

Prepared For Nathoo Mbenyane Engineers & Project Managers and Ramotshere Moiloa Local Municipality





PROJECT DETAILS

Title	:	Basic Assessment Report for the proposed construction of a new river bridge in the Borakalalo Village, North-West Province
Authors	:	Muanowashu SHEQ Trading
Applicant	:	Ramotshere Moiloa Local Municipality
Report Status	:	Basic Assessment Report for Public Review
Date	:	July 2020

TABLE OF CONTENTS

		PAGE
		F CONTENTSii
		DICES
1.	1.1	SUMMARY AND OVERVIEW OF THE PROPOSED PROJECT
	1.1	NEED AND DESIRABILITY FOR THE PROPOSED INFRASTRUCTURE
		REQUIREMENTS FOR A BASIC ASSESSMENT PROCESS
	1.3	
	1.4	DETAILS OF ENVIRONMENTAL ASSESSMENT PRACTITIONER AND EXPERTISE TO
		CONDUCT THE BASIC ASSESSMENT
	1.5	PUBLIC PARTICIPATION
2.		SECTION A: ACTIVITY INFORMATION
	2.1.	PROJECT DESCRIPTION
	2.2. 2.3.	FEASIBLE AND REASONABLE ALTERNATIVES
_		
3.	3.1.	SECTION B: SITE/AREA/PROPERTY DESCRIPTION
	3.2.	LOCATION IN LANDSCAPE
	0	GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE
	3.3.	
	3.4.	GROUNDCOVER
	3.5.	SURFACE WATER
	3.6.	LAND USE CHARACTER OF SURROUNDING AREA
	3.7.	BIODIVERSITY
	3.8.	CULTURAL/HISTORICAL FEATURES
	3.9.	SOCIO-ECONOMIC CHARACTER
	3.10.	SPECIALIST(S) CONSULTATION
4.		SECTION C: IMPACT ASSESSMENT
	4.1.	CONSTRUCTION, OPERATIONAL, DECOMMISSIONING AND CLOSURE PHASES AS WELL
		AS PROPOSED MANAGEMENT OF IDENTIFIED IMPACTS AND PROPOSED MITIGATION
		MEASURES
	4.2.	ENVIRONMENTAL IMPACT STATEMENT
5.		SECTION D: PUBLIC PARTICIPATION
7.		SECTION E. RECOMMENDATION OF PRACTITIONER
8. 9.		SECTION F: AFFIRMATION BY EAP
		SECTION 1. AFFENDICES

APPENDICES

Appendix A: A3 Maps

- » Appendix A1: A3 Locality Map
- » Appendix A2: A3 Layout map
- » Appendix A3: A3 Sensitivity Map

Appendix B:Site PhotographsAppendix C:Facility Illustration(s)Appendix D:Public Participation (for final BAR)

- » Appendix D1: Adverts and Site Notices
- » Appendix D2: Stakeholder Database
- » Appendix D3: Stakeholder Correspondence

Appendix E:Environmental Management Programme (EMPr)Appendix F:EAP Declaration and CVs

1. SUMMARY AND OVERVIEW OF THE PROPOSED PROJECT

It is Ramotshere Moiloa Local Municipality's intention to construct a new bridge in the Borakalalo Village which falls within the jurisdiction of the Ramotshere Moiloa Local Municipality, North-West Province. The construction of a new river bridge will do away the existing unsafe gravel walkway crossing through the riverbed. The new bridge will provide uninterrupted and safe access to amenities for the community in general, on both sides of the stream of the river.

The proposed development will also include the upgrading of approximately 990 meters of approach roads on either side of the bridge. This road extends from 0.00km at a Side-junction to the Left with a surfaced local road before the sharp-bend (Clinic and Cemetery Road) in a North-Westerly direction, for 0.980km, to link to the surfaced roads. The road then follows a north-westerly direction for 0.430 km, past Clinic and bends slightly to the left, towards the stream where the new bridge is coming. It bends westward at 0.880km towards the other surfaced road at 0.990 km.

1.1 SITE LOCATION

The following property will be affected by the construction of the proposed bridge (refer to Table 1.1 and Figure 1):

Province	North-West Province			
District Municipality	Ngaka Modiri Molema District Municipality			
Local Municipality	Ramotshere Moiloa Local Municipality			
Ward number(s)	04			
Nearest	$\sim 1 \text{km}$ east of Motswedi Matjiesfontein and ~ 2			
townships(s)	km south of Poosedumane			
Farm name(s) and	Moilos 412 JO			
number(s)/ Erf				
number				
Portion number(s)	412			
SG 21 Digit Code	T0JO000000041200000			
Co-ordinates	25° 16' 39.8"S 25° 54' 58.0"E			

Table 1.1: Location of the study area

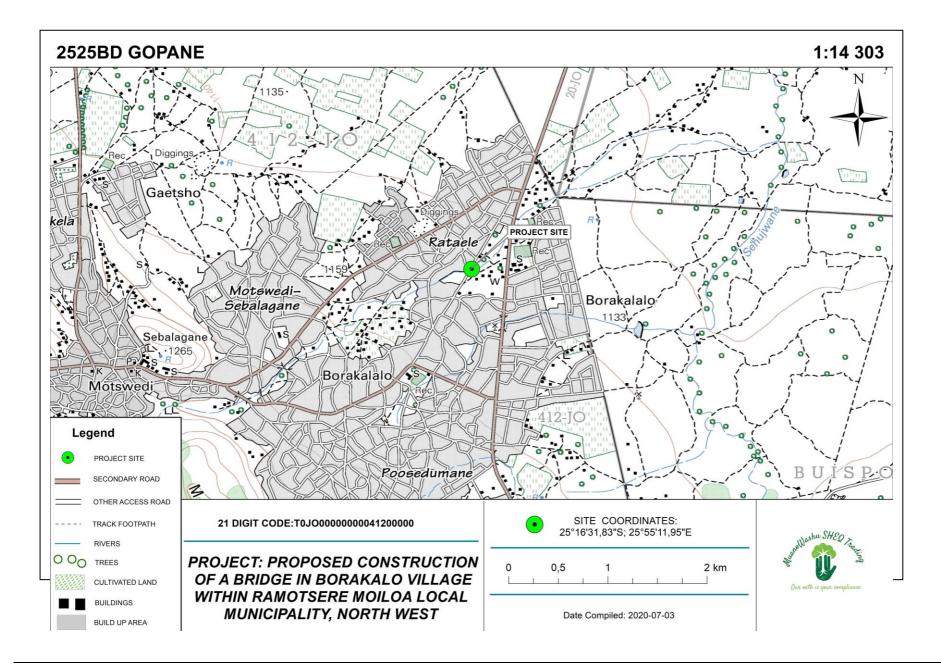
1.2 NEED AND DESIRABILITY FOR THE PROPOSED INFRASTRUCTURE

The aim of the proposed construction of the new river bridge is to eradicate the existing unsafe gravel road crossing through the riverbed. The new bridge will provide uninterrupted and safe access to school children and the community in general, over the river. Currently there is no existing drainage structure. Vehicles and pedestrians must cross the river at riverbed level. The riverbed is \pm 5m deep at the crossing and has steep banks. The eroded banks and riverbed are most possibly symptoms of some high flood velocities. There is no exposed bedrock visible at the existing crossing position.

The bridge site has always been crossing point between the Goo-Nonyane section, which hosts the churches, schools, clinic; and the Ledubana section which hosts the village cemetery and sports ground. There is therefore a need for proper access and crossing between these two sections of one village. Evidence on the ground show that people still walk across and have been doing makeshift plan like packing stones and rubble to assist crossing, but rain always washes these away while erosion makes the crossing deeper and steeper.

From an overall sensitivity and planning perspective, the proposed construction supports the broader strategic context of the municipality and is in line with broader societal needs and the public interest. No exceedance of social, ecological or heritage limits will result from the construction of the proposed bridge and it associated infrastructures, and no significant disturbance of biological diversity is anticipated, as detailed in this Basic Assessment Report.

For the two years prior the municipality failed to implemented MIG allocations as awarded to the municipality for upgrading of streets from gravel to tar or paving. Delay in procurement process impacted negatively for implementation of the MIG Projects. The implementation of storm water projects is not possible due to the costs as per MIG standards, thus the roads also serves as the storm water channels.



1.3 REQUIREMENTS FOR A BASIC ASSESSMENT PROCESS

In terms of the Environmental Impact Assessment (EIA) Regulations of December 2014, as amended, published in terms of Section 24(5) of the National Environmental Management Act (NEMA, Act No. 107 of 1998), Ramotshere Moiloa Local Municipality requires authorisation for the construction of the new bridge and its associated infrastructure. In terms of Sections 24 and 24D of NEMA (No 107 of 1998), as read with the EIA Regulations of GN R982 – R985, a Basic Assessment process is required to be undertaken in support of the application for authorisation for the proposed project.

In terms of Section 24(1) of NEMA, the potential impact on the environment associated with these activities must be considered, investigated, assessed and reported on to the competent authority that has been charged by NEMA with the responsibility of granting Environmental Authorisations. The North West Department of Economic Development, Environment, Conservation and Tourism (DEDECT) is the competent authority.

This report has been compiled in accordance with the requirements of the EIA Regulations of December 2014 (as per Table A below), and includes details of the activity description; the site, area and property description; the public participation process; the impact assessment; and the recommendations of the Environmental Assessment Practitioner.

1.4 DETAILS OF ENVIRONMENTAL ASSESSMENT PRACTITIONER AND EXPERTISE TO CONDUCT THE BASIC ASSESSMENT

The Ramotshere Moiloa Local Municipality, through an appointed implementer, Nathoo Mbenyane Engineers and Project managers has appointed Muanowashu SHEQ Trading as the independent environmental consultant to undertake the required Basic Assessment process and to identify and assess all the potential environmental impacts associated with the proposed project and propose appropriate mitigation and management measures in an Environmental Management Programme (EMPr). As part of these environmental studies, Interested & Affected Parties (I&APs) have been actively involved through the public involvement process. Neither Muanowashu SHEQ Trading nor any of the specialist sub-consultants on this project are subsidiaries of or are affiliated to Ramotshere Moiloa Local Municipality. In addition, Muanowashu SHEQ Trading does not have any interest in secondary developments that may arise out of the authorisation of the proposed project.

The Environmental Assessment Practitioners (EAPs) and the project team from Muanowashu SHEQ Trading who are responsible for this project are:

Mr Tambudzani Mulaudzi is an Environmental Consultant and holds a Master's Degree in Natural Sciences and a Post Grad Diploma in Business Management, and is registered with the South African Council of Natural Science Professions (SACNSP) as an Environmental Scientist. He has workplace training certificates in EIA Administration, Environmental law, EMS ISO 14001 Implementation, and Environmental management Inspector. He has 9 years' experience in EIA review, administration and project management in both public and private sector for small and large scale projects. He is also experienced in auditing compliance monitoring and enforcement.

Mr Errol Baloyi is an Environmental Consultant and holds a Honors Degree in Environmental Sciences. He is an experienced project manager both in public sector and private as waste specialist and an experience EIA consultant.

Curricula Vitae for the project team are included in **Appendix F**.

1.5 PUBLIC PARTICIPATION

According to Annex 2 of the *Directions regarding measures to address, prevent and combat the spread of covid -19 relating to national environmental management permits and licences* (June 2020), a public participation plan must be approved by the competent authority. Below are the public participation activities for your consideration:

- <u>Advertise in the</u> Mmegadikgang (Mafikeng/Mmabatho/ Setlagole/ Madibogo/ Delareyville / Sannieshof/ Zeerust/ Lichtenburg/ Itsoseng/ Boikhutso/ Coligny)- 31 July 2020
- Two site notices on all accesses to the bridge site (22 July)
- Notice at the Ramotshwere Moiloa Local municipality notice board (22 July 2020)
- Notice at Borakalalo Tribal Office (22 July 2020)
- NW DEDECT office for authority comments (22 July 2020)

Evidence of public participation plan as indicated above will be submitted with the final report with the full public participation report as required in the NEMA EIA regulations.

A public participation plan was submitted and approved by the competent authority. Appendix D contains all public participation documentation.



Department: **Rural, Environment and Agricultural Development** North West Provincial Government **REPUBLIC OF SOUTH AFRICA**

AgriCentre Building Cnr. Dr. James Moroka and Stadium Rd Private Bag X2039, Mmabatho 2735

CHIEF DIRECTORATE: ENVIRONMENTAL SERVICES DIRECTORATE: ENVIRONMENTAL QUALITY MANAGEMENT

(For official use only)

Tel: +27 (18) 389 5156 Fax: +27(18) 389 5006 E-mail: <u>oskosana@nwpg.gov.za</u> Enq: EIA Admin Officer

Provincial Reference Number: NEAS Ref 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.
- 2. This report format is current as of **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
- 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. The use of "not applicable" in the report must be done with circumspection. An incomplete report or that does not meet the requirements in terms of Regulation 19 of the NEMA EIA Regulations, 2014, will be rejected to be revised and be resubmitted.
- 6. The report must be handed in at offices of the relevant competent authority as determined by each authority.
- 7. No faxed or e-mailed reports will be accepted.
- 8. The signature of the Environmental Assessment Practitioner (EAP) on the report must be an original.
- 9. The report must be compiled by an independent EAP.
- **10.** 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.
- **11.** A competent authority may require that for specified types of activities in defined situations only parts of this report need to be completed.
- 12. 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.
- 13. Two (2) colour hard copies and one (1) electronic copy of the report must be submitted to the competent authority.
- 14. Shape files (.shp) for maps must be included on the electronic copy of the report submitted to the competent authority.



2. SECTION A: ACTIVITY INFORMATION

2.1. PROJECT DESCRIPTION

a) Describe the project in association with the listed activities applied for

It is Romotshere Moiloa Local Municipality intention to construct a new bridge in the Borakalalo Village which falls within the jurisdiction of the Ramotshere Moiloa Local Municipality, North-West Province. The construction of a new river bridge will eradicate the existing unsafe gravel road crossing through the riverbed. The new bridge will provide uninterrupted and safe access to school children and the community in general, over the river.

The proposed development will also include the upgrading of approximately 990 meters of approach roads on either side of the bridge. This road extends from 0.00km at a Side-junction to the Left with a surfaced local road before the sharp-bend (Clinic and Cemetery Road) in a North-Westerly direction, for 0.980km, to link to the surfaced roads. The road then follows a north-westerly direction for 0.430 km, past Clinic and bends slightly to the left, towards the stream where the new bridge is coming. It bends westward at 0.880km towards the other surfaced road at 0.990 km.

Thirty thousands (30 000m³) earth material for the construction of the bridge will be obtained from a planned borrow pit which will also undergo mining permit application with the department of mineral resources.

A 100m deep borehole will be drilled to obtain water for construction. It is estimated that 20 000 000 litres of water will be used for the construction. Water use application (Abstraction General Authorisation) will be applied for with the Department of Water Sanitation alongside with Section 21 c)& i) General Authorisation.

Page 8

EIA Regulations, 2014

2.2. SITE LOCATION

The following property will be affected by the construction of the proposed bridge (refer to Table 1.1 and Figure 1):

Locality Map will confirm the farm name or erf number.

Province	North-West Province		
District Municipality	Ngaka Modiri Molema District Municipality		
Local Municipality	Ramotshere Moiloa Local Municipality		
Ward number(s)	XX		
Nearest	~1km east of Motswedi Matjiesfontein and ~2		
townships(s)	km south of Poosedumane		
Farm name(s) and number(s)/ Erf number	Moilos 412 JO		
Portion number(s)	Moilos 412 JO		
SG 21 Digit Code	T0JO0000000041200000		
Co-ordinates	25º 16' 31.83"S 25º 55' 11.95"E		

Table 1.1: Location of the study area

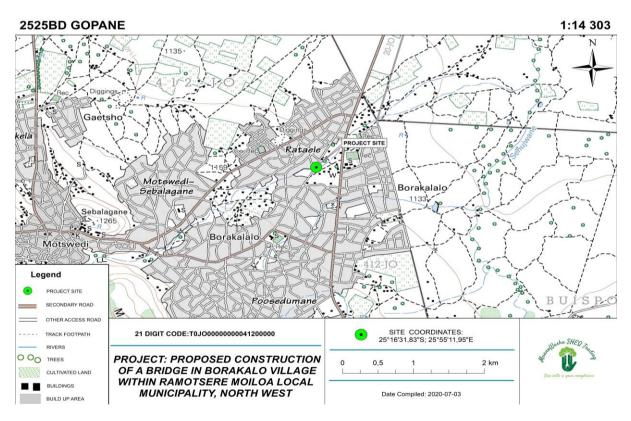


Figure 1: Locality Map

Basic Assessment Report	Department of Rural, Environment	Page 9
EIA Regulations, 2014	and Agricultural Development	

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

Indicate the number and date of the relevant notice:	Activity No (s) and Activity Description (i terms of the relevant notice)	n	Describe each listed activity as per project description		
GN R 983 (Listing Notice 1), 4 December 2014	Item 19: The infilling or depositing of any materi more than 10 cubic metri into, or the dredging, excavation, removal or moving of soil, sand, she shell grit, pebbles or roc more than 10 cubic metri from a watercourse.	res ells, k of	Construction of a 90m long and 15m wide bridge across a ephemeral stream.		
GN R 983 (Listing Notice 1), 4 December 2014	Item 21: Any activity including the operation of that activity which requires a mining permit in terms of section 27 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002), including — (a) associated infrastructure, structures and earthworks, directly related to the extraction of a mineral resource shell grit, pebbles or rock of more than 10 cubic metres from a watercourse.		Establishment of a burrow pit from which to obtain construction earth material for the bridge and road. The earth material required to complete the work is in access of 30 000m ³		
Province		North	-West Province		
District Municipality		Ngaka Modiri Molema District Municipality			
Local Municip		Ramotshere Moiloa Local Municipality			
Ward Numbe	r(s)	4			

Farm name and number	Moilos 412 JO			
Portion number	412 JO			
21 digit Surveyor General Code	T0J00000000041200000			

Page 10

EIA Regulations, 2014

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

2.3. 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-

- the property on which or location where it is proposed to (a) undertake the activity;
- the type of activity to be undertaken; **(b)**
- (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 EIA Regulation, 2014 Appendix 1(h) 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 After receipt of this report the, competent activity and its environment. 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.

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 using the Hartebeeshoek94 WGS84 co-ordinate system.

Site alternatives a)

List alternative sites, if applicable.

Site Alternative	Description	
Basic Assessment Report	Department of Rural, Environment	Page 11
EIA Regulations, 2014	and Agricultural Development	

Alternative Site 1 (preferred or	The project site is located within the Borakalalo Village, which is in the Ramotshere Moiloa Local Municipal area, North-West Province.
only si alternative)	There are no site alternatives for the proposed development. This is an intervention needed where the road actually crosses the river.
Alternative Si 2	
Alternative Si 3	

Site Co-ordinates

	Latii (S):	tude			Longi	tude (E):
Alternative S1 (preferred or only site alternative) (bridge)	25°	16′	38.33 ″	25°	55′	11.95″
Alternative S1 (preferred or only site alternative) (borrow pit)	250	16′	5″	250	55′	49.8″
Alternative S2 (if any)	Ð	<u>′</u>	<u>"</u>	θ	<u>′</u>	<u>"</u>
Alternative S3 (if any)	θ	<u> </u>	<u>"</u>	θ	<u>′</u>	<u>"</u>
In the case of linear activities: Alternative:	Latit (S):	ude		1	Lon (E)	gitude
Alternative S1 (preferred or only route alternative)						
 Starting point of the activity 	θ	<u>′</u>	<u>"</u>	θ	<u>′</u>	<u>"</u>
 Middle/Additional point of the activity 	Ð	<u>′</u>	<u>"</u>	Ð	<u> </u>	<u>"</u>
End point of the activity	Ð	<u>′</u>	<u>"</u>	θ	<u>′</u>	<u>"</u>
Alternative S2 (if any)						
 Starting point of the activity 	Ð	<u>′</u>	<u>"</u>	Ð	<u>′</u>	<u>"</u>
Basic Assessment Report Depa	rtment c	f Rural, E	nvironment			Page 12
EIA Regulations, 2014 an	nd Agric	ultural De	evelopment			

 Middle/Additional point of the activity 	Ð	<u>′</u>	<u>"</u>	θ	<u>′</u>	<u>"</u>
 End point of the activity 	Ð	<u>′</u>	<u>"</u>	Ð	<u>′</u>	<u>"</u>
Alternative S3 (if any)					<u>/</u>	<u>//</u>
 Starting point of the activity 	Ð	<u>′</u>	<u>"</u>	Ð	<u>/</u>	<u>"</u>
 Middle/Additional point of the activity 	θ	<u>′</u>	<u>"</u>	θ	<u>′</u>	<u>"</u>
 End point of the activity 	θ	<u>′</u>	<u>"</u>	θ	<u>'</u>	<u>"</u>

For route alternatives that are longer than 500m, please provide an addendum with co-ordinates taken every 250 metres 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

-Alternatives	Description
Alternative 1	
(preferred or	
only alternative)	
Alternative 2	
Alternative 3	

c) Technology alternatives

<u>c</u> iccilliology ditcil	
-Alternatives	
Alternative 1	
(preferred or	
only alternative)	
Alternative 2	

Department of Rural, Environment

Page 13

EIA Regulations, 2014

Alternative 3	

d) Other alternatives (design alternatives)

Alternatives		Description				
Alternative	1	The proposed column bridge as presented in the facil				
(Column Bridge)		illustration in Appendix D				
Alternative 2	(Be	Precast box culverts to be installed into the river to conne				
culverts)		and form a bridge.				
Alternative 3						

e) No-go alternative

f) Please motivate for preferred site, activity and technology alternative

It should be noted that no site alternatives are being considered for the proposed development. The position of the bridge is on the existing street that connects the two section of on village. Vehicles and pedestrians must cross the river at riverbed level. The riverbed is \pm 5m deep at the crossing and has steep banks. There is no exposed bedrock visible at the existing crossing site. It is currently unsafe for the school children and the community in general to use or cross the existing gravel road through the riverbed.

The preferred bridge design is desirable compared to culverts as the bridge can be easily spanned over and further away from the river to avoid being cut into the river as the soil is not very stable. Culverts can be easily flooded and eroded from the sides.

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

2.4. PHYSICAL SIZE OF THE ACTIVITY

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

Alternative:

Alternative A1 ¹ (Bridge)	1000m ²
Alternative A1 ² (borrow pit)	1000m ²
Alternative A2 (if any)	m²

Size of the activity:

Basic Assessment Report	Department of Rural, Environment	Page 14
EIA Regulations, 2014	and Agricultural Development	
	×	

Alternative A3 (if any)

or, for linear activities:

Alternative:

Length of the activity:

m²

xxxm

m

m

Alternative A1 (preferred activity alternative)

Alternative A2 (if any)

Alternative A3 (if any)

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

Alternative:	Size of site/servitude:	the
Alternative A1 (preferred activity alternative)		xxm²
Alternative A2 (if any)		m ²
Alternative A3 (if any)		m²

2.5. SITE ACCESS

Does ready access to the site exist?	YES	NO
If NO, what is the distance over which a new access		m
road will be built		

Describe the type of access road planned:

Access exist to the bridge site as it is an existing street. However access to the borrow pit will be a one vehicle track of 2 meters wide not more than 300 meters long, which will require only a clearing of a few bushes.

Basic Assessment Report	Department of Rural, Environment	Page 15
EIA Regulations, 2014	and Agricultural Development	
	X	

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.

2.6. LOCALITY MAP

An A3 locality map must be attached to the back of this document, as Appendix A1. 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);
- the accurate indication of the site in relation to closest protected environments or national parks (i.e. within 2.5 km);
- 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, minutes and seconds using the Hartebeeshoek94 WGS84 co-ordinate system

2.7. 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 A2 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.

Basic Assessment Report	

Department of Rural, Environment

Page 16

EIA Regulations, 2014



2.8. 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 Department of Water and Sanitation);
- ridges;
- for gentle slopes the 1 metre contour intervals must be indicated on the plan and whenever the slope of the site exceeds 1:10, the 500mm contours must be indicated on the plan; and
- cultural and historical features;
- areas with indigenous vegetation (even if it is degraded or infested with alien species); and
- critical biodiversity areas and ecological support area.
- protected areas (e.g Magaliesberg Protected Environment, Pilanesberg National Park etc.)

The sensitivity map must also cover areas within 100m of the site and must be part of Appendix A3.

2.9. 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.

2.10. 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.

2.11. 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	NO	Please explain	

Basic Assessment Report	Department of Rural, Environment	Page 17
EIA Regulations, 2014	and Agricultural Development	

The planned approach roads of the proposed new bridge will be within the				
existing road servitudes				
2. Will the activity be in line with the following?				
			Please	
(a) Provincial Spatial Development Framework	YES	NO	l-:	
(PSDF)			explain	
The bridge is to the aid of the existing street reticulation				
-				
			Please	
(b) Urban edge / Edge of Built environment for the area	YES	NO	explain	
			стріані	
The proposed development is proposed within the Borak	alalo V	'illage.		
(c) Integrated Development Plan (IDP) and Spatial			Dianaa	
Development Framework (SDF) of the Local Municipality (e.g. would the approval of this	YES	NO	Please	
application compromise the integrity of the			explain	
existing approved and credible municipal IDP and				
SDF?). The project will not compromise IDP objectives but will a	assist i	n read	hina these	
			-	
objectives as the IDP of the municipality aims to ensure		-	-	
of the Ngaka Modiri Molema District Municipality commu		-		
and quality service, and the effective and optimal util	lisatior	n of r€	esources is	
achieved. The project will further assist in job creation	which	will f	urther help	
achieve IDP objectives.				
			Please	
(d) Approved Structure Plan of the Municipality	YES	NO		
			explain	
The municipality is aware of the proposed development and it does not				
compromise the structure of the municipal plan.		1062 11		

(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?)	YES	NO	Please explain
The approval of this application will not compromise th	e Ngak	a Mod	diri Molema
District Municipality, Environmental Management France			- :

District Municipality Environmental Management Framework. The aim of the proposed construction of the new river bridge is to solve the issues of the unsafe gravel road crossing through the riverbed. The new bridge will provide uninterrupted and safe access to school children and the community in general, over the river.

				Please
(f)	Any other Plans (e.g. Guide Plan)	YES NO	NO	explain
				-

An Environmental Implementation Plan (EIP) was compiled by the North-West Province. In order to encourage cooperative governance across departments, NEMA calls for the development of a national and provincial Environmental Implementation Plans (EIPs) and Environmental management plans (EMPs). The EIP aims to ensure that land use decision-making is carried out using adequate available environmental resource information in order to ensure sustainable and appropriate environmental management to the benefit of its residents. One of the set goals for the Programme is ensuring that all environmental issues are appropriately addressed. This is achieved for this project through this Basic Assessment process.

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)?	YES

Please explain

NO

The aim of the proposed construction of the new river bridge is to solve the dangers existing unsafe gravel road crossing through the riverbed and ease of access to the parts of the village. The new bridge will provide uninterrupted and safe access to school children and the community in general, over the river. The project is proposed within the existing road reserve.

Department of Rural, Environment

Page 19

EIA Regulations, 2014



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	NO	Please explain
The new bridge will provide uninterrupted and safe accest and the community in general, over the river. The project the existing road reserve.			
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 E.)	YES	NO	Please explain
All the services needed for the project have been adequa should any need for other services arise the relevant aut communicated with.			
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.)	YES	NO	Please explain
The proposed project is to be developed by the munici within the infrastructure planning of the municipality. T any implications for the municipality apart from as achievement of their IDP objectives.	he proj	ect w	ill not have
7. Is this project part of a national programme to address an issue of national concern or	YES	NO	Please
importance?			explain
	YES	NO	explain Please explain
importance?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			Please explain

Department of Rural, Environment

Page 20

EIA Regulations, 2014



The proposed construction of a new bridge is proposed v	vithin a	n exi	sting road
servitude.	inclinin d		oung roud
10. Will the benefits of the proposed land use/development outweigh the negative impacts of it?	YES	NO	Please explain
The new bridge will provide uninterrupted and safe ac and the community in general, over the river. Current drainage structure. Vehicles and pedestrians must cross level. The impact assessment undertaken as part of conclude that the development of the proposed pro- medium environmental impacts which can be mitigated to	tly ther is the r this Ba bject w	e is river asic / ill ha	no existing at riverbed Assessment ave low to
11. Will the proposed land use/development set a precedent for similar activities in the area (local municipality)?	YES	NO	Please explain
Similar developments within the area/village will establish community in general. However this is the only stream of community activities in the area.		-	
12. Will any person's rights be negatively affected by the proposed activity/ies?	YES	NO	Please explain
The proposed construction of a new bridge is proposed v servitude.	vithin a	n exi	sting road
13. Will the proposed activity/ies compromise the "urban edge" as defined by the local municipality?	YES	NO	Please explain
The proposed project fall outside the urban edge/ develor the proposed project does not impact upon the urban ed	•	ea. 1	Therefore
14. Will the proposed activity/ies contribute to any of the 17 Strategic Integrated Projects (SIPS)?	YES	NO	Please explain
N/A			
15. What will the benefits be to society in general a local communities?	nd to t	he	Please explain
The new bridge will provide uninterrupted and safe accest and the community in general, over the river. Currently drainage structure. Vehicles and pedestrians must cross level.	there is	s no e	existing
16. Any other need and desirability considerations the proposed activity?	related	to	Please explain

Department of Rural, Environment

Page 21

EIA Regulations, 2014

The construction of the bridge will come with the surfacing of the 90m access street on either side of the bridge. This development will also come with local labour jobs for the locals. During planning over ten (10) local people and one (1) business have already been appointed and trained in different aspects of the project.

17. How does the project fit into the National DevelopmentPleasePlan for 2030?explain

N/A

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

The general objectives of Integrated Environmental Management have been taken into account for this Basic Assessment report by means of identifying, predicting and evaluating the actual and potential impacts on the biophysical environment, socio-economic conditions and cultural heritage.

The risks, consequences, alternatives as well as options for mitigation of activities have also been considered with a view to minimise negative impacts, maximise benefits, and promote compliance with the principles of environmental management.

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

Basic Assessment Report

Department of Rural, Environment

Page 22

EIA Regulations, 2014



Section 2 of NEMA states that environmental management must place people and their needs at the forefront, and serve their physical, psychological, developmental, cultural and social interests equitably. These principles of NEMA include the following:

- » Development must be sustainable;
- » Pollution must be avoided or minimised and remedied;
- » Waste must be avoided or minimised, reused or recycled;
- » Negative impacts must be minimised; and
- » Responsibility for the environmental health and safety consequences of a policy, project, product or service exists throughout its life cycle.

The principles of NEMA have been considered in this assessment through compliance with the requirements of the relevant legislation in undertaking the assessment of potential impacts, as well as through the implementation of the principle of sustainable development where appropriate mitigation measures have been recommended for impacts which cannot be avoided.

This process has been undertaken in a transparent manner and all effort has been made to involve interested and affected parties, stakeholders and relevant Organs of State such that an informed decision regarding the project can be made by the Competent Authority.

Basic Assessment Report

Department of Rural, Environment

Page 23

EIA Regulations, 2014



2.12. 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:

NationalThe EIA RegulationsEnvironmentalhaveManagement Act (Actpromulgated in termsNo. 107 of 1998)of	» National	Application
Act.Listed activities which may not commence without an and environmental authorisation are identified within these Regulations.In terms of S24(1) of NEMA, the potential impact on the environment associated with these listed activities must be assessed and reported on to the competent authority charged by NEMA with granting of the relevant environmental authorisation.In terms of GNR 983 and 985 of April 2014 a Basic Assessment Process is required to be undertaken for the	Department of Environment, Forestry and Fisheries Affairs (DEFF) > Department of Economic Development Environment, Conservation and Tourism (DEDECT)	Application lodged with DEDECT

Basic Assessment Report

Department of Rural, Environment

Page 24

EIA Regulations, 2014



National	In terms of the Duty		DEFF	Part of this
Environmental	In terms of the Duty of Care provision in	» »	DEDECT	application
	•	"	DEDECT	application
Management Act (Act				
No. 107 of 1998)	I I I I I I I I I I I I I I I I I I I			
	ensure that			
	reasonable measures			
	are taken throughout			
	the life cycle of this			
	project to ensure that			
	any pollution or			
	degradation of the environment			
	project is avoided,			
National	stopped or minimised. In terms of S57, the	»	DEFF	A specialist
Environmental	Minister of	<i>"</i>	DEDECT	walk
Management:	Environmental Affairs	~	DEDECT	through will
Biodiversity Act (Act				be done to
No. 10 of 2004)	critically endangered,			confirm
	endangered,			presence of
	vulnerable, and			species of
	protected species in			corncern.
	GNR 151 in			conneerni
	Government Gazette			
	29657 of 23 February			
	2007 and the			
	regulations associated			
	therewith in GNR 152			
	in GG29657 of 23			
	February 2007, which			
	came into effect on 1			
	June 2007.			
	In terms of GNR 152			
	of 23 February 2007:			
	Regulations relating to			
	listed threatened and			
	protected species, the			
	relevant specialists			
	must be employed			
L	· ·	I		I J

Basic Assessment ReportDepartment of Rural, EnvironmentPage 25

EIA Regulations, 2014



during the EIA Phase	
of the project to	
incorporate the legal	
provisions as well as	
the regulations	
associated with listed	
threatened and	
protected species	
(GNR 152) into	
specialist reports in	
order to identify	
permitting	
requirements at an	
early stage of the EIA	
Phase.	
The Act provides for	
listing threatened or	
protected ecosystems,	
in one of four	
categories: critically	
endangered (CR),	
endangered (EN),	
vulnerable (VU) or	
protected. The first	
national list of	
threatened terrestrial	
ecosystems has been	
gazetted, together	
with supporting	
information on the	
listing process	
including the purpose	
and rationale for	
listing ecosystems,	
the criteria used to	
identify listed	
ecosystems, the	
implications of listing	
ecosystems, and	
summary statistics	

Department of Rural, Environment

Page 26

EIA Regulations, 2014

National Environmental Management: Waste	and national maps of listed ecosystems (National Environmental Management: Biodiversity Act: National list of ecosystems that are threatened and in need of protection, (GG 34809, GN 1002), 9 December 2011). The project does not trigger a Waste Management Licence	* *	DEFF DEDECT	Project will comply to the National
Act, 2008 (Act No. 59 of 2008)	(WML), but will generate waste from construction activities.			Norms and Standards for storage of waste
National Water Act (Act No. 36 of 1998)	Water uses under S21 of the Act must be licensed unless such water use falls into one of the categories listed in S22 of the Act or falls under the general authorisation. In terms of S19, the project proponent must ensure that reasonable measures are taken throughout the life cycle of this project to prevent and	*	National Department of Water and Sanitation	Application to be lodged in the e-wulas for a GA
Environment	remedy the effects of pollution to water resources from occurring, continuing, or recurring. National Noise Control	*	DEFF	Compliance
	Donartmont of Pura			

Department of Rural, Environment

Page 27

EIA Regulations, 2014

and Agricultural Development

8

Conservation Act (Act No. 73 of 1989)	Regulations (GN R154 dated 10 January	» DEDECT	during construction
	1992)		
National Heritage Resources Act (Act No. 25 of 1999)	 1992) S38 states that Heritage Impact Assessments (HIAs) are required for certain kinds of development including The construction of a road, power line, pipeline, canal or other similar linear development or barrier exceeding 300 m in length; Any development or other activity which will change the character of a site exceeding 5 000 m² in extent The relevant Heritage Authority must be notified of developments such as linear developments (i.e. roads and power lines), bridges exceeding 50 m, or any development or other activity 	» South African Heritage Resources Agency	Notification to be done on SAHRIS online

Department of Rural, Environment

Page 28

EIA Regulations, 2014

		1		
	the character of a			
	site exceeding 5			
	000 m ² ; or the re-			
	zoning of a site			
	exceeding			
	10 000 m ² in			
	extent. This			
	notification must			
	be provided in the			
	early stages of			
	5			
	development, and			
	details regarding			
	the location,			
	nature and extent			
	of the proposed			
	development must			
	be provided.			
	Standalone HIAs are			
	not required where an			
	EIA is carried out as			
	long as the EIA			
	contains an adequate			
	HIA component that			
	fulfils the provisions of			
	S38. In such cases			
	only those			
	components not			
	addressed by the EIA			
	should be covered by			
	the heritage			
	component.			
Mineral and	» The project will	»	Department of	Application
Petroleum Resources	require a mining		Mineral	lodged
Development Act	permit in terms of		Resources	louged
(Act No 28 of 2002)	section 27 of the		(DMR)	
(ACC NO 20 01 2002)	Act with regard to			
	5			
	the borrow pit to			
	be established for			
	earth material			
	required for the			

Basic Assessment ReportDepartment of Rural, EnvironmentPage 29

EIA Regulations, 2014



construction of the	
bridge and the	
road.	

2.13. 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			
	Not			
determined				
at this				
time.				
Minimal				
waste is				
expec	ted to			
	be			
-	erated			
	by the			
activ	ity m ³			

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

It is anticipated that construction waste will be comprised mainly of packaging material such as cement bags and wood. Non-recyclable waste will be removed from site by a suitable contractor and will be transported to the nearest registered waste disposal facility for appropriate disposal.

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

In order to comply with legal requirements, should there be excess solid construction waste after recycling options have been exhausted, the waste will be transported to the nearest registered waste disposal facility for appropriate disposal.

Will the activity produce solid waste during its operational phase?YESIf YES, what estimated quantity will be produced per month?m³How will the solid waste be disposed of (describe)?

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

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

Basic Assessment Report

Department of Rural, Environment

Page 30

EIA Regulations, 2014



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?

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?YESNOIf YES, what estimated quantity will be produced per month?m³m³Will the activity produce any effluent that will be treated and/or
disposed of on site?YESNO

If YES, describe the type of effluent and the disposal mechanism/method

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

s NO

If YES, provide the particulars of the facility:

/					
Facility					
name:					
Contact					
person:					
Postal					
address:					
Postal					
code:					
Telephone			Cell:		
+					
E-mail:			Fax:		
			_		

Basic Assessment Report	Department of Rural, Environment	Page 31
EIA Regulations, 2014	and Agricultural Development	

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

c) Emissions into the atmosphere

Will the activity release emissions into the atmosphere other that
exhaust emissions and dust associated with construction phase
activities?YESNOIf YES, is it controlled by any legislation of any sphere of
government?YESNOIf YES, the applicant must consult with the competent authority to determine
whether it is necessary to change to an application for scoping and EIA.YESIf NO, describe the emissions in terms of type and concentration:NO

d) Waste Licence/Registration

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

S NO

NO

YES

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

e) Generation of noise

Will the activity generate noise?

If YES, is it controlled by any legislation of any sphere of YES NO 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:

Short term noise impacts are anticipated during the construction phase of the project. It is however anticipated that the noise will be localised and contained within the construction area and its immediate surroundings. The operation phase will not generate any noise.

2.14. 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	Other	The activity will not use water
Basic Assessment	Report	Department	Department of Rural, Environment		
EIA Regulations, 2	2014	and Agri	cultural Developn	ient	

	lake	
		·

If water is to be extracted from groundwater, river, stream, dam, 20 000 000 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 and Sanitation?

YES NO If YES, please provide proof that the application has been submitted to the Department of Water and Sanitation.

2.15. ENERGY EFFICIENCY

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

Not applicable.

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

Not applicable.

Has a specialist been consulted to assist with the completion of YES NO this section?

If YES, please complete the form entitled "Details of specialist and declaration of interest" for the specialist appointed and attach in Appendix F.

Basic Assessment Report

Department of Rural, Environment

Page 33

litres

EIA Regulations, 2014



3. 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, as it appears on the Site Plan.
- 2. Paragraphs 1 6 below must be completed for each alternative.

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

3.1. GRADIENT OF THE SITE

Indicate the general gradient of the site. **Alternative S1:**

Alternative S1:

Steep (bridge site)	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
Flat (Borrow pit site)	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
Altornativ	Altornative S3 (if any):										

Alternative S3 (if any):

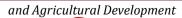
Flat	1:50	- 1:20	_	1:15	-	1:10	_	1:7,5	-	Steeper
	1:20	1:15		1:10		1:7,5		1:5		than 1:5

Basic Assessment Report

Department of Rural, Environment

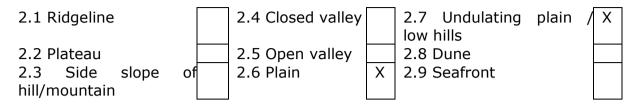
Page 34

EIA Regulations, 2014



3.2. LOCATION IN LANDSCAPE

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



3.3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

	e follov Altern S1:	-	9	Altern S2 any):	ative (if	Altern S3 <u>any):</u>	ative (if
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.

3.4. 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).

Basic Assessment Report	Department of Rural, Environment	Page 35
EIA Regulations, 2014	and Agricultural Development	

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.

3.5. 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

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

It is a non-perennial stream that collect water from the hill up down. It is very shallow upstream near the foot of the ridge where there is rocks and substrate. It is even crossed by low water crossing made of small culverts upstream. The widening and deepening happens when the geology changes to sandy soil. It is obvious that the stream is non perennial, and flows only during rainy days because small shrubs and grass even grow in the middle of the watercourse. The watercourse is dry all around the year except for the rainy days. It is thus by reason not a water resource but a drainage line.

3.6. 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:

Basic Assessment Report	Department of Rural, Environment	Page 36
EIA Regulations, 2014	and Agricultural Development	

Natural area	Dam or reservoir	Polo fields
Low density residential	Hospital/medical centre	Filling station ⁺
Medium density	School	Landfill or waste
residential	School	treatment site
High density residential	Tertiary education facility	Plantation
Informal residential ^A	Church	Agriculture
Retail commercial & warehousing	Old age home	River, stream or wetland $^{\mathbf{N}}$
Light industrial	Sewage treatment plant ^A	Nature conservation area N
Medium industrial AN	Train station or shunting yard [™]	Mountain, koppie or ridge N
Heavy industrial AN	Railway line *	Museum
Power station	Major road (4 lanes or more) [№]	Historical building ^N
Office/consulting room	Airport ^N	Protected Area ^{-N}
Military or police	Harbour	Cray (a) (a) rd
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

The bridge construction across the stream will have erosion impacts on the stream, but this will be limited to the construction phase. Excavation on the river bed will affect the flow regime of the stream, but only if construction happens during the rainy season.

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	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	YES	NO

Basic Assessment Report

Department of Rural, Environment

Page 37

EIA Regulations, 2014



Authorisation?	

If the answer to any of these questions was YES, a map indicating the affected area must be included in Appendix B (as part of sensitivity map).

3.7. 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 B 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)	

b) Indicate and describe the habitat condition on site

Habitat Condition	Percentag e 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	10%	No natural aquatic or riparian habitat at all. This is an indication that the stream of no ecological value. There are some aloe and natural vegetation
Basic Assessment Report		Department of Rural, Environment Page 38
EIA Regulations, 2014		and Agricultural Development

		in patches around the borrow pit site.
Near Natural (includes areas with low to moderate level of	40%	Water still flows in the stream during rainy season without any impediment. However the area is characterised by illegal dumping of waste erosion, alien plans, and the invasive suikerbos.
alien invasive plants)		The site for the borrow pit is still somewhat intact but it is a livestock grazing land which has evidence of small scale earth material mining and illegal dumping.
Degraded (includes areas heavily invaded by alien plants)	40%	The stream is enlarged by heavy erosion which is the problem afterall. Desperate attempts by locals to put material in the stream crossing to aid access across has exabated erosion and some level of well intended dumping
Transformed (includes cultivation, dams, urban, plantation, roads, etc)	20%	Residential land uses, such as streets, subsistence livestock and cultivation agricultural practises

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		osystems
Ecosystem threat status as per the National Environmental Management: Biodiversity Act	Critical Endanger ed Vulnerabl e	channelle	ed and unch	ivers, depressions, anneled wetlands, artificial wetlands)
(Act No. 10 of 2004)	Least Threaten ed	YES NO UNSURE		UNSURE

d) Please provide a description of the vegetation type and/or aquatic ecosystem present on site, including any important biodiversity

Basic Assessment Report	Department of Rural, Environment	Page 39
EIA Regulations, 2014	and Agricultural Development	

features/information identified on site (e.g. threatened species and special habitats)

Water still flows in the stream during rainy season without any impediment. However the area is characterised by illegal dumping of waste erosion, alien plans, and the invasive suikerbos.

No natural aquatic or riparian habitat at all. This is an indication that the stream of no ecological value. There are some aloe and natural vegetation in patches around the borrow pit site.

The site for the borrow pit is still somewhat intact but it is a livestock grazing land which has evidence of small scale earth material mining in the past and illegal dumping.

3.8. CULTURAL/HISTORICAL FEATURES

Are there any signs of culturally or historically significant elements, as defined in section 2 of the National Heritage	YES	NO
Resources Act, 1999, (Act No. 25 of 1999), including Archaeological or paleontological sites, on or close (within 20m) to the site? If YES, explain:	Unce	rtain

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:

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

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

YES	NO
YES	NO

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

3.9. 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.

Basic Assessment Report	Department of Rural, Environment	Page 40
EIA Regulations, 2014	and Agricultural Development	

Level of unemployment:

Ramotshere Moiloa Local Municipality falls under Ngaka Moridi Molome District Municipality and has a population of about 160 000. Unemployment level of the municipality is around 25%.

Economic profile of local municipality:

The economy of the municipality is driven mainly by agriculture and mining, chrome, slate quarry, lime, and manganese being the major resources

Level of education:

For people above the age of 20, people with no schooling accounts for 15% and people with matric accounting to 29% and people with higher education accounting to just 6%

b) Socio-economic value of the activity

What is the expected capital value of the activity on completion?	R 31 000 000.00
What is the expected yearly income that will be generated by	No economic
or as a result of the activity?	activity but
	service
	infrastructure
Will the activity contribute to service infrastructure?	YES NO
Is the activity a public amenity?	YES NO
How many new employment opportunities will be created in	100 labours
the development and construction phase of the activity/ies?	
What is the expected value of the employment opportunities	R 700 000.00
during the development and construction phase?	
What percentage of this will accrue to previously	40%
disadvantaged individuals?	
How many permanent new employment opportunities will be	None
created during the operational phase of the activity?	
What is the expected current value of the employment	R700 000.00
opportunities during the first 10 years?	
What percentage of this will accrue to previously	40%
disadvantaged individuals?	

3.10. SPECIALIST(S) CONSULTATION

Has a specialist be completion of this sect	en consulted to assist with ion?	the	YES	NO
Basic Assessment Report	Department of Rural, Environment			Page 41
EIA Regulations, 2014	and Agricultural Development			

If YES, please complete the form entitled "Details of specialist and declaration of interest" for each specialist thus appointed and attach it in Appendix F. All specialist reports must be contained in Appendix G and must meet the requirement in Appendix 6 of EIA Regulations, 2014.

EIA Regulations, 2014



4. SECTION C: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2014, 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.

4.1. 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.

Activity	Impact summary	Significance	Proposed mitigation					
Alternative 1 (preferred alternative)								
Clearance of vegetation and establishment of borrow pit	Direct impacts: » Loss of commercialised specimens of Aloe Forex in the area of the borrow pit.	medium	 Keep removal of vegetation and trampling to a minimum. Do not remove vegetation in areas outside of the construction footprint. 					
			 Educate staff to keep construction activities within the demarcated areas. 					
			» New access roads must be kept to a minimum and existing access roads used where feasible.					
			» The					
Basic Assessment Repor	t Department o	of Rural, Environmen	t Page 43					

EIA Regulations, 2014

Activity	Impact summary	Significance	Proposed mitigation
			construction footprint should be physically demarcated with, for example, orange snow netting. » Vegetation impacted on during the construction phase in areas not required during the operation phase must be restored. It is likely that this will occur naturally but given the presence of alien species, active rehabilitation and the removal of alien species will be required to ensure that only indigenous species remain.
	Indirect impacts:		
	Cumulative impacts:		
Transport of earth material from borrow pit to the bridge site	<i>Direct impacts:</i> <i>Dust generation</i>		 Implement appropriate dust suppression measures such as wetting of the affected project area during dry, windy periods; Limit the height of stockpiles to <u>1.5m</u> as a far as possible; <u>Vehicles to be</u> covered with tarpaulins at all times. <u>Cease</u>

Basic Assessment Report

Department of Rural, Environment

Page 44

EIA Regulations, 2014

Activity	Impact summary	Significance	Proposed mitigation
			 <u>construction</u> <u>activities that</u> <u>cause dust in high</u> <u>winds.</u> Where practical, do not leave large cleared areas exposed for longer than necessary; and Enforce speed limits for vehicles associated with the construction activities (40 km/h is recommended).
	<i>Construction equipment noise</i>		 Mitigation of this impact is difficult, but noise reduction measures, e.g. silencers that are in good working order, should be implemented in al sensitive areas.
			» As far as possible, no construction activities should take place between sunset and sunrise. No construction activities after 13:00 on Saturdays; not on Sundays or Public Holidays.
			 Machinery that generates noise must be regularly maintained to
Basic Assessment Repor	t Departmen	nt of Rural, Environmen	t Page 45

×

Activity	Impact summary	Significance	Proposed mitigation
			 ensure that no unnecessary additional noise is produced. » Equipment with lower sound levels should be selected where feasible.
	<i>Indirect impacts:</i> <i>Erosion of top soils</i>	medium	 » Control storm water runoff. » Control soil
			 erosion. Transport vehicle to stick to one route that will be rehabilitated after
	<i>Cumulative impacts</i> <i>Erosion - The area has</i> <i>loose sandy soil that is</i> <i>eroding with little</i> <i>disturbance</i>	low	 project. Strong adherence to dust control and erosion control measures.
Excavation of bridge foundation and mining of the borrow pit		low	 >> Use of rapid bridge construction methods >> Synchronise construction activities away from the rainy season. >> No mitigation is proposed before construction starts because the
			archaeological remains are of low significance

Basic Assessment Report

Department of Rural, Environment

Page 46

EIA Regulations, 2014

Activity	Impact summary	Significance	Proposed
			mitigation
			(excluding human remains). However, if concentrations of archaeological materials are exposed then all work must stop in the specific area for an archaeologist to investigate.
			 » If any human remains (or any other concentrations of archaeological heritage material) are exposed during construction, all work must cease and it must be reported immediately to the nearest museum/ archaeologist or to the North West Heritage Resources Authority, so that a systematic and professional investigation can be undertaken. Sufficient time should be allowed to investigate and to remove/collect such material. Recommendations

Basic Assessment Report

Department of Rural, Environment

Page 47

EIA Regulations, 2014



Activity	Impact summary	Significance	Proposed mitigation	
	Indirect impacts:			
	Cumulative impacts:			
Social impacts	Direct impacts: » Accidents- the route from the borrow pit to the bridge construction site intersect a public road.	Medium	 Implement traffic calming measures at the intersection in collaboration with the road authority Implement road signages Negotiate for traffic police presence in the section of the road intersection. 	
	 Influx of construction workers employed on the project and job seekers. Job creation (positive impact). Increase skills Local business participation (positive) 	low	 The movement of construction workers on and off the site should be closely managed and monitored by the contractors. Incoming and outgoing vehicles should be monitored to control traffic 	
			 Employ local staff as far as possible Use of deserving local business in in the project. 	
			 Attempt to provide skills development/ training for local employees. Enhance skills development 	
asic Assessment Rep	port Department	of Rural, Environmen	t Page 4	

Agricultural Develop

Activity	Impact summary	Significance	Proposed
			mitigation
			programme
	<i>Indirect impacts:</i> Social ills -disease, unplanned pregnancies	medium	 Attention should be given to the extension and improvement of the existing HIV / Aids awareness programmes in the area. Provision of condoms at construction camp. HIV awareness
	Cumulative impacts:	High	campaigns» Compliance to
	<i>Disease burden and social ills- prevalent of HIV and then ever rising COVID19 cases</i>		covid19 regulatory regime during construction. » Intensified social programmes and campaigns
No-go option	·		<u> </u>
Socio- economic	Direct impacts: Undesirable state of affairs remains	medium	 Construction of the bridge to facilitate safe access to amenities on both sides of the stream and encourage economic activities.
	Indirect impacts:		
	-		
	Cumulative impacts:		

A complete impact assessment which include process undertaken to identify, assess and rank the impacts, the activity will impose on the site through the life of the activity in terms of EIA Regulation 2014, Appendix 1(i) and (j) of GN R.982 must be included as Appendix H.

Basic Assessment Report	Department of Rural, Environment

Page 49

EIA Regulations, 2014

4.2. 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 <u>after</u> 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 proposed bridge only have construction environmental impacts, relating to erosion, heritage, biodiversity loss, dust pollution and noise.

All the anticipated impacts are manageable to non-significant levels.

The project comes with positive impacts in job creation and skill upgrading and offering local small business opportunity to participate.

There are no environmental impacts at all for the operational phase of the development.

The impacts associated with the borrow pit would be minimised to the lowest during the closure of the burrow pit in accordance with the closure plan to be submitted as part of the DMR permit application.

Overall, the project is a low risk environmentally. The positive impacts of the proposed bridge far outweighs the negative environmental impact after mitigation.

Alternative B

Alternative C

No-go alternative (compulsory)

The indirect socio-economic impacts of the status quoi are undesirable and hence the conception of the project.

Page 50

EIA Regulations, 2014



5. SECTION D: PUBLIC PARTICIPATION

5.1. ADVERTISEMENT AND NOTICE

Publication	Mmegadikgang (including Zeerust) - 24 July 2020		
name			
Date published	29 July 2020		
Site notice	Latitude	Longitude	
position	25° 16′ 38.33″	25° 54′ 57.50″	
Date placed	22 July 2020		

Include proof of the placement of the relevant advertisements and notices in Appendix I1.

5.2. 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 R.982.

Key stakeholders (other than organs of state) identified in terms of Regulation 40(2)(d) of GN R.982:

Title, Name and Surname	Affiliation/ key stakeholder status	Contact details (tel number or e- mail address)
Mr Kenneth Mediro	RMLM	Kenneth.mediro@ramotshere.gov.za
Chief Tiro	Traditional Leader of Borakalalo	Rtmolokwene79@gmail.com
Mr Desmond Makamu	Dept Of Mineral Resources	Desmond.makamu@dmr.gov.za
Ms Ellof Tilde	Dept of Water and Sanitation	elloft@dws.gov.za
Mr Elijah Mkhabela	NME Consultants	elijahkadlomo@gmail.com

Include proof that the key stakeholder received written notification of the proposed activities as Appendix I2. 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.

Department of Rural, Environment

Page 51

EIA Regulations, 2014



5.3. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

Summary of main issues raised by I&APs	Summary of response from EAP

5.4. COMMENTS AND RESPONSE REPORT

The practitioner must make report (s) available to I&APs record all comments received from I&APs and respond to each comment before 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 I3.

5.5. AUTHORITY PARTICIPATION

Authorities and organs of state identified as key stakeholders. Key stakeholders identified in terms of Regulation 7(1) and (2) and Regulation 40(2) (a)-(c) of GN R.982:

Authority/O rgan of State	Contact person (Title, Name and Surna me)	Tel No	e-mail	Postal address
Ramotshere Moiloa Local Municipality	Mr Kenneth Mediro	0793284 615	Kenneth.mediro@ramotshere .gov.za	
Traditional Leader of Borakalalo	Chief Tiro	0739064 714	Rtmolokwene79@gmail.com	
Dept Of Mineral Resources	Mr Desmon d Makamu	0184874 300	Desmond.makamu@dmr.gov. za	
Dept of Water and Sanitation	Ms Ellof Tilde	0828837 899	elloft@dws.gov.za	

Include proof that the Authorities and Organs of State received written notification and draft reports of the proposed activities as Appendix I4.

6. CONSULTATION WITH OTHER STAKEHOLDERS

Basic Assessment Report	Department of Rural, Environment	Page 52
EIA Regulations, 2014	and Agricultural Development	

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 I5.

Copies of any correspondence and minutes of any meetings held must be included in Appendix I6.

Basic Assessment Report

Department of Rural, Environment

Page 53

EIA Regulations, 2014



7. 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 construction of the proposed bridge and borrow pit should be implemented according to the conclusions of this report and the specifications of the EMPr to adequately mitigate and manage potential impacts associated with construction. The construction activities and relevant rehabilitation of disturbed areas should be monitored against the approved EMPr, the Environmental Authorisation (once issued) and all other relevant environmental legislation. Relevant conditions to be adhered to include:

Construction Phase:

- » All relevant practical and reasonable mitigation measures detailed within this report and within the EMPr must be implemented.
- » The implementation of the EMPr for all life cycle phases of the proposed project is considered key in achieving the appropriate environmental management standards as detailed in this report.
- The contractor to carry out the construction must have a full time Environmental Control Officer (ECO) monitor compliance with the specifications of the EMPr for the duration of the construction period. <u>The</u> <u>ECO must have the required Competency Certificates, received from the</u> <u>attendance of a Reptile Husbandry and Handling Course as there may be</u> <u>many poisonous snakes to be moved.</u>
- » An independent environmental consultant will do periodic audits and sumit monthly compaliance reports to the competent authority, including the close out report.
- » If animals need to be relocated a permit will be required from DEDECT (Conservation functional unit).
- » Surface water runoff should be managed by using a storm water management plan. During construction, erosion should be monitored while areas of vegetation are cleared.
- Care must be taken with the topsoil during and after construction on the site. If required, measures to reduce erosion to be employed, such as keeping the soil covered by straw, mulch, erosion control mats, etc., until a healthy plant cover is again established.

Basic Assessment Report	Department of Rural, Environment	Page 54
EIA Regulations, 2014	and Agricultural Development	
	×	

- » Rehabilitate construction sites by establishing with indigenous grasses or alternatively use other suitable plant species according to the landowners recommendations and/ or advice.
- » Erosion control measures must be utilised during construction, operations, decommissioning and rehabilitation of borrow pit and bridge construction site.
- » Contractors must be informed before construction starts on the possible types of heritage sites and cultural material they may encounter and the procedures to follow when they find sites.
- » The proponent should obtain all necessary permits prior to the commencement of construction.

The EMPr that meet the requirements of EIA Regulation, 2014, Appendix 4, must be attached as Appendix J.

Is an EMPr attached?

YES NO

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 F

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

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

Basic Assessment Report

Department of Rural, Environment

Page 55

EIA Regulations, 2014



8. SECTION F: AFFIRMATION BY EAP

I –Tambudzani Mulaudzi----(name of person representing EAP) of – MUANOWASHU SHEQ TRADING-(name of company) declare that the information provided is correct and relevant to the activity/ project and that, the information was made available to interested and affected parties for their comments. All specialist (s) reports are relevant for the competent authority to make informed decision.

SIGNATURE OF EAP

DATE

Basic Assessment Report

Department of Rural, Environment

Page 56

EIA Regulations, 2014

9. SECTION F: APPENDICES

The following appendices must be attached:

Appendix A: A3 Maps

- » Appendix A1: A3 Locality Map
- » Appendix A2: Layout MAp
- » Appendix A3: A3 Sensitivity Map
- Appendix B: Site Photographs
- Appendix C: Facility Illustration(s)
- Appendix D: Public Participation (for final BAR)
 - » Appendix D1: Adverts and Site Notices
 - » Appendix D2: Stakeholder Database
 - » Appendix D3: Stakeholder Correspondence
- Appendix E: Environmental Management Programme (EMPr)
- Appendix F: EAP Declaration and CVs

APPENDIX A: A3 MAPS

» APPENDIX A1: A3 LOCALITY MAP

» APPENDIX A2: A3 LAYOUT MAP

» APPENDIX A3: A3 SENSITIVITY MAP

APPENDIX B: SITE PHOTOGRAPHS

APPENDIX C: FACILITY ILLUSTRATION(S)

APPENDIX D: PUBLIC PARTICIPATION (FOR FINAL BAR)

» APPENDIX D1: ADVERTS AND SITE NOTICES

» APPENDIX D2: STAKEHOLDER DATABASE

» APPENDIX D3: STAKEHOLDER CORRESPONDENCE

APPENDIX E: ENVIRONMENTAL MANAGEMENT PROGRAMME (EMPR)

APPENDIX F: EAP DECLARATION AND CVS