BACKGROUND INFORMATION DOCUMENT (BID)

for the

Proposed Sand Mining on Farm Portion 249/1665 Monte Video Farm, Ward 15, Park Rynie, Umdoni Local Municipality, Ugu District (KZN 212), KwaZulu-Natal.

Applicant:	Environmental Consultant:
CF Landers and Son (Pty)Ltd	
	GREENBELT
	PO BOX 791, Umhlanga, 4320 Tel: 071 140 8350 steven@greenbeltprojects.co.za www.greenbeltprojects.co.za

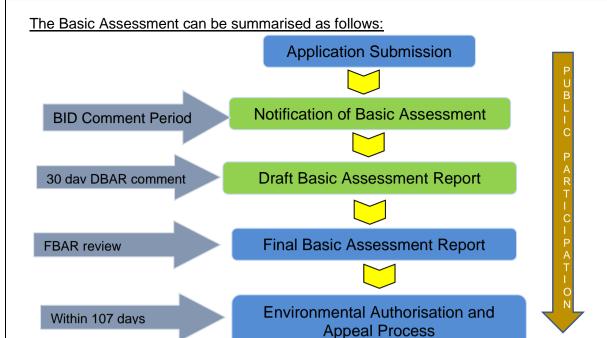
THE PURPOSE OF THIS DOCUMENT

This document aims to provide preliminary project information to enable you as an interested and affected party (IAP), with background information, and an opportunity to comment on the proposed development. This initial project information forms the basis of the Public Participation Process and offers you the opportunity to become actively involved in the project from the outset. Input from I&APs helps to ensure that all potential environmental issues are considered within the context of the proposed sand mining. All issues and comments raised by IAPs during the Application for Environmental Authorisation and Water Use License Application public participation will be documented. This will assist in the identification of environmental issues that could have a negative and/or positive impact on the site and the community as a whole.

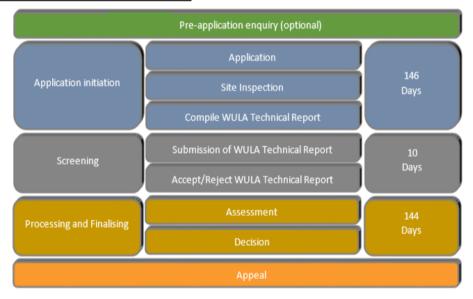
THE PROJECT APPLICATIONS

Greenbelt Projects (Pty)Ltd is submitting an Application for Environmental Authorisation (Mining Permit) and a Water Use Licence Application, on behalf of the applicant CF Landers and Son (Pty) Ltd for the proposed sand mining. The proposed activity will be subject to a Basic Assessment process in terms of the National Environmental Management Act 1998, (Act No. 107 of 1998), associated Environmental Impact Assessment Regulations 2014 (as amended 2017), and, the Mineral and Petroleum Resources Development Act (No.28 of 2002). In addition, a Water Use Licence Application will be submitted to the Department of Water and Sanitation in terms of the National Water Act (No.36 of 1998), Section 21(c) Impeding or diverting the flow of water in a watercourse, and, (i) Altering the bed, banks course or characteristics of a watercourse.

These regulations identify various activities which may have a substantial detrimental effect on the environment. In addition, the Regulations list procedures for assessing potential associated environmental impacts. Scoping forms part of the initial phase of these procedures.



The Water Use License Process is outlined below



THE PROJECT DESCRIPTION

The applicant CF Landers and (Pty)Ltd propose establishing a sand mining operation over 5 hectares on Farm Portion 249 of 1665 of the Farm Monte Video. The project site is located in Ward 15 of the Umdoni Local Municipality, Ugu District, KwaZulu-Natal. The centre point co-ordinates are 30°18'22.76"S 30°44'15.21"E.

The site is currently an established agricultural *Eucalyptus sp.* (Gum tree) plantation. CF Landers and Son (Pty) Ltd have identified the need to provide building sand to the local and regional building sand market, and as such are establishing a sand mining operation. The site comprises grey/red fine windblown sands of the Berea formation with underlying sandstone. The sand(silica) proposed for mining is generally clean and free of silt and clay, and this factor means that the bulk of the sand mined may utilised for building purposes, with no screening or processing required. The composition and quality of the sand is determined by the source rock. Sands derived from the Karoo Supergroup are generally less suitable for use as building sand owing to the high shrinkage which results from the presence of clays.

CF Landers and Son (Pty) Ltd has identified the study site as having suitable sand material for building and commercial use. No screening of sand will be required.

The proposed sand mining activities will entail a combination of the following methods: Mechanical Excavation by Excavator

- Tree felling of existing *Eucalyptus sp.* trees.
- De-stumping of felled trees.
- Stripping of topsoil, and stockpiling for rehabilitation purposes.
- Excavation by mechanical excavator to a maximum depth of 5m.
- Loading of haulage trucks by excavator or Tractor Loaded Backhoe (TLB), as and when required.
- Transportation of screened material to required end point (point of sale/distribution).

A site camp will be established at the existing aircraft landing strip hangar at 30°18'21.90"S 30°44'10.39"E. No stockpile area is anticipated, as material will be excavated and loaded as and when required by the mining operation.



Figure 1. Image taken from the private light aircraft landing strip looking east showing the Gum Tree plantation in the background proposed for sand mining.



Figure 2. Image looking west from the centre point of the proposed mining site.



Figure 3. Image looking north showing the eastern border of the mining site adjacent to the R102 Road.



Figure 4. Image showing test pit located in the southern region of the mining site.

AFFECTED AREA

Topography and Drainage

The site and surrounding areas comprises a gentle east facing dune slope. The proposed mining site is located with the U80K quaternary catchment. There is an un-named nonperennial watercourse located 20m to the north of the site, and another 300m to the south of the site. Within the mining site is a modified drainage channel along the northern boundary. All watercourses drain in an easterly direction. The proposed mining site has a high point of 68masl in the south west east and a low point of 53masl in the north east of the site. A Wetland Assessment and Functionality and Riparian Delineation will be undertaken as part of the Application processes.

Vegetation

The Vegetation of South Africa, Lesotho and Swaziland describes the vegetation in the study area as Indian Ocean Coastal Belt, which corresponds with the Subtropical Coastal Forest Biome, and Mucina and Rutherford (2006) classify the vegetation group as KwaZulu-Natal Coastal Belt (CB3). The KwaZulu-Natal Coastal Belt is characterised by highly dissected undulating plains, which previously may have been covered to a large extent with various types of subtropical coastal forest. Some primary grassland dominated by *Themeda triandra* still occurs in the hilly, high rainfall areas, however, anthropological activities in this belt have created secondary *Aristida* grasslands, thickets and patches of coastal thornveld. Three endemic plant species are recorded by Mucina and Rutherford for the KwaZulu-Natal Coastal Belt (CB3) vegetation type, and these include *Vernonia Africana* (Extinct), *Barleria natalensis* (Baleria) (Extinct) and *Kniphofia pauciflora* (Dainty poker) (Critically Endangered and Declining).

The study site comprises an existing *Eucalyptus sp* (Gum Tree) agricultural plantation. *Strelitzia nicolia* (Stelitzia), *Phoenix reclinata* (Wild Date Palm), and *Dracaena aletriformis* (Dragon tree) were noted in isolation across the proposed mining site. These, however do not constitute indigenous forest formation. Alien invasives noted include *Eucalyptus sp* (Gum tree) *and Nephrolepis exaltata* (Sword Fern) *and Chromolaena Odorata* (Chromolaena).

Fauna

The existing Gum plantation, scrub and agricultural drains are likely to provide habitat for associated species such as birds, small mammals, reptiles and amphibians. The Ezemvelo KZN Wildlife Terrestrial Systematic Conservation Plan 2010 (TSCP) allocates the study area a 100% Transformed Area. The site is not located within a Critical Biodiversity Areas, there are CBA areas located 250m to the north of the northern boundary and 540m to the south of the southernmost boundary.

Culture and Heritage

No areas of cultural or heritage significance where noted from preliminary site investigations. KwaZulu-Zulu Natal Heritage (AMAFA) will be consulted as part of the Public Participation Process. A Heritage Impacts Assessment and Desktop Palaeontological Assessment will be undertaken as part of the application processes.

National and District Roads

The site is located between the R102 road and National Road 2 (N2). The eastern boundary of the proposed mining area abuts the R102 reserve, and the western boundary of the proposed mining area abuts the private light aircraft landing strip. The N2 is located 450m to the west of the proposed mining area. Site access is gained of an existing gravel road from the R102 (at 30°18'13.45"S 30°44'23.50"E), to the north of the mining site. No new road access points will be required on local, regional or national roads.

Services

Limited power lines and telecommunications were noted on and near to the site, however, the presence of underground services is not known. All relevant government departments or parastatals will be consulted as part of the Public Participation Process.

Geology

Mucina and Rutherford describe the regional geology as Ordovician Natal Group sandstone, Dwyka tillite, Ecca shale and Mapumulo gneiss or Mokolian within the KwaZulu Natal Coastal Belt. The weathering process of old dunes has produced Berea red sand in places and the soils supported by the rock types in the area are shallow over hard sandstones and deeper over younger and softer rocks. The site comprises grey/red fine windblown sands of the Berea formation with underlying sandstone.

Land use and Socio-economic structure

Land use for the proposed site is agricultural. The landuses to the north, west and south of the site are also agriculture. Scottburgh South and Park Rynie residential area is located to the east, immediately across the R102 road.

POTENTIAL KEY ISSUES

Visual and Noise Impact

Mining activities to the west of the Park Rynie residential area impacts visual and aesthetics, and a sense of place within the area.

Watercourses

Sand mining is an extractive process, and if not correctly managed the cumulative impacts of sediment loss may impact downstream watercourses.

Vegetation clearance

Some isolated indigenous trees and shrubs will require clearing. Large cleared areas will render the site susceptible to alien invasive plant establishment. Vegetation clearing should be done in a phased approach. As the site is dominantly Gum plantation, the clearing of 5 hectares of Gum tree plantation may result in elevated ground water levels.

Erosion

Potential erosion should always be considered during and after mining. If strict mitigation measures are implemented these potential factors can be prevented / reduced. Mitigation measures include embankment stabilisation and re-vegetation of affected areas as well as the avoiding of areas susceptible to erosion.

Positive Impacts - The direct and indirect opportunities created by the mining activity will contribute to the local and regional building industry.

INTERESTED AND AFFECTED PARTIES

All Interested and Affected Parties (IAPs) wishing to become registered as such and receive additional information, as well as an invitation to any public meeting, should one be required, should complete and return the overleaf registration form or contact the environmental consultant to register as soon as possible. If you are aware of any IAPs who have not been informed or identified by ourselves, please let us know, so that they too may have the opportunity to register and / or receive information. Any issues, which you would like to raise and have not been identified to date, would be welcomed.



Figure 5 – Locality Plan



Figure 6 – Site Plan

Proposed Sand Mining on Portion 249/1665 Monte Video Farm IAP Registration and Comment Form

KINDLY COMPLETE THIS FORM AND RETURN IT TO:

Greenbelt Project (Pty) Ltd

PO BOX 791, Umhlanga, 4320

Tel:(071) 140 8350

Email: steven@greenbeltprojects.co.za

	I I
Title	
First Name	
Surname	
Email	
Telephone	
Fax	
Organisation	
Capacity	
Physical Address	
Postal Address	
1. What is your mair	n interest with regards to the proposed project?
2. Do you have any	issues or points of concern or support regarding the proposed project?
3. Are there any add project?	ditional stakeholders who you feel should be consulted with regards to the proposed