

BASIC ASSESSMENT REPORT



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, 2014, promulgated in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended.

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, 2014 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 **08 December 2014**. 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.

BASIC ASSESSMENT REPORT

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.
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 in 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
	X

PROJECT TITLE

Proposed extension and upgrade of L1867 Road and construction of a causeway structure.

1. PROJECT INFORMATION

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

BACKGROUND INFORMATION

The Department of Transport has responded to community outcries of poor road conditions in the villages. A budget has been set aside for the financial year 2016/2017 to upgrade particular roads in the rural communities to allow access to basic needs. The proposed activity will encourage economic development in the area. The upgrade of the existing road will also make travelling for basic amenities, education and work feasible for local community members. The area is predominantly rural with female headed household and only a few having any formal education. Most people earn a living from governmental social grants, pensions and others from informal trading.

The existing mud track is prone to flooding particularly during periods of high rainfall, thus limiting the access to basic amenities. The site is extremely degraded and banks along the road are highly eroded as a direct result of poor drainage of the existing track. Community members are often left stranded during periods of high rainfall, therefore, the upgrading of the existing track to a gravel road will impact positively to members of the community. The proposed action of upgrading the existing road can be considered as the first step towards upliftment or development of the local community as this will allow access by investors into the community creating employment.

PROJECT DISCRIPTION

The KZN Department of Transport proposes to extend and upgrade the existing L1867 road from a mud track to a type 7A Local Gravel Road. The road will be approximately 13.620 km in length and 6 m in width with a road reserve of 20 m which confirms to the Department of Transport standards. The existing mud track is approx. 9 km, and will extended by a further 4.620 km to form a link road with D1319.

The road transverses a watercourse therefore the Department of Transport proposes to construct a standard causeway structure to allow the continuance of the natural flow of the water. The watercourse area becomes flooded during high rainfall seasons leaving community members stranded. The proposed upgrade will also benefit school children going to Bhekisizwe High School and Amacityana Combined. There is an outcry w.r.t the lack of economic investment and the associated infrastructure in the area.

Having taken environmental impacts into consideration the proposed route was chosen as best practical option as it follows an existing mud track and will have minimal impacts on the receiving environment. The road and causeway designs have taken numerous engineering methodologies into consideration which has a minimal impact on the environment, by improving drainage and reducing erosion along the road.

BASIC ASSESSMENT REPORT



Photo 1: Showing the existing track.



Photo 2: Showing the aerial view of the proposed route.

BASIC ASSESSMENT REPORT



Photo 3: Showing the watercourse along the route.



Photo 4: Showing dwellings in close proximity to the route.

BASIC ASSESSMENT REPORT

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

Listed activity as described in GNR 983 (Listing Notice 1)	Description of project activity
<p>Listing Notice 1 of 2014, Listed Activity 12</p> <p>The development of:</p> <p>(iii) – bridges exceeding 100 square metres in size;</p> <p>(xii) infrastructure or structures with a physical footprint of 100 sq m or more; where such development occurs -</p> <p>(a) within a watercourse</p>	<p>The proposed route crosses a watercourse; therefore DOT proposes to construct a causeway structure, as this will allow for the natural flow of water within the watercourse.</p>
<p>Listing Notice 1 of 2014, Listed Activity 19</p> <p>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 or more than 5 cubic metres from -</p> <p>(i) a watercourse;</p>	<p>The proposed activity will require the temporary removal of soil from the watercourse. The removed soil will be used for infilling and stabilizing the river banks. All top soil will be used in the rehabilitation of the site and NO soil will be removed off-site.</p>

BASIC ASSESSMENT REPORT

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.

a) Site Alternative 1 (preferred alternative)		
Description	Lat (DDMMSS)	Long (DDMMSS)
The preferred route was chosen based on the fact that there is an existing track and a portion of the road will be extended so as to minimize the impact to the receiving environment. The proposed route has shown to be the best practical option. The road design has taken numerous engineering methodologies into consideration which has a minimal impact on the environment, by improving drainage and reducing erosion along the road. The road has been designed according to DOT standards.	S 28°16'10"	E 30°55'48"
Alternative 2		
Description	Lat (DDMMSS)	Long (DDMMSS)
N/A	N/A	N/A
Alternative 3		
Description	Lat (DDMMSS)	Long (DDMMSS)
N/A	N/A	N/A

BASIC ASSESSMENT REPORT

In the case of linear activities:

NOT A LINEAR ACTIVITY. THEREFORE THE SECTION BELOW IS NOT APPLICABLE TO THIS REPORT.

Alternative:

Latitude (S):

Longitude (E):

Alternative S1 (preferred)

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

S 28°16'10"	E 30°55'48"
S 28°15'47.86"	E 30°58'47.96"
S 28°13'36.10"	E 30°59'57.14"

Alternative S2 (if any)

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

N/A	N/A
N/A	N/A
N/A	N/A

Alternative S3 (if any)

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

N/A	N/A
N/A	N/A
N/A	N/A

b) Lay-out alternatives

Alternative 1 (preferred alternative)		
Description	Lat (DDMMSS)	Long (DDMMSS)
ROAD	S 28°16'10"	E 30°55'48"
a) The proposed construction of a local road from a mud track to a Type 7A gravel road, 6m in width and a length of 13.620 km with a 20 m road reserve. The road will be upgraded along an existing mud track and only a portion will be extended so as to minimize the impact to the receiving environment.		

BASIC ASSESSMENT REPORT

CAUSEWAY		
(b) Based on DOT standard details for a causeway the approximately width is 8.45m and length is 7.4m which varies according to the stream width. A standard causeway will be constructed with a length of 30m and width of 8m which will be supported on pad foundation founded on bedrock.	S 28°15'14.31"	E 30°59'08.73"
Alternative 2		
Description	Lat (DDMMSS)	Long (DDMMSS)
No alternate road or causeway designs have been investigated as the proposed/preferred designs/route: 1. Meets the demand (the need for vehicular causeway structures to cross the respective rivers); 2. Meets the DOT standards for a gravel road 3. Is within the budget available from Department of Transport to establish vehicular causeways; 4. Have limited impact on the ecological environment and will not impede the flow of the rivers.	N/A	N/A
Alternative 3		
Description	Lat (DDMMSS)	Long (DDMMSS)
N/A	N/A	N/A

BASIC ASSESSMENT REPORT

c) Technology alternatives

Alternative 1 (preferred alternative)

Figure 1 below: shows the cross section of the proposed portal causeway (Drawing number SD1402). Refer to the plan of the causeway in **Appendix C** - Facility Illustration for a more detailed design.

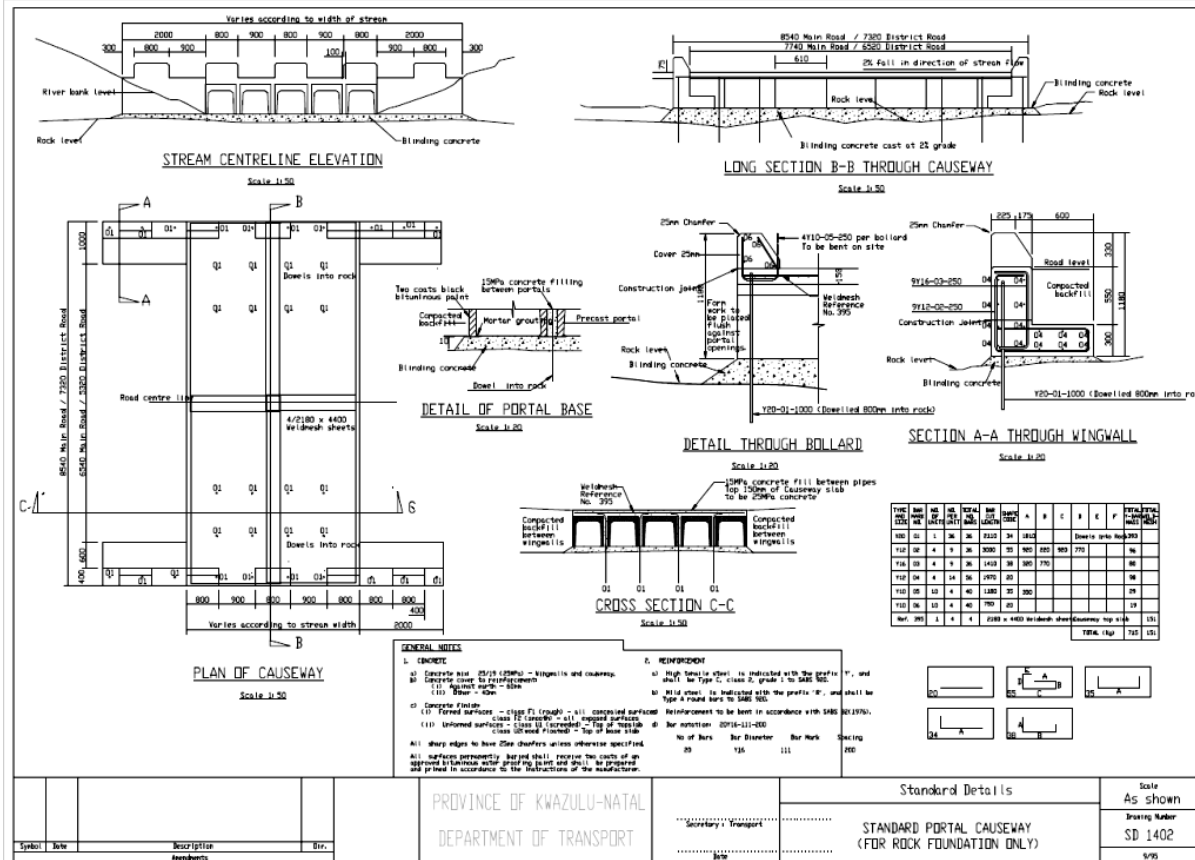


Figure 1: showing the cross section of the causeway (Drawing no. SD1402)

Alternative 2

N/A

Alternative 3

N/A

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

No alternate technologies have been investigated as the proposed/preferred design and route meet the following requirements:

1. Meet the demand (the need for vehicular causeway structures to cross the respective river)

BASIC ASSESSMENT REPORT

2. Is within the budget available from Department of Transport to establish a gravel road as well as a causeway structure.
3. Have limited impact on the ecological environment and will not impede the flow of the river.
4. The best practical means approach has been adopted and the design favorably suits the ambience of the surrounding environment.

e) No-go alternative

No gravel road and causeway will be constructed, therefore there will be no negative impacts associated with construction activity. However, there will also be no positive impacts associated with the road and causeway construction such as the improved connectivity and access for local residents. Residents that make use of the crossing will continue to experience disruptions, as access to the crossing is frequently overtopped by flood water, making access difficult at times of high flow. According to the ward councillor, members of the community are left stranded during periods of high rainfall as the existing crossing point has no formal/safe means of crossing. The site is transformed by existing footpaths and highly degraded, most natural vegetation have been removed.

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)

Alternative A2 (if any)

Alternative A3 (if any)

Size of the activity:

	62.53m ²
	N/A m ²
	N/A m ²

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

BASIC ASSESSMENT REPORT

or, for linear activities:

Alternative:

Length of the activity:

Alternative A1 (preferred activity alternative)

13.620 km

Alternative A2 (if any)

N/A m

Alternative A3 (if any)

N/A m

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

Alternative:

Size of the site/servitude:

Alternative A1 (preferred activity alternative)

N/Am²

Alternative A2 (if any)

N/Am²

Alternative A3 (if any)

N/Am²

4. SITE ACCESS

Does ready access to the site exist?

YES

NO

x

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

N/A

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.

BASIC ASSESSMENT REPORT

5. 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?	YES X	NO	Please explain
<p>The proposed road is located off D1319 along L1867 until it meets D1316 providing access to the local communities, and school children. The causeway will be constructed to ensure safe access to pedestrians and motorists, whilst minimizing soil erosion and siltation of the watercourse due to runoff. This activity is in line with the property's existing land use rights.</p>			
2. Will the activity be in line with the following?			
(a) Provincial Spatial Development Framework (PSDF)	YES X	NO	Please explain
<p>According to the SDF (2011), there exists two major Provincial and Secondary transport corridors, which includes two agricultural corridors. The general qualities of these roads are good except the access routes which are found in the rural areas. The Nquthu region is predominately rural and access to basic developmental areas is limited. Development in this area will create opportunities and unlock new development .Therefore the activity is in line with the PSDF.</p>			
(b) Urban edge / Edge of Built environment for the area	YES X	NO	Please explain
<p>The road is not in a built urban environment thus urban edge policies are not affected.</p>			

BASIC ASSESSMENT REPORT

<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?).</p>	<p>YES</p>	<p>NO X</p>	<p>Please explain</p>
<p>According to the SDF (2011), The Nqutu municipality has highlighted that upgrading of existing roads will provide transport services as well as access to remote regions as such this will open up additional economic opportunities for the area. The area is characterized by poor levels of infrastructure. Investments will improve living conditions and create economic development (IDP, 2015/2016). They also form the basis for the identification of settlement webs. Therefore the activity is in line with both the IDP and SDF of the local municipality. The IDP has prioritized road development and transport nodes.</p>			
<p>(d) Approved Structure Plan of the Municipality</p>	<p>YES X</p>	<p>NO</p>	<p>Please explain</p>
<p>The ward councillor has expressed the communities' concerns with regards to the need for an access route that is not inundated during high rainfall periods. He expressed these concerns to the local municipality which were documented. Therefore the activity is in line with the approved structure plan of the municipality. However project is not funded by the local municipality but rather by the KZN Department of Transport.</p>			

BASIC ASSESSMENT REPORT

<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?)</p>	<p>YES</p>	<p>NO X</p>	<p>Please explain</p>
<p>According to the uMzinyathi District Municipality Draft EMF (2016), the objective of the mitigations and environmental practice is to enhance natural resources for sustainable equitable use, to protect and enhance the quality as well as the safety of the environment. Promoting the conservation and sustainable utilization of our resources to enhance economic growth, and also protecting and improving the quality and safety of the environment Therefore no existing environmental management priorities for the area will be compromised, as the activity will contribute to the EMF.</p>			
<p>(f) Any other Plans (e.g. Guide Plan)</p>	<p>YES</p>	<p>NO X</p>	<p>Please explain</p>
<p>N/A</p>			
<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 X</p>	<p>NO</p>	<p>Please explain</p>
<p>Five national key performance areas (KPA's) were identified by the Nqutu municipality which takes into consideration Basic service delivery and infrastructure investment, local economic development as well as good governance and public participation. The Nqutu IDP (2015/2016) has highlighted the key development priorities, under these priorities roads were highlighted in order to realise the development mandate of the council.</p>			

BASIC ASSESSMENT REPORT

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.)	YES X	NO	Please explain
Community members are often left stranded during periods of high rainfall, therefore, the upgrading of the existing track to a gravel road will impact positively to members of the community. During the construction process local labour will be sourced (required/rooted) by the contractor, thus offering skilled training opportunities to members of the community. As a result of the construction process, employment will increase and skills will be transferred to the local community. This will also allow access to potential investors for long-term development opportunities. It is therefore, a high societal priority for local community members.			
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?	YES X	NO	Please explain
All necessary services are available for the activity to commence.			
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)?	YES	NO X	Please explain
No infrastructure planning is envisaged by the municipality with regards to this project. The project costs are borne by the Department of Transport.			
7. Is this project part of a national programme to address an issue of national concern or importance?	YES	NO X	Please explain
The proposed activity is site specific and is at a localized level.			

BASIC ASSESSMENT REPORT

<p>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.)</p>	<p style="text-align: center;">YES X</p>	<p style="text-align: center;">NO</p>	<p>Please explain</p>
<p>The site is extremely degraded and banks along the road are highly eroded as a direct result of poor drainage of the existing track. The natural vegetation of the site is interrupted and been removed due to human activities. On completion of construction, the site will be rehabilitated. Therefore, the location factors favour this activity.</p>			
<p>9. Is the development the best practicable environmental option for this land/site?</p>	<p style="text-align: center;">YES X</p>	<p style="text-align: center;">NO</p>	<p>Please explain</p>
<p>The proposed site has been assessed and a favorable position for the road construction has been identified with all stakeholders. This will significantly decrease the overall costs of proposing to construct an entirely new gravel road. The upgrade of the existing mud track will minimize the negative environmental impacts in the surrounding area. Therefore the development is the best practical environmental as well as engineering option.</p>			
<p>10. Will the benefits of the proposed land use/development outweigh the negative impacts of it?</p>	<p style="text-align: center;">YES X</p>	<p style="text-align: center;">NO</p>	<p>Please explain</p>
<p>The proposed construction of the road will positively impact the local community by providing access to basic amenities, and minimizing the negative impact of flooding, and soil erosion. The proposed construction will outweigh the negative impacts in terms of increased socio-economic development for the local community.</p>			
<p>11. Will the proposed land use/development set a precedent for similar activities in the area (local municipality)?</p>	<p style="text-align: center;">YES</p>	<p style="text-align: center;">NO X</p>	<p>Please explain</p>
<p>No precedent will be set in the area; however the construction of the causeway and the upgrade of the road from a mud track will improve accessibility for community members; and minimize erosion and storm water run-off.</p>			

BASIC ASSESSMENT REPORT

12. Will any person's rights be negatively affected by the proposed activity/ies?	YES	<input type="radio"/> NO <input checked="" type="radio"/> X	Please explain
<p>During the Public Participation Process no person expressed the view that the proposed activity will directly affect them, all stakeholders fully supported the project proposal. No dwellings will be relocated as the existing track does not transverse any properties or infringe on the rights of the residents. The track will follow the existing footpath.</p>			
13. Will the proposed activity/ies compromise the "urban edge" as defined by the local municipality?	YES	<input type="radio"/> NO <input checked="" type="radio"/> X	Please explain
<p>The project is located in a rural area, and therefore the urban edge is not affected.</p>			
14. Will the proposed activity/ies contribute to any of the 17 Strategic Integrated Projects (SIPS)?	YES	<input type="radio"/> NO <input checked="" type="radio"/> X	Please explain
<p>This is a localized site specific activity, and will benefit the local community members.</p>			
15. What will the benefits be to society in general and to the local communities?	Please explain		
<p>There is an urgent need to ensure safe and reliable means of crossing the road for both vehicles and pedestrians. The upgrade of the existing road and the construction of the causeway structure will also make travelling for basic amenities, education and work feasible for local community members. The existing access road is prone to flooding particularly during periods of high rainfall, thus limiting the access to basic amenities. The majority of the population has no formal education and is illiterate. Most community members are dependent on governmental social grants, pensions and even informal trading to earn a living. Therefore, the development of this area is of great importance. The proposed action of upgrading the existing structure can be considered as the first step towards upliftment or development of the local community. Once construction is complete the road will allow for public transport modes to cater for local communities efficiently. The local road may not have benefits as far reaching as to society in general, however, the upgrade of the existing road lays the foundation for further and knock-on development which would lead to the upliftment of disadvantaged societies.</p>			

BASIC ASSESSMENT REPORT

16. Any other need and desirability considerations related to the proposed activity?	Please explain
<p>According to the IDP (2012 to 2017) there is a critical need to improve access roads within the local municipality. The area is predominately rural and developmental initiatives are limited with regards to funding. The Department of Transport has funded the project and similar projects within the District. Communities expressed their excitement for the project, as they are of the view that the Government is taking their concerns of development seriously.</p>	
17. How does the project fit into the National Development Plan for 2030?	Please explain
<p>The National Development Plan for 2030 sets out strategic goals in terms of access to basic services and amenities. Although this project is site specific in nature, it contributes to the cumulative effect of developmental nodes of rural communities to the urban environments.</p>	
18. Please describe how the general objectives of Integrated Environmental Management as set out in section 23 of NEMA have been taken into account.	
<p>According to section 23 of NEMA the appropriate environmental management tools were applied effectively. The EAP is an independent person, appointed by Nankhoo Engineers to determine all negative as well as positive impacts of the proposed activities might have on the environment. Mitigation measures were also proposed in this report. All the information compiled by the EAP was rated in a scoring matrix, taking environmental, cultural heritage and ecological issues into account. The BAR will be circulated into the public domain for a Public Participation Process as described in NEMA. All comments received during the entire BAR process will be recorded as part of the Issues and Responses Report. Particulars regarding this Process have been included in Appendix D. All impacts with regards to the construction and operation of the causeway have been identified in Section D. The impacts that have been identified must be managed and mitigated. These measures have been included in the Environmental Management Plan attached as Appendix E.</p>	

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

All principles of NEMA have been taken into consideration. The upgrade of the road and construction of the causeway will be socially sustainable due to the continuous access that will be provided to local community members. Access to basic amenities would be available at all times for community members. The proposed activity will ensure that community members gain access to schools at all times encouraging economic development. All factors mentioned in Section 2 (4) of NEMA were taken into consideration, assessed and discussed in Section D. Through Section 2 of NEMA it is understood that the principles as set out in this section have been taken into account through the proper application of a Basic Assessment Process as described by NEMA, and by assessing the predicted and actual impacts of the proposed activity in order to assist the Competent Authority in adequately making an informed decision.

BASIC ASSESSMENT REPORT

6. 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
National Environmental Management Act, 1998 (Act No 107 of 1998)	Environmental Authorisation is required in terms of Regulation GN. 983 of Dec 2014 (included within NEMA 107 of 1998)	Department of Environmental Affairs	1998
Environmental Impact Assessments Regulations (Notice No. GN. 983 of 2014)	Guidelines with regards to the Environmental Impact Assessment Process to be undertaken	Department of Environmental Affairs	1998
Constitution of the Republic of South Africa (Act No 108 of 1996)	The project falls within the boundaries of South Africa	Department of Environmental Affairs	1998
National Heritage Resources Act (Act No 25 of 1999)	Any possible artefacts which could be of cultural or historical significance must be identified	SAHRA	1999
National Environmental Biodiversity Act 10 of 2004	Damaging of, disturbance to or destroying of plant or animal species during the clearing of the site	Department of Environmental Affairs	2004
Integrated Environmental Management Guideline, Public Participation	Public Participation Process	Department of Environmental Affairs	2010

BASIC ASSESSMENT REPORT

7. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

a) Solid waste management

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

YES	NO
<input checked="" type="checkbox"/>	<input type="checkbox"/>
5m ³	

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

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

All solid waste will be disposed at the registered local landfill site. This will be addressed in the EMPr. The ECO will audit the EMPr and submission will be made to the CA for review.

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

The construction solid waste will be disposed of at the registered landfill site by the contractor. This will be addressed in the EMPr. The ECO will audit the EMPR and submission will be made to the CA.

Will the activity produce solid waste during its operational phase?

YES	NO
<input type="checkbox"/>	<input checked="" type="checkbox"/>
N/A m ³	

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

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

N/A

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

N/A

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

N/A

BASIC ASSESSMENT REPORT

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 <input checked="" type="checkbox"/>
-----	---

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 <input checked="" type="checkbox"/>
-----	---

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 <input checked="" type="checkbox"/>
-----	---

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

N/A m³

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

YES	NO <input checked="" type="checkbox"/>
-----	---

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.

BASIC ASSESSMENT REPORT

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

YES	NO X
-----	---------

If YES, provide the particulars of the facility:

Facility name:		
Contact person:		
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 X
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:

N/A

BASIC ASSESSMENT REPORT

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
	X

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
X	
YES	NO
	X

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

Describe the noise in terms of type and level:

Noise will only be generated during the construction phase (machinery, generator etc.) The level of the noise is however low as there are few residents nearby. Construction will be limited to day hours (7h00 to 17h00) to avoid disturbance to the community. No noise will be generated during the operational phase; therefore the impact is temporary in nature.

BASIC ASSESSMENT REPORT

8. WATER USE

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

<input checked="" type="checkbox"/> Municipal	<input type="checkbox"/> Water board	<input type="checkbox"/> Groundwater	<input type="checkbox"/> River, stream, dam or lake	<input checked="" type="checkbox"/> Other	<input type="checkbox"/> The activity will not use water
---	--------------------------------------	--------------------------------------	--	---	---

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:

N/A	
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO

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

9. ENERGY EFFICIENCY

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

N/A

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

N/A

BASIC ASSESSMENT REPORT

SECTION B: SITE/AREA/PROPERTY DESCRIPTION

Important notes:

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):

A

- Paragraphs 1 - 6 below must be completed for each alternative.
- Has a specialist been consulted to assist with the completion of this section?

YES

NO

X

Name of Specialist	Neelesh Ramasis
Qualification	Bsc. Environmental Science

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	UMzinyathi Municipality (DC 24)
	Local Municipality	Nqutu Municipality
	Ward Number(s)	Ward 4
	Farm name and number	Bloubank 17134
	Portion number	0
	SG Code	NOGT02370001713400000

BASIC ASSESSMENT REPORT

Is a change of land-use or a consent use application required?

YES NO

1. 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
			<input checked="" type="checkbox"/>			

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 checked="" 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 type="checkbox"/>
2.10 At sea	<input type="checkbox"/>				

BASIC ASSESSMENT REPORT

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 X	YES	NO	YES	NO
Dolomite, sinkhole or doline areas	YES	NO X	YES	NO	YES	NO
Seasonally wet soils (often close to water bodies)	YES X		YES	NO	YES	NO
Unstable rocky slopes or steep slopes with loose soil	YES X	NO	YES	NO	YES	NO
Dispersive soils (soils that dissolve in water)	YES	NO X	YES	NO	YES	NO
Soils with high clay content (clay fraction more than 40%)	YES	NO X	YES	NO	YES	NO
Any other unstable soil or geological feature	YES	NO X	YES	NO	YES	NO
An area sensitive to erosion	YES X	NO	YES	NO	YES	NO

As per the site investigation on the 03/03/2016 the following features have been identified:

The Nqutu municipality is located within the Northern portions of Kwazulu-Natal and is one of four local municipalities found in the uMzinyathi district municipality (SDF, 2011). The site for the proposed development is located in one of the villages in the Nqutu municipality along local road L1867.

BASIC ASSESSMENT REPORT

The general topography of the region as per the site investigation was classified as undulating plains/low hills. The general gradient of the site is 1:15-1:10, which indicates generally an undulating plain or low hill. A watercourse present along the proposed route and development of a causeway structure will take place in order for community members to utilize, ensuring safety and movement across. The distance across the watercourse is approximately <20m.

The watercourse is underlain by Sedimentary rock, which can be classified as sandstone. The specific watercourse is reliant on rainfall and can be classified as seasonally perennial. The watercourse consists of fine grained, broken material which includes sand.

During the summer months, increased rainfall leads to difficulty in crossing the watercourse, therefore the construction of a causeway structure would be advantageous to the members of the community. The geology of the region is underlain by three specific geological units, the Vryheid formation, Volkrust formation and Karoo Dolerite. In these formations consists geological outcrops which have been identified on site as Sandstone. There exist very few geotechnical hindrances to development where areas are underlain by this specific type of rock.

Soils around this region exhibit a yellow colour, which is an indication of the presence of iron which is dominated by hematite and aluminum. The area has estimated clay content of between 30-50% near the watercourse, during high periods of rainfall the estimated clay content could rise. The banks of the watercourse are severely eroded and presence of gullies and dongas in this region are evident. Some of the soils in this region are severely degraded due to geological influence, overgrazing and improper land use. There are no steep slopes or cliffs near the site of development which means that construction will not be hampered. Therefore there is no need for a slope stability assessment.

BASIC ASSESSMENT REPORT



Photo 5: Showing downstream view of the watercourse with sandstone outcrops.

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 X	Paved surface	Building or other structure	Bare soil X

BASIC ASSESSMENT REPORT

5. SURFACE WATER

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

6. LAND USE CHARACTER OF SURROUNDING AREA

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
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? Specify and explain:

N/A

BASIC ASSESSMENT REPORT

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:

N/A

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	<input type="radio"/> NO <input checked="" type="radio"/> X
Core area of a protected area?	YES	<input type="radio"/> NO <input checked="" type="radio"/> X
Buffer area of a protected area?	YES	<input type="radio"/> NO <input checked="" type="radio"/> X
Planned expansion area of an existing protected area?	YES	<input type="radio"/> NO <input checked="" type="radio"/> X
Existing offset area associated with a previous Environmental Authorisation?	YES	<input type="radio"/> NO <input checked="" type="radio"/> X
Buffer area of the SKA?	YES	<input type="radio"/> NO <input checked="" type="radio"/> X

7. CULTURAL/HISTORICAL FEATURES

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

YES

NO

Uncertain

A DRAFT BASIC ASSESSMENT REPORT HAS BEEN UPLOADED TO THE AMAFA WEBSITE : AWAITING COMMENTS

BASIC ASSESSMENT REPORT

Will any building or structure older than 60 years be affected in any way?

YES	<input checked="" type="checkbox"/> NO
YES	<input checked="" type="checkbox"/> NO

Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?

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.

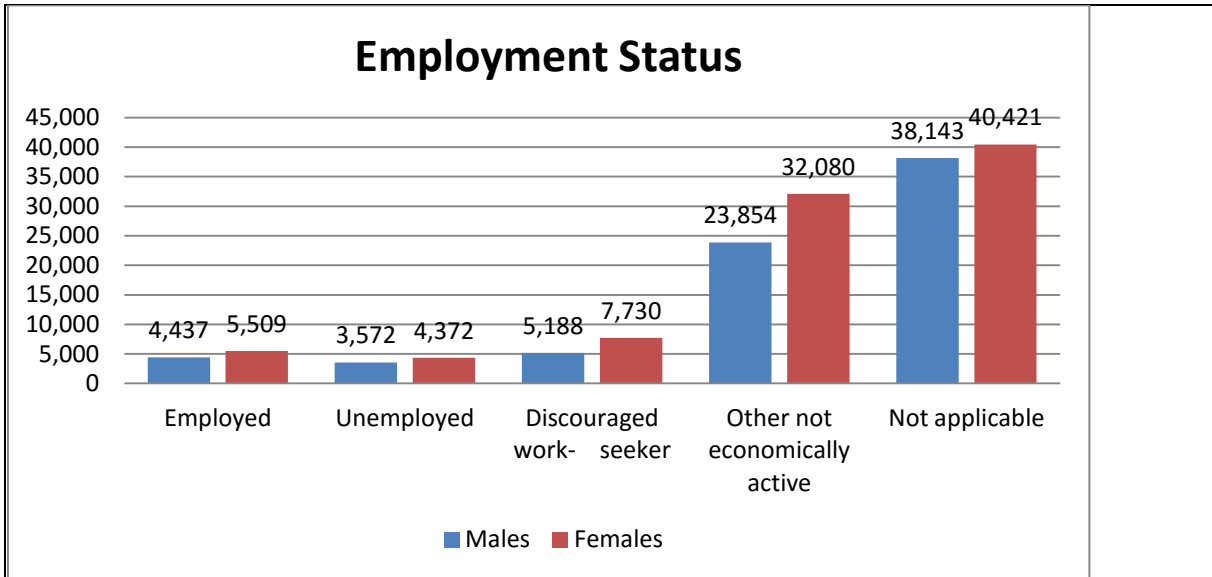
The Nquthu area is predominantly rural in nature with expansive low-density rural settlements being one of the major features. Nquthu has a total population of 165 307, with the community spread unevenly among the 17 municipal wards with the majority being resident within the 9 traditional authority areas. Land use in Nquthu is primarily agriculture, mainly dry land subsistence, where people keep livestock and grow crops such as maize and beans.

Approximately 42% of the population are 14 years and younger, while 53% of the population are aged between 15 and 64 years and 5.1% people with 65+. This indicates a youthful population which places pressure on the need for education and social facilities.

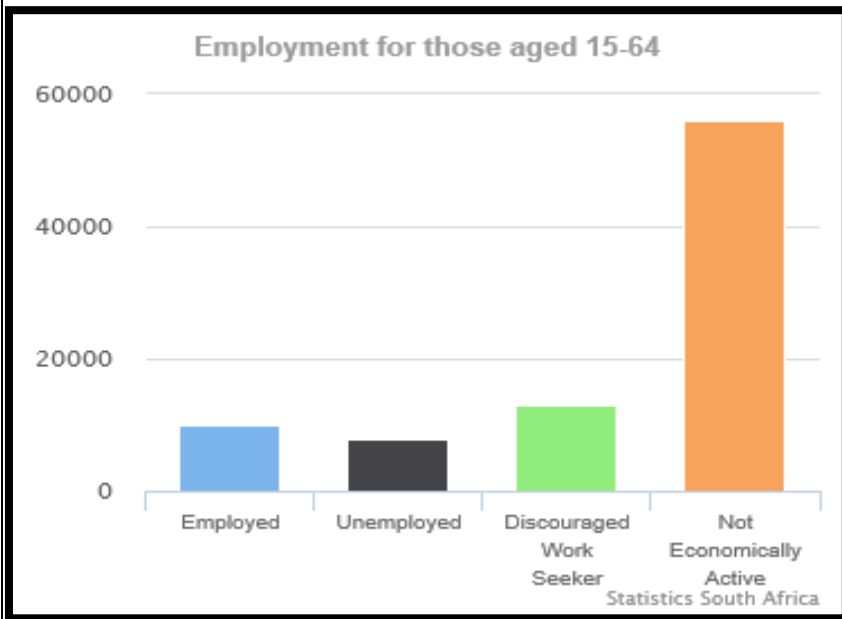
Level of unemployment:

Unemployment levels are high. Only 7.6% of the economically active population are employed. 23.5% of the population are actively seeking employment, while the rest of the potential labour force is not economically active (students, housewives, etc).

BASIC ASSESSMENT REPORT



Stats SA, 2011



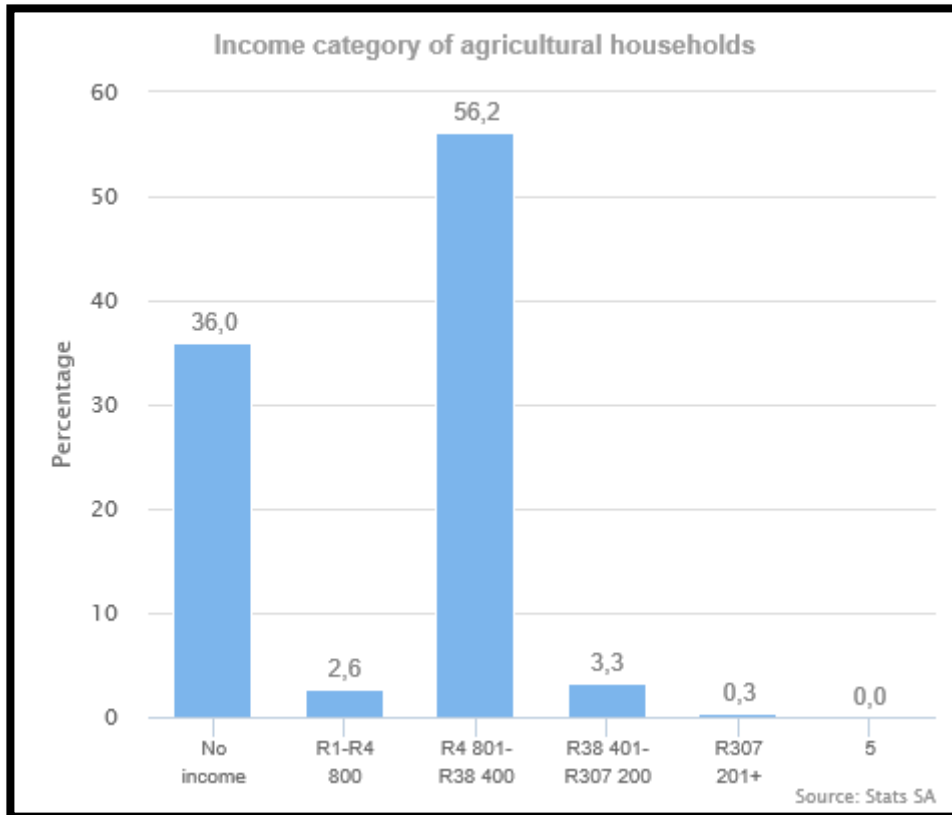
Showing unemployment levels by age groups. (Stats SA, 2011)

Economic profile of local municipality:

The economy of Nquthu is diverse and is centered on agriculture, community services, trade and commerce as the major sectors. The agricultural sector's

BASIC ASSESSMENT REPORT

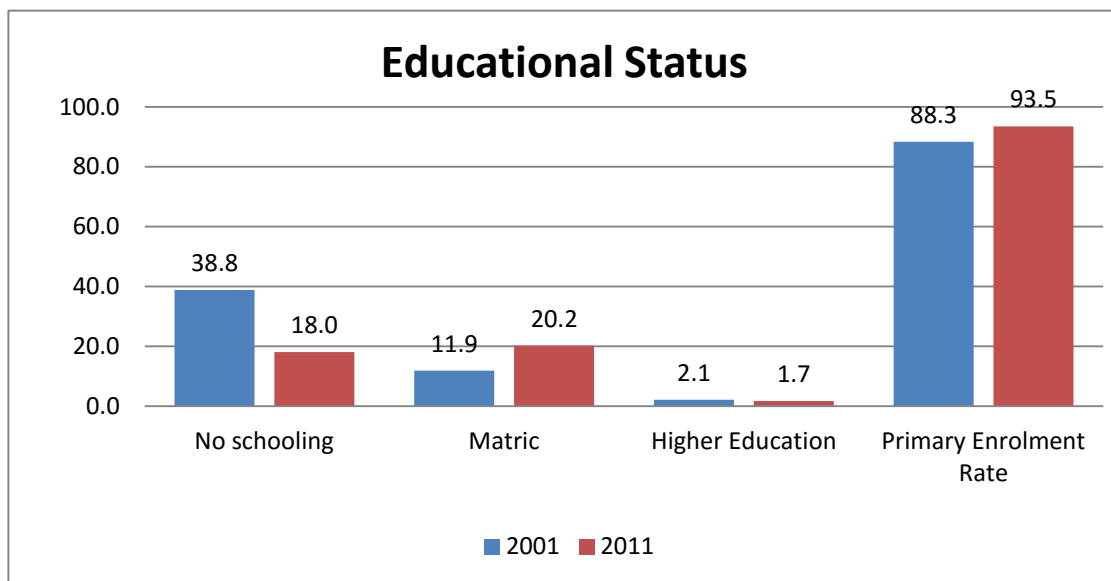
contribution to the economy is the largest of all sectors making up Nquthu economy. Nquthu's overall contribution to the economy is increasing gradually from 1990 to 2001. In 1990 Nquthu contributed R246 695 600, R264 544 900 in 1996 and R271 576 200 in 2001.



BASIC ASSESSMENT REPORT

Level of education:

Nquthu is served by primary, combined and secondary education facilities. Nquthu has 107 Primary Schools, 44 Secondary Schools and 5 combined school. In terms of the basic level of education, only one third of the population has had this type of education. Statistics reveal that 13% of the total population of the municipality has no formal schooling. It is also noted that low portions of the population have a form of higher education this can be related to the fact that the area is mostly rural and transport facilities are limited. There are limited higher educational facilities in the area. There is currently an FET College and a private Nursing College (IDP, 2015/2016).



(Showing level of education, Stats SA, 2011)

b) Socio-economic value of the activity

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

N/A

BASIC ASSESSMENT REPORT

What is the expected yearly income that will be generated by or as a result of the activity?	N/A	
Will the activity contribute to service infrastructure?	YES <input checked="" type="checkbox"/>	NO
Is the activity a public amenity?	YES <input checked="" type="checkbox"/>	NO
How many new employment opportunities will be created in the development and construction phase of the activity/ies?	25	
What is the expected value of the employment opportunities during the development and construction phase?	R4.2 mill	
What percentage of this will accrue to previously disadvantaged individuals?	100 %	
How many permanent new employment opportunities will be created during the operational phase of the activity?	N/A	
What is the expected current value of the employment opportunities during the first 10 years?	N/A	
What percentage of this will accrue to previously disadvantaged individuals?	100 %	

9. BIODIVERSITY

Various sensitivity maps have been consulted during the desk studies, and no biodiversity issues were identified. The site is degraded and there is existing mud tracks which have transformed the site, therefore the proposed activity will contribute to the rehabilitation of the site which has been outlined in the EMPr. **A Draft Basic Assessment Report has been submitted to KZN Wildlife for comments and forms part of the Public Participation Process. Awaiting comment from KZN Wildlife.**

BASIC ASSESSMENT 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)	N/A

- b) Indicate and describe the habitat condition on site

Habitat Condition	Percentage of habitat condition class (adding up to 100%)	Description and additional Comments and Observations (including additional insight into condition, e.g. poor land management practises, presence of quarries, grazing, harvesting regimes etc).
Natural	%	
Near Natural (includes areas with low to moderate level of alien invasive plants)	%	
Degraded (includes areas heavily invaded by alien plants)	%	
Transformed (includes cultivation, dams, urban, plantation, roads, etc)	100 %	The site has been utilized as a crossing point over a number of years; and the existing road has been utilized for a number of years therefore the site has become degraded by footpaths and most natural vegetation has been removed.

BASIC ASSESSMENT REPORT

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 unchanneled 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)**

Natural vegetation is minimal being invaded footpaths, bare soil and grass. The area has become completely transformed and offers no significant biodiversity or natural pristine ecosystems.

SECTION C: PUBLIC PARTICIPATION

1. ADVERTISEMENT AND NOTICE

Publication name	Ilanga Newspaper	
Date published	21/04/2016	
Site notice position	Latitude	Longitude
	S 28°10'27.4008"	E 30°45'24.0912"
Date placed	14/04/2016	

Include proof of the placement of the relevant advertisements and notices.

2. DETERMINATION OF APPROPRIATE MEASURES

Provide details of the measures taken to include all potential I&APs as required by Regulation 41(2)(e) and 41(6) of GN 983.

Site Notice

A site notice was placed at strategic point along L1867 on the 14th of April 2016 for public viewing (**See Appendix D**). The notice was placed so that the community members may have the opportunity to register as Interested and Affected Parties (I&AP's) and also provide comment on the proposed development. No comments have been received to date and no persons registered as I&AP's on the database.

Newspaper Ad

A newspaper article in IsiZulu was published in the Ilanga Newspaper on the 21st of April 2016 (See **Appendix D**) as part of the Public Participation Process. This process allowed for Interested and Affected parties (I&AP's) an opportunity to comment, or raise issues relevant to the proposed development. No comment has been received and no one has registered as an Interested and Affected Party.

Meeting with Ward Councillor, Community Members and Tribal Authority

A formal meeting was held on the 14th of April 2016, at this meeting the elected ward councillor, the community members as well as the tribal authority (Induna) of the area were made aware of the proposed development. The community members were made aware of the EIA process and other related matters w.r.t the proposed development. A formal letter outlining the nature of the proposed development was made available to the ward councilor and tribal authority during the meeting. The letter affirms that the ward councilor and the Induna were made aware of the proposed development and have no objections to the proposed development. (See **Appendix D** for acknowledgement letter). The elected structures that currently exist were chosen to be the most appropriate means of informing community members of the proposed development progress. The community voiced out their need for the road as well as basis for crossing the watercourse area.

All organs of state that were identified during the process were informed and requested to comment on the Draft Basic Assessment Report.

Key stakeholders (other than organs of state) identified in terms of Regulation 41(2) (b) of GN 983

Title, Name and Surname	Affiliation/ key stakeholder status	Contact details (tel number or e-mail address)
Mr M.E. Mnguni	Ward Councillor	071 302 9233
Mr S. Mlambo	Induna	076 054 9327
Mr P. Mthabela	Induna	076 395 3620

BASIC ASSESSMENT REPORT

3. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

Summary of main issues raised by I&APs	Summary of response from EAP
No concerns have been raised by the local community, other than the lack of formal access to all amenities. The ward councillor is in favour of the proposed development and the employment opportunities that will be created during the construction phase. The local road is a priority for DOT projects for the financial year (2016/17).	Responses have been included in the Appendix D entitled 'Comments Received'

4. COMMENTS AND RESPONSE REPORT

SEE **APPENDIX D** FOR COMMENTS AND REPONSES REPORT.

5. AUTHORITY PARTICIPATION

Authorities and organs of state identified as key stakeholders:

Authority/Organ of State	Contact person (Title, Name and Surname)	Tel No	e-mail	Postal address
Department of Transport	Ms Sibongile Mhlungu	034 299 8600	Sibongile.mhlungu@kzntransport.gov.za	Private Bag X2002 Dundee 3000
Amafa	Ms Bernadet	033 394 6543	bernadetp@amafapmb.co.za	P.O.Box 2685 PMB 3201

BASIC ASSESSMENT REPORT

KZN Wildlife	Mr D Wieners	033 845 1999	Dominic.Wieners@kznwildlife.com	P.O.Box 13053 3202
Department of Water & Sanitation	Mr S. Govender	031 336 2759	Govenders2@dwa.gov.za	P.O. Box 1018 Durban 400 4000

SECTION D: IMPACT ASSESSMENT

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

N.B All mitigation measures have been outlined in specific detail in the EMPr (**Appendix E**); therefore this section must be read in conjunction with the EMPr. The impacts that have been outlined below relate to both activities. Due to this being a linear development and the local road following the existing track, no alternative routes have been investigated. The proposed upgrade will follow the existing track which will have minimal impact to the environment as no further disturbance is envisaged. Furthermore the proposed causeway will also be constructed along an existing crossing which has already been disturbed by human activities. It is not feasible to construct the causeway at new crossing points since this will have adverse negative impacts to the environment. For reporting purposes the existing route will be investigated and forms the preferred alternative.

1.1 Selection of Route – Local Road

The selection of a local road will have the greatest environmental impact. The proposed gravel road will be constructed along an existing mud track. The area is degraded with the presence of highly eroded banks. Therefore the existing road has been selected as the preferred alternative as not to cause further disturbance to the environment. Engineering Designs prepared by DOT has taken the most efficient techniques with minimal impact to the environment into consideration. Generally, roads are constructed along the path of least disturbance, often following existing tracks.

1.2 Selection of Site – Causeway

The selection of a new crossing point will have the greatest environmental impact. The proposed causeway structure will be constructed along existing crossing points and footpaths that have developed over the years. Therefore the existing crossing point has been selected as the preferred site as not to cause further disturbance to the environment. Engineering Designs prepared by DOT has taken the most efficient techniques with minimal impact to the environment into consideration.

Impact Rating

Methodology used to determine impacts

The following presents the assessment criteria used to evaluate the impacts resulting from the proposed development. Assessments of potential impacts are taken into account to give a summary of the impacts that would take place on site during construction time. Management and mitigation of impacts have been taken into account, with specific reference to types of impacts, duration of impacts, likelihood of potential impacts actually occurring and the magnitude.

Impact Assessment Methodology

The impacts that may result from the construction phase and operation phase of the project was assessed according to a number of criteria to arrive at an overall significance rating. The criteria used were as follows:

Ranking Scales for Environmental Risk Assessment

Probability Rating (P)

Rating	Probability
5	Definite
4	High Probability
3	Medium Probability
2	Low Probability
1	Improbable
0	None

BASIC ASSESSMENT REPORT

Duration Rating (D)

Rating	Duration
5	Permanent
4	Long term (ceases with operational life)
3	Medium Term (5-15 years)
2	Short-term (0-5 years)
1	Immediate

Scale Rating (S)

Rating	Scale
5	International
4	National
3	Regional
2	Local
1	Site
0	None

BASIC ASSESSMENT REPORT

Magnitude Rating (M)

Rating	Magnitude
10	Very High
8	High
6	Moderate
4	Low
2	Minor

After each impact is rated according to the ranking scales above, the **environmental significance** of each impact could be assessed by applying the following formula:

$$SP = (\text{MAGNITUDE (M)} + \text{DURATION (D)} + \text{SCALE(S)} \times \text{PROBABILITY (P)})$$

where SP is defined as significance points. The maximum value of significance points (SP) is 100. Environmental effects could therefore be rated as either high (H), moderate (M), or low (L) significance is based on the following:

Rating	SP
>60 Points	High Environmental Significance (HES)
30-60 Points	Moderate Environmental Significance (MES)
<30 Points	Low Environmental Significance (LES)

BASIC ASSESSMENT REPORT

Proposal: Proposed road extension and construction of a causeway along L1867 off D1319 in the Nquthu Local Municipality.

Impacts/Significance associated with the Construction Phase

Potential Impact	Proposed Mitigation	Significance Rating					
		Scale	Duration	Probability	Magnitude	Significance Points (SP)	
<p><u>Dust Pollution</u></p> <p>During construction high level of dust is emitted into the atmosphere by construction vehicles as well as some areas being stripped of vegetation and therefore sediment is produced as a result of dust that enters the environment as rainfall runoff.</p>	<p>During construction period areas that have been stripped of vegetation must be dampened periodically to avoid excessive dust and construction vehicles must adhere to a speed limit to avoid excessive dust emission. These impacts are temporary and will only result during the construction period. These impacts have been addressed in detail within the EMPr.</p>						
		Before Mitigation	Local	Immediate	Definite	High	MES
			2	1	5	8	55
		After Mitigation	Local	Immediate	Medium	Low	LES
	2	1	3	4	21		

BASIC ASSESSMENT REPORT

Potential Impact	Proposed Mitigation	Significance Rating					
			Scale	Duration	Probability	Magnitude	Significance Points (SP)
<p><u>Site Establishment</u></p> <p>Should the site not be secured it could cause a negative impact to the surrounding community as children may be exposed to hazardous chemicals and fuels. Lack of proper bins and sanitation facilities may cause pollution of site and negatively affect the receiving environment.</p>	<p>The construction camp and storage site should be fenced off for the duration of the construction phase, in order to allow for maximum security. Proper sanitation and recycling bins must be placed on site. The construction camp must be sited outside the 1:100 floodline. These impacts have been addressed in detail within the EMPr.</p>						
		Before Mitigation	Local	Immediate	High	Moderate	MES
			2	1	4	6	36
		After Mitigation	Site	Immediate	Low	Low	LES
			1	1	2	4	12

BASIC ASSESSMENT REPORT

Potential Impact	Proposed Mitigation	Significance Rating					
			Scale	Duration	Probability	Magnitude	Significance Points (SP)
<p><u>Spillages</u></p> <p>Construction vehicles pose major threats with regards to spillages on-site; this may result in the contamination of soil and water. The presence of fuels and other chemicals on-site may have a negative impact on the groundwater. Cement mixing/spillages on open ground pose a threat to the receiving environment.</p>	<p>Every effort should be made to ensure that any chemicals or hazardous substances do not contaminate the soil or ground water on site. Cement will be mixed off-site and construction vehicles kept at a distance from the watercourse area. These impacts have been addressed in detail within the EMPr.</p>	Before Mitigation	Site	Immediate	High	Moderate	MES
			1	1	4	6	32
		After Mitigation	Site	Immediate	Low	Low	LES
			1	1	2	4	12

BASIC ASSESSMENT REPORT

Potential Impact	Proposed Mitigation	Significance Rating					
			Scale	Duration	Probability	Magnitude	Significance Points (SP)
<p><u>Soil Erosion</u></p> <p>During construction the removal of ground cover (vegetation) increases the probability of the soil being eroded by wind as well as stormwater. All topsoil that will be removed during construction will be prone to erosion. Increase of hardened surfaces due to compaction by vehicles and equipment, thereby increasing stormwater runoff which may lead to soil erosion.</p>	<p>All topsoil will be stockpiled using the appropriate erosion control techniques. Surface flow of water at the site during construction should be controlled to avoid soil erosion. Minimise the clearance of vegetation to avoid exposure of soil. A rehabilitation plan has been included in the EMPr to address the mitigation measures that must be implemented to reduce soil erosion on site.</p>						
		Before Mitigation	Site	Short-term	Definite	High	MES
			1	2	5	8	55
		After Mitigation	Site	Short-term	Low	Low	LES
			1	2	2	4	14

BASIC ASSESSMENT REPORT

Potential Impact	Proposed Mitigation	Significance Rating					
			Scale	Duration	Probability	Magnitude	Significance Points (SP)
<p><u>Unplanned routes/footpaths</u></p> <p>During the construction phase, workers may disturb or create footpaths that are not planned or existing, which may lead to areas becoming prone to erosion and spread of alien vegetation.</p>	<p>Strict control measures must be implemented by the Contractor and ECO. All areas must be clearly demarcated and incidents must be reported immediately to the site agent. These impacts have been addressed in detail within the EMPr.</p>						
		Before Mitigation	Site	Immediate	High	Moderate	MES
			1	1	4	6	32
		After Mitigation	Site	Immediate	Low	Low	LES
			1	1	2	4	12

BASIC ASSESSMENT REPORT

Potential Impact	Proposed Mitigation	Significance Rating					
			Scale	Duration	Probability	Magnitude	Significance Points (SP)
<u>Habitat Fragmentation</u> Roads can act as barriers or filters to animal movement and lead to habitat fragmentation. Many species will not cross the open space created by a road due to the threat of predation, and roads also cause increased animal mortality from traffic. This barrier effect can prevent species from migrating and re-colonizing areas where the species has gone locally extinct as well as restricting access to seasonally available or widely scattered resources	This will be a low negative impact as a track already exists, and the new proposed gravel road is an upgrade, therefore the route has been disturbed by the existing track and footpaths. Road designs take into consideration the social and environmental criteria during planning and design to cause minimal impact on the receiving environment. These impacts have been addressed in detail within the EMPr.						
		Before Mitigation	Local	Long-Term	Medium	Moderate	MES
			2	4	3	6	36
		After Mitigation	Local	Long-term	Low	Low	LES
			2	4	2	4	20

BASIC ASSESSMENT REPORT

Potential Impact	Proposed Mitigation	Significance Rating					
			Scale	Duration	Probability	Magnitude	Significance Points (SP)
<p><u>Water Resource</u></p> <p>During construction water would be used for dust control when clearing vegetation and for road traffic; for making concrete for foundations of the structures; and for consumptive use by the construction crew. Water could be obtained from the watercourse causing strain on the watercourse.</p>	<p>Water will be transported to the site via tanks which will eliminate the impact. No water will be extracted from any watercourse during the construction phase. The construction crew will be educated regarding the protection of the watercourse. These impacts have addressed in the EMPr.</p>						
		Before Mitigation	Site	Immediate	High	Moderate	MES
			1	1	4	6	32
		After Mitigation	Site	Immediate	Improbable	Minor	LES
			1	1	1	2	4

BASIC ASSESSMENT REPORT

Potential Impact	Proposed Mitigation	Significance Rating					
			Scale	Duration	Probability	Magnitude	Significance Points (SP)
<p><u>Stormwater Runoff</u></p> <p>During the construction phase, storm water runoff could lead to erosion of topsoil and siltation of the watercourse without the proper mitigation measures in place, and side drains not properly constructed. The suspended solids silt or chemical pollutants could lead to pollution of the watercourse or groundwater.</p>	<p>There should be proper sediment control in place to prevent siltation. During site establishment, stormwater culverts and drains are to be located and covered with metal grids to prevent blockages. The Contractor shall not in any way modify nor damage the banks and drainage lines adjacent to or within the designated area. These impacts have been addressed in detail within the EMPr.</p>	Before Mitigation	Local	Short-term	High	Low	MES
			2	2	4	4	32
		After Mitigation	Site	Immediate	Medium	Minor	LES
			1	1	3	2	12

BASIC ASSESSMENT REPORT

Potential Impact	Proposed Mitigation	Significance Rating					
			Scale	Duration	Probability	Magnitude	Significance Points (SP)
<p><u>Water quality</u></p> <p>During construction, water quality is compromised. This is mainly due to human activity and by implementing inappropriate techniques such as diverting the flow of the water course. Pollution of the water course is also a major concern during construction, such as washing of equipment and discharging waste into the watercourse.</p>	<p>Equipment must be cleaned in a manner that does not create any discharge of cleaning agents, paints, oil or other pollutants to a water body. Rinse water must be contained in a bucket or other container. Waste on site must be disposed in a recycling bin or waste receptacle to prevent wind or rain from carrying it off-site into a storm drain or water body. These impacts have been addressed in the EMP.</p>						
		Before Mitigation	Site	Immediate	High	Moderate	MES
			1	1	4	6	32
		After Mitigation	Site	Immediate	Low	Minor	LES
			1	1	2	2	8

BASIC ASSESSMENT REPORT

Potential Impact	Proposed Mitigation	Significance Rating					
			Scale	Duration	Probability	Magnitude	Significance Points (SP)
<p><u>Visual impact</u></p> <p>If the construction site is kept untidy it could have negative visual impact on the community. If facilities such as toilets, bins, tanks and topsoil stockpiles are left uncovered and unfenced could have a negative visual impact on the community as well as potentials visitors in the area and could be a health and safety issue.</p>	<p>The ECO shall regularly inspect the site to ensure that it is neat and clean. The site shall be kept visually and aesthetically pleasing, especially in and around the construction camp. Warning signage should be placed around the site of development informing the public of construction activities. The proposed construction will improve aesthetics from visual perspective.</p>						
		Before Mitigation	Local	Short-term	High	Moderate	MES
			2	2	4	6	40
		After Mitigation	Site	Short-term	Low	Low	LES
	1	2	2	4	14		

BASIC ASSESSMENT REPORT

Potential Impact	Proposed Mitigation	Significance Rating					
			Scale	Duration	Probability	Magnitude	Significance Points (SP)
<p><u>Surface and ground water</u></p> <p>Spillage of hazardous chemicals and oil and fuel leaks from construction vehicles may result in the contamination of soil and groundwater. Poor management with regards to solid waste collection at the construction site could lead to surface water contamination. Poor management with regards to solid waste collection at the construction site could lead to surface water contamination</p>	<p>Storage of materials, chemicals and fuels must be kept safely that it may not cause risk to the surface and ground water. Sufficient care must be taken when handling these materials to prevent pollution. Temporary bunds must be constructed around chemical or fuel storage area and such storages should be located outside 1:100 year floodline of the water source. This impact has been addressed in detail in the EMPr.</p>	Before Mitigation	Site	Immediate	High	Moderate	MES
			1	1	4	6	32
		After Mitigation	Site	Immediate	Medium	Low	LES
			1	1	3	4	18

BASIC ASSESSMENT REPORT

Potential Impact	Proposed Mitigation	Significance Rating					
			Scale	Duration	Probability	Magnitude	Significance Points (SP)
<p><u>Waste Disposal and Sanitation</u></p> <p>Waste is generated throughout the construction phase and therefore the possibility of the area being polluted is increased. Waste such as plastic and paper will impact surrounding animals if ingested. Inadequate sanitation could lead to pollution of the water table.</p>	<p>Portable chemical toilets will be available on site, these sanitation facilities must be situated out of 1:100 year floodline of any watercourse. Waste will be disposed at a permitted landfill site and recycling material such as glass, paper and plastic will be encouraged among the construction workers. These impacts have been addressed in the EMP.</p>	Before Mitigation	Site	Short-term	High	Moderate	MES
			1	2	4	6	36
		After Mitigation	Site	Short-term	Low	Low	LES
			1	2	2	4	14

BASIC ASSESSMENT REPORT

Potential Impact	Proposed Mitigation	Significance Rating					
			Scale	Duration	Probability	Magnitude	Significance Points (SP)
<u>Waste Generation</u> Extra waste generated during the construction phase could result in added pressure placed on the local landfill site.	This is temporary in nature as no waste will be generation during operation phase. Addressed in the EMPr and EIA phase.	Before Mitigation	Local	Immediate	Medium	Moderate	LES
			2	1	3	6	30
		After Mitigation	Local	Immediate	Low	Low	LES
	2	1	2	4	14		

BASIC ASSESSMENT REPORT

Potential Impact	Proposed Mitigation	Significance Rating					
			Scale	Duration	Probability	Magnitude	Significance Points (SP)
<p><u>Heritage impacts</u></p> <p>During construction the construction vehicles may cause impact to surrounding artefacts and fossils. If no environmental education is given to the construction workers they may remove or damage heritage structures where such damage could affect the historic, social, and amenity values of the community.</p>	<p>No graves or historic structures were located along the proposed route or its vicinity. However if any artefacts or fossils are found during the construction phase, work will cease immediately and the relevant authority will be informed. Construction will commence after authorisation by relevant authority is granted. No-go areas must be clearly demarcated, such as graves and other sensitive features, and must be afforded an appropriate no-go buffer to prevent disturbance.</p>						
		Before Mitigation	Local	Short-term	High	Moderate	MES
			2	2	4	6	40
		After Mitigation	Site	Short-term	Low	Low	LES
	1	2	2	4	16		

BASIC ASSESSMENT REPORT

Potential Impact	Proposed Mitigation	Significance Rating					
			Scale	Duration	Probability	Magnitude	Significance Points (SP)
<p><u>Noise disturbance</u></p> <p>Excessive noise pollution from the construction sites may impact the surrounding environment. Construction machinery such as jackhammers, construction vehicles such as sand and water trucks loaded with stone and water tanks will create noise.</p>	<p>Such noise will be generated in a discontinuous fashion during daytime only while the road is being built. This impact is temporary in nature as it will last during the construction phase. These impacts have been addressed in detail within the EMPr.</p>						
		Before Mitigation	Local	Immediate	Definite	Moderate	MES
			2	1	4	6	36
After Mitigation	Local	Immediate	Medium	Low	LES		
	2	1	3	3	18		

BASIC ASSESSMENT REPORT

Potential Impact	Proposed Mitigation	Significance Rating					
			Scale	Duration	Probability	Magnitude	Significance Points (SP)
<p><u>Spread of Alien Vegetation</u></p> <p>The removal of topsoil and natural vegetation with an increase in human activity may result in the introduction of alien vegetation therefore a possible loss in biodiversity. Unnecessary removal of vegetation as a result of unregulated vegetation clearance may also lead to introduction of alien vegetation.</p>	<p>The Contractor should be responsible for implementing a programme of weed control (particularly in areas where the soil has been disturbed); and grassing any remaining stockpiles to prevent weed invasion. The disturbed areas should be monitored quarterly to detect any alien plant species. The infrastructure associated with the proposed construction must be designed so that the natural state of the surrounding area is kept to avoid spread of alien vegetation. The EMPR will address this issue in more detail.</p>						
		Before Mitigation	Local	Short-term	High	Moderate	MES
			2	2	4	6	40
		After Mitigation	Local	Short-term	Low	Low	LES
	2	2	2	4	16		

BASIC ASSESSMENT REPORT

Potential Impact	Proposed Mitigation	Significance Rating					
			Scale	Duration	Probability	Magnitude	Significance Points (SP)
<u>Socio-Economic Impact</u> Improved living standards. Roads give easy access to basic amenities such as clinics and schools.	Positive impact noted.						
		Before Mitigation	Local	Permanent	High	N/A	LES
			2	5	4	N/A	28
		After Mitigation	Local	Permanent	High	N/A	LES
			2	5	4	N/A	28

BASIC ASSESSMENT REPORT

Potential Impact	Proposed Mitigation	Significance Rating						
<p><u>Socio-Economic Impact</u></p> <p>The construction phase will be associated with positive socio-economic impacts as construction creates temporary employment for community members. The road would increase the potential for residents to improve their business potential both locally and give them better access to outside markets.</p>	<p>Positive Impact noted.</p>		Scale	Duration	Probability	Magnitude	Significance Points (SP)	
		Before Mitigation	Local	Short-term	Definite	N/A	LES	
			2	2	5	N/A	20	
		After Mitigation	Local	Short-term	Definite	N/A	LES	
			2	2	5	N/A	20	

BASIC ASSESSMENT REPORT

Potential Impact	Proposed Mitigation	Significance Rating					
<p><u>No-go option</u></p> <p>Safety - During most rainy seasons, the road becomes slippery and muddy. The local community's safety will therefore be compromised.</p>	<p>N/A</p>		Scale	Duration	Probability	Magnitude	Significance Points (SP)
		Before Mitigation	-	-	-	-	-
			-	-	-	-	-
		After Mitigation	-	-	-	-	-
			-	-	-	-	-

BASIC ASSESSMENT REPORT

Significant Impacts associated with the Operational Phase

Potential Impact	Proposed Mitigation	Significance Rating					
		Scale	Duration	Probability	Magnitude	Significance Points (SP)	
<p><u>Increased traffic in the area</u></p> <p>The proposed construction of the road and causeway structure would lead to increased traffic in the area. This could lead to soil erosion, gathering of waste as well as loss of peace in the community. This could also lead to risk of speeding vehicles in the road.</p>	<p>This is a rural community with minimal activities. The road primarily services the local community therefore this should not have a significant impact on them.</p>	Before Mitigation	Local	Long-term	Medium	Moderate	MES
			2	4	3	6	36
		After Mitigation	Local	Long-term	Low	Minor	LES
			2	2	2	2	12

BASIC ASSESSMENT REPORT

Potential Impact	Proposed Mitigation	Significance Rating					
			Scale	Duration	Probability	Magnitude	Significance Points (SP)
<p><u>Increased vehicular fumes</u></p> <p>Increase of cars utilizing the road will contribute to air pollution.</p>	<p>It is not envisaged that the increased vehicular fumes will contribute significantly to increased localized air pollution as this is a rural community. Addressed in detail within the EMPr.</p>	Before Mitigation	Local	Medium-term	Medium	Moderate	MES
			2	3	3	6	33
		After Mitigation	Local	Short-term	Medium	Low	LES
			1	2	3	4	21

BASIC ASSESSMENT REPORT

Potential Impact	Proposed Mitigation	Significance Rating					
			Scale	Duration	Probability	Magnitude	Significance Points (SP)
<p><u>Safety Issues for the community</u></p> <p>Increase accessibility to the community could lead to increase criminal activities by interlopers.</p>	<p>The proposed road is within a rural community and the road is only an upgrade of the existing track; therefore safety issues do not pose a major threat</p>	Before Mitigation	Local	Long term	Medium	Moderate	MES
			2	4	3	6	36
		After Mitigation	Local	Long term	Low	Minor	LES
			2	4	2	2	16

BASIC ASSESSMENT REPORT

Potential Impact	Proposed Mitigation	Significance Rating						
<p><u>Increased Noise</u></p> <p>Increase accessibility may cause excessive noise that may harm the activity or balance of human or animal life.</p>	<p>The road services the local community, therefore noise levels should not be affected greatly by the upgrade. Construction time is strictly restricted to working hours</p>		Scale	Duration	Probability	Magnitude	Significance Points (SP)	
		Before Mitigation	Local	Short-term	Medium	Moderate	MES	
			2	4	3	6	36	
		After Mitigation	Local	Immediate	Low	Minor	LES	
			2	1	3	2	15	

BASIC ASSESSMENT REPORT

Potential Impact	Proposed Mitigation	Significance Rating					
			Scale	Duration	Probability	Magnitude	Significance Points (SP)
<p><u>Increased socio-economic benefits</u></p> <p>The positive impact is that of increased socio-economic development to the local community. Efficient access to amenities, for instance, clinics and schools.</p>	<p>Positive Impact</p> <p>Noted</p>						
		Before Mitigation	Local	Permanent	High	N/A	LES
			2	5	4	N/A	28
		After Mitigation	Local	Permanent	High	N/A	LES
			2	5	4	N/A	28

BASIC ASSESSMENT REPORT

Potential Impact	Proposed Mitigation	Significance Rating						
			Scale	Duration	Probability	Magnitude	Significance Points (SP)	
<p><u>Increased socio-economic benefits</u></p> <p>The positive impact is that of increased socio-economic development to the local community. Efficient access to amenities, for instance, clinics and schools.</p>	Positive Impact Noted							
		Before Mitigation	Local	Permanent	High	N/A	LES	
			2	5	4	N/A	28	
		After Mitigation	Local	Permanent	High	N/A	LES	
			2	5	4	N/A	28	

BASIC ASSESSMENT REPORT

Potential Impact	Proposed Mitigation	Significance Rating					
<p><u>No-go option</u></p> <p>Safety - During most rainy seasons, the road is muddy and the watercourse area is flooded. The local community's safety will therefore be compromised.</p>	<p>N/A</p>		Scale	Duration	Probability	Magnitude	Significance Points (SP)
		Before Mitigation	-	-	-	-	-
			-	-	-	-	-
		After Mitigation	-	-	-	-	-
			-	-	-	-	-

4. Risk Rating summary

Preferred Alternative:

The preferred route has been carefully planned to cater for the substantiated needs and requirements of the community while being mindful of imposing the least negative environmental impacts. The preferred route occurs within the existing road servitude. Vegetation clearance will be restricted to alien invasive vegetation; no indigenous vegetation will be removed as the upgrade follows the existing track indicating disturbance. The preferred route does not transverse any environmentally sensitive area (wetlands) as well as homesteads. It is more cost effective and considered a more practical alternative from an environmental and engineering perspective. Furthermore the route follows the existing track which has resulted in significant alteration of the natural habitat. According to the risk rating after all significant impacts were taken into consideration, the preferred route is said to have a **low environmental significance** after all impacts were rated individually. It was found that most of the impacts listed and rated have a low environmental significance. These impacts have low negative risk to the quality of the receiving environment. In this case most of the impacts are short term, local in extent, not intense in its effect and may not be likely to occur. A low impact has no permanent impact of significance. Mitigation measures are feasible and are readily instituted as part of a standing design, construction or operating procedure.

BASIC ASSESSMENT REPORT

Alternative 2

No alternative site or route has been identified. Alternative alignments would require additional disturbance to the environment with very little potential of improvement in terms of environmental performance. This is a linear activity and the proposed gravel road will be upgraded on the existing track to minimise negative impacts to the environment, furthermore DOT has assessed other options and none were cost effective. As a new road will require relocation of dwellings and disturbance to the natural state of the surroundings. Therefore upgrading the existing track to a gravel road with a causeway structure along existing crossing points is the most feasible option.

Alternative 2:

No alternative site has been identified. Alternative alignments would require additional disturbance to the environment with very little potential of improvement in terms of environmental performance. The proposed causeway will be constructed on the existing track which has already been upgraded, and at the same point of the existing crossing to minimise negative impacts to the environment, furthermore DOT has assessed other options and none were cost effective.

Impacts/Significance associated with the Closure Phase

No impacts have been assessed for this section as the closure phase is not envisaged for this development; however the EMPr outlines specifications on rehabilitation measures that must be implemented after the construction phase.

6. ENVIRONMENTAL IMPACT STATEMENT

Alternative A (preferred alternative)

It is the opinion of the EAP that all potential impacts that could potentially occur during the construction and operational phase of the causeway construction have been identified and key impacts and their mitigation measures are provided in this report. No fatal flaws were identified during the Basic Assessment Process, which included a comprehensive Public Participation Process. Most of the impacts will occur during the construction phase, and therefore be for a limited period and can be adequately mitigated. The EMPr has been developed to provide adequate mitigation measures for all phases of the proposed development.

The following factors were taken into consideration (Causeway):

Damage to stream and surrounding environment:

Specific concerns would be heavy vehicle traffic operating in close proximity to the stream and drainage line causing banks to erode and collapse, resulting in sedimentation of the stream. Storage of materials and soil within or near the stream could also result in the deposition of these materials into the stream leading to contamination of the river system. These impacts can be managed by designating areas of the watercourse that are not within the construction footprint as 'no-go' areas. Heavy vehicles should therefore be kept at least 15m away from the stream and drainage line except where needed for the construction of the bridge.

As per the EMPr, no materials may be stored within 30m of the stream or drainage line. No dumping is to be permitted within these areas.

Damage to the steam channel during the excavation of material from the stream bed.

Over time, sediment has accumulated up stream and flow was impeded. This material will be excavated to level out the bed so that water can flow easily through the piers without damming up on the upstream side or falling from too great a height. Although this involves excavation and removal of material from the river bed, most of this material will be re-used in the rehabilitation phase.

It is the opinion of the EAP that the proposed causeway should be constructed.

This construction would result in minor environmental and social impact and general disturbance for the construction of the causeway at this point. The causeway will be designed withstand at least 1:10 year flood events therefore providing safe access to the local community. The construction of this causeway from an environmental perspective will result in an improved situation with less erosion and damage to the stream bed when compared to the current informal crossing.

BASIC ASSESSMENT REPORT

Alternative B

N/A

Alternative C

N/A

No-go alternative (compulsory)

Should the proposed construction of the causeway not go ahead, the site would be exposed to on-going erosion as well as major safety concerns for crossing the existing track during high rainfall periods. The crossing point provides the local community access to a number of services. The proposed construction has positive impacts with minimal environmental impacts.

BASIC ASSESSMENT REPORT

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 x	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).

N/A

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 EMPr must be strictly adhered to and implemented during the construction and operational phases.
- An ECO should be appointed by the applicant to undertake Environmental Audits and submit reports to the Competent Authority when requested.
- All mitigation measures and factors outlined in the BAR must be considered.
- Should cultural artefacts or heritage sites occur in close proximity to the site, construction must cease immediately and the applicant must appoint a heritage specialist to submit a report to AMAFA.
- All impacts identified during the planning and design, construction and operation can be adequately mitigated. Impacts identified and addressed through mitigation included: vegetation, waste management, traffic and emissions.
- The proposed development site will have an impact of **low; short - term significance** on the receiving environment (albeit extremely limited).
- It is imperative that runoff from the proposed development is adequately managed and the sewerage and waste water do not result in deterioration of water quality for the adjacent river.
- The development is designed at the planning stage to take cognizance of the river and to take environmentally sound measures which ensure well

BASIC ASSESSMENT REPORT

rounded sustainability.

- In addition, the development of sound storm water management structures should eliminate any run-off into the River reducing the risk of flood events.
- Based on the status quo above and given the indigent nature of the communities affected it is the EAP's recommendation that the causeway structure be authorized by the Competent Authority.
- Furthermore, no concerns were raised by I&AP's (public and stakeholders) for the preferred layout and development, in contrary there was general consensus in support for the development.
- The development is in keeping with the land use of the surrounding area and it is therefore the EAP's recommendation that the preferred option be approved for the proposed development.

Is an EMPr attached?

YES	
X	NO

SHELDON SINGH

DATE

APPENDIX A.1

LOCALITY MAP

APPENDIX A.2

AERIAL PHOTO

APPENDIX A.3

TOPOGRAPHICAL MAP

APPENDIX B

SITE PHOTOS

APPENDIX C

PLAN OF THE CAUSEWAY

- **C.1- CAUSEWAY DESIGN**
- **C.2- PLAN OF ROAD**

C.1- CAUSEWAY DESIGN

C.2- PLAN OF ROAD

APPENDIX D

PUBLIC PARTICIPATION

- **D.1 – SUMMARY OF COMMENTS/RESPONSES FROM I&APS**
- **D.2 – PROOF OF RECIEPTS**
- **D.3 – COPY OF NEWSPAPER AD**
- **D.4 – COPY OF SITE NOTICES & MEETING PHOTOS**
- **D.5 – COMMENTS FROM AMAFA**
- **D.6 – COMMENTS FROM KZN WILDLIFE**
- **D.7 – COMMENTS FROM WATER & SANITATION**

D.1 – SUMMARY OF COMMENTS/RESPONSES FROM I&APS

D.2 – PROOF OF RECIEPTS

D.3 – COPY OF NEWSPAPER AD

D.4 – COPY OF SITE NOTICES & MEETING PHOTOS

D.5- COMMENTS FROM AMAFA

D.6 – COMMENTS FROM KZN WILDLIFE

D.7 – COMMENTS FROM WATER & SANITATION

APPENDIX E
ENVIRONMENTAL MANAGEMENT
PROGRAMME (EMPR)