

**SANRAL STONE CRESCENT
EMBANKMENT STABILISATION
WORKS – BACKGROUND
INFORMATION DOCUMENT
DEFF Ref: 14/12/16/3/3/1/2425**



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1. INTRODUCTION

Isipho Environmental Consultants has been appointed by Zutari South Africa (Pty) Ltd to provide environmental sub-services for the SANRAL Stone Crescent Embankment Stabilisation Works along the National Route 2 near Grahamstown in the Eastern Cape.

In line with Regulation 15 of the NEMA EIA, 2014 Regulations, the process that has been identified for this application is the Basic Assessment Process. As guided by Section 24C of the NEMA Act, the National Department of Environment, Forestry and Fisheries (DEFF) has been determined to be the competent authority for application process.

An Application for EA has been submitted to DEFF. In support of this, SANRAL is required to undertake a Basic Assessment process as per the NEMA EIA Regulations, 2014 (as amended) for the proposed project.

2. DESCRIPTION OF PROJECT

Proposed Activity:

SANRAL is proposing to undertake geotechnical slope stabilisation works along a section of the N2 outside Grahamstown. The project is located approximately 10 km south of Grahamstown, on the National Route 2 Section 13, km 42.5 to 43.5, opposite Stone Crescent Hotel (33°21'28.0"S 26°29'17.9"E). The site itself comprises a fill embankment immediately adjacent to the national route.

The major aspects of this project include the following:

- Extension of existing 1.8m high concrete retaining wall at toe of embankment (Wall 1) adjacent river course by means of a reinforced concrete or gabion structure, between about chainage 43.110 to 43.160 (approximately 50m distance). Backfilling behind new wall.
- Stabilisation of upper fill embankment at about chainage 43.130, with slumping of embankment slope in this area immediately adjacent road (see Figure 3). Stabilisation may be with soil nails.
- Extension of existing 3.0m high concrete retaining wall at toe of embankment (Wall 2) adjacent river course by means of a reinforced concrete or gabion structure, between about chainage 42.920 to 42.950 (approximately 30m distance). Backfilling behind new wall. In this regard slumping of the lower embankment at about chainage 42.950 (adjacent eastern end of Wall 2) has occurred.
- Undercutting in places of Wall 1 foundation via scour erosion of river (approximate chainage 42.210) requiring infilling via concrete and/or erosion protection support such as reno mattresses.
- Gabion buttress walls in places to stabilise river eroded and undercut toe areas of existing embankment, with or possibly without soil nails. These areas are located at about chainages 43.300 and 43.430.
- Overall length of area to be stabilised anticipated to extend from chainage 42.8 to 43.5 (left hand side). Envisaged not to extend along the entire chainage section as stated but rather in localised key areas identified by the investigation and design process.

Thus, stabilisation works are envisaged on the existing fill embankment within the road reserve but also encroaching slightly into river zone beyond road reserve in places. The construction is anticipated to be approximately 12 months duration,

Location:

The project is located approximately 10 km south of Grahamstown, on the National Route 2 Section 13, km 42.5 to 43.5, opposite Stone Crescent Hotel (33°21'28.0"S 26°29'17.9"E). The site itself comprises a fill embankment immediately adjacent to the national route on the Left-hand side (Refer to Figure 1). The site falls in Makana Local Municipality and Sarah Baartman District Municipality in the Eastern Cape Province. Properties that will be affected by this project are Zyfer Fonteyn 253 (Portion 0, 11 and 12RE) and Palmiet Rivier 305 (Portion 34, 36).

The study area is located on the left side of the northbound carriageway of National Route 2 Section 13, approximately between km 42.5 and km 43.5. The study area is close to Makhanda (Grahamstown) in the Eastern Cape where the road embankment is showing signs of slope instability that could be aggravated by scour during a flood event along the Berg River, which is a tributary of the Palmiet River to the Southwest. Various stabilisation options could be implemented, depending on the level of risk and site conditions.



Figure 1: Locality Map



Figure 2: Undercut embankment along the Berg river at about chainage km 43.300.



Figure 3: Gaps in the existing bitumen pre-mix curbs and resultant erosion and slumping down the embankment at approximate chainage km 43.130



Figure 4: Existing cobble riverbed adjacent the N2

The boundary coordinates of the application area are provided below:

ID	Latitude (DMS)	Longitude (DMS)
A	33°21'21.56"S	26°29'28.26"E
B	33°21'21.93"S	26°29'28.41"E
C	33°21'31.85"S	26°29'11.11"E
D	33°21'31.43"S	26°29'10.72"E

3. LISTED ACTIVITIES TRIGGERED

It is anticipated that the proposed project will trigger the following listed activities:

Table 1: Listed activities triggered by the development

Listed Activity	Description	Applicability to project
Listing Notice 1 Activity 12	The development of- (xii) infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs- (a) within a watercourse; (c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse; -	Stabilization works will include construction of retaining walls within 32 metres of a watercourse. Some sections of the works may encroach into the riparian zone.
Listing Notice 1 Activity 19	The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from- (i) a watercourse;	Works may require infilling or extraction of earth material along the banks of a watercourse.
Listing Notice 1 Activity 49	The expansion of – (v) infrastructure or structures where the physical footprint is expanded by 100 square metres or more; where such expansion or expansion and related operation occurs- (a) within a watercourse; (c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse;	Existing retaining wall will be extended by approximately 50 m
Listing Notice 3 Activity 12	The clearance of an area of 300 square metres or more of indigenous vegetation (a) In Eastern Cape ii. Within critical biodiversity areas identified in bioregional management plans	Clearance of vegetation will be required prior to excavation and construction. CBA to be confirmed through specialist studies
Listing Notice 3 Activity 14	The development of- xii) infrastructure or structures with a physical footprint of 10 square metres or more; (c) In Eastern Cape: ii. Outside urban areas, in: (ff) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; determined; (hh) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres	The development may be location within a critical biodiversity area. This will be confirmed by specialist studies. The area is also within 5km from Thomas Baines Nature Reserve which is a formally protected area.

Listed Activity	Description	Applicability to project
	from any other protected area identified in terms of NEMPAA or	

4. POTENTIAL IMPACTS IDENTIFIED

In order to calculate the significance of an impact, probability, duration, extent and magnitude will be used. The pre- and post-mitigation scores will provide an indication of the extent to which an impact can be mitigated.

Potential impacts that may occur as a result of the proposed project are:

- Impact 1. Loss and fragmentation of the vegetation community
- Impact 2. Loss of important Critical Biodiversity Areas
- Impact 3. Pollution of watercourses (sediment, litter and binding liquid)
- Impact 3. Displacement and disturbance of faunal community) due to habitat loss and disturbances (such as dust and noise);
- Impact 4. Erosion and movement of topsoil resulting in the loss of habitat
- Impact 5. Spread and/or establishment of alien and/or invasive species
- Impact 6. Infringement by humans into the surrounding natural areas, with associated impacts such as poaching, litter and introduction of diseases
- Impact 7. Noise impacts
- Impact 8. Air Quality Impacts
- Impact 9. Disturbance of existing land uses
- Impact 10. Job Creation.

5. PUBLIC PARTICIPATION PLAN

The Public Participation Process (PPP) is a requirement of several pieces of South African Legislation and aims to ensure that all relevant I&AP's are consulted, involved and their opinions are taken into account and a record included in the reports submitted to Authorities. The process ensures that all stakeholders are provided this opportunity as part of a transparent process which allows for a robust and comprehensive environmental study.

The regulations enforced in terms of Government Gazette 43096 which placed South Africa in a national state of disaster limiting, the movement of people to control the spread of the COVID-19 virus has placed some limitations on the undertaking of the public consultation as part of an EIA process. Considering these limitations, the consultation process outlined in this document has been designed and will be implemented, on approval by the Department of Environmental Affairs (DEA), to cater for the conducting of the public participation process which includes I&APs, the competent authority, directly impacted landowners/occupiers, adjacent landowners/occupiers, relevant Organs of State departments, Municipalities, ward councillors and other key stakeholders.

The public participation (PP) process will be undertaken in line with the requirements of Regulations 39 to 44 of the Environmental Impact Assessment (EIA) Regulations, 2014, as amended. The primary aim of the public participation process is to ensure that:

- Information that reasonably has or may have the potential to influence any decision regarding an application is made available to potential stakeholders and I&APs;
- Potential or registered interested and affected parties, including the competent authority, may be provided with an opportunity to comment on reports and plans; and
- Comments received from potential stakeholders and I&APs are recorded and incorporated into the Basic Assessment Report to be submitted to the Competent Authority.

The public participation process will focus on dissemination of project information through electronic methods and minimize physical interaction with interested and affected parties. No public meetings will be held due to the limitations applied by the Disaster Management Act Regulations prohibiting the gathering of people. Project background information will be posted on the company website so that I&APs can take time to understand the proposed activity and potential impacts identified, comments and feedback will be received via registered letters, email and fax. In order to cater for I&APs without access to email, notices will be published in the local news paper and site notices also placed near the site. Registered letters will be posted to Landowners and occupants where postal addresses are available.

IDENTIFICATION AND REGISTRATION OF IAPs

An initial I&AP list will be compiled using records from previous studies undertaken to determine the contact details of government officials and traditional authorities. Landowners will be identified using winded searches and through consultation with known landowners. Additionally, landowners and occupants will be identified through consultation with ward councillors, traditional authority structures and the local municipalities. It is also anticipated that some IAPs will respond to the adverts and notices that will be placed in the newspaper and on site. The I&AP database will be compiled containing the following categories of stakeholders:

- The competent authority
- Directly impacted landowners/occupiers
- Adjacent landowners/occupiers
- Relevant organs of state departments
- Municipalities
- Ward councillors and other key stakeholders.

Registered IAPS will be kept abreast of the application and Basic Assessment process and received notification when there is opportunity to provide comment.

I&AP Category	Name	Organization	Contact Detail
Competent Authority	Zama Langa	Department of Forestry, Fisheries and the Environment	ZLanga@environment.gov.za
Directly impacted landowners/occupiers	Mr Tariq Usman	Stone Crescent Hotel	stonecrescenthotelght@gmail.com/ usmantariq866@gmail.com
Directly impacted landowners/occupiers	Ms Trelss Elen Mc Gregor	Conservation Academy	info@conservationacademy.co.za
Relevant organs of state departments	Mr Briant Noncembu	Eastern Cape Department of Economic Development, Environmental	briant.noncembu@dedea.gov.za

		Affairs and Tourism	
	Mr Sello Mokanya	Eastern Cape Provincial Heritage Resources Authority	smokhanya@ecphra.org.za
	Ms Portia Makhanya	Department of Water and Sanitation	MakhanyaP@dws.gov.za
	Ms Shane Gertze	ECPTA	Shane.Gertze@ecpta.co.za
	Ms Phumza Mathumba	Department of Rural Development and Land Reform	phumza.mathumba@drdlr.gov.za
Municipality	Johanne Esterhuize	Makana Local Municipality	JohanneEsterhuizen@makana.gov.za
Ward councillors	Vuyani Nesi	Makana Local Municipality Ward 14	vnesi/tseyisi@makana.gov.za

NOTIFICATION OF IAPs

Consultation with Competent Authority

In line with Regulation 15 of the NEMA EIA, 2014 Regulations, the process that has been identified for this application is the Basic Assessment Process. As guided by Section 24C of the NEMA Act, the National Department of Environment, Forestry and Fisheries (DEFF) has been determined to be the competent authority for application process. A pre-application meeting request has been submitted to DEFF on 24 August 2021 however it was confirmed that no meeting will be required for this project.

Consultation with other IAPs

The following will be undertaken as part of the public participation process:

- Placement of 2 site notices (in English and isiXhosa) near the project area;
- Placement of an advert in English and isiXhosa in the Provincial Gazette/ Local Newspaper;
- Distribution of registered letters to landowners, occupants and adjacent landowners/occupants
- Notification of interested and affected parties by email and messaging

A questionnaire will be distributed to all interested and affected parties along with a notification letter, background information document containing the project description, locality map of the project and anticipated impacts. The questionnaire will provide I&APs an opportunity to share their knowledge on the sensitivities of the application area, comments as well as any objections they may have. Contact details of I&APs will be registered in a database for subsequent notification as the Basic Assessment Process progresses.

The draft Basic Assessment Report will be made available for public review for 30 days before it is submitted to the Competent Authority for decision making. All comments received from interested and affected parties will be included in the final Basic Assessment Report

Description of the Information Provided to the Community, Landowners and I&AP's

Notification documents to be sent to all pre-identified I&AP's will include the following information:

- The site plan;
- List of activities to be authorised;
- Scale and extent of activities to be authorised;
- Typical impacts of activities to be authorised;
- The duration of the activity;
- Sufficient detail of the intended operation to enable them to assess what impact the activities will have on them or on the use of their land);
- The purpose of the proposed project;
- Details of the affected properties (including parent farm and portion);
- Details of the NEMA Regulations that must be adhered to;
- The information contained in the BAR and EMPR;
- Date by which comment, concerns and objections must be forwarded through to the EAP; and
- Contact details of the Environmental Assessment Practitioner (EAP).
- In addition, a questionnaire will be included in the registered letters, emails and facsimiles sent and request the following information from I&AP's:
- To provide information on how they consider that the proposed activities will impact on them or their socio-economic conditions;
- To provide written responses stating their suggestions to mitigate the anticipated impacts of each activity;
- To provide information on current land uses and their location within the area under consideration;
- To provide information on the location of environmental features on site, to make written proposals as to how and to what standard the impacts on site can be remedied.
- To mitigate the potential impacts on their socio-economic conditions to make proposals as to how the potential impacts on their infrastructure can be managed, avoided or remedied;
- Details of the landowner and information on lawful occupiers;
- Details of any communities existing within the area;
- Details of any Tribal Authorities within the area;
- Details of any other I&AP's that need to be notified;
- Details on any land developments proposed;
- Details of any perceived impacts to the environment that should be considered in the BAR; and
- Any specific comments, concerns or objections to the proposed project.

As a result of the public notification, a register will be opened and maintained, which recorded all contact details of persons whom have submitted written comments or responded to the notifications, and who have requested that they be registered as Interested and Affected Parties (I&APs). All registered I&APs will be informed of the required process of involvement as defined by the EIA

regulations. A detailed Public Consultation Report will be prepared and maintained throughout the process. This will serve to record all comments and response received from and sent to I&AP's.

As part of the PPP the registered I&APs will given an opportunity to comment on the Basic Assessment Reports (BAR) to be submitted to the Competent Authority.

One (1) hard copy of the Draft version of the BAR will be made available at a nearby Public Library and registered I&APs will be notified of its availability. The Final Basic Assessment Reports will be submitted to the Competent Authorities in accordance with the Competent Authorities requirements. All comments received from I&APs will be submitted together with the Basic Assessment Report to the Competent Authorities for decision-making.

Project PPP Timeframes

Notification Type	Description	Anticipation Date
Advert (Local Newspaper)	An Advert will be placed in the Grocott's Mail Newspaper providing detail on the proposed project, the applicant, affected properties and contact details of the EAP for more information. The Advert will be posted in English and IsiXhosa.	30 August 2021
Advert (Provincial Gazette)	An Advert will be placed in the Provincial Gazette providing detail on the proposed project, the applicant, affected properties and contact details of the EAP for more information	30 August 2021
Site Notices	Two A2 size corex notices will be placed near the application area. The Notices will contain information on the proposed project, the applicant, affected properties and contact details of the EAP for more information. A map of the application area and identified sensitivities will be included in the notices. The notices will be posted in English and IsiXhosa.	30 August 2021
Notification Letters	Letters will be sent out to identified IAPs with project background information as well as questionnaires for providing feedback and comment on the proposed project	September 2021
Availability of Basic Assessment Report	Notification regarding availability of the report will be sent out by email, registered letters and sms notification. IAPs will be provided an opportunity to comment on the report for 30 days. The Basic Assessment report will be placed at a public venue such as a library and will also be available by email upon request by the EAP. A summary of the DBAR will be uploaded on the company website.	30 September 2021

Notification Type	Description	Anticipation Date
Submission of FBAR to Competent Authority	Once the Draft BAR has gone through public review process for 30 days, all comments received will be incorporated into the report received and submitted to the competent authority for decision making.	04 November 2021
Notification of decision on application	Notification letter with details as outlined in the EA issued will be sent via email, fax or post.	March 2022

6. OPPORTUNITY TO PARTICIPATE

Interested and Affected Parties (I&AP's) are provided an opportunity to register and comment on the proposed activity and application. The Basic Assessment process will be undertaken in accordance with the National Environmental Management Act (Act 107 of 1998) (NEMA) and associated Regulations. One (1) hard copy of the Draft BAR will be made available at the nearest public venue i.e library and registered I&APs will notified of its availability. The draft Bar will also be submitted to commenting authorities such as DWS and ECDEDEAT. Electronic copies will be made available upon request and posted on the company website (www.isiphoseco.co.za). To ensure that you are identified and registered as an interested and affected party (I&AP) please submit your name, contact details and the reason for your interest, in writing or telephonically, to Isipho Environmental Consultants (Pty) Ltd.

Please submit any queries, comments, concerns or issues (including the reference number 0014) to:

Isipho Environmental Consultants (Pty) Ltd)

Phone: 0814102569 / Fax: 086 685 1304

Contact: Andisiwe Stuurman Xuma

Email: enviro.isipho@gmail.com/ andisiwe@isiphoseco.co.za

Isipho Environmental Consultants will endeavour to ensure that interested and affected parties are kept informed and are provided opportunity to participate in the environmental application process without compromising the safety through compliance with both the requirements of Regulations 39 to 44 of the Environmental Impact Assessment (EIA) Regulations, 2014, as amended as well as the Disaster Management Act Regulations.