</li> <li>Noted.</li> </ul>   |
| Roland Moore<br>Eskom<br>31 May 2016           | <ul style="list-style-type: none"> <li>Eskom has no objection to the proposed Feed Mill provided that no buildings or structures are closer than 12 m from the power line and no materials are to be stored under or near the line. No mechanical equipment, including mechanical excavators or high lifting machinery, shall be used in the vicinity of Eskom's apparatus and/or services, without prior permission having been granted by Eskom. If such permission is granted the applicant must give at least seven working days prior notice of the commencement of any work. This allows time for the arrangements to be made for supervision and/or precautionary instructions to be issued.</li> </ul>  | <ul style="list-style-type: none"> <li>Noted. See above response.</li> </ul>   |
| Nandipha<br>Sontangane<br>DAFF<br>13 June 2016 | <ul style="list-style-type: none"> <li>The proposed site comprises of existing structures, which will be demolished and replaced with the proposed development. There are no natural forests and / or protected trees that will negatively be impacts upon as confirmed by the consultant. Thus DAFF has no objection towards the proposed development.</li> </ul>  | <ul style="list-style-type: none"> <li>Noted.</li> </ul>   |
| Antonia<br>Steenkamp<br>6 June 2016<br>DWS     | <ul style="list-style-type: none"> <li>The Applicant is advised to provide this department with a clear and legible topographical map of the proposed site. This map should identify any environmentally sensitive areas, water resources (such as rivers, streams and wetlands), and the 1:50 and 1:100 year floodline.</li> <li>Although it is indicated in the BID that water connections are available, the Applicant must note that in the event that water is abstracted from the watercourse, a WULA is required (Section 21 (a). However should the Applicant obtain water from the local municipality, then an indication of the specific municipality and service level agreements must be made available to this Department. It is also important to indicate the exact quantity and quality of water that will be sourced for the proposed development.</li> <li>It is the responsibility of the Applicant to identify all water uses application to the activity in terms of Section 21 of the NWA and to ensure that all applicable water uses are authorised as such.</li> </ul> | <ul style="list-style-type: none"> <li>Please refer to Figure 1.</li> <li>Refer to Appendix E for copies of current WUL permits.</li> <li>The Applicant has contracted Roy Mottram to apply for / amend all necessary WULA for the property - in general. However, it must be noted that the feed mill process does not require water. The only</li> </ul> |

| I&AP | COMMENT  | RESPONSE   |
|------|--|--|
|      | <ul style="list-style-type: none"> <li>• If the project proposes to engage in any water use that requires a WULA in terms of the NWA, then by default all other water use activities taking place on the property, irrespective if it would be regulated by a GA, would require to apply for an Integrated WULA. This is part of the integrated licensing process.</li> <li>• Please note that no person may use water unless permitted under the NWA. Should you engage in any water use activity without the necessary water authorisation, it will be regarded as an unlawful water use. You will thus be guilty of an offence and liable for a fine or imprisonment as stipulated in Section 151 of the NWA.</li> <li>• Solid waste Management</li> <li>• It is indicated in the BID that the facility proposes to crush waste foods and mix it with traditional animal feed in two 4000m<sup>2</sup> buildings. Therefore, the Applicant must note that a WML is required in terms of Cat. A Parts 2 and 3 of the NEM:WA. These activities are likely to have a detrimental Impact on the environment, as published in GNR 921. Cat A Part 2 states that a WML Application is required for 'sorting ....' Cat 3 states that a WML is required for 'the recycling ...'.</li> <li>• It is recommended that that a WML in terms of Cat. C part 1 is also applied for.</li> <li>• Should a Cat C Part 1 WML activity also be applied for, the Applicant must note that they must comply with the requirements and standards as set out in NEM:WA: National Norms and Standards For the Storage of Waste, as published in GNR 926 dated 29th Nov 2013 and Govt. Gaz. 37088.</li> <li>• With regards to Waste Management, the Applicant must ensure that: <ul style="list-style-type: none"> <li>○ The wastes obtained have been classified in accordance with the latest edition of the South African National Standards Globally Harmonized System of Classification and Labelling of Chemicals with the preceding 5 years;</li> <li>○ Any container or storage impoundment holding waste is labelled, or where labelling is not possible, records are kept. These records must reflect the dates on which waste was placed in the container for both the first and last time when the container was filled, closed, sealed or covered, as well as when, and quantities of, waste added and waste removed from containers or storage impoundments, if relevant. The aforementioned records must also reflect the specific category or categories of waste in the container or storage impoundment as identified in terms of the National Waste Information Regulations, 2012 and classification of the waste; and</li> <li>○ Waste is not stored for more than 18 month from the date of receipt from the waste generator.</li> </ul> </li> <li>• In the event that the Applicant will personally transport the waste, the Applicant, in their</li> </ul> | <p>additional water, which is indirectly related to the activity, is an increase in ablutions as a result of additional staff on the property.</p> <ul style="list-style-type: none"> <li>• See above response. Roy Mottram is dealing with all WULA issues for the property in general.</li> <li>• Noted. See above responses.</li> <li>• Noted.</li> <li>• Noted. As detailed in the BID, this Application is for a WML.</li> <li>• This has been added to application.</li> <li>• This has been included as a recommendation of the WML.</li> <li>• Noted.</li> <li>• This is a recommendation of this report.</li> <li>• This is a recommendation of this report.</li> <li>• This is a recommendation of this report.</li> <li>• This is a recommendation of this report.</li> <li>• This is a recommendation of this report.</li> </ul> |



| I&AP | COMMENT  | RESPONSE  |
|------|--|---|
|      | <p>capacity as the Waste Transporter, must ensure that the wastes they obtain have been classified in accordance with the latest edition of the South African National Standard Globally Harmonized System of Classification and Labelling of Chemicals within the preceding 5 years.</p> <ul style="list-style-type: none"> <li>• It is important to note that should the Applicant not comply with these regulations or provide incorrect or misleading information in any record or document required or submitted in terms of these regulations, they will be guilty of an offence and liable for a fine or imprisonment as stipulated on Section 13 of the NEM:WA Waste classification and Management Regulations as published in GNR 634 dated 23 August 2013 in Govt. Gaz. No. 36784.</li> <li>• The requirements of this Department with respect to solid waste must be strictly enforced and complied with.</li> <li>• If solid waste will be generated during the construction, initial or operational phase, it is important that the Applicant indicates where such waste will be disposed of. Safe disposal certificates must be kept on record and made available to this Department when required.</li> <li>• The Applicant should note that contaminated soil or other hazardous material must be disposed of at a permitted hazardous landfill site that is authorized to accept the said material and proof of this must be made available to this Department when required.</li> <li>• Should private contractors be used, all solid waste must be disposed of at a permitted landfill site and proof of this must be made available to this Department when required.</li> <li>• Such waste must be kept in bins or skips, which must be stored in a designated storage or collection area prior to being safely disposed of and must not cause any surface and groundwater pollution, or pose any health hazard.</li> </ul> | <p>report.</p> <ul style="list-style-type: none"> <li>• Noted.</li> <li>• Noted.</li> <li>• Solid waste which cannot be recycled will be removed and taken to the Mooi River landfill site by either the facility owner, or by a contractor. Proof of delivery will be kept on file. The amount of unrecyclable waste is expected to be minimal. Waste which can be recycled will be taken to or collected by Wildlands or similar.</li> <li>• Noted. The process will not directly create hazardous waste.</li> <li>• Noted. See above.</li> <li>• Paper, plastic and cardboard waste will be directly created by the proposed process, however this will be minimal as main waste cereal etc will arrive in trucks with no packaging. The above listed waste types will be sent for recycling. The only waste for landfill will be domestic food wastes, from the workforce. Waste food will be kept in bins, until there is a sufficient amount to transport to the landfill site. Recyclable waste will be kept in</li> </ul> |

| I&AP | COMMENT   | RESPONSE   |
|------|---|--|
|      | <ul style="list-style-type: none"> <li>• The recycling of suitable material is encouraged by this Department, provided it is properly managed.</li> <li>• Sewage and Wastewater Management</li> <li>• Washing, refuelling, maintaining of vehicles or the transfer of hazardous substances must be conducted within a bunded area. All drainage arising from the bunded area must be treated as a water containing waste and disposed of safely.</li> <li>• The use of any ablution facilities must not cause any pollution to water sources or pose a health hazard. In addition, these toilets must not be situated within 100 m from a watercourse or within the 1:100 yfl (whichever is greatest). Furthermore, no form of secondary pollution should arise from the disposal of refuse or sewage from the toilets. Any pollution problems arising from the above are to be addressed immediately by the Applicant.</li> <li>• The following is applicable should small volumes of wastewater be generated during the construction phase: <ul style="list-style-type: none"> <li>○ Water containing waste must not be discharged into the natural environment; and</li> <li>○ Measures to contain the water containing waste and safely disposal thereof must be implemented.</li> </ul> </li> <li>• It is imperative that there is proper management of stormwater at the project site. A Stormwater management plan must therefore be drawn up and adhered to.</li> <li>• The Engineer or Contractor must ensure that only clean stormwater runoff enters the environment.</li> <li>• Drainage must be controlled to ensure that runoff from the project area does not culminate on off-set pollution, flooding or result in any damage to properties downstream of any stormwater discharge points(s).</li> <li>• Erosion control</li> <li>• Erosion control measures must be put in place to minimize erosion along the proposed construction areas. Extra precautions must be taken in areas where the soils are deemed highly erodible.</li> <li>• Soil erosion onsite must be prevented at all times, i.e. pre-, during- and post. Construction activities. Erosion control measures must be implemented in areas prone to erosion such as near water supply points, edges of slopes, etc. These measures could include the use of sand bags, hessian sheets, bidim, retention or replacement of vegetation.</li> <li>• Where the land has been disturbed during construction it must be re-habilitated and re-vegetated back to an acceptable state after construction.</li> <li>• Stockpiling of soil or any other materials used during the construction phase must not be</li> </ul> | <p>skips until there is sufficient amounts to be collected by Wildlands or delivered to or similar.</p> <ul style="list-style-type: none"> <li>• Noted. See above.</li> <li>• Noted.</li> <li>• Noted. This is a recommendation of this report.</li> <li>• Noted. Only formal toilets will be used. There is no need for chemical toilets.</li> <li>• Noted.</li> <li>• Noted. This is a recommendation of this report.</li> <li>• Noted. This is a recommendation of this report.</li> <li>• Noted. This is a recommendation of this report.</li> <li>• Noted. This is a recommendation of this report.</li> <li>• Noted. This is a recommendation of this report.</li> <li>• Noted.</li> <li>• Erosion control measures are included in the EMPr.</li> <li>• Erosion control measures are included in the EMPr.</li> <li>• Erosion control measures are included in the EMPr.</li> <li>• Erosion control measures are included in the EMPr.</li> </ul> |

| I&AP | COMMENT   | RESPONSE  |
|------|---|---|
|      | <p>allowed on or near steep slopes, near a watercourse or water body. This is to prevent pollution or the impediment of surface run-off. The Applicant must control and establish suitable mitigation measures to prevent the erosion of stockpiles.</p> <ul style="list-style-type: none"> <li>• Spillages Management</li> <li>• There must be no unacceptable impact on the quality of both surface and groundwater in the area. If pollution of any surface or groundwater occurs, it must be immediately reported to this Department and the appropriate mitigation measures must be employed. In addition, should the proposed development impact on any groundwater and/or surface after use, then water of equal quantity and quality must be proposed to the affected users.</li> <li>• Storage of material, chemicals, fuels etc. must not pose a risk to the surrounding environment, and this includes surface and groundwater. Temporary bunds must also be constructed around chemical or fuel storage areas to contain possible spillages. Such storage areas must be located outside the 1:100 yfl of the water source and must be fenced to prevent unauthorised access into the area.</li> <li>• It is important that any significant spillage of chemical, fuels, etc. during the construction phase and/or operation phase is reported to this Office and other relevant authorities. In the event of a spill, the following steps can be taken: <ul style="list-style-type: none"> <li>○ Stop the source of the spill;</li> <li>○ Contain the spill;</li> <li>○ All significant spills must be reported to this Department and other relevant authorities;</li> <li>○ Remove the spilled product for treatment and authorised disposal;</li> <li>○ Determine if there is any soil, groundwater or other environmental impact; and</li> <li>○ If necessary, remedial action must be taken in consultation with this Department, incident must be documented.</li> </ul> </li> <li>• General</li> <li>• No form of secondary pollution should arise from the disposal of sewage and refuse. The contractor must be clearly briefed on the method of disposal of such waste and compliance must be ensured / monitored. Any pollution problems arising from the above project is to be addressed immediately by the Applicant.</li> <li>• This department acknowledges and emphasises the commitment that an EMPr will be compiled to facilitate the implementation of mitigation measures. It is important that the EMPr outlines the responsibilities of everyone involved on the Project with regards to how negative environmental impacts will be managed, rehabilitated or monitored and how positive impacts will be maximised. All aspects of construction and operation should be considered, i.e. mitigation measures should be considered and implemented for the planning and design phase, the establishment phase, the operational phase and the rehabilitation phase.</li> <li>• This office reserves the right to inspect the site without prior notice in order to ensure that its requirements, as mentioned above, are adhered to. Should any problems be noted,</li> </ul> | <p>included in the EMPr.</p> <ul style="list-style-type: none"> <li>• Noted.</li> <li>• Noted.</li> <li>• This is addressed in the EMPr.</li> <li>• Noted. This is included in the EMPr.</li> <li>• Noted.</li> <li>• Noted.</li> <li>• The EMPr addresses this.</li> <li>• Noted.</li> </ul> |

| I&AP | COMMENT  | RESPONSE  |
|------|--|---|
|      | <p>measures must be undertaken immediately to rectify the situation.</p> <ul style="list-style-type: none"><li>• This Department reserves the right to revise / withdraw these comments and request further information from the applicant should any other information that contradicts the above comes to light.</li><li>• Notwithstanding the above, the responsibility rests with the Applicant to identify all sources or potential sources of pollution from his undertaking and to take appropriate measures to prevent any pollution of the environment. Failure to comply with the requirements of the NWA could lead to legal action being instated against the Applicant.</li></ul> | <ul style="list-style-type: none"><li>• Noted.</li><li>• Noted.</li></ul> |

#### **4.5 SUMMARY OF ISSUES RAISED**

The main issues which were raised following the newspaper adverts, placing of site notice boards, circulation of the BID and the Public Information Session include:

- Proximity to established Eskom power lines;
- The need to ensure that stockpiling of material etc. does not occur under any Eskom power lines;
- The need to comply with current Waste Management Norms and Standards, Classification and Labelling procedures and systems;
- Waste Management;
- Sewage and Wastewater Management;
- Stormwater management;
- Spillages Management; and
- Erosion control measures.

#### **4.6 CIRCULATION OF THE DRAFT BASIC ASSESSMENT REPORT (DBAR)**

Copies of this Draft Basic Assessment Report have been circulated to the following I&APs for review and comment:

- Dominic Wieners – Ezemvelo KZN Wildlife
- Weziwe Tshabalala – Amafa Heritage KZN
- Strini Govender – Department of Water and Sanitation
- Nonhlanhla Myeni – Department of Agriculture
- Mandisa Khomo – uMgungundlovu District Municipality
- Michele Schmid – Department of Transport
- Municipal Manager – Mpofana Local Municipality
- Reka Kallicharan – DEDTEA
- Karen Moodley - DAFF
- Mooi Rivers Farmers Association

A copy has also been made available for viewing at the Greenfields office.

Comments received following circulation of DBAR will be summarised and responded to in Table 2, which will be completed as part of the Final Basic Assessment Report.

**Table 2:** Comments received following the circulation of the DBAR

| <b>I&amp;AP</b>                                      | <b>COMMENT</b> | <b>RESPONSE</b> |
|--|----------------|-----------------|
| To be completed in the Final Basic Assessment Report |                |                 |

## **5. POTENTIAL IMPACTS ON THE SOCIAL AND ECONOMIC ENVIRONMENTS**

### **5.1 LOCAL ECONOMY AND EMPLOYMENT OPPORTUNITIES**

#### **Description:**

Unemployment and poverty are serious issues in the Mooi River area. There are many informal residences and educational and skills levels in the area are relatively low.

#### **Implication / Risk / Impact:**

If approved the facility will provide much needed employment opportunities for the surrounding residents/community. The feed mill will create approximately 300 jobs, 150 of these will be on site. A significant level of skills transfer will take place for the employees. This will further uplift the employees, as well as the community. In KwaZulu-Natal one employee has seven dependents. Thus the 2100 jobs provided by the proposed development.

#### **Mitigation / Recommendations:**

When and if required, local businesses and unemployed people in the immediate area must be considered first, before employing labour and services from further afield.

### **5.2 NEED AND DESIRABILITY**

#### **Description:**

The proposed activity will allow income generation and job opportunities for the surrounding communities. A significant level of skills transfer will take place for the staff. This will further uplift the local community.

The feed mill will use waste foods (e.g. waste potato chips, breakfast cereal etc) collected from food production and packaging enterprises to mix with animal feed. The feed is used for pigs, horses, beef and dairy cattle. Instead of the waste foods being disposed of (at a landfill site) and wasted, it will be used to bulk out the crop feed. The waste food is high in calories which will help in maintaining the animal's overall condition.

#### **Implication / Risk / Impact:**

- Job creation and skills training.
- Reduction in waste food going to landfill.
- Calorific animal feed.
- Reduction of environmental impacts associated with the disposal of waste food.

#### **Mitigation / Recommendations:**

- Local businesses and people must be employed before sourcing skills and materials from further afield.

### **5.3 PLANNING INITIATIVES**

#### **National Spatial Development Perspective (NSDP)**

The Policy Co-ordination and Advisory Services introduced a National Spatial Development Perspective (NSDP), which was then endorsed by the Cabinet in March 2003. The NSDP works in conjunction with different Departmental and Provincial spatial and development strategies. The four principles of the NSDP are as follows:

- Economic growth is a prerequisite for achievement of policy objectives;
- Government spending should concentrate on fixed investment, focusing on localities of economic growth and/or economic potential;
- Efforts to address the past and current inequalities should focus on people not on places; and
- To overcome spatial distortions of apartheid, future settlement and economic development opportunities should be channelled into nodes adjacent to the main growth centres.

In order to distinguish between localities, the NSDP uses two concepts as methodological tools, which are Potential and Poverty Gap. These two concepts will assist the NSDP in providing a coarse-grained analysis from a national perspective, which will be supplemented by a more finely, grained analysis at Provincial and Local Government level.

In defining potential, the NSDP has drawn on recent tradition of “institutional economics” a field that has come to dominate both developmental economics and regional planning. The institutional approach suggests that beyond the usual sources of comparative advantage, the institutional adequacy of a locality will help determine whether development is sustainable or not. The NSDP therefore uses concepts of potential that rely strongly on the presence of institutional capacity to realize the developmental impact of other resources.

In summary, the NSDP will have a role to play as an instrument that informs the respective development plans of the three spheres of government i.e. IDP, PGDS and the Medium Term strategic Framework (MTSF).

#### **Accelerated Services on Growth Initiative South Africa (ASGISA)**

The mandate was for government to halve poverty by 2016. To do this the country needs a growth rate of 5% on average. Because of backlogs in infrastructure, investment, inadequate planning, and in some cases, market structures that do not encourage competition, the price of moving goods and conveying services over distance is higher than it should be. In South Africa, which is a large country, with considerable concentration of production inland, and which is some distance from all major industrial markets, deficiencies in logistics are keenly felt. This is the main reason why beneficiation processes need to be encouraged in the development of the local economy and in close proximity to the areas where products are produced.



Those parts of the legacy of apartheid most difficult to unwind are the deliberately inferior system of education and the irrational patterns of population settlement. In a period of growth, it is evident that we lack sufficient skilled professionals, managers and artisans, and that the uneven quality of education remains a contributory factor. In addition the price of labour of the poor is pushed up by the fact that many live a great distance from their places of work.

Certain weaknesses in the way government is organised, in the capacity of key institutions, including some of those providing economic services, and insufficiently decisive leadership in policy development and implementation all negatively impact on the country's growth potential. Countering these constraints entails a series of decisive interventions. These interventions amount not to a shift in economic policy so much as a set of initiatives designed to achieve our objectives more effectively.

In developing responses to the binding constraints, certain measures to counter the constraints were developed:

- Macroeconomic issues;
- Infrastructure programmes;
- Sector investment strategies (or industrial strategies);
- Skills and education initiatives,
- Second economy interventions; and
- Public administration issues.

### **KZN Growth and Development Strategy (PGDS)**

Inequalities exist in our economy and there is a legacy of inequitable spatial development. This has had a negative impact on public sector investment as highlighted by the National Spatial Development Perspective (NSDP). This is evident in the lopsided economic and social costs for poor communities in locations far from employment and other opportunities. The PGDS is a vehicle to address the legacies of the apartheid space economy, to promote sustainable development and to ensure poverty eradication and employment creation.

Government has a mandate to restructure the process of development and service delivery in the province. This is to be achieved through the three spheres of government, the different government sectors and the various strategic frameworks. The key challenges it faces is to effectively align and harmonise these structures towards this end; and to harness and align fiscal, financial and human resources at its disposal towards eradicating poverty, creating employment and laying the foundations for accelerated economic growth.

The PGDS offers a tool through which provincial government can direct and articulate its strategy and similarly for local government to reflect the necessary human, financial and fiscal support it needs to achieve these outcomes. It facilitates proper coordination between different spheres of government and aims to prevent provincial departments from acting out of concert with local municipalities. It enables

intergovernmental alignment and guides activities of various role players and agencies (provincial sector departments, parastatals, district and local municipalities). The PGDS will enhance service delivery.

It is a framework for public and private sector investment, indicating areas of opportunities and development priorities. It addresses key issues of implementation blockages whilst providing strategic direction. The PGDS implies a developmental approach to government. This implies a pro-active and facilitative approach to development and not one based on formulating and applying regulations and restrictions. The PGDS on the one hand involves preparing policies, strategies and guidelines and on the other hand it involves preparing mechanisms to align and facilitate the implementation, monitoring and evaluation of key growth and development priorities.

### **Millennium Development Goals**

Looking ahead to 2017 and beyond, the Municipality believes they can achieve the overarching goal: to put an end to poverty.

The MDGs represent a global partnership that has grown from the commitments and targets established at the world summits of the 1990s. Responding to the world's main development challenges and to the calls of civil society, the MDGs promote poverty reduction, education, maternal health, gender equality, and aim at combating child mortality, AIDS and other diseases.

Set for the year 2017, the MDGs are an agreed set of goals that can be achieved if all actors work together and do their part. Poor countries have pledged to govern better, and invest in their people through health care and education. Rich countries have pledged to support them, through aid, debt relief, and fairer trade.

### **Alignment with Municipal Goals and Objectives**

In uMgungundlovu Pietermaritzburg serves as the main regional and sub-regional manufacturing centre and plays an important role in the manufacturing economies of the surrounding small towns, including those within Mpofana Municipality.

### **Implication / Risk / Impact:**

The proposed development complies with all of the above Planning Initiatives, most notably job creation and the provision of agricultural based manufacture.

### **Mitigation / Recommendations:**

None.

## **5.4 CULTURAL, HISTORICAL AND ARCHAEOLOGICAL RESOURCES**

### **Description**

Amafa KwaZulu-Natal, the authority responsible for the Province's heritage resources, has been notified via

the South African Heritage Resources Association (SAHRA) online application process, of the proposed activity(s).

**Implication / Risk / Impact:**

A Phase 2 Heritage Impact Assessment (HIA) has been conducted for the proposed development (Appendix C). The Phase 2 HIA identified the following farm structures, located within the main farmstead, which are over 60 years old, and are thus protected:

- Stable buildings 1893 (7 and 5 shown in Figure 3)
- Farm House ("The Manors House") & outbuildings 1893 (1, 2, 3 and 4 shown in Figure 3)
- Other farm buildings within the stone wall 1893-1900 (6, 8, 9 and 10 shown in Figure 3)
- Stone boundary wall 1893-1900 (shown in Figure 4)
- Cast iron gates & gate posts 1893-1900 (11 shown in Figure 3)
- Dry stack stone wall  $\pm$ 1900 (shown in Figure 4)

The other structures on the farm, which are not protected are:

- Farmhouse (A shown in Figure 4)
- Outbuilding (B shown in Figure 4)
- New roofs and workshops (C and D shown in Figure 4)
- Grove of trees

**Mitigation / Recommendations:**

The Phase 2 HIA recommended the following:

- The farmstead and farmhouse remains intact, within the original farm boundary walls.
- Dry stack walls should be retained where possible and not disturbed.
- Any new development of substantial area should be located at a distance away from the farmstead, so as not to overshadow or dominate the historic landscape.
- New types of industries that will involve heavy machinery or trucking should be considered on sites separate from the farmstead - there is clear evidence that the structures cannot withstand any disturbance, due to their age and construction.
- Major earthworks within the vicinity of the buildings are not recommended.
- The whole complex is in need of restoration and a suitable new use, i.e. no heavy machinery or heavy vehicles.
- New agricultural or industrial buildings are to be a minimum of 30 m away from any protected structure.
- Agriculture related activities and buildings are best suited to the immediate vicinity.
- Agriculture related industry sites should be determined by the following criteria:
  - a) The type of structure to be erected and the earthworks required for this;
  - b) The generation of movement or vibration while operational; and
  - c) The generation of traffic and type of vehicles.

The specialist assessed the three alternative sites using the above criteria (refer to Figure 2). The specialist concluded that there would be no structures impacted if site A or B were developed. In the case of site C, the specialist stated that a minimum of 30 m is required between this development footprint and the existing farm building, and that the Applicant would need to obtain permission from Amafa KZN for the old stone farm building to be demolished or relocated.

The Specialist concluded that development of other sites on the farm (outside of the area of study) will not impact on any heritage structures.

Amafa must be contacted if any heritage objects are identified. If any objects are identified, Amafa must be contacted immediately and all development must be halted until further notice. Amafa can be contacted on 033 – 394 6543.



**Figure 3:** Map showing farm structure, located within the main farmstead, which are over 60 years old, and are thus protected



**Figure 4:** Map showing other structures on the farm, which are not protected.

## 5.5 SURROUNDING LANDUSE AND AESTHETICS

### Description:

The feed mill is proposed to be located within an existing farming complex and established farm buildings are located to the north, south and west of the proposed development footprint.

### Implication / Risk / Impact:

Due to the location, there are no negative aesthetic impacts associated with the proposed feed mill.

### Mitigation / Recommendations:

- General housekeeping and waste management must be continuously maintained in an appropriate manner.

## **5.6 TRAFFIC, ROADS AND ACCESS**

### **Description:**

The proposed development site is accessed by a well-maintained gravel road which links directly to the R103. The turnoff to the farm is on the left, approximately 2.8km south of Mooi River Engine Truck stop.

It is proposed that a total of 12 cars/bakkies/light utility vehicles, 14 trucks (30 tons) and 13 taxis will access the site on a daily basis. The breakdown is as following: employees / clients / management reps / contractors (e.g. maintenance personal) - 25 car/bakkies/taxis; waste food delivery in - 7 trucks, and product out - 7 trucks. The operation is proposed to be 24/7.

Unskilled and semiskilled staff who will come to work via taxi will be dropped off where the driveway meets the R 103. It is estimated that 13 taxi round-trips will be made per day. There is ample room for taxis to safely park and unload people. As the increase in traffic is not deemed significant, a Traffic Impact Assessment / Comment has not been commissioned.

### **Implication / Risk / Impact:**

Accelerated deterioration of the access road due to increased use.

### **Mitigation / Recommendations:**

- Vehicles accessing the properties must be driven cautiously within the required speed limits.
- It is recommended that warning signage be erected to warn motorists of slow-moving vehicles and the access point.
- The access road must be regularly maintained.

## **5.7 NOISE AND DUST NUISANCES**

### **Description:**

The feed mill is proposed to be located within an existing farm complex where noise and dust nuisances are expected. The mill proposes to run 24 hours an day, seven days a week.

### **Implication / Risk / Impact:**

The production of noise and dust from both construction and operational activities will not negatively impact upon neighbouring landowners, as the feed mill is proposed to be located a significant distance from neighbouring landowners.

### **Mitigation / Recommendations:**

- Machinery and equipment must be maintained and regularly serviced to ensure that unnecessary noise is prevented. Workers on site must not create unnecessary noise such as hooting or shouting.
- Any dust from the facility must be managed in an efficient and environmentally sensitive manner.
- All machinery is to be fitted with dust bags to avoid dust nuisances.

## 5.8 SECURITY

### Description:

There will be a 24 hour guard stationed at the entrance to the facility. CCTV cameras will also be established prior to operation. The greater farming complex is fenced.

### Implication / Risk / Impact:

Potential exists for labourers to trespass onto adjoining properties. Crime in the area could increase as a result of criminals posing as people seeking employment on the site.

### Mitigation / Recommendations:

- All labourers must remain within the boundaries of the property at all times.
- Access onto and off the site must be controlled by a register system. This includes visitors.
- All restricted areas of the feed mill must be designated with appropriate warning signs.

## 6. POTENTIAL IMPACTS ON THE BIOPHYSICAL ENVIRONMENT

### 6.1 TOPOGRAPHY

#### Description:

Indicate the general gradient of the site:

|      |                |                |             |                 |             |                  |
|------|----------------|----------------|-------------|-----------------|-------------|------------------|
| Flat | 1:50 –<br>1:20 | 1:20 –<br>1:15 | 1:15 – 1:10 | 1:10 –<br>1:7,5 | 1:7,5 – 1:5 | Steeper than 1:5 |
|------|----------------|----------------|-------------|-----------------|-------------|------------------|

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

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

Ground Cover:

|   |  |  |  |           |
|---|--|--|--|-----------|
| Natural veld -<br>good condition <sup>E</sup> | Natural veld with<br>scattered aliens <sup>E</sup> | Natural veld with<br>heavy alien<br>infestation <sup>E</sup> | Veld dominated<br>by alien<br>species <sup>E</sup> | Gardens   |
| Sport field                                   | Cultivated land                                    | Paved surface  | Building or<br>other structure                     | Bare soil |

### Implication / Risk / Impact:

None.

### Mitigation / Recommendations:

- None.

## **6.2 CLIMATE**

### **Description:**

Mean Annual Precipitation and Temperature in KZN are illustrated in Figures 5 and 6.



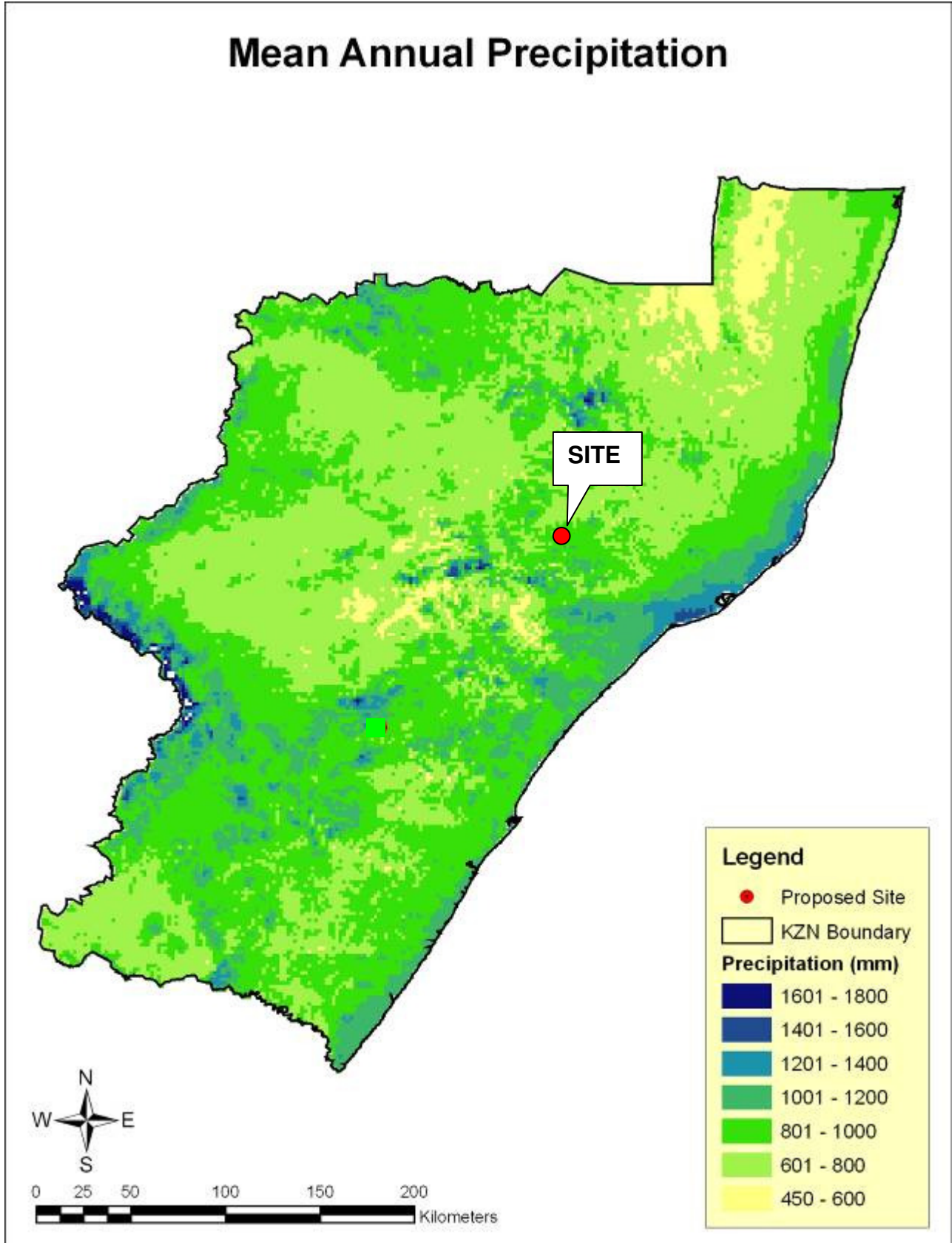
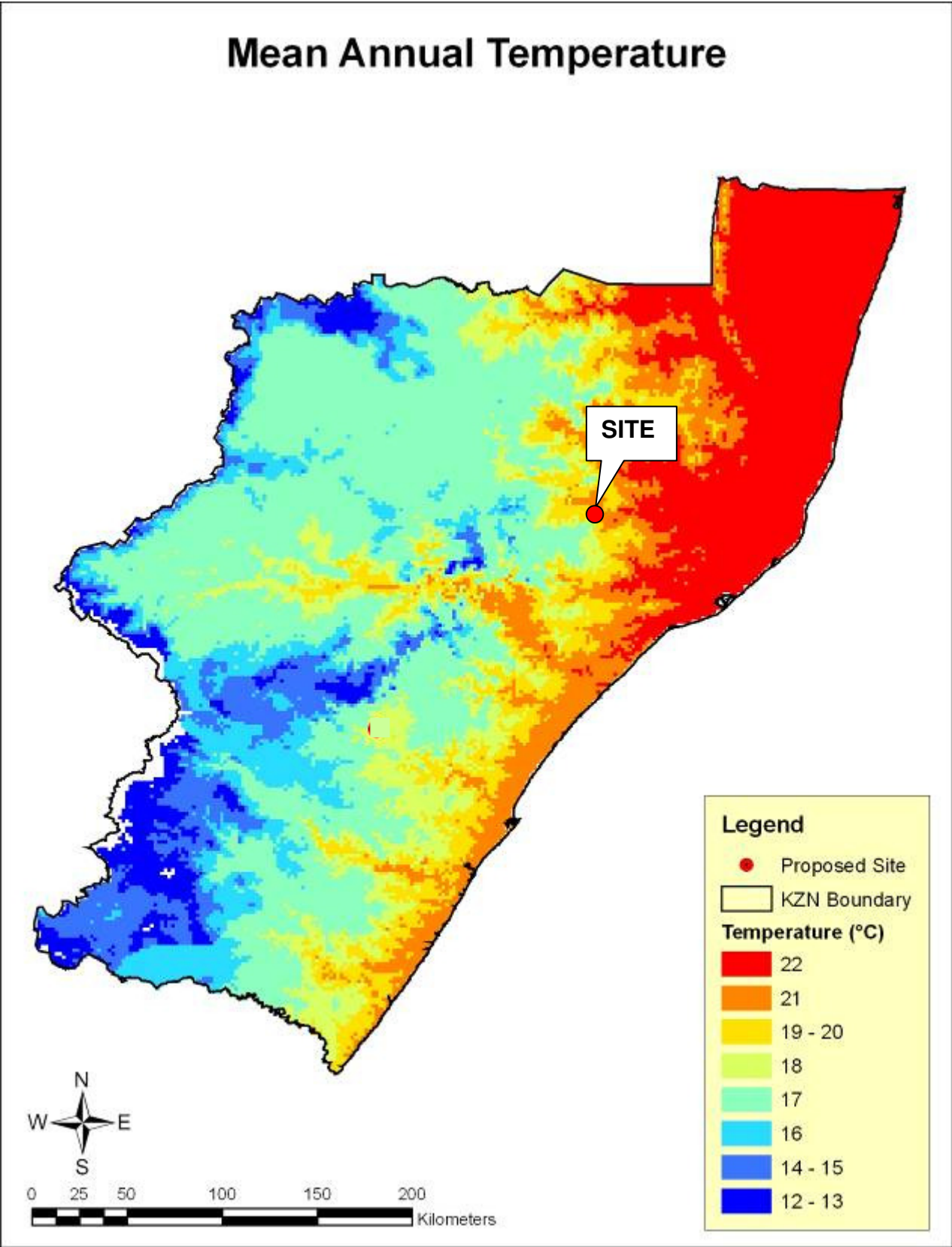


Figure 5: Mean Annual Precipitation for KwaZulu-Natal



**Figure 6:** Mean Annual Temperature for KwaZulu-Natal

**Implication / Risk / Impact:**

Potential exists for high intensity rainstorm events to cause erosion and possible flooding at the facility.

**Mitigation / Recommendations:**

- Appropriate stormwater management must be maintained at the facility.

### **6.3 GEOLOGY AND SOILS**

**Description:**

Not applicable, the feed mill is proposed to be located between two existing structures which have been established for many years. Thus it is evident that the soils are suitable for construction activities.

**Implication / Risk / Impact:**

None.

**Mitigation / Recommendations:**

None.

### **6.4 RIVERS AND WETLANDS**

**Description:**

There are no rivers or wetlands in close proximity to the proposed development site.

**Implication / Risk / Impact:**

None.

**Mitigation / Recommendations:**

None.

### **6.5 GROUND AND SURFACE WATER**

**Description:**

Ground water will not be impacted by the proposed feed mill – there are no natural drainage line in close proximity to the proposed footprint. Potential exists for surface stormwater to negatively impact the facility if not correctly managed.

**Implication / Risk / Impact:**

Potential exists for high intensity rainstorm events to cause erosion and possible flooding at the facility.

**Mitigation / Recommendations:**

- Appropriate stormwater management must be implemented and maintained at the facility.

## **6.6 AIR QUALITY AND SURFACE WIND**

**Description:**

The site is located in an agricultural area where the air quality is generally considered to be good.

**Implication / Risk / Impact:**

Potential exists for dust to be created during the construction and operational phases. However it is unlikely to impact negatively on surrounding landowners as they are located a great distance from the facility.

**Mitigation / Recommendations:**

- All vehicles should comply with speed limits on the access roads. Vehicles and equipment should be properly maintained and regularly serviced to ensure that exhaust emissions are controlled.
- Measures must be implemented and maintained in order to minimise the creation of dust during the feed mixing process and construction. It is recommended that dust suppression measures should be implemented (e.g. dampening) if and when required during all phases of the development.

## **6.7 VEGETATION**

**Description:**

The property on which the feed mill is proposed does not have any vegetation of biodiversity significance occurring on it. The preferred property features an unmaintained woodlot, which has expanded overtime.

**Implication / Risk / Impact:**

Potential exists for alien vegetation to establish and infest the property if not properly managed.

**Mitigation / Recommendations:**

- Alien Vegetation Control Programme must be implemented.

## **6.8 FAUNA**

**Description:**

The property on which the feed mill is proposed does not have any faunal activity occurring on it.

**Implication / Risk / Impact:**

- None.

**Mitigation / Recommendations:**

- None.

## **7. SPECIALIST STUDIES: KEY FINDINGS AND RECOMMENDATIONS**

A Phase 2 Heritage Impact Assessment (HIA) was conducted for the proposed development. The Phase 2 HIA identified the following farm structures, located within the main farmstead, which are over 60 years old, and are thus protected:

- Stable buildings 1893
- Farm House ("The Manors House") & outbuildings 1893
- Other farm buildings within the stone wall 1893-1900
- Stone boundary wall 1893-1900
- Cast iron gates & gate posts 1893-1900
- Dry stack stone wall  $\pm$ 1900

The other structures on the farm, which are not protected are:

- Farmhouse
- Outbuilding
- New roofs and workshops
- Grove of trees

The Phase 2 HIA recommended the following:

- The farmstead and farmhouse remains intact, within the original farm boundary walls.
- Dry stack walls should be retained where possible and not disturbed.
- Any new development of substantial area should be located at a distance away from the farmstead, so as not to overshadow or dominate the historic landscape.
- New types of industries that will involve heavy machinery or trucking should be considered on sites separate from the farmstead - there is clear evidence that the structures cannot withstand any disturbance, due to their age and construction.
- Major earthworks within the vicinity of the buildings are not recommended.
- The whole complex is in need of restoration and a suitable new use, i.e. no heavy machinery or heavy vehicles.
- New agricultural or industrial buildings are to be a minimum of 30 m away from any protected structure.
- Agriculture related activities and buildings are best suited to the immediate vicinity.
- Agriculture related industry sites should be determined by the following criteria:
  - a) The type of structure to be erected and the earthworks required for this;
  - b) The generation of movement or vibration while operational; and
  - c) The generation of traffic and type of vehicles.

The specialist assessed the three alternative sites using the above criteria (refer to Figure 2). The specialist concluded that site there would be no structures impacts if site A or B were developed. In the case of site C, the specialist stated that a minimum of 30 m is required between this development footprint and the

existing farm building, and that the Applicant would need to obtain permission from Amafa KZN for the old stone farm building to be demolished or relocated.

The Specialist concluded that development of other sites on the farm (outside of the area of study) will not impact on any heritage structures.

## 8. ASSESSMENT OF ENVIRONMENTAL IMPACTS

In order to assess potential environmental issues associated with the proposed development, each aspect addressed in Section 5 and 6 have been given a qualitative rating in relation to its environmental impact (Table 3). Each aspect has been divided into a number of different classes, each of which has been assigned various criteria.

Where relevant, the following methods have been used to predict the characteristics of identified impacts:

- Professional judgement;
- Quantitative mathematical models;
- Experiments and physical models;
- Physical or visual simulations or maps (including GIS tools);
- Case studies; and
- Past experience.

**Table 3:** Summary of aspects used for assessing environmental impacts

| ASPECT   | CLASS           | CRITERIA   |
|--|-----------------|--|
| <b>NATURE OF IMPACT</b>                                  | Positive        | The impact on the environment will be positive.  |
|  | Negative        | The impact on the environment will be negative.  |
|  | Direct          | The impact is caused directly by the activity and generally occurs at the same time and at the place of the activity.  |
|  | Indirect        | The impact induces changes that may occur as a result of the activity.   |
|  | Cumulative      | The impact is a result from the incremental impact of the proposed activity on a common resource when added to the impacts of other past, present or reasonably foreseeable future activities. |
| <b>OCCURRENCE OF IMPACT</b>                              | Construction    | The impact will happen during construction.  |
|  | Operation       | The impact will happen during operation.   |
|  | Decommissioning | The impact will happen during decommissioning.   |
|  | Immediate       | The impact will happen immediately   |
|  | Delayed         | There will be a delay in the impact occurring.   |
| <b>PROBABILITY OF IMPACT OCCURRING (with mitigation)</b> | Definitely      | The impact will definitely occur even with mitigation (100%).  |
|  | Likely          | It is likely that the impact will occur (60%-99%).   |
|  | Fair            | There is a fair chance that the impact will occur (30% -59%).  |
|  | Unlikely        | It is unlikely that the impact will occur (0% - 29%)   |

|  |   |  |
|--|---|--|
| <b>REVERSIBILITY<br/>(with mitigation)</b>                   | Possible<br>Partly<br>Not possible                  | It is possible to reverse the impact.<br>It is partly possible to reverse the impact.<br>It is not possible to reverse the impact.   |
| <b>EXTENT OF<br/>IMPACT<br/>(with mitigation)</b>            | Site<br>Local<br>Provincial<br>National             | The impact will be limited to the site.<br>The impact will affect the local area (within a radius of 40km).<br>The impact will affect areas beyond the site but within the boundaries of KwaZulu-Natal.<br>The impact will affect areas beyond the Province but within the boundaries of South Africa. |
| <b>DURATION<br/>(with mitigation)</b>                        | Short-term<br>Medium-term<br>Long-term<br>Permanent | 0-5 years (construction phase).<br>5-40 years (construction and operation).<br>(>40 years).<br>Permanent damage to the environment.  |
| <b>SIGNIFICANCE<br/>OF IMPACT<br/>WITHOUT<br/>MITIGATION</b> | Low<br>Medium<br>High                               | Small impact / disturbance.<br>Moderate impact / disturbance expected.<br>Significant impact / disturbance expected.   |
| <b>SIGNIFICANCE<br/>OF IMPACT<br/>POST-<br/>MITIGATION</b>   | Low<br>Medium<br>High                               | Small impact / disturbance.<br>Moderate impact / disturbance expected.<br>Significant impact / disturbance expected.   |

Table 4 lists potential impacts associated with the proposed development, and details what mitigation measures should be taken to minimize these impacts.

**Table 4:** Assessment of potential impacts associated with the feed mill:

| DESCRIPTION OF IDENTIFIED ENVIRONMENTAL IMPACT |  | MITIGATION   | NATURE OF IMPACT    | DEGREE TO WHICH IMPACT CAN BE MITIGATED | PROBABILITY OF IMPACT OCCURRING |                 | REVERSIBILITY OF IMPACT |                 | EXTENT OF IMPACT                   |                 | DURATION OF IMPACT      |                 | SIGNIFICANCE OF IMPACT WITHOUT MITIGATION | SIGNIFICANCE OF IMPACT WITH MITIGATION |
|--|--|--|---------------------|---|---------------------------------|-----------------|-------------------------|-----------------|------------------------------------|-----------------|-------------------------|-----------------|---|--|
|  |  |  |                     |   | WITHOUT MITIGATION              | WITH MITIGATION | WITHOUT MITIGATION      | WITH MITIGATION | WITHOUT MITIGATION                 | WITH MITIGATION | WITHOUT MITIGATION      | WITH MITIGATION |   |  |
| LOCAL ECONOMY AND EMPLOYMENT OPPORTUNITIES     | <ul style="list-style-type: none"> <li>If approved the facility will provide much needed employment opportunities for the surrounding residents/community. The feed mill will create approximately 300 jobs, 150 of these will be on site. A significant level of skills transfer will take place for the employees. This will further uplift the employees, as well as the community. In KwaZulu-Natal one employee has seven dependents. Thus the 2100 jobs provided by the proposed development.</li> </ul> | <ul style="list-style-type: none"> <li>When and if required, local businesses and unemployed people in the immediate area must be considered first, before employing labour and services from further afield.</li> </ul> | Positive Cumulative | N/A                                     | Definite                        | -               | -                       | -               | Local and potentially provincially | -               | Short-term              | -               | High Positive                             | -                                      |
| NEED AND DESIRABILITY                          | <ul style="list-style-type: none"> <li>Job creation and skills training.</li> <li>Reduction in food wastage.</li> <li>Calorific cattle feed.</li> <li>Reduction of environmental impacts associated with food wastage and the disposal thereof.</li> </ul>   | <ul style="list-style-type: none"> <li>Local businesses and people must be employed before sourcing skills and materials from further afield.</li> </ul>   | Positive Direct     | -                                       | Definite                        | -               | -                       | -               | Local and potentially provincially | -               | Long-term Permanent     | -               | High Positive                             | -                                      |
| PLANNING INITIATIVES                           | <ul style="list-style-type: none"> <li>The proposed development complies with all of the identified Planning Initiatives, most notably job creation and the provision of agricultural based manufacture.</li> </ul>  | <ul style="list-style-type: none"> <li>None</li> </ul>   | Positive indirect   | -                                       | Definite                        | -               | -                       | -               | Local, provincial                  | -               | Medium-term & long-term | -               | High Positive                             | -                                      |



|                                    |  |   |            |               |        |          |              |          |              |              |           |           |      |        |
|------------------------------------|--|---|------------|---------------|--------|----------|--------------|----------|--------------|--------------|-----------|-----------|------|--------|
| CULTURAL AND HISTORICAL RESOURCES  | <ul style="list-style-type: none"> <li>A Phase 2 HIA was conducted. The HIA identified farm structures, located within the main farmstead, which are over 60 years old, and are thus protected, and also other structures on the farm, which are not protected.</li> </ul> | <p>The Phase 2 HIA recommended the following:</p> <ul style="list-style-type: none"> <li>The farmstead and farmhouse remains intact, within the original farm boundary walls.</li> <li>Dry stack walls should be retained where possible.</li> <li>Any new development of substantial area should be located at a distance away from the farmstead.</li> <li>New types of industries that will involve heavy machinery or trucking should be considered on sites separate from the farmstead.</li> <li>Major earthworks within the vicinity of the buildings are not recommended.</li> <li>The whole complex is in need of restoration and a suitable new use, i.e. no heavy machinery or heavy vehicles.</li> <li>New agricultural or industrial buildings are to be a minimum of 30 m away from any protected structure.</li> <li>Agriculture related activities and buildings are best suited to the immediate vicinity.</li> <li>Agriculture related industry sites should be determined by the following criteria:               <ol style="list-style-type: none"> <li>The type of structure to be erected and the earthworks required for this;</li> <li>The generation of movement or vibration while operational; and</li> <li>The generation of traffic and type of vehicles.</li> </ol> </li> </ul> <p>The specialist assessed the three alternative sites using the above criteria. The specialist concluded that there would be no structures impacted if site A or B were developed. In the case of site C, the specialist stated that a minimum of 30 m is required between this development footprint and the existing farm building, and that the Applicant would need to obtain permission from Amafa KZN for the old stone farm building to be demolished or relocated.</p> <p>The Specialist concluded that development of other sites on the farm (outside of the area of study) will not impact on any heritage structures. Amafa must be contacted if any heritage objects are identified.</p> | Neg Direct | Partly        | Likely | Likely   | Not Possible | Possible | Site & local | Site & local | Long-term | Long-term | High | Medium |
| SURROUNDING LANDUSE AND AESTHETICS | <ul style="list-style-type: none"> <li>Due to the location, there are no negative aesthetic impacts associated with the feed mill.</li> </ul>  | <ul style="list-style-type: none"> <li>General housekeeping and waste management must be continuously maintained in an appropriate manner.</li> </ul>   | Neg Direct | Highly likely | Likely | Unlikely | Not Possible | Possible | Site & local | Site & local | Long-term | -         | Low  | Low    |

|                           |   |  |                       |               |               |          |              |              |                                |       |                     |            |         |     |
|---------------------------|---|--|-----------------------|---------------|---------------|----------|--------------|--------------|--------------------------------|-------|---------------------|------------|---------|-----|
| TRAFFIC, ROADS AND ACCESS | <ul style="list-style-type: none"> <li>Accelerated deterioration of the access road due to increased use.</li> </ul>  | <ul style="list-style-type: none"> <li>Vehicles accessing the properties must be driven cautiously within the required speed limits.</li> <li>It is recommended that warning signage be erected to warn motorists of slow-moving vehicles and the access point.</li> <li>The access road must be regularly maintained.</li> </ul>  | Neg Direct            | Partly        | Definite      | Unlikely | Possible     | Not possible | Local                          | Local | Short term          | Short term | Low     | Low |
| NOISE AND DUST NUISANCE   | <ul style="list-style-type: none"> <li>The production of noise and dust from both construction and operational activities will not negatively impact upon neighbouring landowners, as the feed mill is proposed to be located a significant distance from neighbouring landowners.</li> </ul> | <ul style="list-style-type: none"> <li>Machinery and equipment must be maintained and regularly serviced to ensure that unnecessary noise is prevented. Workers on site must not create unnecessary noise such as hooting or shouting.</li> <li>Any dust from the facility must be managed in an efficient and environmentally sensitive manner.</li> <li>All machinery is to be fitted with dust bags to avoid dust nuisances.</li> </ul> | Neg Direct            | Highly Likely | Definitely    | Unlikely | Not possible | Partly       | Site                           | Site  | Short term          | Short term | Med     | Low |
| SECURITY                  | <ul style="list-style-type: none"> <li>Potential exists for labourers to trespass onto adjoining properties.</li> <li>Crime in the area could increase as a result of criminals posing as people seeking employment on the site.</li> </ul>   | <ul style="list-style-type: none"> <li>All labourers must remain within the boundaries of the property at all times.</li> <li>Access onto and off the site must be controlled by a register system. This includes visitors.</li> <li>All restricted areas of the mill must be designated with appropriate warning signs.</li> </ul>  | Neg Direct            | Highly likely | Fair          | Unlikely | Not possible | Possible     | Local                          | Local | Long-term           | Long-term  | Med     | Low |
| TOPOGRAPHY                | <ul style="list-style-type: none"> <li>None.</li> </ul>   | <ul style="list-style-type: none"> <li>None</li> </ul>   | -                     |               |               |          |              |              |                                |       |                     |            |         |     |
| CLIMATE                   | <ul style="list-style-type: none"> <li>Potential exists for high intensity rainstorm events to cause erosion and possible flooding at the facility.</li> </ul>  | <ul style="list-style-type: none"> <li>Appropriate stormwater management must be implemented and maintained at the facility.</li> </ul>  | Neg Direct & Indirect | Highly likely | Likely        | Unlikely | Possible     | Possible     | Site                           | Site  | Long-term           | Long-term  | Med     | Low |
| GEOLOGY AND SOILS         | <ul style="list-style-type: none"> <li>None.</li> </ul>   | <ul style="list-style-type: none"> <li>None</li> </ul>   | -                     |               |               |          |              |              |                                |       |                     |            |         |     |
| RIVERS AND WETLANDS       | <ul style="list-style-type: none"> <li>None.</li> </ul>   | <ul style="list-style-type: none"> <li>None</li> </ul>   | -                     |               |               |          |              |              |                                |       |                     |            |         |     |
| GROUND AND SURFACE WATER  | <ul style="list-style-type: none"> <li>Potential exists for high intensity rainstorm events to cause erosion and possible flooding at the facility.</li> </ul>  | <ul style="list-style-type: none"> <li>Appropriate stormwater management must be implemented and maintained at the facility.</li> </ul>  | Positive indirect     | -             | Highly Likely | -        | -            | Possible     | Local and potential provincial | -     | Long-term Permanent | -          | Med Neg | Low |

|                              |   |   |                       |               |        |          |              |              |       |       |            |            |     |     |
|------------------------------|---|---|-----------------------|---------------|--------|----------|--------------|--------------|-------|-------|------------|------------|-----|-----|
| AIR QUALITY AND SURFACE WIND | <ul style="list-style-type: none"> <li>Potential exists for dust to be created during the construction and operational phases. However it is unlikely to impact negatively on surrounding landowners as they are located a great distance from the facility.</li> </ul> | <ul style="list-style-type: none"> <li>All vehicles must comply with speed limits on the access roads. Vehicles should be properly maintained and regularly serviced to ensure that exhaust emissions are controlled.</li> <li>It is recommended that dust suppression measures should be implemented (e.g. dampening) if and when required during all phases of the development.</li> <li>Measures must be implemented and maintained in order to minimise the creation of dust during the feed mixing process.</li> </ul> | Neg Direct & Indirect | Partially     | Likely | Unlikely | Not possible | Possible     | Local | Local | Short-term | Short-term | Low | Low |
| VEGETATION                   | <ul style="list-style-type: none"> <li>Potential exists for alien vegetation to establish and infest the property if not properly managed.</li> </ul>   | <ul style="list-style-type: none"> <li>Alien Vegetation Control Programme must be implemented.</li> </ul>   | Ne Direct             | Highly likely | Likely | Likely   | Not Possible | Not Possible | Local | Local | Long-term  | Long-term  | Low | Low |
| FAUNA                        | <ul style="list-style-type: none"> <li>None.</li> </ul>   | <ul style="list-style-type: none"> <li>None</li> </ul>  | -                     | -             | -      | -        | -            | -            | -     | -     | -          | -          | -   | -   |

## **9. ENVIRONMENTAL MANAGEMENT PROGRAMME**

In terms of the regulations stated in Appendix 4 of Chapter 8 of NEMA (GNR 982), an Environmental Management Programme (EMPr) has been compiled (Appendix L), which contains guidelines for ensuring that all activities associated with the proposed development are carried out in an environmentally responsible and acceptable manner. Specific management objectives and mitigation measures have been specified for the entire duration of the development.

The EMPr is based on the principles of the NEMA as well as the recommendations made in this Report. It identifies roles and responsibilities of management personnel on site, and will be used as a framework for environmental compliance monitoring and reporting, should the proposed activity(s) be authorised.

An EMPr is a legally-binding document that contains guidelines with which land owners and contractors must comply, and which must be strictly implemented and regularly monitored. If this is done, it is likely that the majority of the potentially adverse impacts associated with proposed activities can be minimised or prevented. An Environmental Control Officer (ECO) should be appointed by the Applicant to ensure compliance with the EMPr during the construction and operational phases. Should non-compliance occur, this must be brought to the attention of the DEDTEA, who will conduct the required prosecution procedure.

Specific management objectives and mitigation measures are specified in the EMPr for the entire duration of the operation, including the following stages:

- Construction activities;
- Operation or undertaking of the activity;
- Rehabilitation of the environment; and
- Closure (decommissioning), where relevant.

## **10. POSITIVE AND NEGATIVE IMPLICATIONS OF THE PROPOSED ACTIVITY**

### **POSITIVE SUMMARY:**

- Job creation and skills transfer.
- In line with the Municipality's IDP and SDF.
- Encourage economic development in the area.
- The provision of a cost effective, calorific feed for farming stock.
- Utilising waste food that would otherwise need to be disposed of at a landfill site.

### **NEGATIVE SUMMARY:**

- Possible noise and dust nuisances.
- Possible impacts from stormwater if not correctly implemented and managed.
- Possible impact on heritage features if construction and operation is not correctly managed.

## **10.1 POSITIVE AND NEGATIVE IMPLICATIONS OF THE IDENTIFIED ALTERNATIVES**

The proposed development would have a far greater detrimental impact on heritage features if any of the alternative sites were chosen.

### **DO-NOTHING**

The “do-nothing” option would be to not establish the feed mill.

#### **POSITIVE**

- No increased risks to the heritage features on the property.

#### **NEGATIVE**

By not granting an EA and a WML, the following would not occur:

- Employment.
- Economic development in the area.
- The provision of a cost effective, calorific feed for farming stock.
- Utilising waste food that would otherwise need to be disposed of at a landfill site.

### **ALTERNATIVE POSITION OF LAYOUT**

Refer to Figure 2.

#### **LAYOUT A**

##### **POSITIVE**

- There would be no structures of heritage significance impacted if this site was developed.

##### **NEGATIVE**

- If this site is developed, it cannot be used to establish a dairy at a later date – which is the intention of the property owner. This site is the most practical for a dairy, due to its proximity to an existing Eskom connection, and the suitable gradient for a lagoon. To locate the dairy elsewhere will not be as economically feasible.

Due to the above, Site A is not the preferred location.

#### **LAYOUT B**

##### **POSITIVE**

- There would be no structures of heritage significance impacted if this site was developed.

##### **NEGATIVE**

- As the site is steep, it is not logistically practical nor economically feasible to establish a feed mill at this location. Building costs would be high, and the feed mill process would be very challenging to manage

and operate, as the different levels of operation would cause issues with process flow.

Due to the above, Site A is not the preferred location.

#### **LAYOUT C (preferred Layout)**

##### **POSITIVE**

- The site is located close to an existing Eskom connection, thus costs to electrify the buildings will be kept to a minimal.
- The site is flat, thus enabling economic building costs and assisting process flow during operation.

##### **NEGATIVE**

- Although the HIA Specialist stipulated a 30 m buffer from the existing heritage buildings – which site C conforms to, development of this site still require the existing old stone building to be removed after an Amafa KZN permit has been issued. Although this impact is considered negative, the impact can be mitigated by the building being demolished and potentially relocated with assistance and guidance from Amafa.

## **11. EAP RECOMMENDATIONS & CONCLUSION**

The EAP wishes to reiterate that the information provided in this report is true and based on factual information provided by the specialist and I&APs.

Signed:



Date: 6 December 2016

The EAP is of the opinion that the proposed activity should be authorised, provided the following activities are made conditions of the Environmental Authorisation:

##### **SAFETY**

- The appended EMPr must be strictly enforced.

##### **HERITAGE**

- The Applicant needs to obtain permission from Amafa KZN for the old stone farm building to be demolished or relocated.
- Amafa should be contacted if any graves are identified during construction and the following procedure is to be followed: stop construction; report finding to local police station; report to Amafa to investigate.

##### **BIOPHYSICAL**

- An Alien Vegetation Control Programme must be implemented for the entire lifetime of the facility.
- Applicant must comply with the requirements and standards as set out in NEM:WA: National Norms

and Standards For the Storage of Waste, as published in GNR 926 dated 29th Nov 2013 and Govt. Gaz. 37088.

- Applicant must ensure that:
  - The wastes obtained have been classified in accordance with the latest edition of the South African National Standards Globally Harmonized System of Classification and Labelling of Chemicals with the preceding 5 years;
  - Any container or storage impoundment holding waste is labelled, or where labelling is not possible, records are kept. These records must reflect the dates on which waste was placed in the container for both the first and last time when the container was filled, closed, sealed or covered, as well as when, and quantities of, waste added and waste removed from containers or storage impoundments, if relevant. The aforementioned records must also reflect the specific category or categories of waste in the container or storage impoundment as identified in terms of the National Waste Information Regulations, 2012 and classification of the waste; and
  - Waste is not stored for more than 18 month from the date of receipt from the waste generator.
- In the event that the Applicant will personally transport the waste, the Applicant, in their capacity as the Waste Transporter, must ensure that the wastes they obtain have been classified in accordance with the latest edition of the South African National Standard Globally Harmonized System of Classification and Labelling of Chemicals within the preceding 5 years.
- Washing, refuelling, maintaining of vehicles or the transfer of hazardous substances must be conducted within a bunded area. All drainage arising from the bunded area must be treated as a water containing waste and disposed of safely.
- A Stormwater management plan must be drawn up and adhered to.
- The Engineer or Contractor must ensure that only clean stormwater runoff enters the environment.
- Drainage must be controlled to ensure that runoff from the project area does not culminate on off-set pollution, flooding or result in any damage to properties downstream of any stormwater discharge points(s).

#### **GENERAL**

- When and if required, local businesses and unemployed people in the immediate area must be considered first, before employing labour and services from further afield.
- Local businesses and people must be employed before sourcing skills and materials from further afield.
- General housekeeping and waste management must be continuously maintained in an appropriate manner.
- Vehicles accessing the properties must be driven cautiously within the required speed limits.
- It is recommended that warning signage be erected to warn motorists of slow-moving vehicles and the access point.
- The access road must be regularly maintained.
- Machinery and equipment must be maintained and regularly serviced to ensure that unnecessary noise

is prevented. Workers on site must not create unnecessary noise such as hooting or shouting.

- Any dust from the facility must be managed in an efficient and environmentally sensitive manner.
- All machinery is to be fitted with dust bags to avoid dust nuisances.
- All labourers must remain within the boundaries of the property at all times.
- Access onto and off the site must be controlled by a register system. This includes visitors.
- All restricted areas of the mill must be designated with appropriate warning signs.
- Appropriate stormwater management must be implemented and maintained at the facility.
- All vehicles must comply with speed limits on the access roads. Vehicles should be properly maintained and regularly serviced to ensure that exhaust emissions are controlled.
- It is recommended that dust suppression measures should be implemented (e.g. dampening) if and when required during all phases of the development.
- Measures must be implemented and maintained in order to minimise the creation of dust during the feed mixing process.
- No buildings or structures are permitted to be closer than 12 m from the power line and no materials are to be stored under or near the line.
- No mechanical equipment, including mechanical excavators or high lifting machinery, shall be used in the vicinity of Eskom's apparatus and/or services, without prior permission having been granted by Eskom.
- The septic tank and soak away system must be periodically inspected for signs of overloading, and corrective action must be taken if and when necessary.

The EAP concludes that not fatal-flaws have been identified during the environmental process and, provided the EMPr and recommendations made in this report are strictly adhered to, there should be no significant, detrimental impacts on the environment.



## **12.APPENDICES**