

**BASIC ENVIRONMENTAL IMPACT ASSESSMENT  
FOR THE  
TRANSNET SOC Ltd BOSHOEK LOOP**



**BACKGROUND INFORMATION DOCUMENT  
&  
INVITATION TO COMMENT:**

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## AIM OF THIS DOCUMENT

The purpose of this document is to ensure that **people interested in or affected by the proposed project** are **provided with information about the proposal, the process being followed** and **provided with an opportunity to be involved** in the environmental assessment process.

Registering as an **Interested and/or Affected Party (I&AP)** allows individuals or groups the opportunity to **contribute ideas, issues, and concerns regarding the project**. I&APs also have an opportunity to **review all reports and submit comments** on those reports. All comments received are included in the reports submitted to the Competent Authority (The national Department of Environmental Affairs).

## THE PROPONENT

Transnet SOC Limited is a South African parastatal that provides freight transport and handling services in South Africa. The company operates through five divisions: Freight Rail, Engineering, National Ports Authority, Port Terminals, and Pipelines. The Freight Rail maintains the rail network across South Africa and it connects with other rail networks in the sub-Saharan region. It also transports automotive products, containers, lime and cement, coal, grains, agricultural fuels, chemicals, fertilizers, chrome and manganese, and granites for mining. The project forms part of the Transnet Waterberg rail corridor expansion between Ermelo and Lephalale located in Mpumalanga and Limpopo respectively.

## THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

EOH Coastal and Environmental Services (EOH CES) is specialised in environmental and social impact assessments and environmental management and has been appointed by Transnet SOC Ltd to conduct the required Basic Assessment for the proposed project.

## PROJECT DESCRIPTION

Transnet SOC Ltd has proposed the expansion of the railway lines by constructing a new loop at the Boshhoek line. The strategic importance of this rail section is highlighted by the large volume and variety of commodities currently being transported, such as coal, chrome, iron ore, containers and general freight.

The new Boshhoek Loop will be 1.6km long, between Boshhoek and Ilitha mining, in the Rustenburg Local Municipality, Bojanala Platinum District Municipality of the North West Province (Figure 1).

The scope of works includes the following activities:

- i. Construction of track work (20t axle loading formation layers), required for doubling of the existing line and expansion of the bridge;
- ii. Installation of a localised remote control system to enable the train driver to remotely operate the tangential point sets of both sides of the loop, using a radio control;
- iii. The extension of 5 box culverts to accommodate the new loop. Only the length of the culverts will be extended, not the existing design type or location; and
- iv. A river bridge will be constructed at approximately km 135.130, the size and shape of which will be similar to the existing one on the main line.

Based on the proximity of nearby surface water resources (Figure 2), the contents of which is explained in more detail below, the proposed development will trigger Section 21(c) and 21(i) water uses, as set out in the National Water Act (NWA – Act 36 of 1998), thus requiring a Water Use Licence (WUL), or General Authorisation (GA), depending on the risk assessment conducted by the Aquatic and Wetland Assessment specialist.

The National Freshwater Ecosystem Priority Areas (NFEPA, 2011) project was a partnership and collaborative process led by the CSIR with the South African National Biodiversity Institute (SANBI), Department of Water Affairs (DWA), the Water Research Commission (WRC), WWF South Africa, as well as expertise from South African National Parks (SANParks) and the South African Institute for Aquatic Biodiversity (SAIAB). The aim was to provide a strategic layout of all national rivers, wetlands and estuaries that should remain healthy. These NFEPA rivers and wetlands are mapped in Figure 2, along with a 500m boundary around wetlands, and a 32m boundary around rivers, in order to show how the project may influence these resources.

Furthermore, the North West Biodiversity Sector Plan (2015) provided input into this project. The purpose of this project was to finalize the biodiversity conservation assessment for the province, which will be used to inform the development of the Provincial Biodiversity Sector plans and bioregional plans. This will also be used to inform Spatial Development Frameworks (SDFs), Environmental Management Frameworks (EMFs), Strategic Environmental Assessments (SEAs) and in the Environmental Impact Assessment (EIA) process in the province. A Critical Biodiversity Area (CBA) map was developed for the province (which includes Ecological Support Areas (ESA). The CBA map is intended to act as the biodiversity sector's input into multi-sectoral plans and assessments (e.g. SDF, EMF EIA, IDP, etc.). The CBA map product is aligned with national standards for bioregional plans in terms of terminology and methods. These regions have thus also been mapped in Figure 2, to show the relative sensitivity of the different ecological zones applicable to this project.



Figure 1: Overall location of Boshhoek Loop. This area defines the 'project region' term used later in this report.

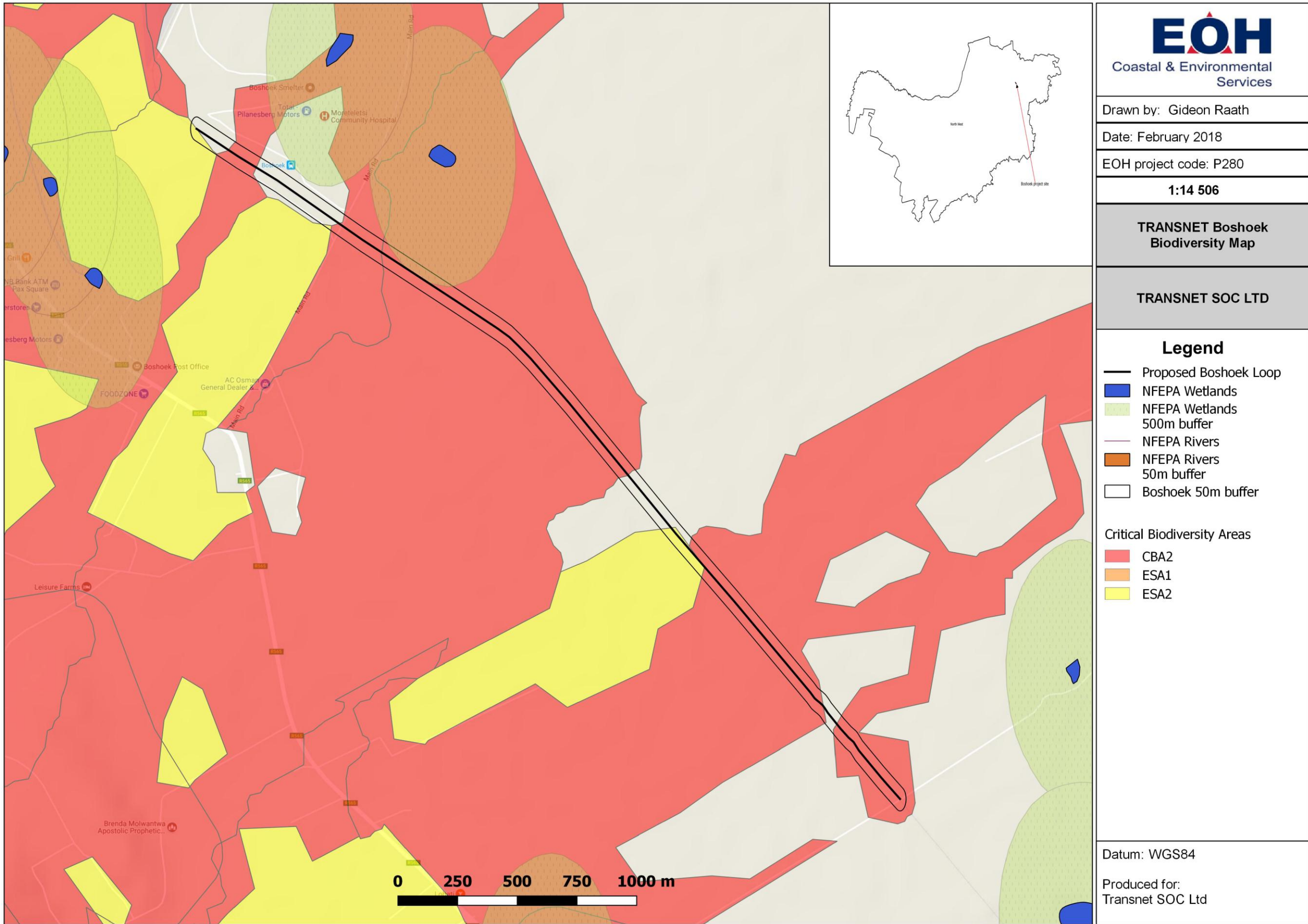


Figure 2: Wetlands and rivers, along with CBA and ESA's for the project region at the proposed Boshhoek Loop.

## RELEVANT LEGISLATION

The Environmental Impact Assessment (EIA) Regulations, made in terms of Section 24 of Chapter 5 of the National Environmental Management Act (Act No 107 of 1998), and the related Lists of Activities (Government Notices (GN) R. 326, issued on the 07<sup>th</sup> April 2017), specify the activities that require either a Basic Assessment, or a full Scoping and EIA respectively.

The proposed project is subject to a Basic Assessment Report in terms of the following activities, which are likely to be triggered:

Activity Number (2017)	Activity Description	Identification of Component Authority
Listing Notice 1 (GNR 327)		
GN R. 327- No. 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; (c) if no development setback exists, within 32metres of a watercourse, measured from the edge of a watercourse; - Excluding – (ee) where such development occurs within existing roads, road reserves or railway line reserves	While the proposed loop construction will occur within the railway line reserve, provision must be made for laydown and construction camp areas, which will not be located within the railway reserve, and will thus trigger this activity
GN R. 327- No. 14	The development and related operation of facilities or infrastructure, for the storage, or for the storage and handling, of a dangerous good, where such storage occurs in containers with a combined capacity of 80 cubic metres or more but not exceeding 500 cubic metres.	Operations of a siding include the temporary storage of moderate quantities of dangerous goods, which may exceed the threshold identified.
GN R. 327- No. 19	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 a watercourse	Due to the alignment of the proposed loop, development within or near a watercourse will definitely occur.
GN R. 327- No. 40	The expansion of— i) infrastructure or structures where the physical footprint is expanded by 100 square metres or more; or where such expansion occurs – (a) within a watercourse; excluding— (ee) where such expansion occurs within existing roads, road reserves or railway line reserves or moving— (a) will occur behind a development setback; (b) is for maintenance purposes	While the proposed loop construction will occur within the railway line reserve, provision must be made for laydown and construction camp areas, which will not be located within the railway reserve, and will thus trigger this activity.

	<p>undertaken in accordance with a maintenance management plan;</p> <p>(c) falls within the ambit of activity 21 in this Notice, in which case that activity applies;</p> <p>(d) occurs within existing ports or harbours that will not increase the development footprint of the port or harbour; or</p> <p>(e) where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies.</p>		
<b>Listing Notice 3 (GNR 324)</b>			
GN R. 324- No.10(h)(iv)	<p>The development and related operation of facilities or infrastructure for the storage, or storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of 30 but not exceeding 80 cubic metres</p>	<p>h. North West</p> <p>iv. Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority;</p> <p>vi. Areas within a watercourse or wetland, or within 100 metres from the edge of a watercourse or Wetland</p>	<p>Operation of a siding includes the temporary storage of moderate quantities of dangerous goods, which may exceed the threshold identified.</p>
GN R. 324- No.12(h)(iv)(Appendix 1)	<p>The clearance of an area of 300 square metres or more of indigenous vegetation except: where such clearance of indigenous vegetation is required for maintenance purpose undertaken in accordance with a maintenance management plan.</p>	<p>h. North West:</p> <p>iv. Critical biodiversity areas as identified in a systematic biodiversity plan.</p>	<p>Construction of the proposed loop comprises clearance of indigenous vegetation in excess of the threshold, across regions classified as CBA 2.</p>
GN R. 324- No.14	<p>The development of— (ii) infrastructure</p>	<p>h. North West</p> <p>iv. Critical biodiversity areas as identified in systematic biodiversity</p>	<p>Due to the alignment of the proposed loop, development within or near a watercourse will be definitely occur.</p>

	<p>or structures with a physical footprint of 10 square metres or more; ]where such development occurs—  (a) within a watercourse;</p>	<p>plans adopted by the competent authority;  vi. Areas within a watercourse or wetland, or within 100 metres from the edge of a watercourse or wetland.</p>	
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**\*Please note:** Only summary descriptions are included here for the sake of brevity. Please consult the Government Notices (GN) R.327, 325 and 324, of the EIA Regulations (7<sup>th</sup> April 2017) for a complete listing and description of each activity mentioned here.



## APPROACH TO THIS BASIC ASSESSMENT REPORT

The BA for the proposed project is presently in the planning phase. This phase serves primarily to inform the public and relevant authorities about the proposed project and to determine any impacts. These impacts will then be extensively addressed during the environmental impact assessment studies. Only after the full Basic Assessment Report has been submitted will the relevant authorities make a decision.

A Draft Basic Assessment Report (dBAR) will be compiled which will comprehensively describe the activities and impacts that the project may have on the receiving environment, including specialist reports and details from the PPP process. The dBAR and Environmental Management Programme (EMPr) will be submitted for a 30 day public comment period.

Subsequent to the review and commenting period, a Final BAR will be compiled for submission to Department of Environmental Affairs (DEA). This will include all public comments and response to issues raised by I&APs.

Should the authorities grant approval via an environmental authorisation, all registered I&APs will be notified accordingly and given the opportunity to appeal against the decision, should they so wish.

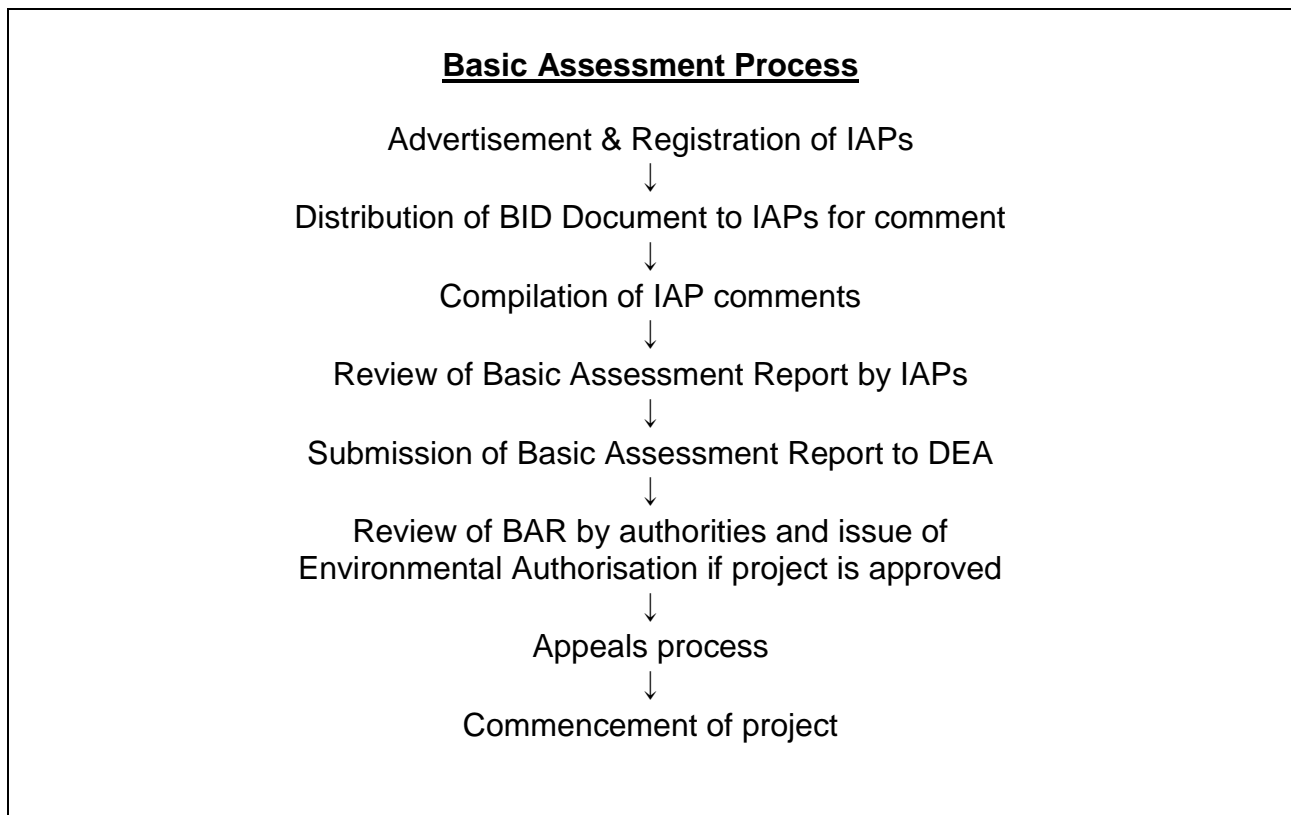


Figure 3: Proposed Basic Assessment Process Including Public Participation.

## POTENTIAL IMPACTS AND BENEFITS

The following general impacts are anticipated from the rail upgrade works:

- Alteration of hydrological regime of rivers
- Light pollution
- Hazardous spillage
- Dust generation
- Soil erosion
- Noise increase
- Heritage impacts
- Vegetation and faunal impacts
- Traffic impacts
- Sedimentation of rivers
- Water contamination
- Social impacts
- Invasive alien species spread
- Stormwater impacts
- Loss of habitat and ecosystem quality
- Loss of soil fertility
- Waste creation and storage

The following specialist studies will be conducted to ascertain any potential impacts, positive and negative, that may occur as a result of the potential authorization of the project, and to propose mitigation measures for the construction and operation phases:

- Phase I Heritage Impact Assessment;
- Ecological Impact Assessment; and
- Aquatic and Wetland Assessment (inclusive of Present Ecological State (PES) and Ecological Importance and Sensitivity (EIS) and risk assessment – in order to satisfy WUL requirements).

## HOW CAN YOU BE INVOLVED?

A Public Participation Process (PPP) is being conducted as part of the BAR. The aim of the PPP is to allow everyone who is interested in, or likely to be affected by, the proposed development to provide input into the process.

The Public Participation Process will include:

- Advertisements in the local newspapers;
- Notice Boards on site;
- Circulation of the BID (this document) to all I&APs and stakeholders;
- Registration of all I&APs and stakeholders;
- Community and focus group meetings; and
- Review of all comments by registered I&APs and stakeholders.

If you consider yourself an interested and/or affected person/party, **it is important that you become and remain involved in the public participation process.** In order to do so please follow the steps below in order to ensure that you are continually informed of the project developments and will ensure your opportunity to raise issues and concerns pertaining to the project.

**STEP 1:** Please **register** by responding to our notification and invitation, with your name and contact details (details provided on cover page and below). As a registered I&AP you will be informed of all meetings, report reviews and project developments throughout the EIA process.

**STEP 2:** Please send us any comments, concerns or queries you may have in relation to the proposed rail upgrade activities.

**STEP 3:** Attend meetings that will be held throughout the BAR process. As a registered I&AP, you will be invited to these meetings.

EOH CES is required to engage with all private and public parties that may be interested and/or affected by the proposed rail upgrade BAR, in order to distribute information for review and comment in a transparent manner.

In the same light, it is important for I&APs to note the following:

1. In order for EOH CES to continue engaging with you, please **ENSURE** that you register on our database by contacting the person below.
2. As the BAR process is regulated by specific review and comment timeframes, it is your responsibility to submit your comments within these timeframes.

**I hereby wish to register as an Interested and Affected Party (I&AP) for the  
Transnet SOC Ltd railway line expansion at the Boshhoek Line.**

Name:

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Organization:

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Postal address:

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Email:

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Mobile #: \_\_\_\_\_ Fax #: \_\_\_\_\_

Landline #: \_\_\_\_\_

My initial comments, issues or concerns are:

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Other individuals, stakeholders, organisations or entities that should be registered are:

Name:

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Organization:

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Postal address:

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Email:

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Phone #: \_\_\_\_\_ Fax #: \_\_\_\_\_

Landline #: \_\_\_\_\_

Please return details to: Gideon Raath: Block D, Gillooly's View Office Park  
(EOH Business Park), 1 Osborne Lane, Bedfordview, Johannesburg, 2007.

Tel: (011) 607 8389 (ext: 8389) Email: [gideon.raath@eoh.co.za](mailto:gideon.raath@eoh.co.za)