



KWAZULU-NATAL PROVINCE

ECONOMIC DEVELOPMENT, TOURISM
AND ENVIRONMENTAL AFFAIRS
REPUBLIC OF SOUTH AFRICA

DIRECTORATE:

ENVIRONMENTAL SERVICES

Private Bag X454, PIETERMARITZBURG, 3200
Moses Mabhida Building, 330 Langalibalele Street, Pietermaritzburg, 3200
Tel: 033 341 4830 Fax: 033 341 0986

Enquiries: Mr D.Gwede
Imibuzo :
Navrae :
Reference: DC23/0015/2019
Inkomba :
Verwysing:

Telephone: 036 634 5006
Ucingo :
Telefoon :
Fax :
iFeksi :
Faks :

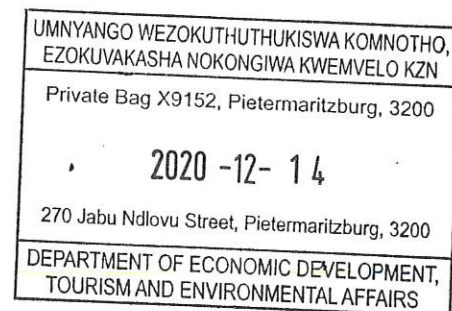
Private Bag : X9905
Isikhwama Seposi : Ladysmith
Privaat Sak : 3370
Date :
Usuku : 14/12/2020
Datum :

Email Transmission

Alfred Duma Local Municipality

P O Box 29
Ladysmith
3370

Attention : Ms Sibusisiwe Ngiba
Tel : (036) 637 2231
Fax : 036 631 1400
Email : ssngiba@alfredduma.gov.za



Dear Madam,

DC23/0015/2019: ENVIRONMENTAL AUTHORISATION FOR THE PROPOSED EZAKHENI STIMELA D INTEGRATED HOUSING DEVELOPMENT WITHIN ALFRED DUMA LOCAL MUNICIPALITY, UTHUKELA DISTRICT MUNICIPALITY

The KwaZulu-Natal Department of Economic Development, Tourism and Environmental Affairs has **authorized** the abovementioned project. A copy of the environmental authorisation and reasons for the decision are attached herewith.

1. ENQUIRIES

Please note:

- All queries regarding this application for environmental authorisation (including the Department's decision) must be directed to the official of this Department with contact details provided on the letterhead above.
- Only** queries regarding appeals must be submitted to the Office of the MEC (details provided below).

2. TIMEFRAMES APPLICABLE TO THIS APPLICATION FOR ENVIRONMENTAL AUTHORISATION **In accordance with Regulation 4.1 and 4.3 of Government Notice No. R. 650 dated 05 June 2020, all the timeframes prescribed in the EIA Regulations 2014 have been extended by the number of days**



KWAZULU-NATAL PROVINCE

ECONOMIC DEVELOPMENT, TOURISM
AND ENVIRONMENTAL AFFAIRS
REPUBLIC OF SOUTH AFRICA

calculated from 27 March 2020 and an additional 21 days during Alert Level 3 of the Covid-19 lockdown period of the national state of disaster declared for the COVID-19 pandemic in Government Notice No. R. 608 dated 28 May 2020.

3. NOTIFICATION OF DECISION ON APPLICATION

In accordance with regulation 4(2) of the EIA Regulations 2014 and taking the requirements of Annexure 3 of Government Notice No. R. 650 (dated 05 June 2020) into account, the applicant must in writing **within 14 days** of the date of this decision (with the timeframe extension as indicated under section 2 (above) ensure that

- All registered interested and affected parties are provided with access to this decision and the reasons for the decision; and,
- The attention of all registered interested and affected parties is drawn to the fact that an appeal may be lodged against the decision in terms of the National Appeal Regulations 2014, if such appeal is available in the circumstances of the decision.

4. APPEALS

In accordance with regulation 4(1) of the National Appeal Regulations, 2014 an appellant must submit an appeal to the appeal administrator and a copy of the appeal to the applicant, any registered interested and affected party and organ of state with interest in the matter with 20 days from the date of notification of this decision (with the timeframe extension as indicated under section 2 (above).

An appellant must comply with regulation 4(2), take the requirements of Annexure 3 of Government Notice No. R. 650 (dated 05 June 2020) into account and submit the appeal in writing, on the form obtainable from the Appeal Administrator and **by post, fax, e-mail or hand delivery** to the following address:

**The Appeal Administrator,
Office of the KwaZulu-Natal MEC for Economic Development, Tourism & Environmental Affairs**

POSTAL/ E-MAIL/ TELEPHONE	PHYSICAL:
Private Bag X9152 PIETERMARITZBURG 3200 Tel: 033 264 2651 / 081 731 7361 E-Mail: haresh.inderlall@kznedtea.gov.za (Haresh Inderlall)	Room 218.23, 2 nd Floor 270 Jabu Ndlovu Street PIETERMARITZBURG 3201

5. COLLECTION OF ORIGINAL ENVIRONMENTAL AUTHORISATION

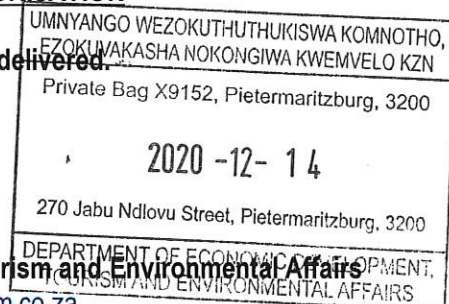
The original environmental authorisation will be hand delivered.

Yours faithfully

for: **Head of Department:**

KwaZulu-Natal Department of Economic Development, Tourism and Environmental Affairs

cc: Gert Watson K2M environmental Pty (Ltd) email: gert@k2m.co.za



**Environmental Authorisation
For
Ezakheni Stimela D Integrated Housing Development within Alfred Duma Local Municipality, Uthukela District
Municipality**



KWAZULU-NATAL PROVINCE

ECONOMIC DEVELOPMENT, TOURISM
AND ENVIRONMENTAL AFFAIRS
REPUBLIC OF SOUTH AFRICA

Environmental Authorisation

In terms of regulation 327 of the
Environmental Impact Assessment Regulations, 2017

Project Title: The proposed Ezakheni Stimela D Integrated Housing Development within Alfred Duma Local
Municipality, Uthukela District Municipality

Local Municipality: Alfred Duma Local Municipality

Application number:	DC23/0015/2019	UMNYANGO WEZOKUTHUKISWA KOMNOTHO, EZOKUVAKASHA NOKONGIWA KWEMVELO KZN Private Bag X9152, Pietermaritzburg, 3200
NEAS Number	KZN/EIA/0001261/2019	2020-12-14 270 Jabu Ndlovu Street, Pietermaritzburg, 3200
Date of issue:	14 DECEMBER 2020	DEPARTMENT OF ECONOMIC DEVELOPMENT, TOURISM AND ENVIRONMENTAL AFFAIRS
Authorisation holder:	Alfred Duma Local Municipality	
Location:	Erf 1205 to Erf 1894 including RE/2564 Ward 1 and 4 Ezakheni D within Alfred Duma Local Municipality within uThukela District.	

**Environmental Authorisation
For
Ezakheni Stimela D Integrated Housing Development within Alfred Duma Local Municipality, Uthukela District
Municipality**

Scope of Project

The Alfred Duma Local Municipality proposes a housing development on a vacant site that is approximately 37 hectares on portion of Wards 1 and 4 of the Alfred Duma Local Municipality. The site is adjacent to existing houses. The development entails the construction of housing units as well as the installation of supporting infrastructure. The proposed development includes:

- Construction of 246 RDP/subsidised housing units
- Construction of 100 FLISP housing units
- Approximately 58 GAP housing units
- Community Facility
- Park or Sportsfield
- Education (either a primary, secondary or combined school).
- The construction of internal roads, to provide easy access to each site. The road widths of the internal roads range from 4.5m and 5m with a road reserve width of 12m and less.
- Installation of internal pipelines for water supply. Class 12 pipes are to be used with a diameter of pipelines range from 75mm to 160mm.
- Installation of internal pipelines for waterborne sewage. The pipes to be used are 160mm diameter uPVC Class 34 pipes.
- Construction and installation pipelines for the management of stormwater discharge. The minimum diameter of storm water pipes to be used is 450mm.

A copy of the layout plan is attached as **Annexure 3** of this environmental authorisation.

KwaZulu-Natal Department of Economic Development, Tourism & Environmental Affairs	Environmental Authorisation 2014	DC23/0015/2019 KZN/EIA/0001261/2019	Page 2 of 19 <i>Dg</i>
---	----------------------------------	--	------------------------

**Environmental Authorisation
For
Ezakheni Stimela D Integrated Housing Development within Alfred Duma Local Municipality, Uthukela District
Municipality**

Decision

By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act No. 107 of 1998) and the Environmental Impact Assessment Regulations, 2014, the **KwaZulu-Natal Department of Economic Development, Tourism and Environmental Affairs** (Hereafter referred to as the ("Department"))

Grants environmental authorization

to:

(herein after referred to as "the authorization holder")

Alfred Duma Local Municipality

P.O. Box X29

Ladysmith

3370

Attention : Ms S.S. Ngiba

Tel : (036) 637 2231

Fax : (036) 631 1409

Email : mm@alfredduma.gov.za

to undertake the following activities (hereafter referred to as "the activities") as described in section 1 below.

1. Activities authorized and location of activity

The following activities in Listing Notice 1 of the EIA Regulations 2014 as amended are triggered by the abovementioned project:

Description of activities and location

Component (or phase) of the project	Listing Notice/ Activity No.	21 Digit Surveyor General code
	Listing Notice 1 Activity 12 The development of— (ii) infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs— (a) within a watercourse;	From N0GS0521000014610000 To N0GS0521000025640000

**Environmental Authorisation
For**

**Ezakheni Stimela D Integrated Housing Development within Alfred Duma Local Municipality, Uthukela District
Municipality**

	<p>Listing Notice 1 Activity 19</p> <p>The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from- (i) a watercourse;</p>	
	<p>Listing Notice 2 Activity 15</p> <p>The clearance of an area of 20 hectares or more of indigenous vegetation, except where such clearance of indigenous vegetation is required for:</p> <ul style="list-style-type: none"> (i) Undertaking of a linear activity; (ii) Maintenance purposes undertaken in accordance with a maintenance management plan (iii) 	

As described in the Final Environmental Impact Assessment Report (Final EIAR) dated September 2020, the activities authorized must only be carried out at the location as described in 1.2 below.

1.2 The Co-ordinates and Physical address of authorised activity:

Location:	Latitude(S)			Longitude(E)		
	28°	37'	5.32"	29°	56'	10.43"

2. Conditions of Authorization

This Environmental Authorization is subject to the conditions set out below:

3.3 Period of Validity: The listed activities authorized must commence within **ten (10) years** from the date of issue and activity must be concluded not later than ten (10) years. If commencement of the authorized activity/ any of the authorized activities does not occur within that period, this authorization lapses.

2.2 Environmental Audit Report

2.2.1 The environmental audit reports must be prepared in Compliance with *Appendix 7 of GNR 326 amended EIA Regulations 2014.*

2.2.2 The environmental audit report must indicate:

KwaZulu-Natal Department of Economic Development, Tourism & Environmental Affairs	Environmental Authorisation 2014	DC23/0015/2019 KZN/EIA/0001261/2019	Page 4 of 19
---	----------------------------------	--	--------------

DG

**Environmental Authorisation
For
Ezakheni Stimela D Integrated Housing Development within Alfred Duma Local Municipality, Uthukela District
Municipality**

- 2.2.3.1 The date of the audit;
- 2.2.3.2 The name of the auditor; and
- 2.2.3.3 The outcome of the audit in terms of compliance with the environmental authorisation conditions as well as the requirements of the EMPr.
- 2.2.3 Records relating to monitoring and auditing must be kept on site and made available for inspection to any relevant and competent authority in respect of this development.
- 2.2.4 The following records must be kept on site for the Department officials if required:
 - 2.2.4.1 The Environmental Authorisation from this Department;
 - 2.2.4.2 The Environmental Management Programme (EMPr);
 - 2.2.4.3 The construction layout plans;
 - 2.2.4.4 Photographic records of before, during and post construction; and
 - 2.2.4.5 All communications detailing changes of design that will have environmental implications.

2.3 Environmental Management Programme

- 2.3.1 The Environmental Management Programme (EMPr) compiled by K2M Environmental Pty (Ltd) dated September 2020 for the construction, operational and rehabilitation phases of this project as submitted for the environmental authorization of this project complies with section 24N of NEMA and Appendix 4 of the EIA Regulations, 2017. This EMPr is hereby **approved** and must be implemented.
- 2.3.2 The EMPr must be kept on site during construction phase of the development.

2.4 Monitoring and Reporting to the Department

- 2.4.1 The holder of the authorization must appoint an Independent Environmental Control Officer (ECO) for the construction and post-construction phase of the development to ensure that the mitigation and rehabilitation measures referred to in this authorisation and EMPr are implemented.
- 2.4.2 The details of appointed ECO must be forwarded to the Department in writing at the address indicated in 3.4 herein.
- 2.4.3 The ECO must be appointed before commencement of any land clearing or construction activities. The ECO responsibilities among others include:
 - 2.4.3.1 Responsible for keeping records of both compliance and non-compliance.
 - 2.4.3.2 Developing a complaints register and keep all records of complaints received.
 - 2.4.3.3 Conduct environmental audits every two (02) weeks during the construction phase;

**Environmental Authorisation
For**

**Ezakheni Stimela D Integrated Housing Development within Alfred Duma Local Municipality, Uthukela District
Municipality**

- 2.4.3.4 Provide environmental awareness training for site managers and staff;
- 2.4.3.5 Provide support and advice, to the Engineer regarding environmental issues;
- 2.4.3.6 Compile monthly environmental audit reports for construction and (One) 1 post construction audit report.
- 2.4.3.7 Performing all tasks assigned to the ECO in the approved EMPr's;
- 2.4.3.8 Ensuring the holder of the environmental authorization is enforcing all the conditions contained in the EA and approved EMPr; and,
- 2.4.3.9 Providing guidance/advice that ensures implementation of environmental management measures and adherence with environmental legislation/regulations.
- 2.4.4 Should the ECO be changed at any time, this must be communicated in writing to the Department within **14 (fourteen)** calendar days of the appointment of the new ECO.
- 2.4.5 All requirements for the management, monitoring and reporting of impacts for all phases of the project must be as specified in the EMPr.
- 2.4.6 The holder of the environmental authorization must submit environmental audit reports to this Department as per the time intervals specified below. The reports must be addressed to the Control Environmental Officer, CME Component as per the contact details specified in 3.4 herewith. The intervals for the environmental audit reports are as follows:
 - 2.4.6.1 One (01) environmental audit report monthly during construction; and
 - 2.4.6.2 A post construction environmental audit report. This report must be submitted within sixty (60) days from the date that the construction activities are completed.

2.5 Written notice of the commencement of the construction phase

- 2.5.1 Not less than **seven (7) days** written notice must be given to the Department that the construction phase will commence. Commencement for the purposes of this condition includes site preparation. The notice must include a date on which it is anticipated that the construction will commence.

2.6 Availability of this environmental authorization

- 2.6.1 A copy of this environmental authorization must be kept by the authorization holder on site where the activities will be undertaken during construction phase. The authorisation must be produced to any authorised official of the Department who requests to see it and must be made available for inspection by any employee or agent of the holder of the authorisation who works or undertakes work on site.

DG

**Environmental Authorisation
For
Ezakheni Stimela D Integrated Housing Development within Alfred Duma Local Municipality, Uthukela District
Municipality**

2.7 Notification of Interested and Affected Parties

- 2.7.1 The applicant must, in writing, and within **14 (Fourteen) days**, of the date of the decision of the application ensure that:
- 2.7.1.1 All the registered and affected parties are provided with access to the decision and the reasons for such decision and;
- 2.7.1.2 The attention of all registered and affected parties is drawn to the fact that an appeal may be lodged against the decision in terms of the National Appeals Regulation, if such appeal is available in the circumstances of the decision.

2.8 Construction phase

- 2.8.1 The development must comply with layout plan titled "Alfred Duma Local Municipality Ezakheni Stimela D Stimela D Housing" as attached in Annexure 3 here within.
- 2.8.2 Any proposed deviations from the original layout must be approved by this Department prior to its implementation.
- 2.8.3 The wetland rehabilitation plan compiled by the biodiversity company dated September 2020 is hereby approved and must be implemented.
- 2.8.4 The 5.49ha demarcated as conservation area must be maintained as no-go area and made visible.
- 2.8.5 Conservation areas must not be used as laydown areas or storage for construction material. Signage must be made visible.
- 2.8.6 Erf 1423 and 1387 must demarcated as no-go areas and must be made visible.
- 2.8.7 Erosion channels must be backfilled and compacted to restore vegetation establishment.
- 2.8.8 All cut and fill embankments must be revegetated immediately after completion to prevent soil erosion.
- 2.8.9 All disturbed areas must be revegetated with indigenous grass sods or by seeding.
- 2.8.10 Removal of invasive alien species and the planting of indigenous species must be undertaken within the development footprint.
- 2.8.11 Concrete aprons of at least 0.8m width must be cast around each individual structure to ensure a stable moisture regime below the buildings.
- 2.8.12 Progressive rehabilitation must be done to maintain ground cover to prevent soil erosion.
- 2.8.13 The dongas on the South of the development must be stabilised to prevent and minimise continued impacts of erosion.
- 2.8.14 The servitude through the watercourse must be rehabilitated once work in the area has been completed and must not wait until the end of the project.

Environmental Authorisation

For

Ezakheni Stimela D Integrated Housing Development within Alfred Duma Local Municipality, Uthukela District Municipality

- 2.8.15 No stockpiling of any material must take place within 100m from edge of the watercourse.
- 2.8.16 The stormwater management plan compiled by Bigen Africa Services (Pty) Ltd dated 18 November 2018 is hereby approved and must be implemented.
- 2.8.17 All major and minor stormwater infrastructure must be designed to discharge collected stormwater runoff into an existing stormwater system or watercourse.
- 2.8.18 The outflow structure at each release point must include anti erosion measures to prevent scouring of the soil surface and slow release of the water.
- 2.8.19 The site drainage must not allow stormwater or surface water to accumulate within 1.5m of individual structures.
- 2.8.20 Drainage facilities must have silt traps to prevent silt from entering natural water systems downslope of the site.
- 2.8.21 Dust suppression measures must be implemented to minimize generation of dust.
- 2.8.22 Scavenger proof dustbin must be used to store waste onsite and made visible.
- 2.8.23 Waste generated during construction must be disposed at a registered landfill site.
- 2.8.24 Chemical ablution facilities must be 100m away from watercourse, be anchored firmly on the ground to prevent being blown away and serviced weekly.
- 2.8.25 All trenches excavated in excess of 1.2m deep must be suitably battered back to a stable slope or must be shored.
- 2.8.26 Hazardous spillages of substances must be contained to prevent contamination of the environment. All hazardous materials must be stored on an impermeable surface to prevent contaminants from entering the environment.
- 2.8.27 All machinery and vehicles must be checked for leakages; drip trays must be placed underneath when stationary.
- 2.8.28 Oil spill kits must be available on site to respond to accidental hydrocarbon spillages.
- 2.8.29 All oil spillages must be cleaned up immediately and contaminated soil must be removed and disposed of at a hazardous landfill site. Safe waste disposal certificate for the contaminated soil must be kept on site.
- 2.8.30 Should any remains be found on site during earth-moving activities that is potentially human remains, the South African Police Service (SAPS) must be contacted. No SAPS official may remove remains (recent or not) until the correct permit/s have been obtained from AMAFA.

**Environmental Authorisation
For
Ezakheni Stimela D Integrated Housing Development within Alfred Duma Local Municipality, Uthukela District
Municipality**

in writing, by the Department before such changes or deviations may be effected.

3.3.2. Any subsequent amendments to the approved EMPr must also be submitted to the Department for review. The amendments must only be implemented after being approved by the Department.

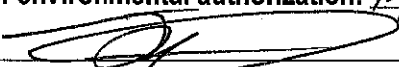
3.1 Contact details of the Department

The following contact details for the Department must be used for all reports, notices etc. which must be submitted to the Department:

Department of Economic Development, Tourism and Environmental Affairs
Private Bag X9905
LADYSMITH
3370
Fax No: 036 634 1977

Attention: Control Environmental Officer: Compliance Monitoring and Enforcement, uThukela District.

3.2 This environmental authorization does not exempt you from compliance with other applicable legislation.

Date of environmental authorization: 14/12/2020


for: Head of Department

KwaZulu-Natal: Department of Economic Development, Tourism and Environmental Affairs

UMNYANGO WEZOKUTHUKISWA KOMNTHO, EZOKUVAKASHA NOKONGIWA KWEMVELO KZN Private Bag X9152, Pietermaritzburg, 3200
2020 -12- 14 DEPARTMENT OF ECONOMIC DEVELOPMENT, 270 Jabu Ndlovu Street, Pietermaritzburg, 3200
DEPARTMENT OF ECONOMIC DEVELOPMENT, TOURISM AND ENVIRONMENTAL AFFAIRS

Annexure 1: Reasons for Decision

1. Information considered in making the decision.

In reaching its decision, the Department took, *inter alia*, the following into consideration -

- a) Application form dated 04 November 2019.
- b) The final EIAR dated September 2020.
- c) The comments received from the organs of state and interested and affected parties as included in the FEIAR dated September 2020.
- d) Mitigation measures as proposed in the FEIR dated September 2020 compiled by K2M Environmental Pty (Ltd) have been incorporated in the EMP; and
- e) The findings of the site visit undertaken by Nozipho Mthembu, and Onwabile Ndzumo officials of this Department and representatives from K2M Environmental Consultants on 04 August 2020.

2. Key factors considered in making the decision

a) Basic Assessment Report dated September 2019.

- i) The FEIAR dated September 2020 compiled by K2M Environmental Pty (Ltd) complies with the requirements of the EIA Regulations, 2014.
- ii) The FEIAR dated September 2020, compiled by K2M Environmental Pty (Ltd) included a description of the environment that may be affected by the activity and the manner in which the physical, biological, social, economic and cultural aspects of the environment may be affected by the proposed activity;
- iii) The methodology used in assessing the potential impacts identified in the FEIR dated September 2020.
- iv) The findings and recommendations of the specialist studies conducted as part of the assessment.
- v) The compatibility of the activity with surrounding land uses.
- vi) The proposed project layout has taken into account all the environmental sensitive areas.

- b) Biodiversity Assessment by Peter le Roux dated March 2020** as incorporated in the Final EIAR. The site investigation was undertaken on 03 March 2020. The study area comprised a variety of habitats including degraded indigenous vegetation and transformed quarry sites that were not representative of Thukela Thornveld. A large area consisted of primary vegetation (28.75 ha or 77.7%) that was representative of Thukela Thornveld. No plant species of conservation concern were found on the study site, and it is unlikely that any occur considering the high grazing and browsing pressure. The biodiversity value of the site is of lesser concern

Environmental Authorisation

For

Ezakheni Stimela D Integrated Housing Development within Alfred Duma Local Municipality, Uthukela District Municipality

because the vegetation type is common; it is ranked 'Least Concern'; it is not part of a Critical Biodiversity Area. A large proportion of the site has a primary vegetation type, the development would have a relatively low impact on the flora and fauna locally and further, because these are well represented in the adjacent hills and valleys.

Recommendations were

- A suitable setback of 32 metres is recommended for the major water courses.
- Structures must be installed to attenuate increased runoff and trap pollutants.
- *Aloe marlothii* must be used for landscaping onsite.

c) **Wetland Baseline and Risk Assessment by The Biodiversity Company** dated April 2020. The site visit was conducted on 19th of March 2020. Three wetland types were identified within the 500 m regulated area, namely that of a channeled valley bottom (HGM 1 and 2), an unchanneled valley bottom HGM 3) and a hillslope seep (HGM 4). In addition to these systems, various non-wetland drainage lines and one dam was identified within the 500 m regulated area. It is the specialist's opinion that the proposed development proceeds on the condition that all of the recommendations made within this report as well as the prescribed mitigation measures are adhered to.

Recommendations were:

- A sewerage system must be installed to accommodate the proposed development and an action plan must be set in place for sewerage bursts and leaks.
- During construction activities, all rubble generated must be removed from the site.
- The first 300 mm of soil must be stockpiled separate from the soil excavated deeper than 300 mm.
- Construction vehicles and machinery must make use of existing access routes as much as possible, before new areas are considered for access.

d) **Geotechnical Report by Bigen Africa Services (Pty) Ltd** dated June 2018. The development area is underlain by SHALE of the Volksrust Formation, Ecca Group, Karoo Sequence. The regional geology is typified by extreme faulting synonymous with the various phases of plutonic intrusion of igneous KAROO DOLERITE which mainly take the forms of dykes and sills. The residual soils formed from the insitu weathering exhibit expansive characteristics and free swell may range from 0.01 to 7.0 percent. In the vicinity of dolerite intrusions, contact metamorphism and associated shattering may reduce the stability of the slope as a whole. No subsoil seepage was observed during the excavation of the trial holes. However, seepage can be expected during the wet months at the interface of the residual soils and bedrock.

Environmental Authorisation

For

Ezakheni Stimela D Integrated Housing Development within Alfred Duma Local Municipality, Uthukela District Municipality

Recommendations were:

- Foundation trenches must extend to a depth that corresponds with the upper contact of the completely weathered rock horizon.
- Strip footings must not be placed on overlaying colluvial and residual horizons.
- Where site class H1 are encountered adequately lightly reinforced raft foundation must be used.
- Extra precaution and care should be adopted to ensure adequate compaction for all platforms.

e) **Heritage Scoping Report by Ethembeni Cultural Heritage** dated May 2020. The site inspection was conducted on 28 April 2020. No Stone Age or Iron Age archaeological residues were observed, and no graves were apparent. Three deflated, rectangular stone structures were recorded and had their stone culled for other off-site construction purposes. They are interpreted as small-stock kraals probably associated with the original farming enterprises on the Doornkloof farm. No residential platforms (hut foundations) or domestic discards were observed in association with these enclosures, suggesting that they were not coeval with homesteads of earlier farm residents or labour tenants. In the absence of any heritage resources of significance, and that no further palaeontological mitigation is required, we accordingly request that Amafa allow the proposed township development to proceed with no further heritage resource mitigation.

Recommendations were:

- A Chance Find Protocol must be added to the EMP: if fossils are found once excavations for foundations, pipes and services has commenced, they must be rescued and a palaeontologist must be called to assess and collect a representative sample and AMAFA must be notified immediately.

f) **Stormwater Management Plan** dated November 2018 dated October 2019. The minor and major flood events will be characterized by the 5 and 25 year recurrence intervals, respectively. The minor flood event will be drained by means of an underground stormwater system consisting of kerb inlets, field inlets, concrete pipes and outlet structures. The major flood event will be drained by means of an aboveground system which consists of the road network, stormwater channels, outlet structures and in some places road culvert crossings. Both the minor and major stormwater infrastructure will be designed to discharge the collected stormwater runoff into either an existing stormwater system, a defined natural watercourse. The southern part of the site has extensive erosion this has resulted in the formation of dongas, in order to develop on this part rehabilitation is required.

13

**Environmental Authorisation
For
Ezakeni Stimela D Integrated Housing Development within Alfred Duma Local Municipality, Uthukela District
Municipality**


Recommendations were:

- A 3m servitude be registered between Erven 1881 and 1880 in order to ensure that stormwater does not concentrate and be discharged.
- Erf 1423 is located downstream a 15% steep road. The steepness of this road presents the risk of stormwater rushing over the kerb into the stand. The layout of the stand will have to be reconsidered.
- The requirement of subsoil drainage must be investigated at the Design Development Stage of the project.

g) Public participation:

1. The Draft Scoping Report and Draft EIR was circulated into the public domain for a 30-day, as an integral component of the Public Participation Process as identified by the National Environmental Management Act (Act 107 of 1998) EIA. During the legislated 30-day Public Participation Process (PPP), the Draft EIR was circulated to all identified I&APs and organs of state for comment and responses (Refer to I&AP database).
2. The public participation process complies with the requirements of Chapter 6 of the EIA Regulations, 2017 and the comments from the organs of state and interested and affected parties have been included in the EIR dated September 2020.
3. A notice advertising the proposed development appeared in Two (2) Regional Newspapers and One (1) local newspaper on the 10th January 2019. The regional newspapers included the Natal Witness (in English) and Ilanga News (Zulu) and the local newspaper included the Ladysmith Gazette (English).
4. The Scoping report and Draft EIR were circulated to the following Departments for review and comments, Ezemvelo KZN Wildlife, Department of Agriculture and Rural Development, Department of Water and Sanitation, Amafa, Eskom, Uthukela District Municipality, Department of Transport, Department of Education, and EDTEA.
5. Comments received from the Interested and affected parties (I&AP's) and the issues that were raised were responded to.
6. Site notice boards, that comprised both English and/or Zulu text, were erected at visible locations on the site and in the surrounding area on the 15th January 2019.
7. Knock and drop of pamphlets was done to all adjacent landowners.

This Department is satisfied that this application has met the requirements of Regulation 39 of the EIA Regulation of the Government Notice No. 326 of EIA Regulations as amended. During the Public Participation Process, no person expressed the view that the proposed activity will negatively affect them.

KwaZulu-Natal Department of Economic Development, Tourism & Environmental Affairs	Environmental Authorisation 2014	DC23/0015/2019 KZN/EIA/0001261/2019	Page 14 of 19 
---	----------------------------------	--	---

**Environmental Authorisation
For**

**Ezakheni Stimela D Integrated Housing Development within Alfred Duma Local Municipality, Uthukela District
Municipality**

h) Socio-economic impact

The proposed development will generate positive socio-economic impacts with the creation of job opportunities during the construction and operational phases of the development. The site is likely to serve as a residential hub and the possible commercial sector will serve as a small localized economic/business node. Few direct impacts on existing business is likely as the site is relatively distant from other larger nodes. The project cost value was estimated at R 200 000 000. New skilled employment opportunities created in the construction phase of the project will be 20 and new unskilled employment opportunities created in the construction phase of the project will be 80 and no new employment will be created during the operational phase.

i) Need and desirability:

The need and desirability for the eZakheni Integrated Housing Development is evident in the SDF and IDP of the Alfred Duma Municipality, as it has identified the project area as an area for housing developments. The implementation of the housing development will assist in mitigating the establishment of informal settlements. The implementation of the housing development will assist in reducing the establishment of informal settlements and housing backlog within the municipality. Given that this project is a mixed-use housing development, it will cater for all income groups as there is a combination of housing typologies. The proposed development will also include the construction of water networks and proper sanitation infrastructure.

j) Alternatives:

Activity alternative

Due to the high demand for formal housing within the Alfred Duma Local Municipality, the preferred activity will be to construct housing units, together with supporting facilities and infrastructure (e.g. water and sewerage pipelines). Furthermore, the project area is adjacent to an existing township, which means that this project will extend/increase the existing township. Should the preferred activity not be granted, the housing demand will remain high within the municipality. One alternative would be to leave the site vacant considering that there are wetlands and drainage lines that traverse the southern and eastern portions of the site. This alternative however, would not be feasible as it will leave the site vulnerable to land invasion and illegal occupancy.

Layout Alternative

Layout	Advantages	Disadvantages
--------	------------	---------------

Environmental Authorisation

For

Ezakheni Stimela D Integrated Housing Development within Alfred Duma Local Municipality, Uthukela District Municipality

Preferred Layout Annexure 3	Some erven zoned for Residential Purposes will only be utilized as Conservation to allow for the continuation of the Wetland System.	Proposes the construction of roads, sewer and water pipelines that cross watercourses.
	Accommodates for a variety of housing typologies. GAP Housing and Social Housing will contribute to the Municipality Rates.	Entails the removal of degraded indigenous vegetation.
	Includes only the proposed project area.	Infill of drainage lines.
	Layout is aligned with the existing approved land parcels.	
	Environmentally sensitive areas are depicted on layout and has been excluded from the developable area.	
Alternate Layout 1	Increased number of fully subsidized housing units.	Limited rates based for the Municipality.
		Fewer erven set aside for residential development.
		Entails the removal of degraded indigenous vegetation.
		The wetland system will be cut off from the larger system on the southern boundary of the development.
		Over supply in terms of commercial land use. There is no demand for the additional Commercial Component due to existing proximity of the existing mall.
Alternate Layout 2	Environmentally sensitive areas depicted on layout.	Development is proposed within environmentally sensitive areas.
	Various housing typologies are proposed.	The wetland system will be cut off from the larger system on the southern boundary of the development.
		Entails the removal of degraded indigenous vegetation.

k) No-go alternative:

Should this development not go through, The housing demand will remain the same within the municipality, unless there are other housing operations where construction has commenced or has been completed. The vacant piece of land will be left vulnerable to illegal occupancy, dumping and informal housing. Indigenous vegetation will not be removed; however, the site will continue to be used for illegal dumping.

Environmental Authorisation

For

Ezakheni Stimela D Integrated Housing Development within Alfred Duma Local Municipality, Uthukela District Municipality

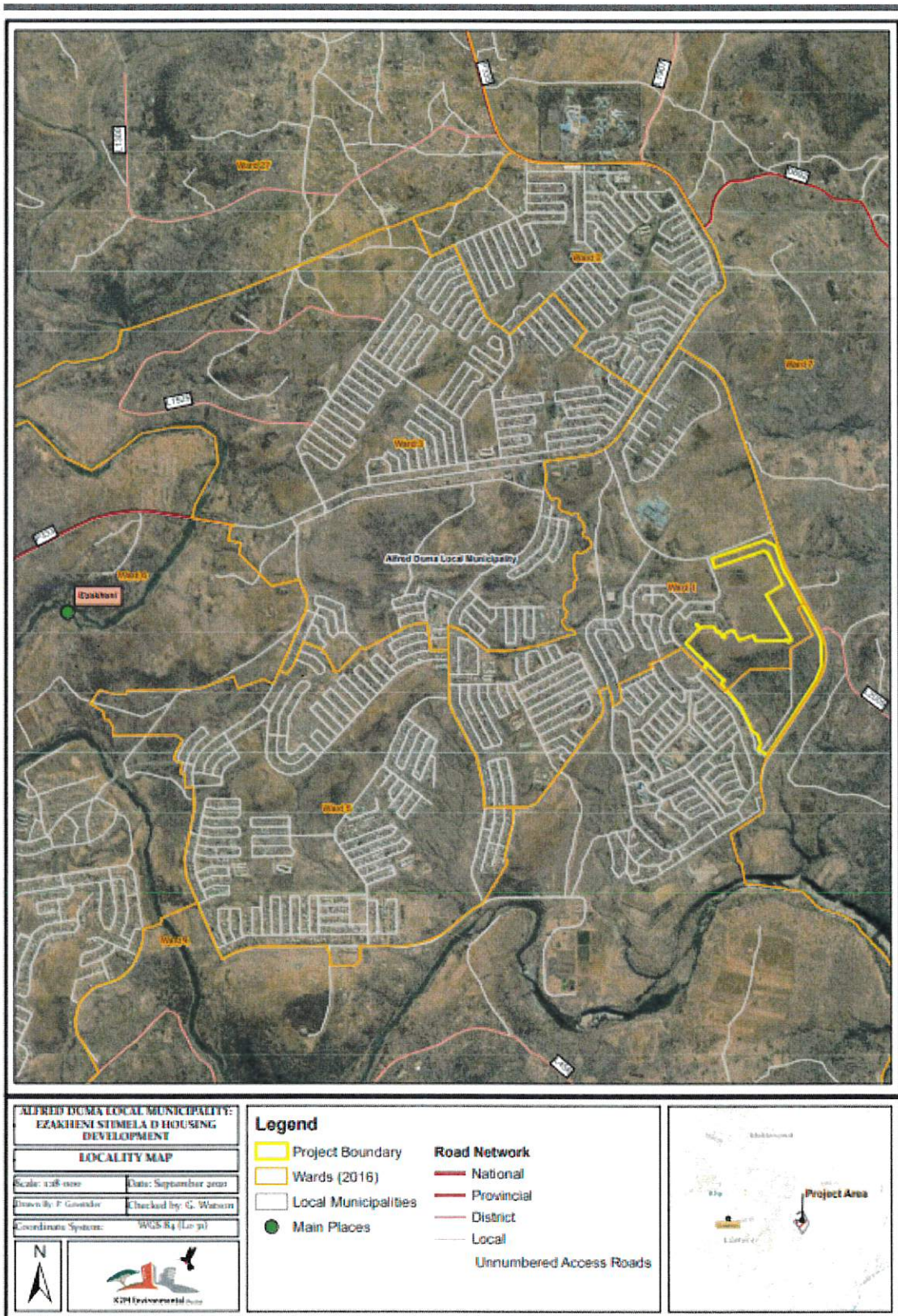
l) Objectives of integrated environmental management:

In view of the above, the Department is satisfied that, subject to compliance with the conditions contained in the environmental authorisation, the proposed activity will not conflict with the general objectives of the integrated environmental management laid down in Chapter 5 of the National Environmental Management Act, 1988 and that any potentially detrimental environmental impacts resulting from the proposed activity can be mitigated to acceptable levels. The application is accordingly granted.

KwaZulu-Natal Department of Economic Development, Tourism & Environmental Affairs	Environmental Authorisation 2014	DC23/0015/2019 KZN/EIA/0001261/2019	DG Page 17 of 19
---	----------------------------------	--	---------------------

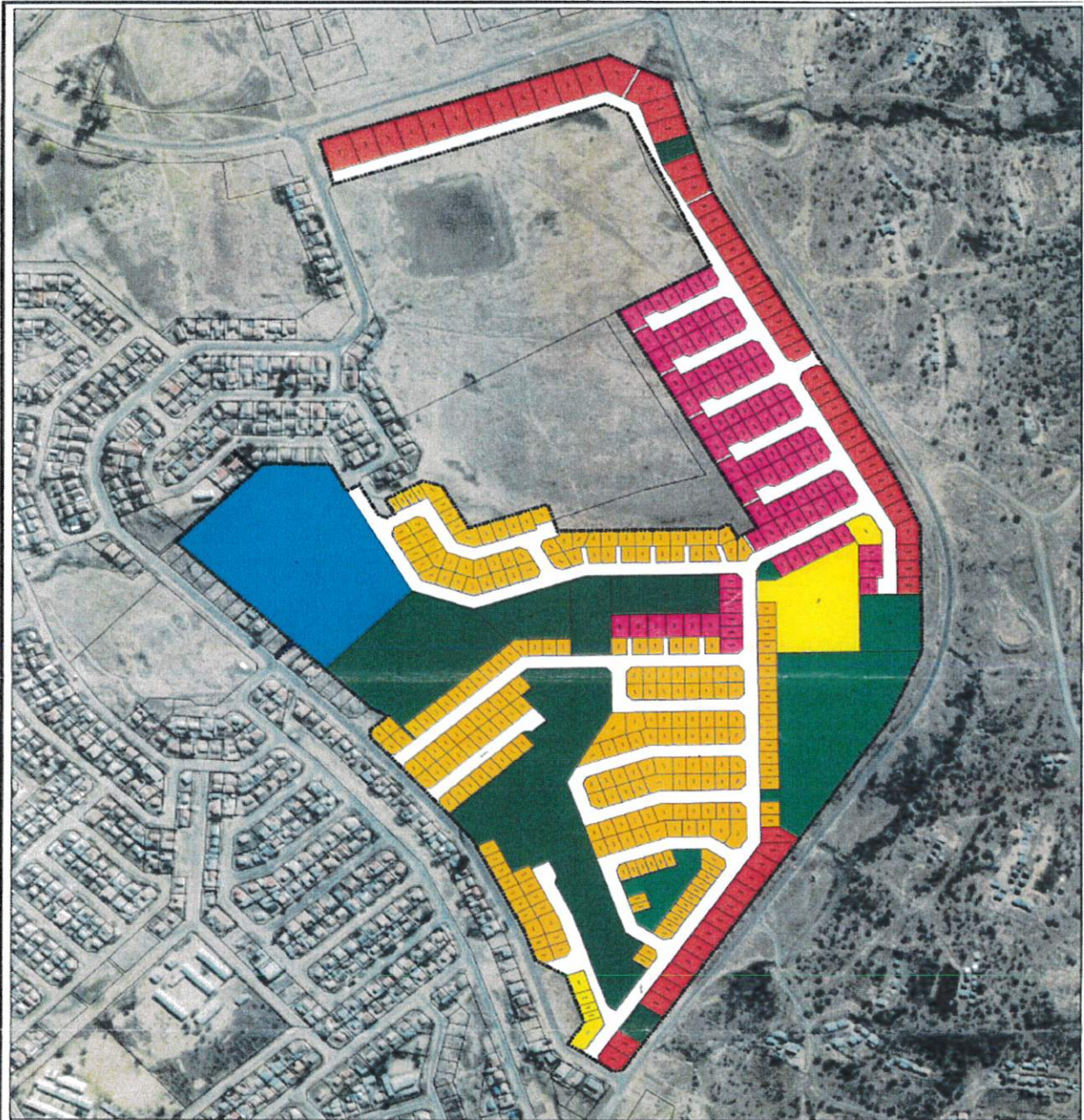
**Environmental Authorisation
For
Ezakheni Stimela D Integrated Housing Development within Alfred Duma Local Municipality, Uthukela District
Municipality**

ANNEXURE 2: Locality



**Environmental Authorisation
For
Ezakheni Stimela D Integrated Housing Development within Alfred Duma Local Municipality, Uthukela District
Municipality**

ANNEXURE 3: Layout Plan



<p>ALFRED DUMA LOCAL MUNICIPALITY: EZAKHENI STIMELA D HOUSING DEVELOPMENT</p> <p>Preferred Layout with Proposed Land Uses</p> <p>Scale: 1:4 000 Date: September 2020</p> <p>Drawn By: R. van Rensburg Signed: </p> <p>Coordinate System: WGS 84 (L0 31)</p>	<p>Legend</p> <table style="width: 100%;"> <tr> <td></td> <td>Project Boundary</td> <td></td> <td>Community Facility/Other</td> </tr> <tr> <td></td> <td>Surrounding Cadastral</td> <td></td> <td>Conservation</td> </tr> <tr> <td></td> <td></td> <td></td> <td>Education</td> </tr> <tr> <td></td> <td></td> <td></td> <td>FLSP Housing</td> </tr> <tr> <td></td> <td></td> <td></td> <td>GAP Housing</td> </tr> <tr> <td></td> <td></td> <td></td> <td>Park/Sports Field</td> </tr> <tr> <td></td> <td></td> <td></td> <td>RDP Housing</td> </tr> <tr> <td></td> <td></td> <td></td> <td>Roads</td> </tr> </table>		Project Boundary		Community Facility/Other		Surrounding Cadastral		Conservation				Education				FLSP Housing				GAP Housing				Park/Sports Field				RDP Housing				Roads	
	Project Boundary		Community Facility/Other																															
	Surrounding Cadastral		Conservation																															
			Education																															
			FLSP Housing																															
			GAP Housing																															
			Park/Sports Field																															
			RDP Housing																															
			Roads																															