



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

(For official use only)

File Reference Number:

Application Number:

Date Received:

Basic assessment report in terms of the Environmental Impact Assessment Regulations, 2010, promulgated in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended.

THE PROPOSED CONSTRUCTION OF A NEW ENTRANCE (BAYVUE GATE) AND ACCESS ROAD TO THE PORT OF RICHARDS BAY SITUATED WITHIN THE UMHLATHUZE LOCAL MUNICIPALITY, UTHUNGULU DISTRICT MUNICIPALITY, KWAZULU-NATAL

DEA REFERENCE: 14/12/16/3/3/1/1016

Kindly note that:

1. This **basic assessment report** is a standard report that may be required by a competent authority in terms of the EIA Regulations, 2010 and is meant to streamline applications. Please make sure that it is the report used by the particular competent authority for the activity that is being applied for.
2. This report format is current as of **1 September 2012**. It is the responsibility of the applicant to ascertain whether subsequent versions of the form have been published or produced by the competent authority
3. The report must be typed within the spaces provided in the form. The size of the spaces provided is not necessarily indicative of the amount of information to be provided. The report is in the form of a table that can extend itself as each space is filled with typing.
4. Where applicable **tick** the boxes that are applicable in the report.
5. An incomplete report may be returned to the applicant for revision.
6. The use of "not applicable" in the report must be done with circumspection because if it is used in respect of material information that is required by the competent authority for assessing the application, it may result in the rejection of the application as provided for in the regulations.
7. This report must be handed in at offices of the relevant competent authority as determined by each authority.
8. No faxed or e-mailed reports will be accepted.
9. The signature of the EAP on the report must be an original signature.
10. The report must be compiled by an independent environmental assessment practitioner.
11. Unless protected by law, all information in the report will become public information on receipt by the competent authority. Any interested and affected party should be provided with the information contained in this report on request, during any stage of the application process.

BASIC ASSESSMENT REPORT

12. A competent authority may require that for specified types of activities in defined situations only parts of this report need to be completed.
13. Should a specialist report or report on a specialised process be submitted at any stage for any part of this application, the terms of reference for such report must also be submitted.
14. Two (2) colour hard copies and one (1) electronic copy of the report must be submitted to the competent authority.
15. Shape files (.shp) for maps must be included on the electronic copy of the report submitted to the competent authority.

SECTION A: ACTIVITY INFORMATION

Has a specialist been consulted to assist with the completion of this section? ~~YES~~ NO
 If YES, please complete the form entitled “Details of specialist and declaration of interest” for the specialist appointed and attach in Appendix I.

1. PROJECT DESCRIPTION

a) Describe the project associated with the listed activities applied for

Introduction

The proposed project involves upgrade of Bayvue Entrance, one of the three entrances to The Port of Richards Bay. Bayvue is the “main” entrance into the port and accommodates both vehicular (cars and trucks) and pedestrian traffic. Due to the port’s exceptional growth record Bayvue Entrance is now under-designed for the current and forecasted traffic volumes. This is especially apparent during peak traffic hours where there is considerable traffic build-up. Furthermore the entrance has no pedestrian specific walk areas or turnstiles at this entrance limiting proper foot traffic control. These concerns were raised by an audit team reporting on security compliance (in terms of the International Ship and Port Facility Security (ISPS), NIA, PSS, South African Police Service (SAPS), Department of Transport (DOT) and Transnet National Port Authority (TNPA) requirements) in the Port of Richards Bay. Consequently TNPA decided to construct a new entrance and associated road infrastructure, construct a new by-pass road to enable undisturbed construction of the new Bayvue Entrance and decommissioning the old one.

Proposed development

Bayvue entrance will comprise the following infrastructure:

- double lane with a lay bye on entry and exit for people to disembark (three each way)
- Lanes to be separated by raised platform/pavement for security to stand and address traffic from the right hand side
- 8 turnstiles (4 in and 4 out) and a safe walkway for people
- Water borne toilets to accommodate 2 persons at any given time
- Adequate lighting, Illuminating at least 50 meters before access point on the outside and 50 meters on the inside
- 2 x parking space for police and security response vehicles
- 3 buildings to accommodate staff
- Place for electronic sign boards
- Backup generator
- Associated road infrastructure

Typical road geometric standards proposed for this project are summarized in table below:

Table 1: Geometric design criteria for proposed road

DESIGN PARAMETER	DESIGN VALUES	COMMENTS
Road Reserve Width	10m	
Carriage Way Width for roads	7m	Surfaced
Carriage Way Width for Bayvue gate entrance	On entry 3 lanes of 3m width and on exit 2 lanes of 3m width.	
Minimum Centre Line Radii for Angles of Deflection less than 60°	120m	For roads
Minimum Centre Line Radii for Angles	30m	For roads

BASIC ASSESSMENT REPORT

of Deflection 60° and more		
Roadway Verges (low side)	Natural gravel (compacted)	Alternatively Paved walkways
Roadway Verges (high side)	Natural gravel (compacted)	Alternatively Paved walkways
Roadway Shoulders	n/a	There are no road shoulders

Table 2: Road design parameters

DESIGN PARAMETER	VALUES
Design speed for roads	60km/hr
Desired Maximum Speed for roads	40 km/h
Minimum Stopping Distances	80m
Minimum Gradient	0,5%
Maximum Gradient	12.5%
Minimum K-value	16
Minimum Vertical Curve Length	100m
Cross fall	3% across
Super Elevation	N/A

Stormwater management

Any stormwater runoff will be through use of swales. A stormwater management plan will be prepared to this effect.

b) Provide a detailed description of the listed activities associated with the project as applied for

Listed activity as described in GN R.544, 545 and 546	Description of project activity
GN R.544 Item 11: The construction of <ol style="list-style-type: none"> i. buildings exceeding 50 square metres in size; or ii. infrastructure or structures covering 50 square metres or more where such construction occurs within a watercourse or within 32 metres of a watercourse, measured from the edge of a watercourse, excluding where such construction will occur behind the development setback line.	The proposed building exceeds 50 square metres in size and associated infrastructure covers more than 50 square metres and occurs within 32 metres of a wetland.
GN R.544 Item 18: 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 from a watercourse but excluding where such infilling, depositing, dredging, excavation, removal or moving <ol style="list-style-type: none"> (i) is for maintenance purposes undertaken in accordance with management plan agreed to by the relevant environmental authority; or (ii) occurs behind the development 	The construction of Bavuew Entrance and associated infrastructure will involve excavation, removal or moving of soil or rock of more than 5 cubic metres from a wetland.

BASIC ASSESSMENT REPORT

setback line.	
---------------	--

2. FEASIBLE AND REASONABLE ALTERNATIVES

“alternatives”, in relation to a proposed activity, means different means of meeting the general purpose and requirements of the activity, which may include alternatives to—

- (a) the property on which or location where it is proposed to undertake the activity;
- (b) the type of activity to be undertaken;
- (c) the design or layout of the activity;
- (d) the technology to be used in the activity;
- (e) the operational aspects of the activity; and
- (f) the option of not implementing the activity.

Describe alternatives that are considered in this application as required by Regulation 22(2)(h) of GN R.543. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity (NOT PROJECT) could be accomplished in the specific instance taking account of the interest of the applicant in the activity. The no-go alternative must in all cases be included in the assessment phase as the baseline against which the impacts of the other alternatives are assessed.

The determination of whether site or activity (including different processes, etc.) or both is appropriate needs to be informed by the specific circumstances of the activity and its environment. After receipt of this report the, competent authority may also request the applicant to assess additional alternatives that could possibly accomplish the purpose and need of the proposed activity if it is clear that realistic alternatives have not been considered to a reasonable extent.

The identification of alternatives should be in line with the Integrated Environmental Assessment Guideline Series 11, published by the DEA in 2004. Should the alternatives include different locations and lay-outs, the co-ordinates of the different alternatives must be provided. The co-ordinates should be in degrees, minutes and seconds. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

a) Site alternatives

Alternative 1 (preferred alternative)		
Description	Lat (DDMMSS)	Long (DDMMSS)
Alternative 1 considers use of a new site. Selection of the site was limited to only the chosen area because the Port is already a developed area and as such presents limited options. The reason for locating the gate at the proposed area is to allow for traffic build-up without affected traffic at the road intersection to the west of the old gate. The proposed 231m road location is the only feasible alternative to by-pass the new Bayvue entrance during construction.		

BASIC ASSESSMENT REPORT

The centre of the entrance and its associated road infrastructure can be found at the following coordinates:	28° 47' 06.74"S	32° 01' 49.29"E
The start of the road can be found at the following coordinates:	28° 47' 10.21"S	32° 01' 43.70"E
The end of the road can be found at the following coordinates:	28° 47' 12.27"S	32° 01' 49.14"E
Alternative 2		
Description	Lat (DDMMSS)	Long (DDMMSS)
Alternative 2 considers upgrading of the current Bayvue entrance. This means the site would remain the same but the footprint will be increased. The drawback with this option is congestion at the road intersection to the west of the entrance. This site has limited space to accommodate vehicles on busy days, therefore traffic congestion and interruption will persist.	28° 47' 06.96"S	32° 01' 40.61"E
Alternative 3		
Description	Lat (DDMMSS)	Long (DDMMSS)
N/A		

In the case of linear activities:

Alternative:

Latitude (S):

Longitude (E):

Alternative S1 (preferred)

- Starting point of the activity
- Middle/Additional point of the activity
- End point of the activity

N/A	

Alternative S2 (if any)

- Starting point of the activity
- Middle/Additional point of the activity
- End point of the activity

Alternative S3 (if any)

- Starting point of the activity
- Middle/Additional point of the activity
- End point of the activity

For route alternatives that are longer than 500m, please provide an addendum with co-ordinates taken every 250 meters along the route for each alternative alignment.

In the case of an area being under application, please provide the co-ordinates of the corners of the site as indicated on the lay-out map provided in Appendix A.

b) Lay-out alternatives

Alternative 1 (preferred alternative)		
Description	Lat (DDMMSS)	Long (DDMMSS)
Alternative 1 has 3 lanes of 3m width on entry and 2 lanes of 3m on exit giving a total 17m including 2m median. This option has	28° 47' 06.74"S	32° 01' 49.29"E

BASIC ASSESSMENT REPORT

<p>two security buildings, one on entry (thus northern side) and one in the middle (i.e. between the two carriage ways).</p> <p>This alternative differs from alternative 2 by not having a generator house therefore has a reduced footprint.</p> <p>Included in this layout alternative is the layout for the by-pass road (Drawing No. C-RDS-001). Only one option has been proposed and this option appears on all layout alternatives.</p>		
Alternative 2		
Description	Lat (DDMMSS)	Long (DDMMSS)
<p>Alternative 2 has 3 lanes of 3m width on entry and 2 lanes of 3m on exit giving a total 17m including 2m median. This option also has two security buildings, one on entry (thus northern side) and one in the middle (i.e. between the two carriage ways).</p> <p>This option has a generator house that infringes the wetland therefore is not recommended.</p> <p>Included in this layout alternative is the layout for the by-pass road (Drawing No. C-RDS-001).</p>	28° 47' 06.74"S	32° 01' 49.29"E
Alternative 3		
Description	Lat (DDMMSS)	Long (DDMMSS)
<p>Alternative 3 has 3 lanes of 3m width each in each direction giving a total 20m including 2m median. It also has 3 security building with two on either side of the road and one in the middle.</p> <p>This option has been discarded because of the increased footprint that significantly infringes the wetland.</p> <p>Included in this layout alternative is the layout for the by-pass road (Drawing No. C-RDS-001).</p>	28° 47' 06.74"S	32° 01' 49.29"E

c) Technology alternatives

Alternative 1 (preferred alternative)
N/A
Alternative 2
N/A
Alternative 3
N/A

d) Other alternatives (e.g. scheduling, demand, input, scale and design alternatives)

Alternative 1 (preferred alternative)
N/A

BASIC ASSESSMENT REPORT

Alternative 2
N/A
Alternative 3
N/A

e) No-go alternative

A no-go alternative has been considered in this assessment. This entails not constructing a new Bayvue entrance or upgrading the old one. However, this option has significant social and economic impacts therefore is not recommended. Please review the environmental impact assessment section of the report for social and economic impacts.

Paragraphs 3 – 13 below should be completed for each alternative.

3. PHYSICAL SIZE OF THE ACTIVITY

a) Indicate the physical size of the preferred activity/technology as well as alternative activities/technologies (footprints):

Alternative:

Alternative A1¹ (preferred activity alternative) (5 lane road without generator but with by-pass road)
 Alternative A2 (if any) (5 lane road with generator and by-pass road)
 Alternative A3 (if any) (6 lane road with generator and by-pass road)

Size of the activity:

	5668 m ²
	5929 m ²
	6682 m ²

or, for linear activities:

Alternative:

Alternative A1 (preferred activity alternative)
 Alternative A2 (if any)
 Alternative A3 (if any)

Length of the activity:

	m
	m
	m

b) Indicate the size of the alternative sites or servitudes (within which the above footprints will occur):

Alternative:

Alternative A1 (preferred activity alternative)
 Alternative A2 (if any)
 Alternative A3 (if any)

Size of the site/servitude:

	m ²
	m ²
	m ²

¹ "Alternative A.." refer to activity, process, technology or other alternatives.

4. SITE ACCESS

Does ready access to the site exist?

YES	NO
m	

If NO, what is the distance over which a new access road will be built

Describe the type of access road planned:

N/A

Include the position of the access road on the site plan and required map, as well as an indication of the road in relation to the site.

5. LOCALITY MAP

An A3 locality map must be attached to the back of this document, as Appendix A. The scale of the locality map must be relevant to the size of the development (at least 1:50 000. For linear activities of more than 25 kilometres, a smaller scale e.g. 1:250 000 can be used. The scale must be indicated on the map.). The map must indicate the following:

- an accurate indication of the project site position as well as the positions of the alternative sites, if any;
- indication of all the alternatives identified;
- closest town(s);
- road access from all major roads in the area;
- road names or numbers of all major roads as well as the roads that provide access to the site(s);
- all roads within a 1km radius of the site or alternative sites; and
- a north arrow;
- a legend; and
- locality GPS co-ordinates (Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in degrees and decimal minutes. The minutes should have at least three decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection).

6. LAYOUT/ROUTE PLAN

A detailed site or route plan(s) must be prepared for each alternative site or alternative activity. It must be attached as Appendix A to this document.

The site or route plans must indicate the following:

- the property boundaries and numbers of all the properties within 50 metres of the site;
- the current land use as well as the land use zoning of the site;
- the current land use as well as the land use zoning each of the properties adjoining the site or sites;
- the exact position of each listed activity applied for (including alternatives);
- servitude(s) indicating the purpose of the servitude;
- a legend; and

- a north arrow.

7. SENSITIVITY MAP

The layout/route plan as indicated above must be overlain with a sensitivity map that indicates all the sensitive areas associated with the site, including, but not limited to:

- watercourses;
- the 1:100 year flood line (where available or where it is required by DWA);
- ridges;
- cultural and historical features;
- areas with indigenous vegetation (even if it is degraded or infested with alien species); and
- critical biodiversity areas.

The sensitivity map must also cover areas within 100m of the site and must be attached in Appendix A.

8. SITE PHOTOGRAPHS

Colour photographs from the centre of the site must be taken in at least the eight major compass directions with a description of each photograph. Photographs must be attached under Appendix B to this report. It must be supplemented with additional photographs of relevant features on the site, if applicable.

9. FACILITY ILLUSTRATION

A detailed illustration of the activity must be provided at a scale of at least 1:200 as Appendix C for activities that include structures. The illustrations must be to scale and must represent a realistic image of the planned activity. The illustration must give a representative view of the activity.

10. ACTIVITY MOTIVATION

Motivate and explain the need and desirability of the activity (including demand for the activity):

1. Is the activity permitted in terms of the property's existing land use rights?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	Please explain
The development is an upgrade of existing infrastructure and will occur only within the boundary of the Port of Richards Bay.			

BASIC ASSESSMENT REPORT

2. Will the activity be in line with the following?			
(a) Provincial Spatial Development Framework (PSDF)	<input checked="" type="checkbox"/> YES	NO	Please explain
<p>The development contributes towards the “Principle of Economic Potential” identified in the Provincial Spatial Development Framework (PSDF) which aims to improve productivity. In terms of Priority Interventions areas Richards Bay is one of the four towns that have been identified as provincial Secondary Nodes. This means Richards Bay as an urban centre with good existing economic development has the potential for growth and services to the regional economy.</p>			
(b) Urban edge / Edge of Built environment for the area	<input checked="" type="checkbox"/> YES	NO	Please explain
<p>The development is an upgrade of existing infrastructure and will occur only within the boundary of the Port of Richards Bay.</p>			
(c) Integrated Development Plan (IDP) and Spatial Development Framework (SDF) of the Local Municipality (e.g. would the approval of this application compromise the integrity of the existing approved and credible municipal IDP and SDF?).	<input checked="" type="checkbox"/> YES	NO	Please explain
<p>The IDP recognises the importance of the Port of Richards Bay and also identified an area for the expansion of the Port given it’s exceptionally growth.</p>			
(d) Approved Structure Plan of the Municipality	<input checked="" type="checkbox"/> YES	NO	Please explain
<p>The development is an upgrade of existing infrastructure and will occur only within the boundary of the Port of Richards Bay.</p>			
(e) An Environmental Management Framework (EMF) adopted by the Department (e.g. Would the approval of this application compromise the integrity of the existing environmental management priorities for the area and if so, can it be justified in terms of sustainability considerations?)	<input checked="" type="checkbox"/> YES	NO	Please explain
<p>The draft Environmental Management Framework (EMF) report for Richards Bay Port Expansion Area and Industrial Development Zone identifies Port of Richards Bay as an area of strategic importance to the country.</p>			
(f) Any other Plans (e.g. Guide Plan)	YES	<input checked="" type="checkbox"/> NO	Please explain
<p>None were identified.</p>			

BASIC ASSESSMENT REPORT

<p>3. Is the land use (associated with the activity being applied for) considered within the timeframe intended by the existing approved SDF agreed to by the relevant environmental authority (i.e. is the proposed development in line with the projects and programmes identified as priorities within the credible IDP)?</p>	<p>YES</p>	<p>NO</p>	<p>Please explain</p>
<p>Richards has no approved SDF at the moment.</p>			
<p>4. Does the community/area need the activity and the associated land use concerned (is it a societal priority)? (This refers to the strategic as well as local level (e.g. development is a national priority, but within a specific local context it could be inappropriate.)</p>	<p>YES</p>	<p>NO</p>	<p>Please explain</p>
<p>Unfortunately the proposed development does not directly benefit the local community but is of national priority and hence has the potential to positively impact on both the National and Provincial GDP.</p>			
<p>5. Are the necessary services with adequate capacity currently available (at the time of application), or must additional capacity be created to cater for the development? (Confirmation by the relevant Municipality in this regard must be attached to the final Basic Assessment Report as Appendix I.)</p>	<p>YES</p>	<p>NO</p>	<p>Please explain</p>
<p>Since the development is an upgrade it will link into existing service infrastructure and the old Bayvue gate will be decommissioned. Confirmation is yet to be obtained from the municipality.</p>			
<p>6. Is this development provided for in the infrastructure planning of the municipality, and if not what will the implication be on the infrastructure planning of the municipality (priority and placement of services and opportunity costs)? (Comment by the relevant Municipality in this regard must be attached to the final Basic Assessment Report as Appendix I.)</p>	<p>YES</p>	<p>NO</p>	<p>Please explain</p>
<p>The upgrade will take place within an existing harbour and therefore does not impact on municipal infrastructure with the exception of linking the new Bayvue gate to existing service infrastructure within the harbour.</p>			

BASIC ASSESSMENT REPORT

7. Is this project part of a national programme to address an issue of national concern or importance?	YES	NO	Please explain
The project is of national importance in the sense that it contributes to the GDP of the country.			
8. Do location factors favour this land use (associated with the activity applied for) at this place? (This relates to the contextualisation of the proposed land use on this site within its broader context.)	YES	NO	Please explain
The proposed development does not affect the current land use as it will remain the same. The location factors are therefore in favour of this land use.			
9. Is the development the best practicable environmental option for this land/site?	YES	NO	Please explain
The proposed development occurs within a built-up area therefore it complements the existing infrastructural development. Furthermore a stringent EMPr has been developed to adequately mitigate negative impacts.			
10. Will the benefits of the proposed land use/development outweigh the negative impacts of it?	YES	NO	Please explain
Through proper implementation of the Environmental Management Programme (EMPr) negative impacts can be mitigated to acceptable levels thereby rendering the development more beneficial to the economy and the environment. The environment will benefit from the rehabilitation of the wetland post construction.			
11. Will the proposed land use/development set a precedent for similar activities in the area (local municipality)?	YES	NO	Please explain
It is unlikely the proposed development will set a precedent for similar activities in the area as it occurs within the port and there is only one port in Richards Bay.			
12. Will any person's rights be negatively affected by the proposed activity/ies?	YES	NO	Please explain
No individual will be negatively affected directly or indirectly by the proposed development.			

BASIC ASSESSMENT REPORT

13. Will the proposed activity/ies compromise the “urban edge” as defined by the local municipality?	YES	<input checked="" type="checkbox"/> NO	Please explain
The development is an upgrade of existing infrastructure and will occur only within the boundary of The Port of Richards Bay.			
14. Will the proposed activity/ies contribute to any of the 17 Strategic Integrated Projects (SIPS)?	<input checked="" type="checkbox"/> YES	NO	Please explain
The proposed development contributes to the country’s GDP therefore is in line with SIP 17.			
15. What will the benefits be to society in general and to the local communities?	Please explain		
The only benefits to society would be temporary employment opportunities during the construction phase and increased security.			
16. Any other need and desirability considerations related to the proposed activity?	Please explain		
<p>The project is also motivated from a risk & compliance point of view and the following benefits will be derived from this investment:</p> <ul style="list-style-type: none"> • Improved traffic management and flow patterns. • Improved statutory compliance with overloaded/ height restricted vehicles. • Reduce the risk of stopping port operations and turning around trucks that have missed a turn and ended up in the wrong road, hence damaging road infrastructure. • Accommodation of future growth 			
17. How does the project fit into the National Development Plan for 2030?	Please explain		
<p>The development will complement the following NDP objectives:</p> <ul style="list-style-type: none"> • Economy and Employment: Through improving infrastructure that attracts trade and job creation during the construction phase. • Economic infrastructure: Through construction of a new gate which is a step towards expanding the Port of Richards Bay 			

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

The general objective of integrated environmental management is to:

- a. promote the integration of the principles of environmental management set out in section 2 into the making of all decisions which may have a significant effect on the environment;
- b. identify, predict and evaluate the actual and potential impact on the environment, socio-economic conditions and cultural heritage, the risks and consequences and alternatives and options for mitigation of activities, with a view to minimising negative impacts, maximising benefits, and promoting compliance with the principles of environmental management set out in section 2;
- c. ensure that the effects of activities on the environment receive adequate consideration before actions are taken in connection with them;
- d. ensure adequate and appropriate opportunity for public participation in decisions that may affect the environment;
- e. ensure the consideration of environmental attributes in management and decision-making which may have a significant effect on the environment; and
- f. identify and employ the modes of environmental management best suited to ensuring that a particular activity is pursued in accordance with the principles of environmental management set out in section 2.

Several specialist studies were commissioned to identify, predict and evaluate the actual and potential impact on the environment, cultural heritage, the risks and consequences and alternatives and options for mitigation of activities. Effects of construction and operation activities on the environment have received adequate consideration prior to implementation of mitigation measures and Section 23 (2b and 2c) has been achieved.

In terms of public participation, all IAPs have been engaged through circulation of newspaper adverts, registered letter, site posters, public meeting and public consultation, therefore the public have been provided with an opportunity to contribute their input on the project and Section 23 (2d and 2e) has been achieved.

Finally, a stringent site specific EMPr has been compiled with the input from specialists to manage any potential impacts to acceptable levels so Section 23 (2f) has been achieved.

19. Please describe how the principles of environmental management as set out in section 2 of NEMA have been taken into account.

To ensure mitigation and management of impacts the following has been carried out:

- Commissioned various specialist studies to assess, evaluated and mitigate the impacts of the proposed development
- Consulted I&AP to assist with identification of potential impacts
- Prepared a stringent EMPr to manage all potential negative impacts

BASIC ASSESSMENT REPORT

11. APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES

List all legislation, policies and/or guidelines of any sphere of government that are applicable to the application as contemplated in the EIA regulations, if applicable:

Title of legislation, policy or guideline	Applicability to the project	Administering authority	Date
Integrated Coastal Management Act (No. 24 of 2008)	The port is located in a coastal area	Department of Agriculture and Environmental Affairs	2008
South Africa's Constitution (Act 108 of 1996), including the Bill of Rights (Chapter 2, Section 24)	Section 24 in the Bill of Rights provides for the environmental right.	The State	1996
National Environmental Management Act (Act No. 107 of 1998)	Overarching environmental framework legislation in South Africa.	Department of Agriculture and Environmental Affairs	1998
National Environmental Management: Waste Act, 2008 (Act no 59 of 2008)	Management of waste.	KwaZulu-Natal, Department of Agriculture and Environmental Affairs	2008
National Water Act, 1998 (Act 36 of 1998)	The proposed development has impacts wetlands.	Department of Water Affairs	1998
Integrated Environmental Management (IEM)	Works in conjunction NEMA, identifies, predicts and evaluates actual and potential impacts and the risks, consequences and alternatives for mitigation of activities.	Department of Environment Agriculture	2002
National Environmental Management: Biodiversity Act, 2004 (Act 10 of 2004)	The development will have impact on biodiversity found nearby.	Department of Agriculture and Environmental Affairs & Ezemvelo KZN Wildlife	2004
The National Heritage Resources Act (Act No 25 of 1999 as amended)	Development footprint is greater than 0.5 Ha.	Amafa aKwaZulu-Natali	1999
KwaZulu-Natal Nature Conservation Ordinance 15	The development might impact on protected biodiversity found	KwaZulu-Natal, Department of Agriculture and Environmental Affairs	1974

BASIC ASSESSMENT REPORT

	nearby.		
Conservation of Agricultural Resources Act, 1983 (Act 43 of 1983)	Relates to the control of alien vegetation	Department of Agriculture, Forestry, and Fisheries	1983
National Forest Acts (Act No. 84 of 1998)	Conservation of forest resources	Department of Agriculture, Forestry, and Fisheries	1998
KwaZulu-Natal Provincial Roads Act (Act No. 4 of 2001)	Construction and use of roads during the construction phase	Department of Transport	2001
Municipal Systems Act (Act No 32 of 2000)	Proposed construction of Darvill WWTW occurs within uMhlatuze Municipality	Department of Co-operative Governance and Traditional Affairs	2000
KwaZulu-Natal Planning and Development Act, 2008 (Act No.6 of 2008).	Monitor the planning of Richards Bay infrastructure	The local authority and COGTA	2008

12. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

a) Solid waste management

Will the activity produce solid construction waste during the construction/initiation phase?

If YES, what estimated quantity will be produced per month?

YES	NO
3 m ³ during construction	
22 m ² during decommissioning	

How will the construction solid waste be disposed of (describe)?

The solid waste produced would be collected in skips placed at strategic points within the construction site. The Environmental Management Programme makes provision for effective monitoring of the construction site to ensure that construction solid waste is never left on the site for a period of time longer than 7 days.

Where will the construction solid waste be disposed of (describe)?

BASIC ASSESSMENT REPORT

The waste will then be taken to Richards Bay Landfill Site. All hazardous solid waste would be transported to uThungulu Regional Landfill Site.

Will the activity produce solid waste during its operational phase?

YES	NO
----------------	----

If YES, what estimated quantity will be produced per month?

1 m ³	
------------------	--

How will the solid waste be disposed of (describe)?

A small amount of waste will be generated will be added to the Port's waste for collection by the municipality.

If the solid waste will be disposed of into a municipal waste stream, indicate which registered landfill site will be used.

Solid waste will be taken away by the municipality to Richards Bay Landfill Site.

Where will the solid waste be disposed of if it does not feed into a municipal waste stream (describe)?

N/A

If the solid waste (construction or operational phases) will not be disposed of in a registered landfill site or be taken up in a municipal waste stream, then the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

Can any part of the solid waste be classified as hazardous in terms of the NEM:WA?

YES	NO
-----	---------------

If YES, inform the competent authority and request a change to an application for scoping and EIA. An application for a waste permit in terms of the NEM:WA must also be submitted with this application.

Is the activity that is being applied for a solid waste handling or treatment facility?

YES	NO
-----	---------------

If YES, then the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA. An application for a waste permit in terms of the NEM:WA must also be submitted with this application.

b) Liquid effluent

Will the activity produce effluent, other than normal sewage, that will be disposed of in a municipal sewage system?

YES	NO
-----	---------------

If YES, what estimated quantity will be produced per month?

m ³	
----------------	--

Will the activity produce any effluent that will be treated and/or disposed of on site?

YES	NO
----------------	----

If YES, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

Will the activity produce effluent that will be treated and/or disposed of at another facility?

YES	NO
-----	---------------

If YES, provide the particulars of the facility:

Facility name: Richards Bay Minerals Sewage Treatment Works

Contact person:

--

BASIC ASSESSMENT REPORT

Postal address:			
Postal code:			
Telephone:		Cell:	
E-mail:		Fax:	

Describe the measures that will be taken to ensure the optimal reuse or recycling of waste water, if any:

N/A

c) Emissions into the atmosphere

Will the activity release emissions into the atmosphere other than exhaust emissions and dust associated with construction phase activities?

YES	NO
YES	NO

If YES, is it controlled by any legislation of any sphere of government?

If YES, the applicant must consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

If NO, describe the emissions in terms of type and concentration:

The only emissions that would be released would be exhaust emissions and dust associated with construction phase and exhaust emissions associated with the operation of the backup generator during operational phase.

d) Waste permit

Will any aspect of the activity produce waste that will require a waste permit in terms of the NEM:WA?

YES	NO
-----	---------------

If YES, please submit evidence that an application for a waste permit has been submitted to the competent authority

e) Generation of noise

Will the activity generate noise?

YES	NO
YES	NO

If YES, is it controlled by any legislation of any sphere of government?

If YES, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

If NO, describe the noise in terms of type and level:

BASIC ASSESSMENT REPORT

The primary noise is likely to be typical noise levels as those that occur during normal construction activity and should not be that intrusive to the neighbouring communities.

TABLE OF ACCEPTABLE NOISE LEVELS AS PER SABS		
Type of district	Daytime ratings level Lr for ambient noise dB (A)	Nigh time ratings level Lr for ambient noise Db (A)
Sub-urban districts with little road traffic	50	40
Urban districts	55	45

During the operational phase noise would be generated by arrival of haulage trucks. However this is considered inherent at the Port of Richards Bay.

13. WATER USE

Please indicate the source(s) of water that will be used for the activity by ticking the appropriate box(es):

Municipal	Water board	Groundwater	River, stream, dam or lake	Other	The activity will not use water
-----------	-------------	-------------	----------------------------	------------------	---------------------------------

Ready mix concrete will be used during construction.

If water is to be extracted from groundwater, river, stream, dam, lake or any other natural feature, please indicate the volume that will be extracted per month:

Does the activity require a water use authorisation (general authorisation or water use license) from the Department of Water Affairs?

If YES, please provide proof that the application has been submitted to the Department of Water Affairs.

litres	
YES	NO

14. ENERGY EFFICIENCY

Describe the design measures, if any, that have been taken to ensure that the activity is energy efficient:

The entrance would make use of energy saving light fittings.

Describe how alternative energy sources have been taken into account or been built into the design of the activity, if any:

N/A

SECTION B: SITE/AREA/PROPERTY DESCRIPTION

Important notes:

1. For linear activities (pipelines, etc) as well as activities that cover very large sites, it may be necessary to complete this section for each part of the site that has a significantly different environment. In such cases please complete copies of Section B and indicate the area, which is covered by each copy No. on the Site Plan.

Section B Copy No. (e.g. A):

2. Paragraphs 1 - 6 below must be completed for each alternative.

3. Has a specialist been consulted to assist with the completion of this section? YES NO
 If YES, please complete the form entitled "Details of specialist and declaration of interest" for each specialist thus appointed and attach it in Appendix I. All specialist reports must be contained in Appendix D.

Property description/physical address:

Province	KwaZulu Natal
District Municipality	Uthungulu District Municipality
Local Municipality	Umhlathuze Municipality
Ward Number(s)	
Farm name and number	
Portion number	Ptn 21 of Erf 5333
SG Code	N0GV04210000533300021

Where a large number of properties are involved (e.g. linear activities), please attach a full list to this application including the same information as indicated above.

Current land-use zoning as per local municipality IDP/records:

Harbour / Port

In instances where there is more than one current land-use zoning, please attach a list of current land use zonings that also indicate which portions each use pertains to, to this application.

Is a change of land-use or a consent use application required? YES NO

BASIC ASSESSMENT REPORT

1. GRADIENT OF THE SITE

Indicate the general gradient of the site.

Alternative S1:

Flat	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5
------	------------------------	-------------	-------------	--------------	-------------	------------------

Alternative S2 (if any):

Flat	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5
------	------------------------	-------------	-------------	--------------	-------------	------------------

Alternative S3 (if any):

Flat	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5
------	-------------	-------------	-------------	--------------	-------------	------------------

2. LOCATION IN LANDSCAPE

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

2.1 Ridgeline <input type="checkbox"/>	2.4 Closed valley <input type="checkbox"/>	2.7 Undulating plain / low hills <input type="checkbox"/>
2.2 Plateau <input type="checkbox"/>	2.5 Open valley <input type="checkbox"/>	2.8 Dune <input type="checkbox"/>
2.3 Side slope of hill/mountain <input type="checkbox"/>	2.6 Plain <input type="checkbox"/>	2.9 Seafront <input checked="" type="checkbox"/>

3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

Is the site(s) located on any of the following?

	Alternative S1:	Alternative S2 (if any):	Alternative S3 (if any):			
Shallow water table (less than 1.5m deep)	YES	NO	YES	NO	YES	NO
Dolomite, sinkhole or doline areas	YES	NO	YES	NO	YES	NO
Seasonally wet soils (often close to water bodies)	YES	NO	YES	NO	YES	NO
Unstable rocky slopes or steep slopes with loose soil	YES	NO	YES	NO	YES	NO
Dispersive soils (soils that dissolve in water)	YES	NO	YES	NO	YES	NO
Soils with high clay content (clay fraction more than 40%)	YES	NO	YES	NO	YES	NO
Any other unstable soil or geological feature	YES	NO	YES	NO	YES	NO
An area sensitive to erosion	YES	NO	YES	NO	YES	NO

If you are unsure about any of the above or if you are concerned that any of the above aspects may be an issue of concern in the application, an appropriate specialist should be appointed to assist in the completion of this section. Information in respect of the above will often be available as part of the project information or at the planning sections of local authorities. Where it exists, the 1:50 000 scale Regional Geotechnical Maps prepared by the Council for Geo Science may also be consulted.

BASIC ASSESSMENT REPORT

4. GROUNDCOVER

Indicate the types of groundcover present on the site. The location of all identified rare or endangered species or other elements should be accurately indicated on the site plan(s).

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

If any of the boxes marked with an “E” is ticked, please consult an appropriate specialist to assist in the completion of this section if the environmental assessment practitioner doesn’t have the necessary expertise.

5. SURFACE WATER

Indicate the surface water present on and or adjacent to the site and alternative sites?

Perennial River	YES	NO	UNSURE
Non-Perennial River	YES	NO	UNSURE
Permanent Wetland	YES	NO	UNSURE
Seasonal Wetland	YES	NO	UNSURE
Artificial Wetland	YES	NO	UNSURE
Estuarine / Lagoonal wetland	YES	NO	UNSURE

If any of the boxes marked YES or UNSURE is ticked, please provide a description of the relevant watercourse.

Detail is provided under Section 9(d) of this report.

6. LAND USE CHARACTER OF SURROUNDING AREA

Indicate land uses and/or prominent features that currently occur within a 500m radius of the site and give description of how this influences the application or may be impacted upon by the application:

Natural area	Dam or reservoir	Polo fields
Low density residential	Hospital/medical centre	Filling station ^H
Medium density residential	School	Landfill or waste treatment site
High density residential	Tertiary education facility	Plantation
Informal residential ^A	Church	Agriculture
Retail commercial & warehousing	Old age home	River, stream or wetland
Light industrial	Sewage treatment plant ^A	Nature conservation area
Medium industrial ^{AN}	Train station or shunting yard^N	Mountain, koppie or ridge

BASIC ASSESSMENT REPORT

Heavy industrial ^{AN}	Railway line ^N	Museum
Power station	Major road (4 lanes or more) ^N	Historical building
Office/consulting room	Airport ^N	Protected Area
Military or police base/station/compound	Harbour	Graveyard
Spoil heap or slimes dam ^A	Sport facilities	Archaeological site
Quarry, sand or borrow pit	Golf course	Other land uses (describe)

If any of the boxes marked with an "N" are ticked, how will this impact / be impacted upon by the proposed activity?

The proposed entrance and its associated road infrastructure will be located adjacent to a railway line about 100m away while the new road will be located about 30m from the railway line on the south. No impacts on the railway line are anticipated.

If any of the boxes marked with an "An" are ticked, how will this impact / be impacted upon by the proposed activity? Specify and explain:

The proposed entrance serves to improve trade within the Port and has no negative impacts on the industry.

If any of the boxes marked with an "H" are ticked, how will this impact / be impacted upon by the proposed activity? Specify and explain:

N/A

Does the proposed site (including any alternative sites) fall within any of the following:

Critical Biodiversity Area (as per provincial conservation plan)	YES	NO
Core area of a protected area?	YES	NO
Buffer area of a protected area?	YES	NO
Planned expansion area of an existing protected area?	YES	NO
Existing offset area associated with a previous Environmental Authorisation?	YES	NO
Buffer area of the SKA?	YES	NO

If the answer to any of these questions was YES, a map indicating the affected area must be included in Appendix A.

7. CULTURAL/HISTORICAL FEATURES

Are there any signs of culturally or historically significant elements, as defined in

YES

~~NO~~

BASIC ASSESSMENT REPORT

section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999), including Archaeological or paleontological sites, on or close (within 20m) to the site? If YES, explain:	Uncertain

If uncertain, conduct a specialist investigation by a recognised specialist in the field (archaeology or palaeontology) to establish whether there is such a feature(s) present on or close to the site. Briefly explain the findings of the specialist:

The following are the findings of the Heritage Assessment from the addendum to Heritage Impact Assessment Report.

"I (Gavin Anderson) noted that this area had already been surveyed in 2008 as part of the general TNPA Port expansion project. This survey recorded several archaeological sites, noted sensitive areas, as well as the occurrence of palaeontological remains. These areas were plotted and assessed with a management plan. None of the sites recorded in the 2008 survey occur in the study area. The Bayvue Gate thus has no known heritage resources and should be exempted from a full Heritage Impact Assessment (HIA)."

Will any building or structure older than 60 years be affected in any way?	<table border="1" style="border-collapse: collapse;"> <tr> <td style="padding: 2px 5px;">YES</td> <td style="padding: 2px 5px; text-align: center;">NO</td> </tr> </table>	YES	NO
YES	NO		
Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?	<table border="1" style="border-collapse: collapse;"> <tr> <td style="padding: 2px 5px;">YES</td> <td style="padding: 2px 5px; text-align: center;">NO</td> </tr> </table>	YES	NO
YES	NO		

If YES, please provide proof that this permit application has been submitted to SAHRA or the relevant provincial authority.

8. SOCIO-ECONOMIC CHARACTER

a) Local Municipality

Please provide details on the socio-economic character of the local municipality in which the proposed site(s) are situated.

Level of unemployment:

The following is an extract from the 2012/2017 Integrated Development Plan for uMhlathuze Municipality:

"In South Africa, where the unemployment rate is sitting at 25%, provincial figure sits at 22.6% and uMhlathuze's is estimated at 40%. Manufacturing the dominant economic sector in the uThungulu District is centred in the City of uMhlathuze, only 24% of people employed work within this sector as described below.

The results of the 2007 Quality of Life Survey provides the following information pertaining to the number of dependents per person employed:

Table 3 Employment levels

BASIC ASSESSMENT REPORT

Municipality	Dependents per Person Employed
uMhlathuze (Local)	5.9
uThungulu (District)	6.2

Source: uThungulu's Quality of Life Survey (2007)

The unemployment problem in uMhlathuze is complicated by the lack of skills. This can be largely attributed to a political, economic and social system that excluded the majority of the populace from quality education and directed them to semiskilled or unskilled labour.”

Economic profile of local municipality:

The following is an extract from the 2012/2017 Integrated Development Plan for uMhlathuze Municipality:

“Richards Bay falls within the fastest growing provincial economies at an average rate of 4,3% per annum. The Port of Richards Bay is one of the two largest and busiest Ports in Africa creating a drive for the area to be one of the major industrial investment opportunities. The Port plays an important economic role not only for this province but for the whole of South Africa (SA). Whilst they are presently export oriented, the potential for import prospects are being contemplated. The City also functions as a district node and dominant commercial centre in the uThungulu District providing greater economic opportunities for the town and hinterland.

The area is the third most important in KZN in terms of economic production, contributing 16.7% to national Gross Domestic Product (GDP) whilst also the third most important primary manufacturing area in KwaZulu Natal (KZN) in terms of economic production. Manufacturing is highly specialized export orientated, largely concentrated on basic iron and steel, paper and printing as well as food and beverages.

The City of uMhlathuze is rich in mineral resources. The mining of these minerals meets all of South Africa's (S.A) demand for titanium dioxide, zircon and almost all of the country's pig iron requirements. Most of the industrial and commercial activities are vested in Richards Bay, Empangeni and Felixton (specifically the industrial development nodes of the City of uMhlathuze). The manufacturing sector employs the majority of population. Manufacturing contributes 29% of the national GDP.

uMhlathuze's Economy has the following components:

- Local Economic Development
- Agriculture
- Tourism
- Other sectors such as mining, construction and manufacturing”

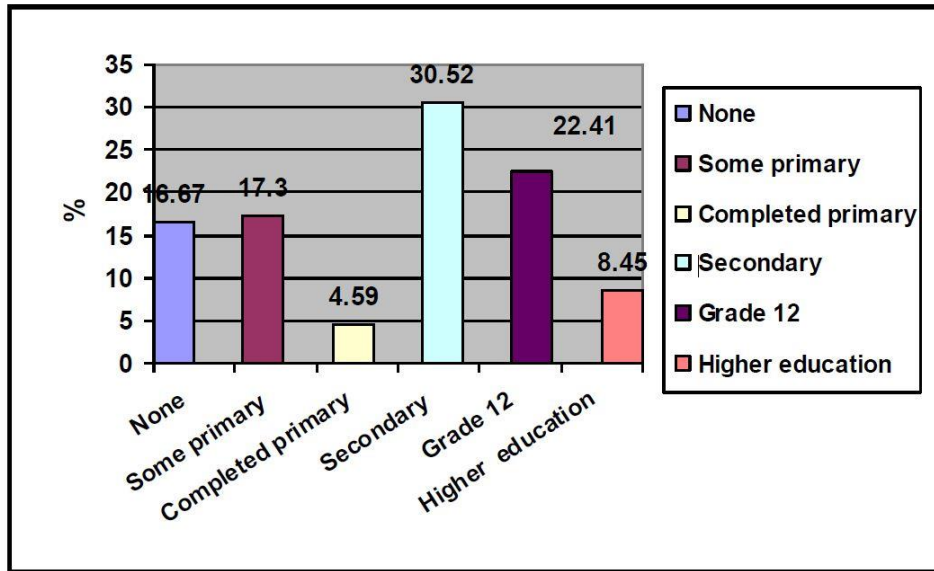
Level of education:

--

The following is an extract from the 2012/2017 Integrated Development Plan for uMhlathuze Municipality:

“The table below is a reflection of the number of individuals that participated at in the education system (Table 4). Most pupils reached secondary schooling. The percentage of the population that was older than 20 with higher education was 8.45%. There is then a drop in the system of people that complete Grade 12. It is after Grade 12 that the community is unable to continue with their studies. The below could be attributed to immigration of skilled workers into the area.

Table 4: Level of Education



Source: uThungulu Quality of Life Survey 2009: Stats SA, 2001 ”

b) Socio-economic value of the activity

What is the expected capital value of the activity on completion?

What is the expected yearly income that will be generated by or as a result of the activity?

Will the activity contribute to service infrastructure?

Is the activity a public amenity?

How many new employment opportunities will be created in the development and construction phase of the activity/ies?

R 20 Million	
R 0	
YES	NO
YES	NO
10 – 20 people shall be employed during construction in three sectors: Steel Fabrication, Road Construction and General Building	

BASIC ASSESSMENT REPORT

What is the expected value of the employment opportunities during the development and construction phase?	Assume approximately R5000 per month per person over 12 months = R1,2million
What percentage of this will accrue to previously disadvantaged individuals?	80 %
How many permanent new employment opportunities will be created during the operational phase of the activity?	None. The staff to operate the upgraded facility are already employed by TNPA
What is the expected current value of the employment opportunities during the first 10 years?	Assume: R10 000 per person per month. 18 staff members (4 on shift) = R21,6million
What percentage of this will accrue to previously disadvantaged individuals?	At least 80 %

9. BIODIVERSITY

Please note: The Department may request specialist input/studies depending on the nature of the biodiversity occurring on the site and potential impact(s) of the proposed activity/ies. To assist with the identification of the biodiversity occurring on site and the ecosystem status consult <http://bgis.sanbi.org> or BGIShelp@sanbi.org. Information is also available on compact disc (cd) from the Biodiversity-GIS Unit, Ph (021) 799 8698. This information may be updated from time to time and it is the applicant/EAP's responsibility to ensure that the latest version is used. A map of the relevant biodiversity information (including an indication of the habitat conditions as per (b) below) and must be provided as an overlay map to the property/site plan as Appendix D to this report.

- a) **Indicate the applicable biodiversity planning categories of all areas on site and indicate the reason(s) provided in the biodiversity plan for the selection of the specific area as part of the specific category)**

Systematic Biodiversity Planning Category				If CBA or ESA, indicate the reason(s) for its selection in biodiversity plan
Critical Biodiversity Area (CBA)	Ecological Support Area (ESA)	Other Natural Area (ONA)	No Natural Area Remaining (NNR)	Wetland patch in between transformed areas

- b) **Indicate and describe the habitat condition on site**

Habitat Condition	Percentage of habitat condition	Description and additional Comments and Observations (including additional insight into condition, e.g. poor

BASIC ASSESSMENT REPORT

	class (adding up to 100%)	land management practises, presence of quarries, grazing, harvesting regimes etc).
Natural	0 %	
Near Natural (includes areas with low to moderate level of alien invasive plants)	55 %	This refers to the area that will be occupied by the entrance and its associated road infrastructure as well as the new road.
Degraded (includes areas heavily invaded by alien plants)	0 %	
Transformed (includes cultivation, dams, urban, plantation, roads, etc)	45 %	This refers to the existing road where the proposed entrance is currently located.

c) Complete the table to indicate:

- (i) the type of vegetation, including its ecosystem status, present on the site; and
- (ii) whether an aquatic ecosystem is present on site.

Terrestrial Ecosystems		Aquatic Ecosystems								
Ecosystem threat status as per the National Environmental Management: Biodiversity Act (Act No. 10 of 2004)	Critical	Wetland (including rivers, depressions, channelled and unchannelled wetlands, flats, seeps pans, and artificial wetlands)			Estuary		Coastline			
	Endangered									
	Vulnerable									
	Least Threatened									
		YES	NO	UNSURE	YES	NO	YES	NO		

d) Please provide a description of the vegetation type and/or aquatic ecosystem present on site, including any important biodiversity features/information identified on site (e.g. threatened species and special habitats)

The following is the discussion and recommendations of the Biodiversity Specialist (extracted from the Biodiversity Report):

“The entire area which comprises the existing entrance to the Port of Richards Bay, as well as all of the infrastructure around the entrance, including warehouses, railway lines and roads, was historically part of the complex lowland wetland system surrounding the bay. This has subsequently been dramatically transformed and much of the functionality of the wetland system has been destroyed. The area immediately adjacent to the proposed new entrance gate and access road has not been identified as a Critical Conservation Area, and, in fact, has been left out of contemporary wetland coverage in the National Vegetation Type Map (Mucina & Rutherford, 2006). Nevertheless, the

varying size patches that remain still have value, both in terms of the ecosystem services value of wetlands and value for biodiversity conservation. It needs, however, to be determined to what level those remaining patches are still fully functional wetlands.

For reporting convenience, the open areas to the north and south of the site of the proposed new entrance gate were termed “wetland patch” and “grassy patch” respectively, whereas they are both part of the historical wetland system. It seems that the southern section may have been infilled during construction of the port, whereas the northern section probably still collects water during the rainy season and still has a variety of wetland plants growing in it. As it stands, the southern section is essentially just a lawned open space. Nevertheless, even though it lacks its original character, it still has some value as animal habitat. It is obvious that the northern patch has not been managed, as evidence by the presence of various alien plants and the rank nature of the grass within it.

Because so little of its’ range falls within protected areas, from a conservation perspective, the Natal Leaf-folding Frog must rate as the most important species potentially occurring on the site, though its actual presence would need to be confirmed. There are no other animal or plant species that stand out and for which the wetland patch and grassy patch adjacent to the proposed new entrance gate and access road would rate as critical habitat.

Nevertheless, having said that, as reiterated in the bird account, any habitat fragment has some conservation value, particularly when it is a threatened, diminishing habitat, such as wetland. Any loss or damage thus equates to a pro-rata loss in dependant biota. Providing breeding opportunity is the single biggest ecological criterion of value, but smaller fragments have a role to play as temporary breeding habitat when conditions are suitable, and as stepping stones for dispersing birds and other mobile animals where other fragments are within range. Since Richards Bay still has substantial areas of a range of habitats, maintaining fragments, such as the site in question, has greater significance than if it were completely isolated.

A portion of both the wetland patch and grassy patch will unavoidably be transformed by building of the new entrance gate and access road. For the reasons outlined above, every effort should be made to retain as much of the character of the remaining open areas as possible and a proper rehabilitation, landscaping and maintenance plan for the area should be compiled by a wetland ecologist, as part of the development, both from an aesthetic and conservation perspective.

It is not clear to what extent connectivity between the mosaic of wetland patches in amongst the transformed areas has been maintained, but this is an important factor that needs to be considered and, wherever possible, the connectivity should be maintained or reinstated where possible. By maintaining these areas in as natural a state as possible, they will provide essential ecosystem services, provide connectivity to other natural areas and provide habitat for a range of faunal species, whilst serving to lessen the visual and aesthetic impact that the Port of Richards Bay infrastructure

has on the area, and acting as a “green lung” within the port area.”

The following is the executive summary of the Wetland Report (extracted from the Wetland Report):

“This wetland study relates to the proposed construction of a new entrance, the Bayvue Gate, at Richards Bay Harbour. It is likely that historically the entire site was wetland habitat, or at least part of a mosaic of wetland habitat linked with the coastal aquifer that lies behind the coastal dunes of the KZN north coast. The site is bisected by the main tarred access road. South of this road has been transformed to create a platform. This area is terrestrial, with no signs of hydromorphy observed in the soil profile, and no wetland plant species present. The area north of the road consists of wetland habitat, described in the text.

The wetland is hydrologically isolated (at least at the surface), and is considered to be in a poor Present Ecological State. The ecological importance and sensitivity of the wetland is also considered to be low. The key ecological drivers are rainfall, surface inputs from the adjacent developments and to a limited extent contact with groundwater. The alteration to the surrounding topography has essentially turned the wetland into a depression, with the main flux of water out of the system being via evapotranspiration.

A buffer zone is not advocated since it is unlikely to mitigate the impacts of the development. Many of the proposed benefits of buffer zones are not applicable within the context of the site. A more appropriate approach would entail the application of measures aimed directly at mitigating the main anticipated impact, this being an increase in surface water inputs into the wetland. Two strategies are suggested:

1. Direct surface runoff away from the site through grass swales prior to discharge into the area to the west of the harbour, and/or
2. Planting indigenous trees to increase evapotranspiration losses, mitigating increased inputs. This is likely to also improve the biodiversity value of the wetland by stratifying the vegetation structure.”

SECTION C: PUBLIC PARTICIPATION

1. ADVERTISEMENT AND NOTICE

Publication name	Zululand Observer	
Date published	26 September 2013 English version 27 September 2013 Zulu version	
Site notice position	Latitude	Longitude
	28° 47' 14.47" S	32° 01' 37.66" E
	28° 47' 19.17" S	32° 01' 35.18" E
	28° 47' 06.37" S	32° 01' 47.22" E
	28° 47' 07.10" S	32° 01' 47.24" E
	28° 47' 19.05" S	32° 02' 02.25" E
	28° 47' 09.55" S	32° 01' 52.17" E
	28° 47' 08.46" S	32° 02' 01.78" E
	28° 47' 06.83" S	32° 02' 20.42" E
	28° 47' 04.21" S	32° 03' 11.85" E
	28° 47' 05.18" S	32° 03' 09.70" E
	28° 46' 55.82" S	32° 04' 02.88" E
	28° 47' 03.81" S	32° 03' 46.96" E
	28° 47' 03.36" S	32° 03' 43.58" E
	28° 47' 13.21" S	32° 03' 14.15" E
	28° 47' 06.89" S	32° 02' 04.77" E
	28° 47' 06.48" S	32° 02' 06.10" E
	28° 45' 32.65" S	32° 02' 34.98" E
28° 45' 06.75" S	32° 03' 08.10" E	
28° 45' 14.47" S	32° 03' 07.94" E	
28° 46' 13.57" S	32° 02' 11.48" E	
Date placed	20 September 2013	

Include proof of the placement of the relevant advertisements and notices in Appendix E1.

2. DETERMINATION OF APPROPRIATE MEASURES

Provide details of the measures taken to include all potential I&APs as required by Regulation 54(2)(e) and 54(7) of GN R.543.

Key stakeholders (other than organs of state) identified in terms of Regulation 54(2)(b) of GN R.543:

Title, Name and Surname	Affiliation/ key stakeholder status	Business Address	Contact details (tel number or e-mail address)
KEY STAKEHOLDERS			
Ms Mmatlala Rabothata	National Department of Environmental Affairs: Pretoria	Private Bag X447, Pretoria, 0001	mrabothata@environment.gov.za
Zama Mbanjwa	Department of Agriculture and Environmental Affairs	"Private Bag X1048, Richards Bay, 3900	zama.mbanjwa@kzndae.gov.za
Zibusiso Dlamini	DAEA: Macro Planning Component	Private Bag X9059, Pietermaritzburg,	dlaminizn@kzndae.gov.za

BASIC ASSESSMENT REPORT

		3200	
Manisha Thakurdin	Department of Water Affairs	PO Box 1018, Durban, 4000	thakurdinm@dwa.gov.za
Roy Ryan	KZN Department of Transport	Private Bag X9043, Pietermaritzburg 3200	Roy.Ryan@kzntransport.gov.za
Wiseman Rozani	Department of Agriculture, Forestry & Fisheries	Box 9029, Pietermaritzburg, 3200	wisemanR@daff.gov.za
Ms Tammy Pillay	Department of Rural Development and Land Reform	Private Bag X9000 Pietermaritzburg, 3200	tpillay@ruraldevelopment.gov.za/ 033 355 4358
Carolyn Schwegman	Coast Watch KZN		afromatz@telkomsa.net
Bernadet Pawandiwa	AMAFA AkwaZulu Natali	P O Box 2685, Pietermaritzburg 3206	bernadetp@amafapmb.co.za
Dominic Wieners	Ezemvelo KZN Wildlife	PO Box 13053, Cascades, 3202	wienersd@kznwildlife.com
Pravesh Manipersadh	Ingonyama Trust Board	65 Trelawney Road, Southgate, PMB, 3200	praveshm@ingonyamatrust.org.za
Allen Viljoen	Ward councillor: Ward 2	10 Busidal Birdewood Richards Bay 3900	alchris@mweb.co.za

Include proof that the key stakeholder received written notification of the proposed activities as Appendix E2. This proof may include any of the following:

- e-mail delivery reports;
- registered mail receipts;
- courier waybills;
- signed acknowledgements of receipt; and/or
- or any other proof as agreed upon by the competent authority.

3. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

Summary of main issues raised by I&APs	Summary of response from EAP
Recommended green building standards be implemented.	Currently on a few standards have been adopted but the EAP is in consultation with the architects and engineers to implement more green building standards.
Requested that the management of stormwater and how it might impact on the wetland be described.	Although the stormwater management plan is yet to be developed it is proposed that stormwater be managed through swales. This will assist in recharging the wetland system on site and improve its status.

4. COMMENTS AND RESPONSE REPORT

The practitioner must record all comments received from I&APs and respond to each comment before the Draft BAR is submitted. The comments and responses must be captured in a comments and response report as prescribed in the EIA regulations and be attached to the Final BAR as Appendix E3.

5. AUTHORITY PARTICIPATION

Authorities and organs of state identified as key stakeholders:

Authority/Organ of State	Contact person (Title, Name and Surname)	Tel No	Fax No	e-mail	Postal address
National Department of Environmental Affairs: Pretoria	Mmatlala Rabothata	012 395 1768	012 320 7539	mrabothata@environment.gov.za	Private Bag X447, Pretoria, 0001
Department of Agriculture, Environmental Affairs and Rural Development	Zibusiso Dlamini	033 355 9339	033 355 9330	dlaminizn@kzndae.gov.za	Private Bag X9059, PMB, 3200
Department of Agriculture, Forestry & Fisheries	Wiseman Rozani	033 392 7761	0865160896	wisemanR@daff.gov.za	PO Box 9029, Pietermaritzburg, 3200
Commission on Restitution of Land Rights: Regional Land Claims Commission	Zweli Xaba	033 341 2600		zwxaba@ruraldevelopment.gov.za	Private Bag X9120, Pietermaritzburg, 3200
AMAFA AkwaZulu Natali	Weziwe Tshabalala	033 394 6543	033 342 6097	weziwet@amafapmb.co.za	P O Box 2685 Pietermaritzburg 3206
Ezemvelo KZN Wildlife	Andy Blackmore	033 845 1349	033 845 1499	andyb@kznwildlife.com	PO Box 13053, Cascades, 3202
Department of Water Affairs	Manisha Thakurdin	031 336 2750	033 305 9915	thakurdinm@dwa.gov.za	PO Box 1018, Durban, 4000
Department of Transport	Roy Ryan	033 355 8600	033 342 3962	Roy.Ryan@kzntransport.gov.za	Private Bag X9043, Pietermaritzburg 3200

Include proof that the Authorities and Organs of State received written notification of the proposed activities as appendix E4.

In the case of renewable energy projects, Eskom and the SKA Project Office must be included in the list of Organs of State.

6. CONSULTATION WITH OTHER STAKEHOLDERS

Note that, for any activities (linear or other) where deviation from the public participation requirements may be appropriate, the person conducting the public participation process may deviate from the requirements of that sub-regulation to the extent and in the manner as may be agreed to by the competent authority.

Proof of any such agreement must be provided, where applicable. Application for any deviation from the regulations relating to the public participation process must be submitted prior to the commencement of the public participation process.

A list of registered I&APs must be included as appendix E5.

Copies of any correspondence and minutes of any meetings held must be included in Appendix E6.

SECTION D: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2010, and should take applicable official guidelines into account. The issues raised by interested and affected parties should also be addressed in the assessment of impacts.

1. IMPACTS THAT MAY RESULT FROM THE PLANNING AND DESIGN, CONSTRUCTION, OPERATIONAL, DECOMMISSIONING AND CLOSURE PHASES AS WELL AS PROPOSED MANAGEMENT OF IDENTIFIED IMPACTS AND PROPOSED MITIGATION MEASURES

Provide a summary and anticipated significance of the potential direct, indirect and cumulative impacts that are likely to occur as a result of the planning and design phase, construction phase, operational phase, decommissioning and closure phase, including impacts relating to the choice of site/activity/technology alternatives as well as the mitigation measures that may eliminate or reduce the potential impacts listed. This impact assessment must be applied to all the identified alternatives to the activities identified in Section A(2) of this report.

A complete impact assessment in terms of Regulation 22(2)(i) of GN R.543 must be included as Appendix F.

Activity	Impact summary	Significance	Proposed mitigation
Alternative 1 (preferred alternative)			
Alternative 1 entails constructing a new entrance and its associated road infrastructure and constructing a new access road to by-pass the new gate during construction. The following alternatives as per Section 2 of this report make up this alternative:			
<ul style="list-style-type: none"> • Site alternative 1 • Layout alternative 1 			
PLANNING AND DESIGN PHASE	Direct impacts: <ul style="list-style-type: none"> • None identified 	See Significance Scoring	<ul style="list-style-type: none"> • No mitigation needed
	Indirect impacts: <ul style="list-style-type: none"> • None identified 		<ul style="list-style-type: none"> • No mitigation needed
	Cumulative impacts: <ul style="list-style-type: none"> • None identified 		<ul style="list-style-type: none"> • No mitigation needed
CONSTRUCTION PHASE	Direct impacts: Soil and Geologic Resources: <ul style="list-style-type: none"> • Soil compaction due to construction activities would reduce aeration, permeability, and water-holding capacity of the soils and cause an increase in surface runoff, potentially causing increased sheet or gully erosion. • Soil compaction and blending could also impact the viability of 	See Significance Scoring	<ul style="list-style-type: none"> • Excavated soil, not used as fill, must be deposited of in a registered landfill site. • Soil disturbance will be minimized by establishing the extent of the construction site (pre-construction) and clearly demarcating this on the site layout plans. No construction personnel or vehicles may leave the demarcated areas except when authorised to do so by the project manager.

BASIC ASSESSMENT REPORT

Activity	Impact summary	Significance	Proposed mitigation
	<p>future vegetation establishment.</p> <ul style="list-style-type: none"> • Soil erosion caused by displacement of soil during site clearance and stockpiling. <p>Potential Biodiversity and Ecological Processes:</p> <ul style="list-style-type: none"> • Loss of biodiversity (flora and fauna) • Loss of biodiversity habitat • Increased alien vegetation 		<ul style="list-style-type: none"> • Topsoil will be stockpiled separately and re-applied post construction. • Erosion prevention measures should be implemented: Berms, sand bags and hessian sheets may be used to contain all sediment whilst energy dissipaters must be constructed at all outflow points. • The site should be monitored weekly for any sign of off-site siltation. All exposed earth should be rehabilitated promptly with suitable vegetation to protect the soil. • Once an area has been cleared of vegetation, the top layer (nominally 250-300mm) of soil should be removed and stockpiled in a designated area. • Topsoil stripped from the construction camp and other construction areas must be stockpiled away from any potential disturbances. • Care must be taken to prevent the compaction of topsoil in any way, especially by trucks and other construction machinery. • Provide temporary stabilization of disturbed areas that are not actively under construction. • Apply erosion controls (e.g. berms, sand bags and hessian sheets) to prevent/minimize soil erosion during construction activities. • Clean and maintain drainage ditches and culverts regularly. • Stockpile topsoil removed during construction and use to reclaim disturbed areas. <p>Potential Biodiversity and Ecological Processes:</p> <ul style="list-style-type: none"> • Demarcate the construction area with highly visibly materials • Alien vegetation must be controlled by handpulling. • Avoid the spread of invasive alien plants by keeping vehicles and equipment clean.

BASIC ASSESSMENT REPORT

Activity	Impact summary	Significance	Proposed mitigation
	<p>Dust and Noise:</p> <ul style="list-style-type: none"> • Construction activities have the potential to generate significant amounts of dust and noise. Sources of dust: <ul style="list-style-type: none"> ○ Soil and material stockpiles, if not properly seeded or covered. ○ Loading of soil and material into load trucks ○ Transportation of soil and other material to disposal sites (landfill or stockpile areas) without the load being covered ○ Not covering skips and other waste disposal containers used to hold construction related waste materials like rubble and concrete. <p>Noise can be generated in several ways including excess revving of vehicle engines, unnecessary use of the vehicles horn, workers shouting and making excessive noise and radios and stereos turned up too loud.</p>		<ul style="list-style-type: none"> • Reseed disturbed areas with indigenous plants during interim and final reclamation. All reclamation activities be undertaken within 2 weeks after construction activities are completed using weed-free indigenous vegetation. <p>Dust and Noise:</p> <ul style="list-style-type: none"> • Adhere to the speed limits. • Limit site access to authorized vehicles and persons. • Access points and other cleared surfaces must be dampened whenever necessary and especially in dry and windy conditions to avoid excessive dust. • Vehicles and machinery are to be kept in good working order and to meet the manufacturer's specifications. Should excessive emissions be observed, the Contractor/Site Manager is to have the equipment seen to as soon as possible. • If dust is unavoidable, screening will be required utilising wooden supports and shade cloth. • Use dust abatement techniques (such as watering) on unpaved, un-vegetated surfaces to minimize airborne dust and during earthmoving activities, prior to clearing, before excavating, backfilling, compacting, or grading. • Cover construction materials, skips and stockpiled soils if they are a source of dust. • Train workers to handle construction materials and debris during construction and dismantlement to reduce emissions. • The soil or construction material must be loaded below the freeboard of the construction vehicle. • The gate seals on construction vehicles must be tightened and the load covered before the vehicle can use public roads or move the material on-site. • When feasible, shut down idling vehicles and equipment to reduce noise levels.

BASIC ASSESSMENT REPORT

Activity	Impact summary	Significance	Proposed mitigation
	<p>Water Resources (Sources of Contamination):</p> <ul style="list-style-type: none"> • Sources of water pollution on construction sites include: diesel and oil; paint, solvents, cleaners and other harmful chemicals; and construction debris and dirt. • Siltation of wetlands and which then leads to these water bodies becoming turbid, reducing sunlight filtration and the destruction of aquatic life. • Spillages and deposition of chemicals onsite can soak into ground water. • Contamination of water resources • Ground disturbing activities such as road and foundation construction could lead to increased erosion and run-off. <p>Non-Hazardous Waste:</p> <ul style="list-style-type: none"> • Plastics, metal, wood, stone and concrete from construction activities have the potential to contaminate the environment if not appropriately managed. • Built-up of waste could attract vermin to the site, cause the spread of disease and serious visual impacts for neighbouring communities. • Absence of secure waste 		<ul style="list-style-type: none"> • Limit noisy activities to the least noise-sensitive times of day (weekdays between 07:00 and 18:00 hrs). • All equipment should have sound-control devices no less effective than those provided on the original equipment. Motorized equipment should be adequately muffled and maintained. If possible, the source of the noise should be enclosed, if feasible. • Using high-pressure hydraulic rock crushers to split rock, instead of hydraulic or pneumatic hammers, if required. <p>Water Resources (Sources of Contamination):</p> <ul style="list-style-type: none"> • All hazardous substances to be utilised during construction are to be stored in designated areas, which are sign-posted and bunded to prevent environmental contamination. • Portable construction equipment (e.g. generators) to be located on an impervious surface or alternatively, drip trays to be provided. • Fuels required for construction are to be stored in an impervious bunded area which can contain 110% of the liquid being stored. • Absorbent material to be available to absorb any fuel / oil / solvent spills. Any used absorbent material to be disposed as a hazardous landfill using an approved waste disposal contractor. • No washing of vehicles on site is permitted. <p>Non-Hazardous Waste:</p> <ul style="list-style-type: none"> • A formal waste management plan must be drawn up post approval. This will be adhered to in order to manage waste generated on the site on a continual basis. • The construction area must be cleared of litter, debris (e.g. Cement packets, etc) and other domestic waste on completion of the day's work. • Bins and / or skips should be emptied regularly and waste should be disposed

BASIC ASSESSMENT REPORT

Activity	Impact summary	Significance	Proposed mitigation
	<p>storage facilities (fenced) pose a health and safety risk to pedestrians and workers.</p> <ul style="list-style-type: none"> • Solid waste will be generated during the demolition of the following structures: all three of the existing biological trickling filters, the existing wash water chlorine contact tank, the second old humus tank, the four original digesters and the existing inlet works. <p>Hazardous Waste:</p> <ul style="list-style-type: none"> • Workers are not provided with the proper training to contain, report, and/or clean up any oil or hazardous material spill. This could lead to the contamination of the surrounding environment if quick and decisive action is not taken to control the spillage, leak or release of hazardous substances. • Failure to keep construction vehicles and other equipment in good working order to prevent oil and fuel leakages could contaminate the surrounding environment. • Construction vehicles that transport, place or compact concrete and asphalt being washed onsite pose a threat to the environment in terms of contamination. 		<p>of at a registered landfill site. Waybills for all such disposal are to be kept by the Contractor/Site Manager for review by the Engineer / ECO.</p> <ul style="list-style-type: none"> • Fenced areas (comprising 1.8 high bonnox covered with shade cloth) must be provided during construction for the effective storage of materials. • All mechanical equipment, piping, electrical equipment, cabling shall be carefully removed from the structures to avoid undue damage. All nuts, bolts and fixings shall be loosened and no cutting of sections may take place without the authorisation of the Engineer. • All items removed shall be carefully transported and neatly placed in the designated lay down area on the site. • All concrete structures shall be removed without blasting. Removal shall include grubbing up of the entire structure and the total removal of all rubble. • All rubble shall be removed from the site and disposed at the appropriate disposal sites. <p>Hazardous Waste:</p> <ul style="list-style-type: none"> • Ensure suitably qualified personnel are employed to control hazardous waste and any potential spillages. • Every effort must be made to ensure that any chemicals or hazardous substances do not contaminate the soil resources, drainage lines and water bodies on the site. • Contaminated water associated with construction activities should be contained in separate bermed/bunded areas and must not be allowed to enter into the natural drainage system. • Contaminated wastewater must be managed by the Contractor/Site Manager who will organise for it to be collected and removed from the site for appropriate disposal to a licensed facility. • Refuel in a designated fuelling area that includes a temporary berm to limit the spread of any spill. Use drip pans/trays

BASIC ASSESSMENT REPORT

Activity	Impact summary	Significance	Proposed mitigation
	<ul style="list-style-type: none"> • Cement and other potential environmental pollutants being mixed on the bare ground poses a threat to the environment in terms of contamination. 		<p>during refuelling to contain accidental spillages and under fuel pump and valve mechanisms of any bulk fuelling vehicles parked at the construction site.</p> <ul style="list-style-type: none"> • Any fuelling areas to be bunded, on an impervious slab and be able to retain 110% of the volume of the largest container within that fuelling facility. • Apply spillage prevention practices and response actions such as the instalment of drip trays in refuelling and vehicle-use areas to minimize accidental contamination of the surrounding environment .i.e. water bodies, forests and grasslands. • Address spillages and deposition of hazardous chemicals immediately per the appropriate spillage management plan, and initiate soil cleanup and soil removal if needed. • No vehicles transporting concrete or bitumen may be washed on site. • All empty containers of hazardous materials must be removed from the site on a weekly basis for appropriate disposal at a licensed commercial facility. • All hazardous substances / materials are to be transported in sealed containers and bags. • Soil that is contaminated with, e.g. cement, bitumen, petrochemicals or paint must be disposed of at an appropriate registered landfill site. • Material Safety Data Sheets (MSDSs) shall be available on site for all chemicals and hazardous substances to be used on the site. MSDSs must provide additional information on ecological impacts and measures to minimize the negative environmental impacts should occur. • Staff dealing with these materials/ substances must be made aware of their potential impacts and follow the correct safety measures should a spillage or escape occur. • The Contractor must ensure that staff are made aware of the health risks associated with al hazardous

BASIC ASSESSMENT REPORT

Activity	Impact summary	Significance	Proposed mitigation
	<p>Sanitation:</p> <ul style="list-style-type: none"> • Workers using the surround grassland, drainage lines, watercourses and bush as toilet facilities and the use of long-drop toilets on site. • Failure to dispose of chemical toilet waste on a regular basis and in an appropriate manner poses a health risk to workers and can lead to the contamination of the ground water, water bodies and the grasslands. <p>Traffic:</p> <ul style="list-style-type: none"> • Increased construction related traffic, especially heavy vehicles in the vicinity of the construction site causes an increase in dust and noise levels creating a nuisance to local resident and guests. • An overall increase in heavy truck traffic would accelerate the deterioration of road network. • Failure of the Contractor to repair the damaged roads or replace more frequently could result in damage to vehicle (construction, local residents and guests), death or injury to 		<p>substances used and been provided with the appropriate protective clothing/ equipment in the case of spillages or accidents.</p> <ul style="list-style-type: none"> • Provide portable spill containment and clean-up equipment in all vehicles. • Keep vehicles and equipment in good working order to prevent oil and fuel leaks. • Firefighting equipment must be present on site at all times. Train workers in the early detection of fires and firefighting. <p>Sanitation:</p> <ul style="list-style-type: none"> • There shall be a minimum of 1 toilet for every 7 workers and these must be situated no further than 100 m from the work front. • Chemical toilets are to be maintained in a clean state and should be moved to ensure that they adequately service the work areas. • Waste from chemical toilets should be disposed of regularly and in a responsible manner by a registered waste contractor. Care must be taken to avoid contamination of soils and water, pollution and nuisance to adjoining areas. • The contractor must ensure that the bush, degraded areas and built up areas are not used as a toilet facility. <p>Traffic:</p> <ul style="list-style-type: none"> • Instruct and require all personnel and contractors to adhere to speed limits to ensure safe and efficient traffic flow. • Contractor/Site Manager shall ensure that access roads on the site are maintained in good condition by attending to potholes, corrugations and storm water damages as soon as these develop. • On site, the compaction of soil by heavy vehicles must be avoided; construction vehicles must be restricted to demarcated access, haulage routes and turning areas. • During construction, as a temporary measure, the dirt access roads could

BASIC ASSESSMENT REPORT

Activity	Impact summary	Significance	Proposed mitigation
	<p>pedestrians, and an increase in traffic accidents and congestion.</p> <ul style="list-style-type: none"> • The increase in construction related traffic also increases the potential for the spillage of hazardous substances onsite and on public roads causing contamination of the surrounding environment. <p>Health and safety:</p> <ul style="list-style-type: none"> • Most accidents involving workers on the construction sites result from overexertion, falls, or being struck by equipment. • Workers could contract construction-related illnesses from exposure to chemical substances from spills. • Potentially hazardous areas such as excavated trenches/pits or chemical storage areas are not clearly demarcated or clearly signed in English and Zulu resulting in death or injury to workers or local residents. • Difficulty in navigating by vehicle or on foot along existing roads and walkways when construction activities are in process will increase the potential for accidents and delays. • Failure to put up, replace missing or damaged traffic safety signage could result in traffic accidents which could cause injury or death. • Inappropriate manoeuvring of construction workers and vehicles around the proposed site during the construction phase will result in increased road safety issues and accidents if not appropriately managed. • Material stockpiles, such as pipes and scaffolding, are not stabilised or secured which 		<p>potentially be surfaced with a compacted gravel layer (shale) in order to allow for the increase in vehicular traffic on these roads.</p> <p>Health and safety:</p> <ul style="list-style-type: none"> • Material stockpiles, such as pipes and scaffolding, must be stable and well secured to avoid collapse and possible injury to site workers / local residents. • No materials are to be stored in unstable or high-risk areas such as in floodplains or on steep slopes. • The construction camp is to be securely fenced and locked and guarded. • No unauthorised access is to be allowed to members of the public and people not associated with the construction process. • Construction personnel to be issued with suitable PPE (e.g. safety shoes, hard hats) prior to the construction activity commencing. • Provide secondary containment for all on-site hazardous materials and waste storage, including fuel. • Containerise and periodically remove wastes for recycling or for disposal at appropriate off-site permitted disposal facilities. • Provide portable spill containment and clean-up equipment in all vehicles. • Keep vehicles and equipment in good working order to prevent oil and fuel leaks. • Document accidental releases as to cause, corrective actions taken, and resulting environmental or health and safety impacts.

BASIC ASSESSMENT REPORT

Activity	Impact summary	Significance	Proposed mitigation
	<p>could cause collapse and possible injury to site workers / local residents and guests.</p> <ul style="list-style-type: none"> • The storage of materials in unstable or high-risk areas such as in floodplains or on steep slopes. • Failure to control access of pedestrians and guests to the construction site will increase the risk of accidents and potentially death. <p>Cultural And Heritage Resources:</p> <ul style="list-style-type: none"> • Loss of archaeological resources through construction. 		<ul style="list-style-type: none"> • Should any heritage resources, as defined in the National Heritage Resources Act 25 of 1999, be discovered during the course of development activities, the developer must cease all work immediately, and adhere to the protocol set out in the correspondence received by Amafa.
	<p>Indirect impacts:</p> <ul style="list-style-type: none"> • None 		<p>Indirect impacts:</p> <ul style="list-style-type: none"> • No mitigation required
	<p>Cumulative impacts:</p> <ul style="list-style-type: none"> • None 		<p>Cumulative impacts:</p> <ul style="list-style-type: none"> • No mitigation required
<p>OPERATIONAL PHASE</p>	<p>Direct impacts:</p> <p>Potential Biodiversity and Ecological Processes:</p> <ul style="list-style-type: none"> • Increased alien vegetation <p>Impact on Water Resources:</p> <ul style="list-style-type: none"> • Road surfaces could lead to increased erosion and run-off. <p>Non-Hazardous Waste:</p> <ul style="list-style-type: none"> • Build-up of waste could attract vermin to the site, cause the spread of disease and serious visual impacts for neighbouring communities. • Absence of secure waste bins pose a health and safety risk to pedestrians and workers. 	<p>See Significance Scoring</p>	<p>Potential Biodiversity and Ecological Processes:</p> <ul style="list-style-type: none"> • Alien vegetation must be controlled by hand pulling. <p>Impact on Water Resources:</p> <ul style="list-style-type: none"> • This will be managed by a stormwater management plan. <p>Non-Hazardous Waste:</p> <ul style="list-style-type: none"> • Bins and / or skips should be emptied regularly and waste should be disposed of at a registered landfill site • Bin must have secure lids to prevent wind-blown litter or scavenging.

BASIC ASSESSMENT REPORT

Activity	Impact summary	Significance	Proposed mitigation
	<p>Traffic:</p> <ul style="list-style-type: none"> Increased operational related traffic, especially heavy vehicles in the vicinity of the site causes increased dust and noise levels creating a nuisance to local resident and guests. An overall increase in heavy truck traffic would accelerate the deterioration of road network. <p>Health and safety:</p> <ul style="list-style-type: none"> Failure to put up, replace missing, damaged traffic safety signage could result in traffic accidents which could cause injury or death. Inappropriate manoeuvring of workers and vehicles around the proposed site during the operational phase will result in increased road safety issues and accidents if not appropriately managed. Failure to control access of pedestrians and guests to the construction site will increase the risk of accidents and potentially death. 		<p>Traffic:</p> <ul style="list-style-type: none"> Instruct and require all personnel and contractors to adhere to speed limits to ensure safe and efficient traffic flow. Site Manager shall ensure that access roads on the site are maintained in good condition by attending to potholes, corrugations and storm water damages as soon as these develop. <p>Health and safety:</p> <ul style="list-style-type: none"> Firefighting equipment must be present on site at all times. Train workers in the early detection of fires. No unauthorised access is to be allowed to members of the public and workers.
	<p>Indirect impacts:</p> <ul style="list-style-type: none"> none 		<ul style="list-style-type: none"> No mitigation required
	<p>Cumulative impacts:</p> <ul style="list-style-type: none"> none 		<ul style="list-style-type: none"> No mitigation required
<p>DECOMMISSIONING PHASE</p> <p>i.e. Demolishing of the existing Bayview Gate.</p>	<p>Direct impacts:</p> <p>Soil and Geologic Resources:</p> <ul style="list-style-type: none"> Soil compaction of adjacent unpaved areas <p>Potential Biodiversity and Ecological Processes:</p> <ul style="list-style-type: none"> Spillage of chemicals during demolition activities can cause the contamination of the biodiversity habitat 	<p>See Significance Scoring</p>	<p>Soil and Geologic Resources:</p> <ul style="list-style-type: none"> The demolition site must be demarcated using a 1.8m high bonnox fence covered with a shade cloth. The space between the fence and building should only allow for demolition vehicles to manoeuvre with ease. <p>Potential Biodiversity and Ecological Processes:</p> <ul style="list-style-type: none"> All chemicals must be secured properly in lockable structure.

BASIC ASSESSMENT REPORT

Activity	Impact summary	Significance	Proposed mitigation
	<p>Dust and Noise:</p> <ul style="list-style-type: none"> • Dust generated from demolition of structures, unpaved roads, waste stock piles, transportation of waste etc. • Noise from machinery and workers <p>Water Resources (Sources of Contamination):</p> <ul style="list-style-type: none"> • Stockpiling of demolition waste material may contaminate water resources <p>Non-Hazardous Waste:</p> <ul style="list-style-type: none"> • Plastics, metal, wood, stone and concrete from construction activities have the potential to contaminate the environment if not appropriately managed. • Build-up of waste could attract vermin to the site, cause the spread of disease and serious visual impacts for neighbouring communities. <p>Traffic:</p> <ul style="list-style-type: none"> • Absence of or poor signage could lead to fatalities. <p>Health and safety:</p> <ul style="list-style-type: none"> • Most accidents involving workers on the construction sites result from overexertion, falls, or being struck by equipment. • Workers could contract construction-related illnesses from exposure to chemical substances from spills. • Potentially hazardous areas such as excavated trenches/pits or chemical storage areas are not clearly demarcated and clearly signed in English and Zulu resulting in 		<p>Dust and Noise:</p> <ul style="list-style-type: none"> • Adhere to the speed limits. • Access points and other cleared surfaces must be dampened whenever necessary and especially in dry and windy conditions to avoid excessive dust. • If dust is unavoidable, screening will be required utilising wooden supports and shade cloth. • Cover construction materials, skips and stockpiled soils if they are a source of dust. <p>Water Resources (Sources of Contamination):</p> <ul style="list-style-type: none"> • Demolition waste must be loaded onto trucks as soon as it is created. (<i>i.e. Structures demolished must be loaded straight away</i>). <p>Non-Hazardous Waste:</p> <ul style="list-style-type: none"> • Demolition waste must loaded onto trucks as soon as it is created. (<i>i.e. Structures demolished must be loaded straight away</i>). <p>Traffic:</p> <ul style="list-style-type: none"> • Road and Health and Safety signage must be provided where necessary. <p>Health and safety:</p> <ul style="list-style-type: none"> • Firefighting equipment must be present on site at all times. Train workers in the early detection of fires and firefighting. • Material stockpiles, such as pipes and scaffolding, must be stable and well secured to avoid collapse and possible injury to site workers. • No materials are to be stored in unstable area. • No unauthorised access is to be allowed to members of the public and people not associated with the demolition process.

BASIC ASSESSMENT REPORT

Activity	Impact summary	Significance	Proposed mitigation
	<p>death or injury to workers or local residents.</p> <ul style="list-style-type: none"> • Failure to put up, replace missing, damaged traffic safety signage could result in traffic accidents which could cause injury or death. • Inappropriate manoeuvring of construction workers and vehicles around the demolition site will result in increased road safety issues and accidents if not appropriately managed. • Material stockpiles, such as pipes and scaffolding, are not stabilised or secured which could cause collapse and possible injury to site workers / local residents and guests. • The storage of materials in unstable or high-risk areas such as in floodplains or on steep slopes. • Failure to control access of pedestrians and guests to the demolition site will increase the risk of accidents and potentially death. <p>Visual:</p> <ul style="list-style-type: none"> • Demolition structures have a significant visual impact 		<ul style="list-style-type: none"> • Construction personnel to be issued with suitable PPE (e.g. safety shoes, hard hats) prior to the demolition activity commencing. • Provide secondary containment for all on-site hazardous materials and waste storage, including fuel. • Containerise and periodically remove wastes for recycling or for disposal at appropriate off-site permitted disposal facilities. • Provide portable spill containment and clean-up equipment in all vehicles. • Document accidental releases as to cause, corrective actions taken, and resulting environmental or health and safety impacts. <p>Visual</p> <ul style="list-style-type: none"> • The entire site is to be fenced with a 1.8m high bonnox fence covered with a shade cloth.
	<p>Indirect impacts:</p> <ul style="list-style-type: none"> • none 		<ul style="list-style-type: none"> • No mitigation required
	<p>Cumulative impacts:</p> <ul style="list-style-type: none"> • none 		<ul style="list-style-type: none"> • No mitigation required
<p>Alternative 2</p> <p>Alternative 2 entails upgrading the current entrance. The following alternatives as per Section 2 of this report make up this alternative:</p> <ul style="list-style-type: none"> • Site alternative 2 • Layout alternative 1 			
<p>PLANNING AND DESIGN PHASE</p>	<p>Direct impacts:</p> <ul style="list-style-type: none"> • None identified 	<p>See Significance Scoring</p>	<ul style="list-style-type: none"> • No mitigation needed

BASIC ASSESSMENT REPORT

Activity	Impact summary	Significance	Proposed mitigation
	Indirect impacts: <ul style="list-style-type: none"> • None identified 		<ul style="list-style-type: none"> • No mitigation needed
	Cumulative impacts: <ul style="list-style-type: none"> • None identified 		<ul style="list-style-type: none"> • No mitigation needed
CONSTRUCTION PHASE	Direct impacts: Soil and Geologic Resources: <ul style="list-style-type: none"> • Soil compaction due to construction activities would reduce aeration, permeability, and water-holding capacity of the soils and cause an increase in surface runoff, potentially causing increased sheet or gully erosion. • Soil compaction and blending could also impact the viability of future vegetation establishment. • Soil erosion caused by displacement of soil during site clearance and stockpiling. 	See Significance Scoring	Soil and Geologic Resources: <ul style="list-style-type: none"> • Excavated soil, not used as fill, must be deposited of in a registered landfill site. • Soil disturbance will be minimized by establishing the extent of the construction site (pre-construction) and clearly demarcating this on the site layout plans. No construction personnel or vehicles may leave the demarcated areas except when authorised to do so by the project manager. • Topsoil will be stockpiled separately and re-applied post construction. • Erosion prevention measures should be implemented: Berms, sand bags and hessian sheets may be used to contain all sediment whilst energy dissipaters must be constructed at all outflow points. • The site should be monitored weekly for any sign of off-site siltation. All exposed earth should be rehabilitated promptly with suitable vegetation to protect the soil. • Once an area has been cleared of vegetation, the top layer (nominally 250-300mm) of soil should be removed and stockpiled in a designated area. • Topsoil stripped from the construction camp and other construction areas must be stockpiled away from any potential disturbances. • Care must be taken to prevent the compaction of topsoil in any way, especially by trucks and other construction machinery. • Provide temporary stabilization of disturbed areas that are not actively under construction. • Clean and maintain drainage ditches and culverts regularly.

BASIC ASSESSMENT REPORT

Activity	Impact summary	Significance	Proposed mitigation
	<p>Potential Biodiversity and Ecological Processes:</p> <ul style="list-style-type: none"> • Loss of biodiversity (flora and fauna) • Loss of biodiversity habitat • Increased alien vegetation <p>Dust and Noise:</p> <ul style="list-style-type: none"> • Construction activities have the potential to generate significant amounts of dust and noise. Sources of dust: <ul style="list-style-type: none"> ○ Soil and material stockpiles, if not properly seeded or covered. ○ Loading of soil and material into load trucks ○ Transportation of soil and other material to disposal sites (landfill or stockpile areas) without the load being covered ○ Not covering skips and other waste disposal containers used to hold construction related waste materials like rubble and concrete. • Noise can be generated in several ways including excess revving of vehicle engines, unnecessary use of the vehicles horn, workers shouting and making excessive noise and radios and stereos turned up too loud. 		<p>Potential Biodiversity and Ecological Processes:</p> <ul style="list-style-type: none"> • Demarcate the construction area with highly visibly materials • Alien vegetation must be controlled by hand or light machinery. • Avoid the spread of invasive alien plants by keeping vehicles and equipment clean. • Reseed disturbed areas with indigenous plants during interim and final reclamation. All reclamation activities be undertaken within 2 weeks after construction activities are completed using weed-free indigenous vegetation. <p>Dust and Noise:</p> <ul style="list-style-type: none"> • Adhere to the speed limits. • Limit site access to authorized vehicles and persons. • Access points and other cleared surfaces must be dampened whenever necessary and especially in dry and windy conditions to avoid excessive dust. • Vehicles and machinery are to be kept in good working order and to meet the manufacturer's specifications. Should excessive emissions be observed, the Contractor/Site Manager is to have the equipment seen to as soon as possible. • If dust is unavoidable, screening will be required utilising wooden supports and shade cloth. • Use dust abatement techniques on unpaved, un-vegetated surfaces to minimize airborne dust and during earthmoving activities, prior to clearing, before excavating, backfilling, compacting, or grading. • Cover construction materials, skips and stockpiled soils if they are a source of dust. • Train workers to handle construction materials and debris during construction and dismantlement to reduce emissions. • Loading of construction material and

BASIC ASSESSMENT REPORT

Activity	Impact summary	Significance	Proposed mitigation
	<p>Water Resources (Sources of Contamination):</p> <ul style="list-style-type: none"> • Sources of water pollution on construction sites include: diesel and oil; paint, solvents, cleaners and other harmful chemicals; and construction debris and dirt. • Siltation of wetlands and which then leads to these water bodies becoming turbid, reducing sunlight filtration and the destruction of aquatic life. • Spillages and deposition of chemicals onsite can soak into ground water. • Ground disturbing activities such as road and foundation construction could lead to increased erosion and run-off. 		<p>soil onto construction vehicles (load trucks):</p> <ul style="list-style-type: none"> • The soil or construction material must be loaded below the freeboard of the construction vehicle. • The gate seals on construction vehicles must be tightened and the load covered before the vehicle can use public roads or move the material on-site. • When feasible, shut down idling vehicles and equipment to reduce noise levels. • Limit noisy activities to the least noise-sensitive times of day (weekdays between 07:00 and 18:00 hrs). • All equipment should have sound-control devices no less effective than those provided on the original equipment. Motorized equipment should be adequately muffled and maintained. If possible, the source of the noise should be enclosed, if feasible. • Using high-pressure hydraulic rock crushers to split rock, instead of hydraulic or pneumatic hammers, if required. <p>Water Resources (Sources of Contamination):</p> <ul style="list-style-type: none"> • All hazardous substances to be utilised during construction are to be stored in designated areas, which are sign-posted and bunded to prevent environmental contamination. • Portable construction equipment (e.g. generators) to be located on an impervious surface or alternatively, drip trays to be provided. • Fuels required for construction are to be stored in an impervious bunded area which can contain 110% of the liquid being stored. • Absorbent material to be available to absorb any fuel / oil / solvent spills. Any used absorbent material to be disposed as a hazardous landfill using an approved waste disposal contractor. • No washing of vehicles on site is

BASIC ASSESSMENT REPORT

Activity	Impact summary	Significance	Proposed mitigation
	<p>Non-Hazardous Waste:</p> <ul style="list-style-type: none"> • Plastics, metal, wood, stone and concrete from construction activities have the potential to contaminate the environment if not appropriately managed. • Build-up of waste could attract vermin to the site, cause the spread of disease and serious visual impacts for neighbouring communities. • Absence of secure waste storage facilities (fenced) pose a health and safety risk to pedestrians and workers. <p>Hazardous Waste:</p> <ul style="list-style-type: none"> • Workers are not provided with the proper training to contain, report, and/or clean up any oil or hazardous material spill. This could lead to the contamination of the surrounding environment if quick and decisive action is not taken to control the spillage, leak or release of hazardous 		<p>permitted.</p> <p>Non-Hazardous Waste:</p> <ul style="list-style-type: none"> • A formal waste management plan must be drawn up post approval. This will be adhered to in order to manage waste generated on site on a continual basis. • The construction area must be cleared of litter, debris (e.g. Cement packets, etc) and other domestic waste on completion of the day's work. • Bins and / or skips should be emptied regularly and waste should be disposed of at a registered landfill site. Waybills for all such disposal are to be kept by the Contractor/Site Manager for review by the Engineer / ECO. • Fenced areas (comprising 1.8m bonnox covered with shade cloth) must be provided during construction for the effective storage of materials. • All mechanical equipment, piping, electrical equipment, cabling shall be carefully removed from the structures to avoid undue damage. All nuts, bolts and fixings shall be loosened and no cutting of sections may take place without the authorisation of the Engineer. • All items removed shall be carefully transported and neatly placed in the designated lay down area on the site. • All concrete structures shall be removed without blasting. Removal shall include grubbing up of the entire structure and the total removal of all rubble. • All rubble shall be removed from the site and disposed at the appropriate disposal sites. <p>Hazardous Waste:</p> <ul style="list-style-type: none"> • Ensure suitably qualified personnel are employed to control hazardous waste and any potential spillages. • Every effort should be made to ensure that any chemicals or hazardous substances do not contaminate the soil resources, drainage lines and water bodies on the site.

BASIC ASSESSMENT REPORT

Activity	Impact summary	Significance	Proposed mitigation
	<p>substances.</p> <ul style="list-style-type: none"> • Failure to keep construction vehicles and other equipment in good working order to prevent oil and fuel leakages that could contaminate the surrounding environment. • Construction vehicles that transport, place or compact concrete and asphalt being washed onsite pose a threat to the environment in terms of contamination. • Cement and other potential environmental pollutants being mixed on the bare ground poses a threat to the environment in terms of contamination. 		<ul style="list-style-type: none"> • Contaminated water associated with construction activities should be contained in separate bermed/bunded areas and should not be allowed to enter into the natural drainage system. • Contaminated wastewater must be managed by the Contractor/Site Manager who will organise for it to be collected and removed from the site for appropriate disposal to a licensed commercial facility. • Care must be taken to ensure that runoff from vehicle or plant washing does not enter surface or ground water. • Refuel in a designated fuelling area that includes a temporary berm to limit the spread of any spill. Use drip pans/trays during refuelling to contain accidental releases and under fuel pump and valve mechanisms of any bulk fuelling vehicles parked at the construction site. • Any fuelling areas to be bunded, on an impervious slab and be able to retain 110% of the volume of the largest container within that fuelling facility. • Apply spillage prevention practices and response actions such as the instalment of drip trays in refuelling and vehicle-use areas to minimize accidental contamination of the surrounding environment .i.e. water bodies, forests and grasslands. • Address spillages and deposition of hazardous chemicals immediately per the appropriate spillage management plan, and initiate soil cleanup and soil removal if needed. • No vehicles transporting concrete or bitumen may be washed on site. • All empty containers of hazardous materials must be removed from the site on a daily basis for appropriate disposal at a licensed commercial facility. • All hazardous substances / materials are to be transported in sealed containers and bags. • Soil that is contaminated with, e.g. cement, bitumen, petrochemicals or paint must be disposed of at an

BASIC ASSESSMENT REPORT

Activity	Impact summary	Significance	Proposed mitigation
	<p>Sanitation:</p> <ul style="list-style-type: none"> • Workers using the surround grassland, drainage lines, watercourses and bush as toilet facilities and the use of long-drop toilets on site. • Failure to dispose of chemical toilet waste on a regular basis and in an appropriate manner poses a health risk to workers and can lead to the contamination of the ground water, water bodies and the grasslands. 		<p>appropriate registered landfill site.</p> <ul style="list-style-type: none"> • Material Safety Data Sheets (MSDSs) shall be available on site for all chemicals and hazardous substances to be used on the site. Where possible and available, MSDSs must provide additional information on ecological impacts and measures to minimize the negative environmental impacts during accidental releases or escapes. • Staff dealing with these materials/substances must be made aware of their potential impacts and follow the correct safety measures should a spillage or escape occur. • The Contractor must ensure that staff are made aware of the health risks associated with all hazardous substances used and been provided with the appropriate protective clothing/equipment in the case of spillages or accidents. • Provide portable spill containment and cleanup equipment in all vehicles. • Keep vehicles and equipment in good working order to prevent oil and fuel leaks. • Firefighting equipment must be present on site at all times. Train workers in the early detection of fires. • Hazardous waste would require disposal to hazardous landfill sites. <p>Sanitation:</p> <ul style="list-style-type: none"> • There shall be a minimum of 1 toilet for every 7 workers and these must be situated no further than 100 m from the work front. • Chemical toilets are to be maintained in a clean state and should be moved to ensure that they adequately service the work areas. • Waste from chemical toilets should be disposed of regularly and in a responsible manner by a registered waste contractor. Care must be taken to avoid contamination of soils and water, pollution and nuisance to adjoining areas.

BASIC ASSESSMENT REPORT

Activity	Impact summary	Significance	Proposed mitigation
	<p>Traffic:</p> <ul style="list-style-type: none"> • Increased construction related traffic, especially heavy vehicles in the vicinity of the construction site causes an increased dust and noise levels are nuisance to local resident and guests. An overall increase in heavy truck traffic would accelerate the deterioration of road network. • Failure of the Contractor to repair the damaged roads or replace more frequently could result in damage to vehicle (construction, local residents and guests), death or injury to pedestrians, and an increase in traffic accidents and congestion. • The increase in construction related traffic also increases the potential for the spillage of hazardous substances onsite and public roads cause contamination of the surrounding environment. <p>Health and safety:</p> <ul style="list-style-type: none"> • Most accidents involving workers on the construction sites result from overexertion, falls, or being struck by equipment. • Workers could contract construction-related illnesses from exposure to chemical substances from spills. • Potentially hazardous areas such as excavated trenches/pits or chemical storage areas are not clearly demarcated and clearly signed in English and Zulu resulting in death or injury to workers or local residents. • Difficulty in navigating by vehicle or on foot along existing roads and walkways when 		<ul style="list-style-type: none"> • The contractor must ensure that the bush, degraded areas and built up areas are not used as a toilet facility. <p>Traffic:</p> <ul style="list-style-type: none"> • Instruct and require all personnel and contractors to adhere to speed limits to ensure safe and efficient traffic flow. • Contractor/Site Manager shall ensure that access roads on the site are maintained in good condition by attending to potholes, corrugations and storm water damages as soon as these develop. • On site, the compaction of soil by heavy vehicles must be avoided; construction vehicles must be restricted to demarcated access, haulage routes and turning areas. • During construction, as a temporary measure, the dirt access roads could potentially be surfaced with a compacted gravel layer (shale) in order to allow for the increase in vehicular traffic on these roads. <p>Health and safety:</p> <ul style="list-style-type: none"> • Firefighting equipment must be present on site at all times. Train workers in the early detection of fires and firefighting. • Material stockpiles, such as pipes and scaffolding, must be stable and well secured to avoid collapse and possible injury to site workers / local residents. • No materials are to be stored in unstable or high-risk areas such as in floodplains or on steep slopes. • The construction camp is to be securely fenced and locked when not in use. • No unauthorised access is to be allowed to members of the public and people not associated with the construction process. • Construction personnel to be issued with suitable PPE (e.g. safety shoes,

BASIC ASSESSMENT REPORT

Activity	Impact summary	Significance	Proposed mitigation
	<p>construction activities are in process which will increase the potential for accidents and delays.</p> <ul style="list-style-type: none"> • Failure to put up, replace missing, damaged traffic safety signage could result in traffic accidents which could cause injury or death. • Inappropriate manoeuvring of construction workers and vehicles around the proposed site during the construction phase will result in increased road safety issues and accidents if not appropriately managed. • Material stockpiles, such as pipes and scaffolding, are not stabilised or secured which could cause collapse and possible injury to site workers / local residents and guests. • The storage of materials in unstable or high-risk areas such as in floodplains or on steep slopes. • Failure to control access of pedestrians and guests to the construction site will increase the risk of accidents and potentially death. <p>Cultural And Heritage Resources:</p> <ul style="list-style-type: none"> • Loss of archaeological resources. 		<p>hard hats) prior to the construction activity commencing.</p> <ul style="list-style-type: none"> • Containerize and periodically remove wastes for recycling or for disposal at appropriate off-site permitted disposal facilities. • Provide portable spill containment and clean-up equipment in all vehicles. • Keep vehicles and equipment in good working order to prevent oil and fuel leaks. • Document accidental releases as to cause, corrective actions taken, and resulting environmental or health and safety impacts. <ul style="list-style-type: none"> • Should any heritage resources, as defined in the National Heritage Resources Act 25 of 1999, be discovered during the course of development activities, the developer must cease all work immediately, and adhere to the protocol set out in the correspondence received by Amafa.
<p>OPERATIONAL PHASE</p>	<p>Direct impacts:</p> <p>Potential Biodiversity and Ecological Processes:</p> <ul style="list-style-type: none"> • Increased alien vegetation 	<p>See Significance Scoring</p>	<p>Potential Biodiversity and Ecological Processes:</p> <ul style="list-style-type: none"> • Alien vegetation must be controlled by hand or light machinery.

BASIC ASSESSMENT REPORT

Activity	Impact summary	Significance	Proposed mitigation
	<p>Non-Hazardous Waste:</p> <ul style="list-style-type: none"> • Build-up of waste could attract vermin to the site, cause the spread of disease and serious visual impacts for neighbouring communities. • Absence of secure waste bins pose a health and safety risk to pedestrians and workers. <p>Traffic:</p> <ul style="list-style-type: none"> • Increased operational related traffic, especially heavy vehicles in the vicinity of the site causes an increased dust and noise levels are nuisance to local resident and guests. An overall increase in heavy truck traffic would accelerate the deterioration of road network. <p>Health and safety:</p> <ul style="list-style-type: none"> • Failure to put up, replace missing, damaged traffic safety signage could result in traffic accidents which could cause injury or death. • Inappropriate manoeuvring of workers and vehicles around the proposed site during the operational phase will result in increased road safety issues and accidents if not appropriately managed. • Failure to control access of pedestrians and guests to the construction site will increase the risk of accidents and potentially death. 		<p>Non-Hazardous Waste:</p> <ul style="list-style-type: none"> • Bins and / or skips should be emptied regularly and waste should be disposed of at a registered landfill site <p>Traffic:</p> <ul style="list-style-type: none"> • Instruct and require all personnel and contractors to adhere to speed limits to ensure safe and efficient traffic flow. • Site Manager shall ensure that access roads on the site are maintained in good condition by attending to potholes, corrugations and storm water damages as soon as these develop. <p>Health and safety:</p> <ul style="list-style-type: none"> • No unauthorised access is to be allowed to members of the public and workers.
	<p>Indirect impacts:</p> <ul style="list-style-type: none"> • none 		<ul style="list-style-type: none"> • No mitigation required
	<p>Cumulative impacts:</p> <ul style="list-style-type: none"> • none 		<ul style="list-style-type: none"> • No mitigation required
<p>DECOMMISSIONING PHASE</p>	<p>Direct impacts:</p> <p>Soil and Geologic Resources:</p> <ul style="list-style-type: none"> • Soil compaction of adjacent unpaved areas 	<p>See Significance Scoring</p>	<p>Soil and Geologic Resources:</p> <ul style="list-style-type: none"> • The demolition site must be demarcated using a 1.8m bonnox fence covered with shade cloth. The space between the fence and building should only allow for demolition vehicles to manoeuvre with

BASIC ASSESSMENT REPORT

Activity	Impact summary	Significance	Proposed mitigation
	<p>Potential Biodiversity and Ecological Processes:</p> <ul style="list-style-type: none"> Spillage of chemicals during demolition activities can cause the contamination of the biodiversity habitat <p>Dust and Noise:</p> <ul style="list-style-type: none"> Dust generated from demolition of structures, unpaved roads, waste stock piles, transportation of waste etc. Noise from machinery and workers <p>Water Resources (Sources of Contamination):</p> <ul style="list-style-type: none"> Stockpiling of demolition waste material may contaminate water resources <p>Non-Hazardous Waste:</p> <ul style="list-style-type: none"> Plastics, metal, wood, stone and concrete from construction activities have the potential to contaminate the environment if not appropriately managed. Build-up of waste could attract vermin to the site, cause the spread of disease and serious visual impacts for neighbouring communities. <p>Traffic:</p> <ul style="list-style-type: none"> Absence of or poor signage could lead to fatalities. <p>Health and safety:</p> <ul style="list-style-type: none"> Most accidents involving workers on the construction sites result from overexertion, falls, or being struck by 		<p>ease.</p> <p>Potential Biodiversity and Ecological Processes:</p> <ul style="list-style-type: none"> All chemicals must be secured properly in lockable structure. <p>Dust and Noise:</p> <ul style="list-style-type: none"> Adhere to the speed limits. Access points and other cleared surfaces must be dampened whenever necessary and especially in dry and windy conditions to avoid excessive dust. If dust is unavoidable, screening will be required utilising wooden supports and shade cloth. Cover construction materials, skips and stockpiled soils if they are a source of dust. <p>Water Resources (Sources of Contamination):</p> <ul style="list-style-type: none"> Demolition waste must be loaded onto trucks as soon as it is created. (<i>i.e. Structures demolished must be loaded straight away</i>). <p>Non-Hazardous Waste:</p> <ul style="list-style-type: none"> Demolition waste must be loaded onto trucks as soon as it is created. (<i>i.e. Structures demolished must be loaded straight away</i>). <p>Traffic:</p> <ul style="list-style-type: none"> Road and Health and Safety signage must be provided where necessary. <p>Health and safety:</p> <ul style="list-style-type: none"> Firefighting equipment must be present on site at all times. Train workers in the early detection of fires. Material stockpiles, such as pipes and

BASIC ASSESSMENT REPORT

Activity	Impact summary	Significance	Proposed mitigation
	<p>equipment.</p> <ul style="list-style-type: none"> • Workers could contract construction-related illnesses from exposure to chemical substances from spills. • Potentially hazardous areas such as excavated trenches/pits or chemical storage areas are not clearly demarcated and clearly signed in English and Zulu resulting in death or injury to workers or local residents. • Failure to put up, replace missing, damaged traffic safety signage could result in traffic accidents which could cause injury or death. • Inappropriate manoeuvring of construction workers and vehicles around the demolition site will result in increased road safety issues and accidents if not appropriately managed. • Material stockpiles, such as pipes and scaffolding, are not stabilised or secured which could cause collapse and possible injury to site workers / local residents and guests. • The storage of materials in unstable or high-risk areas such as in floodplains or on steep slopes. • Failure to control access of pedestrians and guests to the demolition site will increase the risk of accidents and potentially death. <p>Visual:</p> <ul style="list-style-type: none"> • Demolition structures have a significant visual impact 		<p>scaffolding, must be stable and well secured to avoid collapse and possible injury to site workers / local residents.</p> <ul style="list-style-type: none"> • No materials are to be stored in unstable area. • No unauthorised access is to be allowed to members of the public and people not associated with the demolition process. • Construction personnel to be issued with suitable PPE (e.g. safety shoes, hard hats) prior to the demolition activity commencing. • Provide secondary containment for all on-site hazardous materials and waste storage, including fuel. • Provide portable spill containment and clean-up equipment in all vehicles. • Document accidental releases as to cause, corrective actions taken, and resulting environmental or health and safety impacts. <p>Visual</p> <ul style="list-style-type: none"> • The entire site is to be fenced with a 2m dark green bonnox fence.
	<p>Indirect impacts: None</p>		No mitigation required
	<p>Cumulative impacts: None</p>		No mitigation required
<p>Alternative 3</p>			

BASIC ASSESSMENT REPORT

Activity	Impact summary	Significance	Proposed mitigation
N/A			
No-go option			
PLANNING AND DESIGN PHASE	N/A		
OPERATIONAL PHASE	<p>Direct impacts:</p> <ul style="list-style-type: none"> The increasing road traffic volumes leads to the growing congestion Lack of adequate facilities compromises security. Create non-compliance with state security agencies requirements, including those of TNPA Risk of damage to or loss of property Increased safety and health risk and liability in case of incidents 	See Significance Scoring	<p>Direct impacts:</p> <ul style="list-style-type: none"> Upgrading the facility is the only feasible mitigation measure
	<p>Indirect impacts:</p> <ul style="list-style-type: none"> The lack of adequate facilities at all the port entrances creates a very poor image of the port. Decreased capital investment 		<p>Indirect impacts:</p> <ul style="list-style-type: none"> Upgrading the facility is the only feasible mitigation measure
	<p>Cumulative impacts:</p> <ul style="list-style-type: none"> Transnet National Port Authority tenants will get frustrated by traffic congestion. 		<p>Indirect impacts:</p> <ul style="list-style-type: none"> Upgrading the facility is the only feasible mitigation measure
DECOMMISSIONING PHASE	N/A		

2. ENVIRONMENTAL IMPACT STATEMENT

Taking the assessment of potential impacts into account, please provide an environmental impact statement that summarises the impact that the proposed activity and its alternatives may have on the environment after the management and mitigation of impacts have been taken into account, with specific reference to types of impact, duration of impacts, likelihood of potential impacts actually occurring and the significance of impacts.

Alternative A (preferred alternative)

The preferred alternative of constructing a new gate on a new site has the following impacts -

New entrance and associated road infrastructure impacts:

- There will definitely be minimal loss of wetland due to the widening of the road but rehabilitation of disturbed areas will improve the status of the wetland.
- Negligible loss of natural environment (grassland) through transformation. This aspect has a very high probability of occurring.
- Stormwater will be managed through use of swales which will assist in recharging the wetland and promoting growth of wetland plant species. This aspect will improve the functionality of the wetland.

New road impacts:

- Reduced/interrupted surface and subsurface flow of water across the grassland where the new road is to be located. This aspect has a very high probability of occurring.
- Fragmentation of the grassland thereby limiting the movement of fauna. This aspect has a low probability of occurring.
- Negligible loss of natural environment (grassland) through transformation. This aspect will definitely occur but its magnitude is very low.
- Increased risk of alien encroachment post rehabilitation. This aspect has a high probability of occurring and the magnitude might be significant.

Alternative B

Alternative B will have similar impacts to Alternative A as the layout will remain the same and the two sites have similar environmental attributes. However an additional impact is anticipated:

New entrance and associated road infrastructure impacts:

- Upgrading the current entrance will not solve the problem of congestion at the intersection. During peak times vehicles will queue up and block the intersection as the entrance is very close to the intersection. This aspect will definitely occur and therefore would be a fatal flaw not moving and upgrading the entrance.

Alternative C

N/A

No-go alternative (compulsory)

The no-go alternative has negatives that outweigh positive impacts. The following must be taken into consideration when assessing the proposed development for approval/disapproval:

- Increasing road traffic volumes leads to the growing congestion
- Lack adequate facilities compromises security.
- Create non-compliance with state security agencies requirements, including those of TNPA
- Risk of damage to or loss of property
- Increased safety and health risk and liability in case of incidents
- Lack of adequate facilities at all the port entrances creates a very poor image of the port.
- Decreased capital investment
- Transnet National Port Authority tenants will get frustrated by traffic congestion.

SECTION E. RECOMMENDATION OF PRACTITIONER

Is the information contained in this report and the documentation attached hereto sufficient to make a decision in respect of the activity applied for (in the view of the environmental assessment practitioner)?

YES	NO
----------------	----

If "NO", indicate the aspects that should be assessed further as part of a Scoping and EIA process before a decision can be made (list the aspects that require further assessment).

--

If "YES", please list any recommended conditions, including mitigation measures that should be considered for inclusion in any authorisation that may be granted by the competent authority in respect of the application.

The EAP recommends the approval of Alternative 1 (preferred) which entails constructing a new entrance at a new site. All negative impacts associated with it can be adequately mitigated to acceptable levels and the positive impacts are in the interest of the local, regional and national importance. Although the locals may not directly benefit from this development apart from employment opportunities during construction, the proposed development will certainly be in their interest.

The following conditions should form part of the Environmental Authorisation should a positive decision be granted by the competent authority:

- An independent Environmental Control Officer (ECO) must be appointed to ensure that regular audits are undertaken prior, during and post – construction of the activity to ensure implementation of mitigation and management measures. It is recommended that the frequency of audits during the first two months of construction must be not less than once a week and thereafter not less than twice a month.
- The ECO must complete environmental audit reports to monitor the applicant's compliance with the conditions stipulated in the EMPr and Environmental Authorisation and provide relevant recommendations. These environmental audit reports must be submitted to the relevant organ of state (i.e. DEA) on a monthly basis.
- The ECO has the authority to instruct the contractor to cease any particular operation that is not part of the EMPr and Environmental Authorisation provisions.
- The ECO shall induct the main contractor(s) on environmental issues specific to the site.
- All the mitigation measures recommended in this report, specialist studies, and the EMPr should be implemented.
- A copy of the EMPr and environmental authorisation must be kept on site during the construction phase of the project. These documents must be made available to officials of the department, employees or agents who undertake work on site.
- Coloured copies of the Basic Assessment Report including all Appendices, any additional reports and application forms that have been compiled by the EAP, ECO or specialists must be kept on site for the duration of the construction phase. These documents must be made available to officials of the department, employees or agents who undertake work on site.
- The requirements of the EMPr and/or Environmental Authorisation must be incorporated into any tender/contract documents by way of specific clauses that convey the impact and mitigation required.
- The generator must be housed in a building with sound deafening measures to minimise

BASIC ASSESSMENT REPORT

noise impact.

- A wetland rehabilitation plan must be prepared specifically for wetland areas impacted on by construction prior to construction.
- Runoff from Bayvue entrance development must be intercepted and directed via grassed swales away from the site and discharged it into the wetland mosaic to the west of the harbour complex.
- A decommissioning/demolition plan must be prepared by a suitably qualified person with the assistance of an Environmental Assessment Practitioner and submitted to DEA for approval prior to any demolition activities. The plan must indicate the following:
 - a) Outline of the decommissioning process;
 - b) Infrastructure and structures to be retained;
 - c) Alternative uses and further development proposals for retained infrastructure and structures;
 - d) Infrastructure and structures to be dismantled, removed, sold for recycling and / or disposed of;
 - e) Identify the working area required.

Is an EMPr attached?

YES NO

The EMPr must be attached as Appendix G.

The details of the EAP who compiled the BAR and the expertise of the EAP to perform the Basic Assessment process must be included as Appendix H.

If any specialist reports were used during the compilation of this BAR, please attach the declaration of interest for each specialist in Appendix I.

Any other information relevant to this application and not previously included must be attached in Appendix J.

Brian Mafela
NAME OF EAP



SIGNATURE OF EAP

02 December 2013
DATE

SECTION F: APPENDIXES

The following appendixes must be attached:

Appendix A: Maps

Appendix B: Photographs

Appendix C: Facility illustration(s)

Appendix D: Specialist reports (including terms of reference)

Appendix E: Public Participation

Appendix F: Impact Assessment

Appendix G: Environmental Management Programme (EMPr)

Appendix H: Details of EAP and expertise

Appendix I: Specialist's declaration of interest

Appendix J: Additional Information