Final Basic Assessment Report

PROPOSED REHABILITATION OF 29KM OF THE N9 FROM MIDDELBURG TO CARLTON HEIGHTS, EASTERN CAPE

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PROVINCE OF THE EASTERN CAPE
DEPARTMENT OF ECONOMIC DEVELOPMENT
AND
ENVIRONMENTAL AFFAIRS

BASIC ASSESSMENT REPORT

(For official use only)

File Reference Number:	
Application Number:	
Date Received:	

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

Kindly note that:

1. This **basic assessment report** is a standard report that may be required by a competent authority in terms of the EIA Regulations, 2010 and is meant to streamline applications. Please make sure that it is the report used by the particular competent authority for the activity that is being applied for.

2. 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.

3. Where applicable **tick** the boxes that are applicable or **black out** the boxes that are not applicable in the report.

4. An incomplete report may be returned to the applicant for revision.

5. 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.

6. This 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 report must be compiled by an independent environmental assessment practitioner.

9. 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.

10. A competent authority may require that for specified types of activities in defined situations only parts of this report need to be completed.

SECTION A: ACTIVITY INFORMATION

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

If YES, please complete form XX for each specialist thus appointed:
Any specialist reports must be contained in Appendix D.

1. ACTIVITY DESCRIPTION

Describe the activity, which is being applied for, in detail

1. Introduction

The South African National Roads Agency (SANRAL) is proposing to upgrade a 27km section of the National Road (N9) between Middelburg and Carlton Heights in the Eastern Cape Province (Figure 1.1). Arcus Gibb has been appointed by SANRAL as the project managers who subcontracted Coastal & Environmental Services (CES) as the Environmental Assessment Practitioner (EAP).

Figure 1.1. Location of the proposed upgrade of the N9 between Middelburg and Carlton Height in the Eastern Cape. The darkened red line indicates the affected road.

The proposed activity includes widening the existing road and reconstructing the road to provide the requisite level of service both in terms of geometrics and pavement structure, and reinforcing the existing pavement. The Flonkers "rail over road bridge" will be demolished and reconstructed and the road deviated to accommodate the new "rail over road bridge". A number of other "river crossing bridges" will also be reconstructed, widened and rehabilitated. The road will not result in the widening of

the road reserve boundaries and should not intrude into private-owned land at any point.

In addition to the EIA process, a water use license application will be undertaken in accordance to the requirements of the National Water Act of 1998 (Act No. 36 of 1998) regulated by the Department of Water Affairs (DWA) for the upgrade and widening of 11 bridges within the road section.

A mining license application will also be submitted for an existing quarry site (called Wolwekop) in accordance with the regulations pertaining to the Minerals and Petroleum Resources Development Act (Act No.28 of 2002) regulated by the Department of Mineral Resources.

2. Activities associated with the proposed project

The following activities are all associated with the upgrade of the N9 between Middelburg and Carlton Heights.

Bridge upgrades:

Authorisation from the Department of Water Affairs are being applied for on these bridge upgrades by CES.

2.1. Bridge over Ludlow Stream

GPS co-ordinates: S 31° 20.214" E 24° 58.949"

The bridge over Ludlow Stream needs to be upgraded and widened to suit the new road alignment; however it is impossible to widen the bridge at the current angle which the stream runs below. SANRAL engineers have therefore suggested a realignment of the Ludlow Spruit as shown in Figure 2.1. The current spruit (light blue) will be diverted and run parallel to the road where it will cross at Tweefontein Culvert 3 to re-join with the original Ludlow Spruit. See Section 3.1 for more detail.

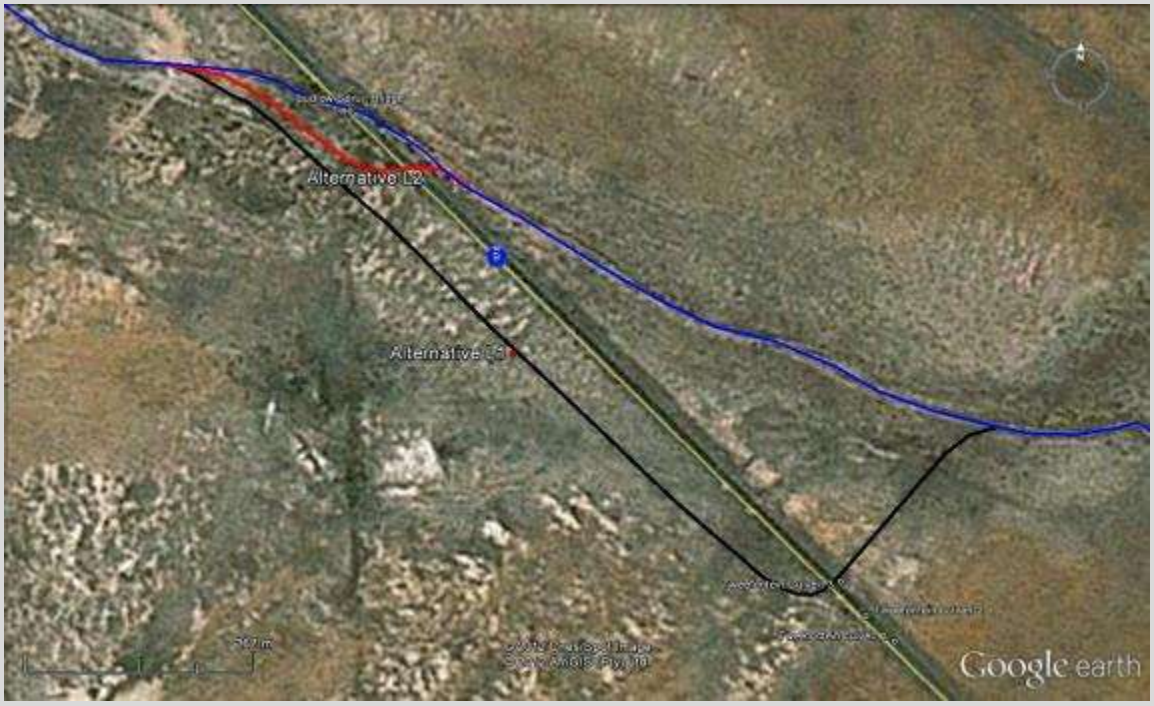


Figure 1: Ludlow Spruit shown in lue with preferred alternative diversion of the spruit (L1) shown in black and alternative L2 shown in red.

2.2. Droë River Bridge

GPS Co-ordinates: S 31° 30.006” E 26° 01.264”

The bridge will be upgraded with a new wearing course, the joints and seals will be serviced or replaced and the balustrades will be replaced with standard SANRAL detail.


2.3. Klein Brak River Bridge

GPS Co-ordinates: S 31° 30.800” E 25° 01.178”

The bridge will be upgraded with a new wearing course, the joints and seals will be serviced or replaced and the balustrades will be replaced with standard SANRAL detail.




2.4. Culvert over Grootfontein Stream

GPS Co-ordinates: S 31° 29.464” E 25° 00.905”

The culvert will be widened or replaced to suit the new cross section. The culvert capacity will also be improved.

2.5. Bridge over Elandskloof Spruit

GPS Co-ordinates: S 31° 26.508” E 25° 01.274”

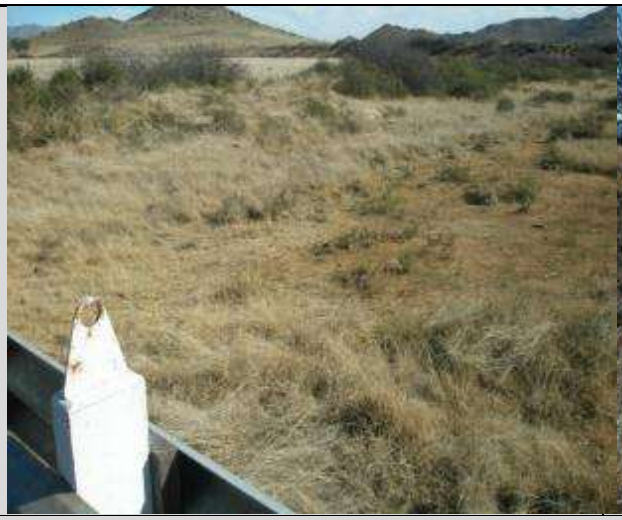
The bridge will be widened to suit the new road alignment and cross section.




2.6. Bridge over Seligman Spruit

GPS Co-ordinates: S 31° 27.627” E 25° 01.145”

The bridge will be widened to suit the new road alignment and cross section.


2.6. Culvert 1 over Wolwekop Stream

GPS Co-ordinates: S 31° 22.500” E 25° 01.795”

The culvert will be widened or replaced to suit the new cross section and the culvert’s capacity will be improved.




2.8. Culvert 2 over Wolwekop Stream

GPS Co-ordinates: S 31° 22.288” E 25° 01.393”

The culvert will be widened or replaced to suit the new cross section and the culvert capacity will be improved.


2.9. Culvert 3 over Wolwekop Stream

GPS Co-ordinates: S 31° 21.403” E 25° 00.587”

The culvert will be widened or replaced to suit the new cross section and the culvert capacity will be improved.




2.10. Culverts 1 over Tweefontein Stream

GPS Co-ordinates: S 31° 20.569” E 24° 59.366”

The culverts will be widened or replaced to suit the new cross section and the culvert’s capacity will be improved.


2.11. Culverts 2 over Tweefontein Stream

GPS Co-ordinates: S 31° 20.540” E 24° 59.331”

The culverts will be widened or replaced to suit the new cross section and the culvert’s capacity will be improved.


2.12. Culverts 3 over Tweefontein Stream

GPS Co-ordinates: S 31° 20.524” E 24° 59.312”

The culverts will be widened or replaced to suit the new cross section and the culvert’s capacity will be improved.

Road re-alignments:

2.14. Flonkers rail over bridge

The railway line runs parallel to the N9 at some places, but is still outside the road reserve and will not be impacted. The railway line crosses the N9 through a bridge over the road at Wolwekop (Figure).

Photo of the Flonkers rail over road bridge that will be upgraded.

This bridge will be upgraded and possibly re-aligned to the new road layout. (Figure 5.2).

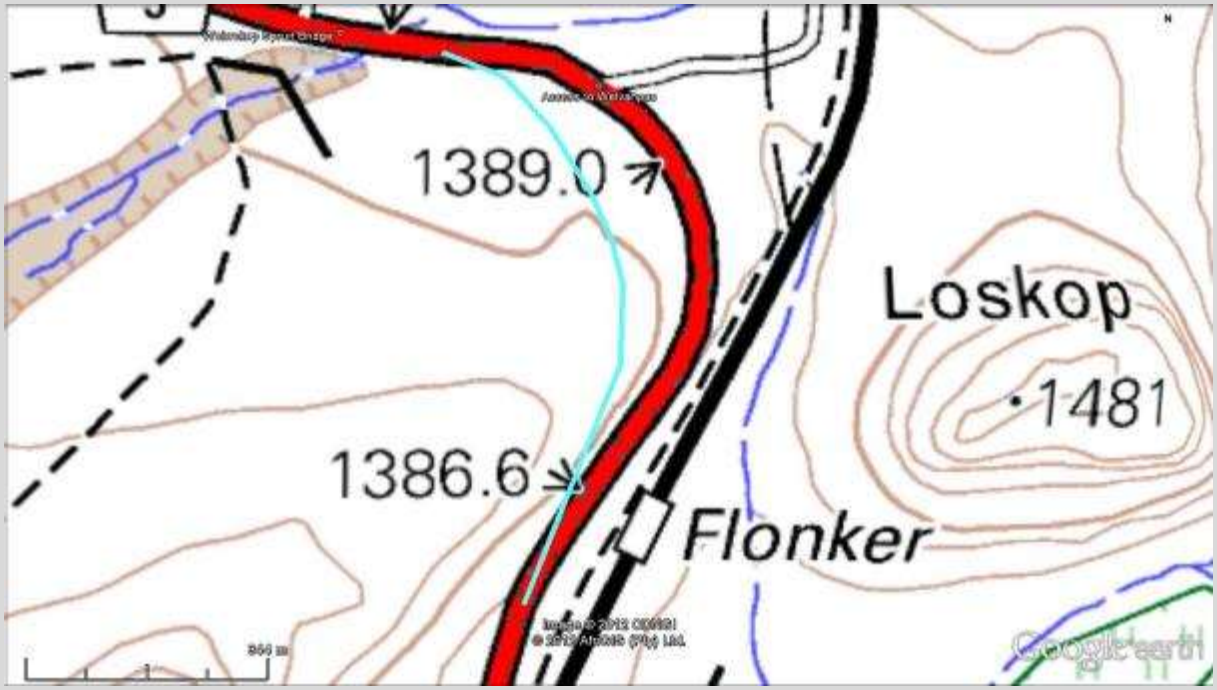
New road alignment at the Flonkers Rail over Road bridge indicated with a red line.

SANRAL is proposing the decommissioning and subsequent removal of the existing Flonkers Bridge, and the construction of a new upgraded bridge allowing for the proposed road widening, at a new site next to the existing bridge.

The main reason for this alteration is current height clearance problems coinciding with a major storm water drainage problem. Deepening the existing Flonkers Bridge to solve the current height problem, will only enhance the current drainage problem as this section is already lying in a low lying area that does not allow storm water to flow away from the road. The only viable solution is to build a new bridge underneath the railway line in a higher lying area slightly to the west.

2.15. Wolwekop pass

The curve of the road around Wolwekop will be re-aligned to allow for a less sharp and saver curve of the road. All extra rock and sediment from this road cutting will be used as road fill for the rest of the project area.



The light-blue line represents the new road alignment around the Wolwekop pass.

3. Alternatives

The NEMA guidelines require the consideration of various development alternatives or proposals as part of the EIA process. The consideration of project alternatives is a key requirement of an EIA as it provides a basis for comparison by the competent authority and I&APs. In the NEMA EIA Regulations, alternatives in relation to a proposed activity are defined as:- different means of meeting the general purpose and requirements of the activity, which may include alternatives to the:

(a) property on which or location where it is proposed to undertake the activity;
(b) type of activity to be undertaken;
(c) design or layout of the activity;
(d) technology to be used in the activity; and
(e) operational aspects of the activity;

3.1. Ludlow stream deviation alternatives

The existing Ludlow Stream bridge will be widened to suit the new road alignment and cross section. The result is that the Ludlow stream will have to be permanently deviated to allow for this to happen. The stream crosses the road at such an obscure angle (Figure 3.1) that it does not allow for the proposed widening of the bridge.

The engineers (Arcus Gibb) are proposing two stream deviation alternatives (namely L1 and L2) that will be submitted to the Department of Water Affairs for approval (Table 3.1.).

Alternative L1 is considered the preferred alternative. Both alternatives will be submitted to the department of Water Affairs with the Water Use licence Application for decision making.

Alternative L1 (preferred alternative)	
	• Lined diversion of Ludlow Stream, to join up with the Tweefontein Culvert 3. • New bridge at Tweefontein culvert 3 • Existing stream bed to be rehabilitated. • Existing bridge to be demolished.
Alternative L2	
	• Diversion of Ludlow Stream, to new Bridge under the N9. • Existing stream bed to be rehabilitated. • Existing bridge to be demolished.

3.2. No development (No-go)

It is mandatory to consider the no development (no-go) alternative in the EIA process. In context of this project it implies the consideration that the road upgrade will not take place.

4. Biophysical environment

4.1. Climate

The area normally receives about 234mm of rain per year, with most rainfall occurring mainly during autumn. The chart below (lower left) shows the average rainfall values for Middelburg per month. It receives the lowest rainfall (3mm) in July and the highest (51mm) in March. The monthly distribution of average daily maximum temperatures (centre chart below) shows that the average midday temperatures range from 15.3°C in June to 30.2°C in January. The region is the coldest during July when temperatures drop to 0.2°C on average during the night.

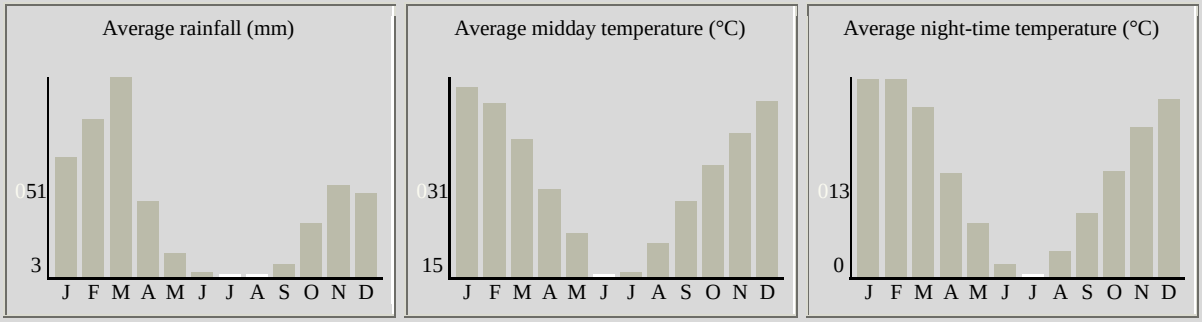


Figure 4.1. Showing average rainfall and temperature variation over a 12 month period.

4.2. Topography

Elevation decreases from 1477 m.a.s.l. (meters above sea level) in the north to 1251 m.a.s.l. in the south. The topography can be considered a gently undulating terrain along ridges and drops off towards the south.

Figure 4.2. Elevation profile along the N9 from Carlton Heights to Middelburg.

4.3. Geology and Soils

The study area falls within the Main Karoo Basin which signifies a large scale basin that was infilled with up to 12 km of sedimentary strata and capped by a 1.4 km thick unit of basaltic lava (today the remnants of the lava layer is called the Drakensberg Mountain).

More locally the rocks consist of a sandstone-rich layer called the Katberg Formation, although there are some mudstones present, increasing slightly towards the north. Intraformational mud-pellet conglomerates are common, with red coloured mudstone units and predominant arenaceous sandstones.

Intruding through all the sediment layers are dolerite dykes and sills of various sizes.

4.4. Vegetation and floristics

Vegetation types found in the area includes Eastern Upper Karoo vegetation (NKu4) and Tarkastad Montane Scrubland (Gs17) (Figure 4.3). Over 95% of the affected and surrounding area makes up Eastern Upper Karoo vegetation that consists of gently sloping plains dominated by dwarf microphyllous scrubs and 'white' grasses of the genera *Aristata* and *Eragrostis*. Tarkastad Montane Scrubland is found on ridges and hills characterised by high surface rock cover. The vegetation is low, semi-open mixed scrubland with grasses and dwarf scrubs. **Both vegetation types are considered Least Threatened by SANBI**.

Figure 4.3. SANBI Vegetation map (Mucina and Rutherford, 2006) showing Eastern Upper Karoo vegetation (NKu4) and Tarkastad Montane Shrubland (Gs17).

4.5. Eastern Cape Biodiversity Conservation Plan (ECBCP)

The ECBCP is a first attempt at detailed, low-level conservation mapping for land-use planning purposes. Specifically, the aims of the Plan were to map critical biodiversity areas through a systematic conservation planning process. The current biodiversity plan includes the mapping of priority aquatic features, land-use pressures, critical biodiversity areas and develops guidelines for land and resource-use planning and decision-making.

The main outputs of the ECBCP are "critical biodiversity areas" or CBAs. Two different CBA's were identified in the study site:

1. CBA 3 = Functional landscapes (grey)
2. CBA 4 = Towns & settlements (brown)

The ECBCP maps CBAs based on extensive biological data and input from key stakeholders. The ECBCP, although mapped at a finer scale than the National Spatial Biodiversity Assessment (Driver et al., 2005) is still, for the large part, inaccurate and "course". Therefore it is imperative that the status of the environment, for any proposed development MUST first be verified before the management recommendations associated with the ECBCP are considered (Berliner and Desmet, 2007). In spite of these short-comings, the ECBCP has been adopted by the Provincial Department of Economic Development and Environmental Affairs (DEDEA) as a strategic biodiversity for the Eastern Cape.

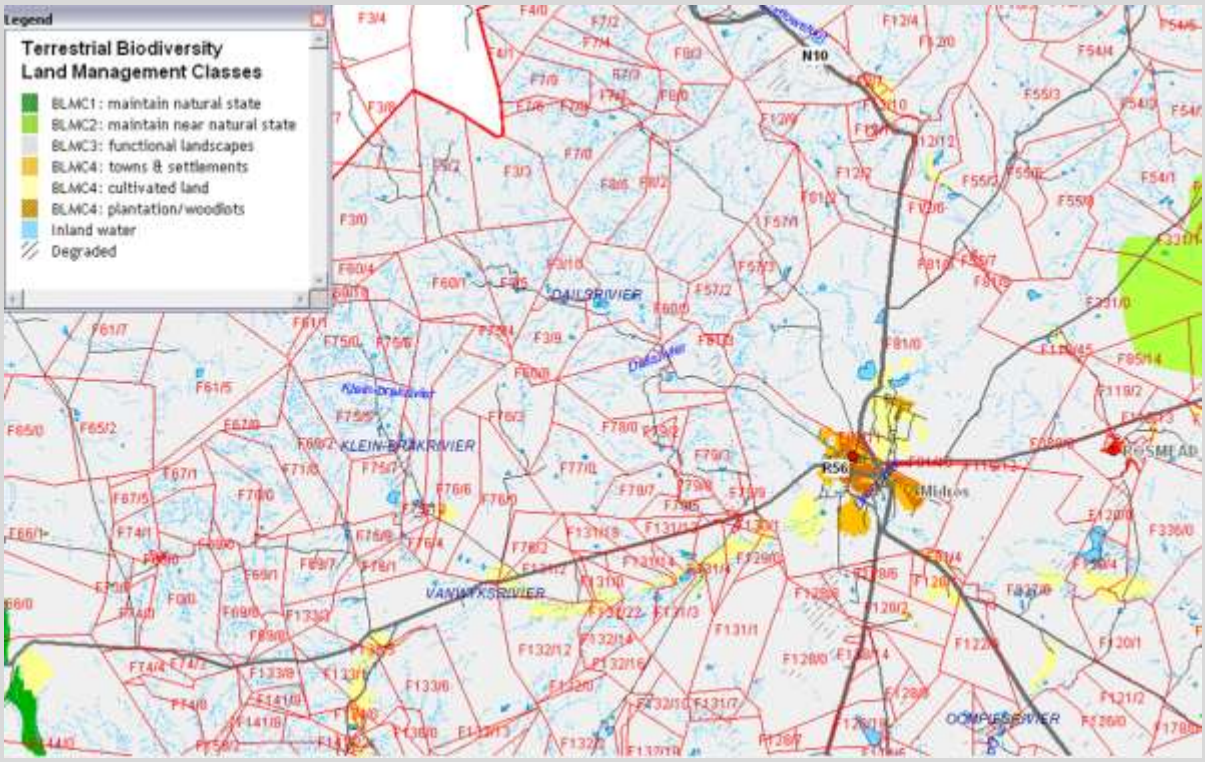


Figure 4.5. ECBCP map of the surrounding area.

The largest section of the study area, including the proposed Wolwekop quarry site falls under CBA 3, classifying it as functional landscape. Recommended land use management involves managing this area for sustainable development. This involves keeping all natural habitats intact in wetlands (including wetland buffers) and riparian zones.

The area around the town of Middelburg classifies as transformed landscape, classifying it as 'towns & settlements' (CBA 4). Recommended land use management involves managing the environment for sustainable development.

It is important to note that there are **no areas of HIGH conservation value** identified in term of ECBCP.

5. Socio-economic profile

The proposed project is located in the Inxuba Yethemba Local Municipality, formerly known as Cradock Local Municipality, which is a local municipality in Chris Hani District Municipality, Eastern Cape

Province.

5.1. Population

The most recent population data for Inxuba Yethemba LM is provided by Statistics SA Community Survey 2007 data. Based on these data, the population in 2007 was determined to be about 48,000 with 40% of the population under the age of 19 years.

5.2. Settlements

The Inxuba Yethemba LM is categorised by the following settlement patterns:

- Urban settlement
- Scattered Peri-Urban and Rural settlements
- Rural/Agriculture areas

The vast majority of people (92%) live in of households described as "brick houses on separate stands" with most of the remainder (7%) living in "flats, townhouses, etc.".

5.3. Income and poverty levels

The Inxuba Yethemba LM is characterised by poor socio economic conditions and low levels of development which is not an uncommon trend in the region.

It is evident that a significant number of people in the age group 15 – 65), receive no income (45%) while about 70% receive an income of less than R1, 600 per month.

5.4. Employment

In terms of employment data for Inxuba Yethemba LM, a significant proportion of "potentially employable" people are unemployed (23%).

5.5. Economic Activity

The predominant employment sector in the Inxuba Yethemba LM includes agriculture (6%), manufacturing (4%), wholesale and retail (5%) and community services (9%).

2. FEASIBLE AND REASONABLE ALTERNATIVES

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

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

Describe alternatives that are considered in this application. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity could be accomplished in

the specific instance taking account of the interest of the applicant in the activity. The no-go alternative must in all cases be included in the assessment phase as the baseline against which the impacts of the other alternatives are assessed. The determination of whether site or activity (including different processes etc.) or both is appropriate needs to be informed by the specific circumstances of the activity and its environment. After receipt of this report the competent authority may also request the applicant to assess additional alternatives that could possibly accomplish the purpose and need of the proposed activity if it is clear that realistic alternatives have not been considered to a reasonable extent.

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

3. ACTIVITY POSITION

Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in degrees and decimal minutes. The minutes should have at least three decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

Alternative:	**Latitude (S):**		**Longitude (E):**	
Alternative S1 (only site alternative)	31°	24.382‘	25°	1.610‘

In the case of linear activities:

Alternative:	**Latitude (S):**		**Longitude (E):**	
Alternative S1 (only route alternative)				
• Starting point of the activity	31°	30.883‘	25°	1.154‘
• Middle point of the activity	31°	24.382‘	25°	1.610‘
• End point of the activity	31°	19.937‘	24°	58.614‘

Ludlow Stream alteration alternatives:

Alternative L1				
• Starting point of the activity	31°	20.190‘	24°	58.817‘
• Middle point of the activity	31°	20.374‘	24°	59.073‘
• End point of the activity	31°	20.416‘	24°	59.432‘
Alternative L2				
• Starting point of the activity	31°	20.190‘	24°	58.817‘
• Middle point of the activity	31°	20.229‘	24°	58.915‘
• End point of the activity	31°	20.254‘	24°	59.016‘

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

Table 3.1. Co-ordinates taken every 250 meters along the route.

	Latitude (S)		**Longitude (E)**	
Starting point	31°	30.883’	25°	1.154’
	31°	30.618’	25°	1.234’
	31°	30.347’	25°	1.314’
	31°	30.075’	25°	1.306’
	31°	29.805’	25°	1.127’
	31°	29.540’	25°	0.952’

	31°	29.267’	25°	0.770’
	31°	29.010’	25°	0.607’
	31°	28.730’	25°	0.597’
	31°	28.457’	25°	0.660’
	31°	28.189’	25°	0.805’
	31°	27.938’	25°	1.092’
	31°	27.658’	25°	1.143’
	31°	27.374’	25°	1.176’
	31°	27.089’	25°	1.209’
	31°	26.806’	25°	1.241’
	31°	26.526’	25°	1.271’
	31°	26.249’	25°	1.306’
	31°	25.978’	25°	1.338’
	31°	25.709’	25°	1.381’
	31°	25.445’	25°	1.427’
	31°	25.182’	25°	1.473’
	31°	24.923’	25°	1.517’
	31°	24.671’	25°	1.559’
	31°	24.424’	25°	1.602’
	31°	24.174’	25°	1.646’
	31°	23.937’	25°	1.689’
	31°	23.704’	25°	1.728’
	31°	23.472’	25°	1.793’
	31°	23.234’	25°	1.864’
	31°	22.997’	25°	1.939’
	31°	22.771’	25°	2.096’
	31°	22.535’	25°	2.004’
	31°	22.486’	25°	1.703’
	31°	22.290’	25°	1.396’
	31°	22.233’	25°	1.316’
	31°	21.996’	25°	1.198’
	31°	21.767’	25°	1.043’
	31°	21.537’	25°	0.837’
	31°	21.374’	25°	0.522’
	31°	21.202’	25°	0.184’
	31°	20.984’	24°	59.869’
	31°	20.771’	24°	59.613’
	31°	20.548’	24°	59.344’
	31°	20.331’	24°	59.083’
	31°	20.112’	24°	58.822’
End point	31°	19.937’	24°	58.614’

4. PHYSICAL SIZE OF THE ACTIVITY

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

~~**Alternative:**~~ ~~**Size of the activity:**~~

~~Alternative A1[1] (only activity alternative)~~	~~m^2~~
~~Alternative A2 (if any)~~	~~m^2~~
~~Alternative A3 (if any)~~	~~m^2~~

or, for linear activities:

Alternative:	**Length of the activity:**
Alternative A1 (only activity alternative)	27 000m
~~Alternative A2 (if any)~~	~~m~~
~~Alternative A3 (if any)~~	~~m~~

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)	594 000m^2
~~Alternative A2 (if any)~~	~~m^2~~
~~Alternative A3 (if any)~~	~~m^2~~

5. SITE ACCESS

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

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.

6. SITE OR ROUTE PLAN

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

The site or route plans must indicate the following:

6.1 the scale of the plan which must be at least a scale of 1:500;
6.2 the property boundaries and numbers of all the properties within 50 metres of the site;
6.3 the current land use as well as the land use zoning of each of the properties adjoining the site or sites;
6.4 the exact position of each element of the application as well as any other structures on the site;
6.5 the position of services, including electricity supply cables (indicate above or underground), water supply pipelines, boreholes, street lights, sewage pipelines, storm water infrastructure and telecommunication infrastructure;
6.6 all trees and shrubs taller than 1.8 metres;
6.7 walls and fencing including details of the height and construction material;
6.8 servitudes indicating the purpose of the servitude;
6.9 sensitive environmental elements within 100 metres of the site or sites including (but not limited thereto):

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

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

6.9 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

6.10 the positions from where photographs of the site were taken.

7. 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 form**.** It must be supplemented with additional photographs of relevant features on the site, if applicable.

8. FACILITY ILLUSTRATION

A detailed illustration of the activity must be provided at a scale of 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.

9. ACTIVITY MOTIVATION

9(a) Socio-economic value of the activity

What is the expected capital value of the activity on completion?	Not determined	
What is the expected yearly income that will be generated by or as a result of the activity?	Not determined	
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 the development phase of the activity?	Not determined	
What is the expected value of the employment opportunities during the development phase?	Not determined	
What percentage of this will accrue to previously disadvantaged individuals?	Not determined	
How many permanent new employment opportunities will be created during the operational phase of the activity?	Not determined	
What is the expected current value of the employment opportunities during the first 10 years?	Not determined	
What percentage of this will accrue to previously disadvantaged individuals?	Not determined	

9(b) Need and desirability of the activity

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

The aim of this proposed project is to improve the quality of the N9 which may have adequate remaining structural life, but has an unacceptable quality of service. Improvements are normally applied to roads to improve quality of service on existing roads such as relieving

traffic congestion, road safety, road passability, etc. The proposed improvement works include the following works types:

LEVEL OF SERVICE: This comprises works that retain the existing pavement structure, but increases the width in selected areas (i.e. addition of climbing lanes) throughout the length of the section to improve passability.

CAPACITY: This comprises works that retain the existing pavement, but increases the width over the total length of the section. These include partial widening and lane addition.

ALIGNMENT: This comprises works that change the road geometry for part of a section, but that retain some of the existing pavement structure. These include local geometric improvements, and intersection improvements.

BRIDGES: This comprises works that retain the existing bridge, but increases the width over the total length of the bridge. It also include all work related to improve the horizontal and vertical clearances over and under the bridge.

Indicate any benefits that the activity will have for society in general:

The proposed project will also create job opportunity for skilled and semi-skilled workers in the area.

Indicate any benefits that the activity will have for the local communities where the activity will be located:

Job creation during construction phase for skilled and semi-skilled workers, skills development.
The road upgrade will result in a safer and better quality road for its users.

10. 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:	Administering authority:	Date:
National Environmental Management Act (No 107 of 1998)	Department of Environmental Affairs (DEA)	1998
Constitution Act (No. 108 of 1996)	Constitution Assembly	1996
National Environmental Management: Biodiversity Act (Act No 10 of 2004)	Department Environmental Affairs (DEA)	2004
National Water Act (No. 36 of 1998)	Department of Water Affairs (DWA)	1998
National Forest Act (84 of 1998)	Department of Agriculture, Forestry and Fisheries (DAFF)	1998
Minerals and Petroleum Resources Development Act (No. 28 of 2002)	Department of Mineral Resources (DMR)	2002
National Road Traffic Act (No. 93 of 1996)	Department of Transport	1996

11. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

11(a) Solid waste management

Will the activity produce solid construction waste during the construction/initiation phase?	YES	~~NO~~
If yes, what estimated quantity will be produced per month?	20-50 m^3	

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

All solid waste will be collected at a central location and will be stored temporarily until removed to an appropriately permitted landfill site near the construction site. The nearest licenced landfill site is at Queenstown.

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

Solid waste will be removed to an appropriately permitted landfill site near the construction site. The nearest licenced landfill site is at Queenstown.

Will the activity produce solid waste during its operational phase?	~~YES~~	NO
If yes, what estimated quantity will be produced per month?	~~m^3~~	

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

N/A

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

N/A

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

Can any part of the solid waste be classified as hazardous in terms of the relevant legislation?	~~YES~~	NO

If yes, inform the competent authority and request a change to an application for scoping and EIA.

Is the activity that is being applied for a solid waste handling or treatment facility?	~~YES~~	NO

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

11(b) Liquid effluent

Will the activity produce effluent, other than normal sewage, that will be disposed of in a municipal sewage system?	~~YES~~	NO
If yes, what estimated quantity will be produced per month?	~~m^3~~	
Will the activity produce any effluent that will be treated and/or disposed of on site?	~~Yes~~	NO

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

Will the activity produce effluent that will be treated and/or disposed of at another facility?	~~YES~~	NO

If yes, provide the particulars of the facility:

Facility name:	N/A
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:

11(c) Emissions into the atmosphere

Will the activity release emissions into the atmosphere?	YES	~~NO~~
If yes, is it controlled by any legislation of any sphere of government?	~~YES~~	NO

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

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

Nuisance dust as a result of construction activities

11(d) Generation of noise

Will the activity generate noise?	YES	~~NO~~
If yes, is it controlled by any legislation of any sphere of government?	~~YES~~	NO

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

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

Noise during construction

12. WATER USE

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

municipal	~~water board~~	~~groundwater~~	~~river, stream, dam or lake~~	~~other~~	~~the activity will not use water~~

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:	~~litres~~	
Does the activity require a water use permit from the Department of Water Affairs?	YES	~~NO~~

If yes, please submit the necessary application to the Department of Water Affairs and attach proof thereof to this application if it has been submitted.

13. ENERGY EFFICIENCY

Describe the design measures, if any, that 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

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 C and indicate the area, which is covered by each copy No. on the Site Plan.

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

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

3. Has a specialist been consulted to assist with the completion of this section?

YES	~~NO~~

If YES, please complete form XX for each specialist thus appointed:
All specialist reports must be contained in Appendix D.

1. GRADIENT OF THE SITE

Indicate the general gradient of the site.

Alternative S1 (only alternative):

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
~~2.2 Plateau~~
2.3 Side slope of hill/mountain
~~2.4 Closed valley~~
~~2.5 Open valley~~
2.6 Plain
2.7 Undulating plain / low hills
~~2.8 Dune~~
~~2.9 Seafront~~

3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

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

	Alternative S1:		**~~Alternative S2 (if any):~~**		**~~Alternative S3 (if any):~~**	
Shallow water table (less than 1.5m deep)	~~YES~~	NO	~~YES~~	~~NO~~	~~YES~~	~~NO~~

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

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

4. GROUNDCOVER

Indicate the types of groundcover present on the site:

4.1 Natural veld – good condition [E]
4.2 Natural veld – scattered aliens [E]
~~4.3 Natural veld with heavy alien infestation [E]~~
~~4.4 Veld dominated by alien species [E]~~
~~4.5 Gardens~~
~~4.6 Sport field~~
~~4.7 Cultivated land~~
4.8 Paved surface
~~4.9 Building or other structure~~
~~4.10 Bare soil~~

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

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

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

5. 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:

5.1 Natural area
~~5.2 Low density residential~~
5.3 Medium density residential
~~5.4 High density residential~~
~~5.5 Informal residential~~
~~5.6 Retail commercial & warehousing~~
~~5.7 Light industrial~~
~~5.8 Medium industrial~~ **AN**
~~5.9 Heavy industrial~~ **AN**
~~5.10 Power station~~
~~5.11 Office/consulting room~~
~~5.12 Military or police base/station/compound~~
~~5.13 Spoil heap or slimes dam~~**A**
5.14 Quarry, sand or borrow pit
~~5.15 Dam or reservoir~~
~~5.16 Hospital/medical centre~~
~~5.17 School~~
~~5.18 Tertiary education facility~~
~~5.19 Church~~
~~5.20 Old age home~~
~~5.21 Sewage treatment plant~~**A**
~~5.22 Train station or shunting yard~~ **N**
5.23 Railway line **N**
~~5.24 Major road (4 lanes or more)~~ **N**
~~5.25 Airport~~ **N**
~~5.26 Harbour~~
~~5.27 Sport facilities~~
~~5.28 Golf course~~
~~5.29 Polo fields~~
~~5.30 Filling station~~ **H**
~~5.31 Landfill or waste treatment site~~
~~5.32 Plantation~~
5.33 Agriculture
5.34 River, stream or wetland
~~5.35 Nature conservation area~~
5.36 Mountain, koppie or ridge
~~5.37 Museum~~
~~5.38 Historical building~~
~~5.39 Protected Area~~
~~5.40 Graveyard~~
~~5.41 Archaeological site~~
~~5.42 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.

5.23. Railway lines

The railway line runs parallel to the N9 at some places, but is still outside the road reserve and will not be impacted. The railway line crosses the N9 through a bridge over the road at Wolwekop (Figure 5.1 below).

Figure 5.1. Photo of the Flonkers rail over road bridge that will be upgraded.

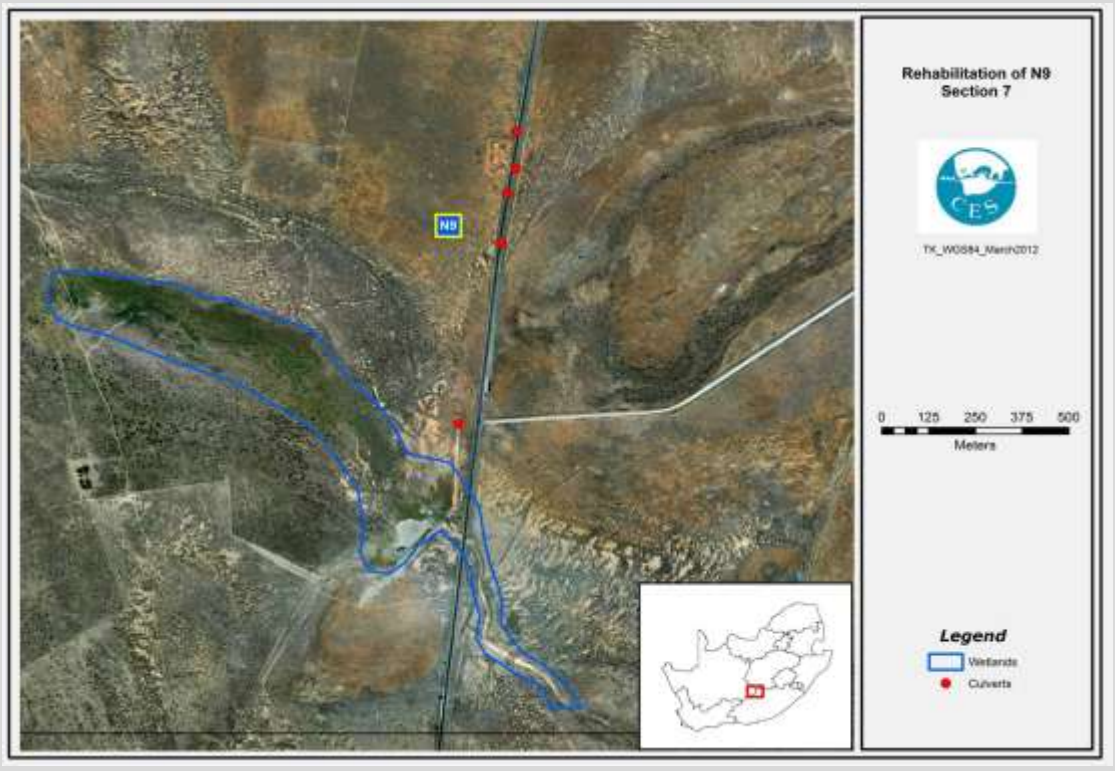
This bridge will be upgraded and possibly re-aligned to the new road layout. (Figure 5.2).

Figure 5.2. New road alignment at the Flonkers Rail over Road bridge.

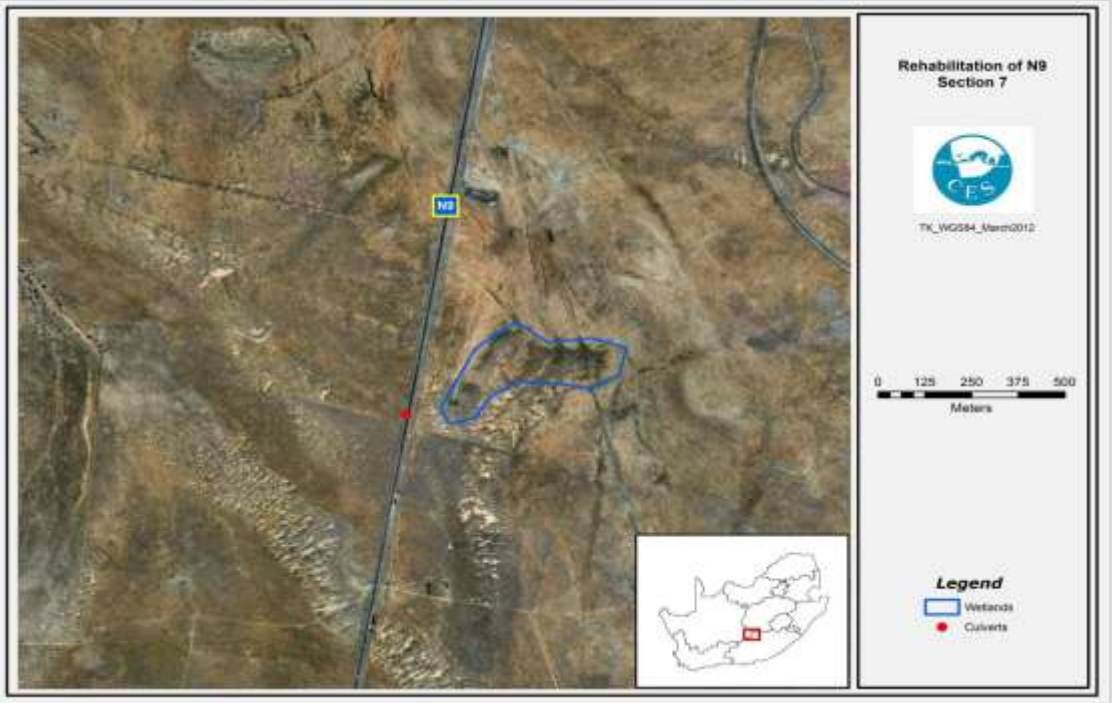
SANRAL is proposing the decommissioning and subsequent removal of the existing Flonkers Bridge, and the construction of a new upgraded bridge allowing for the proposed road widening, at a new site next to the existing bridge.

The main reason for this alteration is current height clearance problems coinciding with a major storm water drainage problem. Deepening the existing Flonkers Bridge to solve the current height problem, will only enhance the current drainage problem as this section is already lying in a low lying area that does not allow storm water to flow away from the road. The only viable solution is to build a new bridge underneath the railway line in a higher lying area slightly to the west.

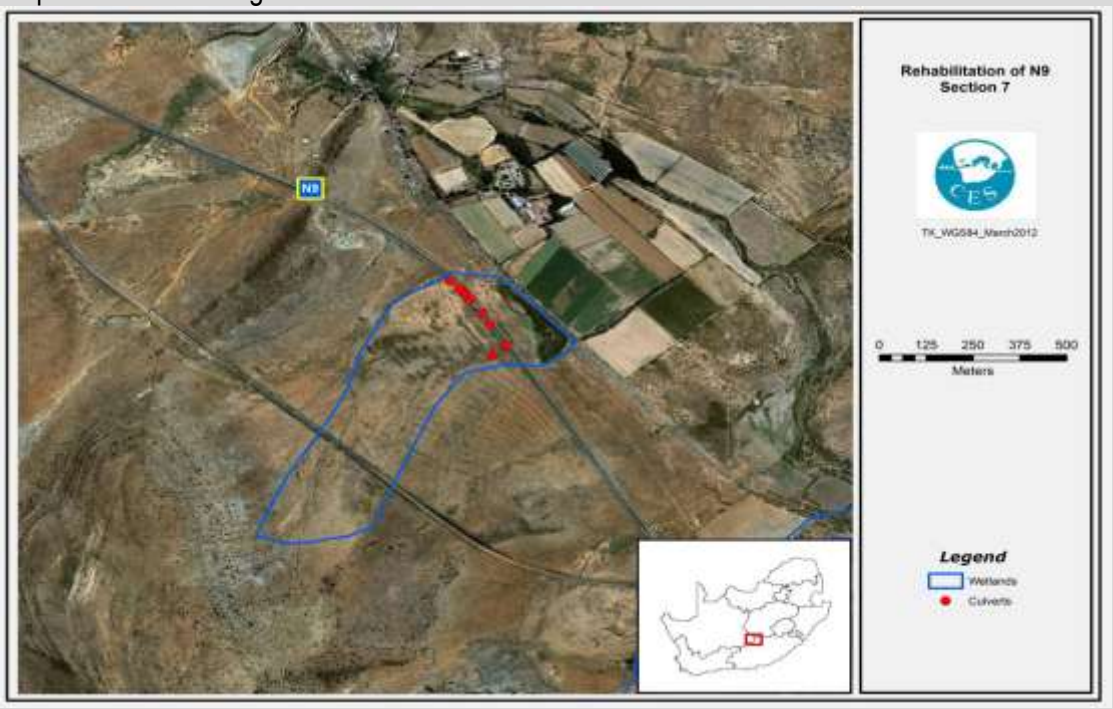
5.3.4. Wetlands



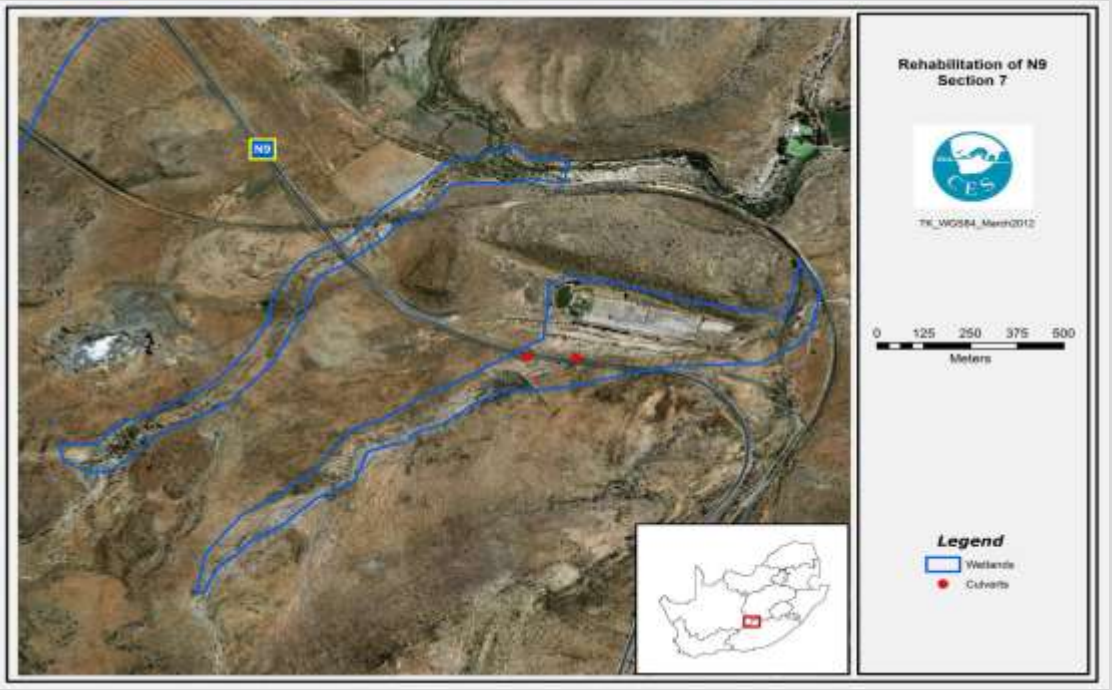
Map 1: Elandskloof wetland.



Map 2: Borehole along the N9



Map 3: Southernwood wetland



Map 4: Wolwekop wetland

Geology, soils and surface water
Several areas where flows are considerable, natural Palustrine wetlands do occur along the affected area of the N9 and the associated man-made dams. These wetlands are dominated by *Phragmites australis* and *Typha capensis*, which prefer permanent water sources.

Wetlands on site
No natural wetlands were identified along the affected area of the N9. All areas identified occurred as a result of human intervention. These are mostly in drainage channels or small streams. Two of the identified wetlands are formed by weirs built on rivers west of the road. These two wetlands can be regarded as 'valley bottom with a channel' type wetland. Both are within a 100 meter distance from the road. Overall the present ecological state of these wetlands falls within a category 'D', indicating that these wetlands have been largely modified. Thus, a large change in ecosystem processes and loss of natural habitat and biota has occurred.

The hydrology of both these wetlands falls within a category E. This means that the change in ecosystem processes and loss of natural habitat and biota is great but some remaining natural habitat features are still recognizable. However, this is not likely to worsen or improve in the next five years.

The state of the vegetation of the wetland falls within a category D. The vegetation of the wetland is largely modified. This may be caused by the drainage of the areas around the streams and rivers in the area to make way for arable fields. A large change in ecosystem processes and loss of natural habitat and biota has occurred. However, this is not likely to worsen in the next five years, provided no development takes place within the 15m buffer of the wetland. The deep flooding by the man-made dams within the wetland has caused the greatest impact on the wetland, and the wetland vegetation. This has resulted in a situation where flooding is too deep for emergent vegetation to grow.

Vegetation
Limited zonation patterns from terrestrial to the aquatic vegetation, with the dominant species listed in Table 3-2 reflect the habitat preferences of the plants observed within the study area, with

approximately 50% of the plants requiring moist or waterlogged soil conditions. The vegetation listed in this report is those used as wetland indicators only. A detailed list of plant species is indicated in Appendix 2 of the specialist report. No species of conservation concern were found (i.e. Threatened or Endangered). Some bulb species such as *Kniphofia* species, as most were not flowering during the survey, could not be identified

Wetland fauna
Wetland fauna observed during the site visit included a variety of groups ranging from amphibians and birds to small mammals. The greatest proportion of animals included mostly Grebes, Ducks, Geese, Cormorants and Herons. All species found have no conservation concern.

The highest number of faunal species was observed in the wetlands with the highest number of habitats, i.e. reed / sedge cover, as well as shallow and deep water areas. These wetlands also had the highest number of plant, bird and amphibian species.

Wetland value
No water quality assessment was done for the proposed development. The Southernwood wetland, although receiving run-off from a road, looked to have very few other impacts, and there were well developed wetland vegetation which implies limited water quality problems which might not be the case for the other two wetlands within the study area, as they are not well developed in terms of wetland plant biota.

This implies that should all the wetlands which have been impacted in the area be improved either through improving the quality of the water sources or by increasing the available wetland habitats through landscaping the wetland verges, the quality of the water moving in this portion of the catchment could be improved.

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

If YES, specify and explain: N/A
If YES, specify: N/A

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

If YES, specify and explain: N/A
If YES, specify: N/A

6. 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	~~YES~~	~~NO~~
Archaeological or palaeontological sites, on or close (within 20m) to the site?	Uncertain	
If YES, explain:	N/A	
If uncertain, conduct a specialist investigation by a recognised specialist in the field to establish whether there is such a feature(s) present on or close to the site.		

Briefly explain the findings of the specialist:	A heritage survey conducted by Umlando CC (Find full report in Appendix D) recorded three archaeological sites, noted two areas of paleontological sensitivity, and two bridges that are over 60 years in age. The archaeological sites date to the Late Stone Age and are open scatters. Two of these scatters have good examples of stone tools and would need to be sampled if impacted by the road. SANRAL will need to apply for a permit for each of these sites if they are affected. The heritage report indicated that a separate paleontological survey will be required. However sensitive areas were noted during the survey and the Heritage specialist suggests that a Phase 1 paleontological survey is undertaken, as opposed to a Phase 0. Two bridges are older than 60 years and thus need SAHRA's Built Environment approval to be destroyed. One bridge is 58 years old and is technically not protected; however, the heritage specisalist believes this should be submitted for approval as well.

Will any building or structure older than 60 years be affected in any way?	YES	~~NO~~
Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?	YES	~~NO~~

If yes, please submit or, make sure that the applicant or a specialist submits the necessary application to SAHRA or the relevant provincial heritage agency and attach proof thereof to this application if such application has been made.

SECTION C: PUBLIC PARTICIPATION

1. ADVERTISEMENT

The person conducting a public participation process must take into account any guidelines applicable to public participation as contemplated in section 24J of the Act and must give notice to all potential interested and affected parties of the application which is subjected to public participation by—

(a) fixing a notice board (of a size at least 60cm by 42cm; and must display the required information in lettering and in a format as may be determined by the competent authority) at a place conspicuous to the public at the boundary or on the fence of—
  (i) the site where the activity to which the application relates is or is to be undertaken; and
  (ii) any alternative site mentioned in the application;
(b) giving written notice to—
  (i) the owner or person in control of that land if the applicant is not the owner or person in control of the land;
  (ii) the occupiers of the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;
  (iii) owners and occupiers of land adjacent to the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;
  (iv) the municipal councillor of the ward in which the site or alternative site is situated and any organisation of ratepayers that represent the community in the area;
  (v) the municipality which has jurisdiction in the area;
  (vi) any organ of state having jurisdiction in respect of any aspect of the activity; and
  (vii) any other party as required by the competent authority;
(c) placing an advertisement in—
  (i) one local newspaper; or
  (ii) any official *Gazette* that is published specifically for the purpose of providing public notice of applications or other submissions made in terms of these Regulations;
(d) placing an advertisement in at least one provincial newspaper or national newspaper, if the activity has or may have an impact that extends beyond the boundaries of the metropolitan or local municipality in which it is or will be undertaken: Provided that this paragraph need not be complied with if an advertisement has been placed in an official *Gazette* referred to in subregulation 54(c)(ii); and
(e) using reasonable alternative methods, as agreed to by the competent authority, in those instances where a person is desiring of but unable to participate in the process due to—
  (i) illiteracy;
  (ii) disability; or
  (iii) any other disadvantage.

2. CONTENT OF ADVERTISEMENTS AND NOTICES

A notice board, advertisement or notices must:

(a) indicate the details of the application which is subjected to public participation; and
(b) state—
  (i) that the application has been submitted to the competent authority in terms of these Regulations, as the case may be;

(ii) whether basic assessment or scoping procedures are being applied to the application, in the case of an application for environmental authorisation;

(iii) the nature and location of the activity to which the application relates;

(iv) where further information on the application or activity can be obtained; and

(iv) the manner in which and the person to whom representations in respect of the application may be made.

PROPOSED REHABILITATION OF SECTION 7 ON THE N9 BETWEEN MIDDELBURG AND CARLTON HEIGHTS, EASTERN CAPE.

NOTICE OF ENVIRONMENTAL IMPACT ASSESSMENT AND INVITATION TO REGISTER AS AN I&AP

Notice is hereby given in terms of Regulation 54(2) published in Government Notice No. R543 under Chapter 5 of the National Environmental Management Act (Act 107 of 1998) (NEMA), of the intent to submit an Environmental Impact Assessment (EIA) application to the Department of Environmental Affairs (DEA).

Proponent and Location:
SANRAL (South African National Roads Agency Ltd.) is proposing the rehabilitation of Section 7 on the N9 National Road between Middelburg and Carlton Heights.

Project Activities:
The proposed project includes widening of the existing road, demolishing and reconstructing the rail over the road bridge, and the upgrade and reconstruction of a number of river bridges. The process will also include a Water Use License application at regulated by the National Water Act (Act No. 36 of 1998), and a quarry mining license as regulated by the Minerals and Petroleum Resources Development Act (Act No. 28 of 2002)

Listed Activities:
The proposed project requires a BASIC ENVIRONMENTAL ASSESSMENT due to the following activities listed in terms of GN R 544:

- Activity 47 (i & ii): The widening of a road by more than 6 meters, or the lengthening of a road by more than 1 kilometer-
  - (i) Where the existing reserve is wider than 13.5 meters
  - (ii) Where no reserve exists, where the existing road is wider than 8 meters.
- As well as Activities 11(iii) and 39 (iii) of GN R544.

Coastal & Environmental Services has been commissioned to undertake the Environmental Impact Assessment. You are hereby invited to register as an Interested & Affected Party (I&AP). Please submit your name, contact information and any comments to the contact person below within 30 days**.**

For more information, registration as an I&AP or submission of written comments contact by post, phone, fax or e-mail:
Contact details: Mr Roy de Kock, PO Box 8145, East London, 5210, Tel: 043 742 3302, Fax: 043 742 3306, e-mail: r.dekock@cesnet.co.za

Date of advert: 21 July 2011

Figure C1. Copy of newspaper ad placed in the local newspaper.

NOTICE
ENVIRONMENTAL IMPACT ASSESSMENT

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Listed Activities: The proposed project requires a BASIC ENVIRONMENTAL ASSESSMENT due to the following activities listed in terms of GN R 544:

- **Activity 11 (iii): The construction of bridges within a watercourse or within 32 meters of a watercourse.**
- **Activity 39: The expansion of bridges within a watercourse of within 32 meters of a watercourse.**
- **Activity 47 (i & ii): the widening of a road by more than 6 meters where the existing reserve is wider than 13.5 meters or where no reserve exists and the existing road is wider than 8 meters.**

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Contact details: For more information, registration as an I&AP or submission of written comments contact by post, phone, fax or e-mail: Mr. Roy de Kock, PO Box 8145, East London, 5210 Tel: 043 742 3302, Fax: 043 742 3306, Email: r.dekock@cesnet.co.za

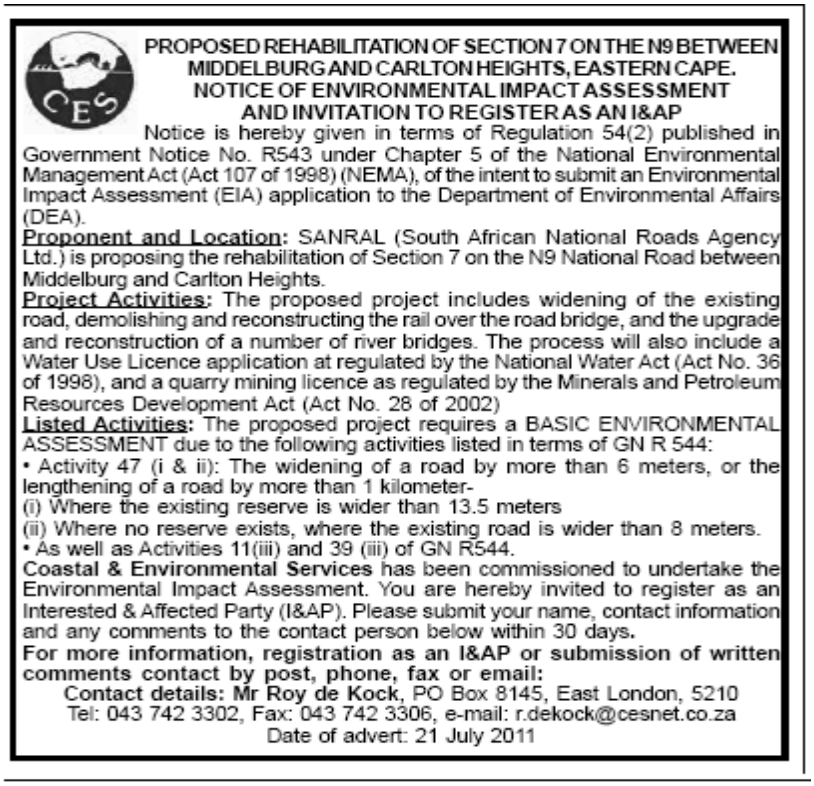
Figure C2: Copy of notice placed on site.

3. PLACEMENT OF ADVERTISEMENTS AND NOTICES

Where the proposed activity may have impacts that extend beyond the municipal area where it is located, a notice must be placed in at least one provincial newspaper or national newspaper, indicating that an application will be submitted to the competent authority in terms of these regulations, the nature and location of the activity, where further information on the proposed activity can be obtained and the manner in which representations in respect of the application can be made, unless a notice has been placed in any *Gazette* that is published specifically for the purpose of providing notice to the public of applications made in terms of the EIA regulations.

Advertisements and notices must make provision for all alternatives.

Figure C3: Photo proof of site notice placed on site, next to the proposed Wolwekop quarry access road.



PROPOSED REHABILITATION OF SECTION 7 ON THE N9 BETWEEN MIDDELBURG AND CARLTON HEIGHTS, EASTERN CAPE.
NOTICE OF ENVIRONMENTAL IMPACT ASSESSMENT AND INVITATION TO REGISTER AS AN I&AP

Notice is hereby given in terms of Regulation 54(2) published in Government Notice No. R543 under Chapter 5 of the National Environmental Management Act (Act 107 of 1998) (NEMA), of the intent to submit an Environmental Impact Assessment (EIA) application to the Department of Environmental Affairs (DEA).

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Listed Activities: The proposed project requires a BASIC ENVIRONMENTAL ASSESSMENT due to the following activities listed in terms of GN R 544:

- Activity 47 (i & ii): The widening of a road by more than 6 meters, or the lengthening of a road by more than 1 kilometer-

(i) Where the existing reserve is wider than 13.5 meters
(ii) Where no reserve exists, where the existing road is wider than 8 meters.

- As well as Activities 11(iii) and 39 (iii) of GN R544.

Coastal & Environmental Services has been commissioned to undertake the Environmental Impact Assessment. You are hereby invited to register as an Interested & Affected Party (I&AP). Please submit your name, contact information and any comments to the contact person below within 30 days.

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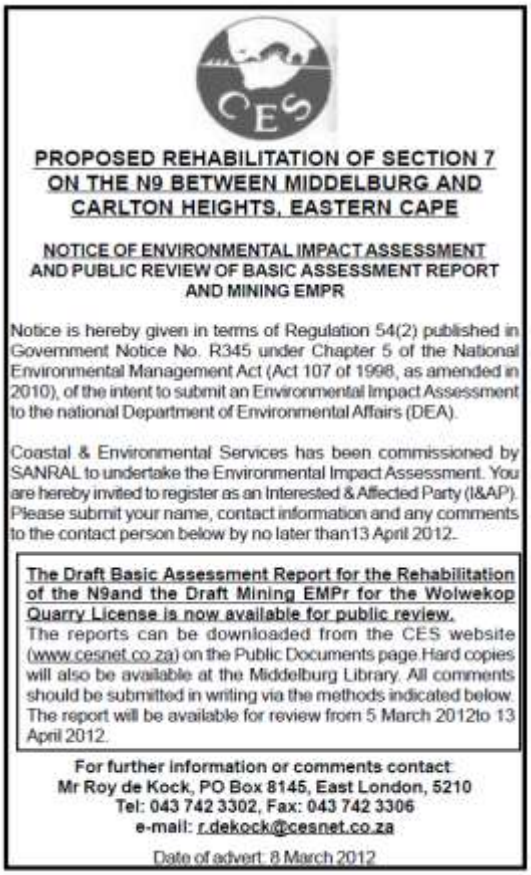
Contact details: Mr Roy de Kock, PO Box 8145, East London, 5210
Tel: 043 742 3302, Fax: 043 742 3306, e-mail: r.dekock@cesnet.co.za
Date of advert: 21 July 2011

Figure C4. Proof of notification advert placed in the Middelburg Courant on the 21 July 2011



PROPOSED REHABILITATION OF SECTION 7 ON THE N9 BETWEEN MIDDELBURG AND CARLTON HEIGHTS, EASTERN CAPE

NOTICE OF ENVIRONMENTAL IMPACT ASSESSMENT AND PUBLIC REVIEW OF BASIC ASSESSMENT REPORT AND MINING EMPR

Notice is hereby given in terms of Regulation 54(2) published in Government Notice No. R345 under Chapter 5 of the National Environmental Management Act (Act 107 of 1998, as amended in 2010), of the intent to submit an Environmental Impact Assessment to the national Department of Environmental Affairs (DEA).

Coastal & Environmental Services has been commissioned by SANRAL to undertake the Environmental Impact Assessment. You are hereby invited to register as an Interested & Affected Party (I&AP). Please submit your name, contact information and any comments to the contact person below by no later than13 April 2012.

The Draft Basic Assessment Report for the Rehabilitation of the N9and the Draft Mining EMPr for the Wolwekop Quarry License is now available for public review.
The reports can be downloaded from the CES website (www.cesnet.co.za) on the Public Documents page.Hard copies will also be available at the Middelburg Library. All comments should be submitted in writing via the methods indicated below. The report will be available for review from 5 March 2012to 13 April 2012.

For further information or comments contact:
Mr Roy de Kock, PO Box 8145, East London, 5210
Tel: 043 742 3302, Fax: 043 742 3306
e-mail: r.dekock@cesnet.co.za

Date of advert: 8 March 2012

Figure C5: Proof of notification advert for Public Review Period on the 8th March 2012

4. DETERMINATION OF APPROPRIATE MEASURES

The practitioner must ensure that the public participation is adequate and must determine whether a public meeting or any other additional measure is appropriate or not based on the particular nature of each case. Special attention should be given to the involvement of local community structures such as Ward Committees, ratepayers associations and traditional authorities where appropriate. Please note that public concerns that emerge at a later stage that should have been addressed may cause the competent authority to withdraw any authorisation it may have issued if it becomes apparent that the public participation process was inadequate.

A public meeting were held on the 25 April 2012 at the Carlton Heights Bed & Breakfast outside Middelburg. All issues were recorde and responded to in the Comments & response Report.

PROPOSED REHABILITATION OF SECTION 7 ON THE N9 BETWEEN MIDDELBURG AND CARLTON HEIGHTS, EASTERN CAPE

NOTICE OF PUBLIC MEETING

Notice is hereby given in terms of Chapter 6 of Government Notice No. R543 under Chapter 5 of the National Environmental Management Act (Act 107 of 1998), of the intent to hold a public meeting.

Date: Wednesday 25 April 2012
Venue: Sherborne Guest Farm (16km from Middleburg on the N9)
Time: 17H30

Coastal & Environmental Services has been commissioned by SANRAL to undertake the Environmental Impact Assessment.

For further information or comments contact: Roy De Kock, PO Box 8145, East London, 5210, Tel: 043 742 3302, Fax: 043 742 3306, e-mail: r.dekock@cesnet.co.za

Date of advert: 19 April 2012

FIGURE C6: COPY OF ADVERT PLACED TO INVITE I&AP'S TO THE PUBLIC MEETING.

COPY OF NOTIFICATION LETTER TO STAKEHOLDERS AN I&APS OF THE PUBLIC MEETING:

COASTAL & ENVIRONMENTAL SERVICES
Environmental Management and Impact Assessment

67 African Street P.O. Box 934
Grahamstown 6140 SOUTH AFRICA
Tel: 046-622 2364 Fax: 046-622 6564
International: +27-46-622 2364
Email: info@cesnet.co.za
Website: www.cesnet.co.za

2 Marine Terrace P.O. Box 8145
East London 5210 SOUTH AFRICA
Tel: 043-722 5812 Fax: 043-742 3306
International: +27-43-722 5812
Email: cesel@cesnet.co.za
Website: www.cesnet.co.za

18 April 2012

Dear Stakeholder and Interested and Affected Party

NOTICE: NOTIFICATION OF PUBLIC MEETING FOR THE PROPOSED REHABILITATION OF SECTION 7 ON THE N9 BETWEEN MIDDELBURG AND CARLTON HEIGHTS, EASTERN CAPE

Notice is hereby given in terms of Chapter 6 of Government Notice No. R543 under Chapter 5 of the National Environmental Management Act (Act 107 of 1998), of the intent to hold a public meeting.

Date: Wednesday 25 April 2012
Venue: Sherborne Guest Farm (16km from Middleburg)
Time: 17H30

For more information, registration as an Interested and Affected Party (I&AP), or submission of written comments, please contact by phone, fax, post or email the person below.

Coastal & Environmental Services
Attn: Mr Roy De Kock
PO Box 8145
East London
Tel: 043 742 3302
Fax: 043 742 3306
E-mail: r.dekock@cesnet.co.za

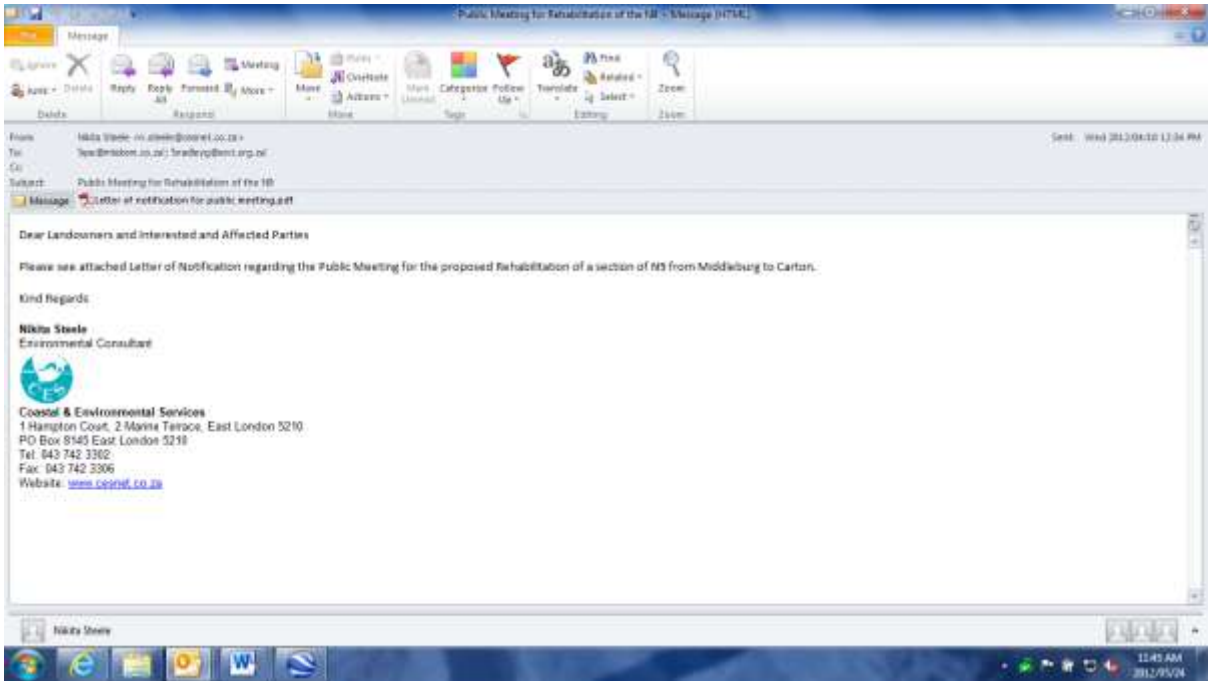
We would like to emphasise that should you consider yourself an interested and/or affected party, we request that you register by simply contacting our office at the details given above. This will ensure that all correspondence and progress with regards to the Environmental Impact Assessment are made available to you in a timeous and transparent manner.

We look forward to hearing from you.

Kind regards

Roy De Kock
Environmental Consultant

COPY OF E-MAILS SEND TO STAKEHOLDERS & I&APS TO NOTIFY THEM OF THE PUBLIC MEETING:



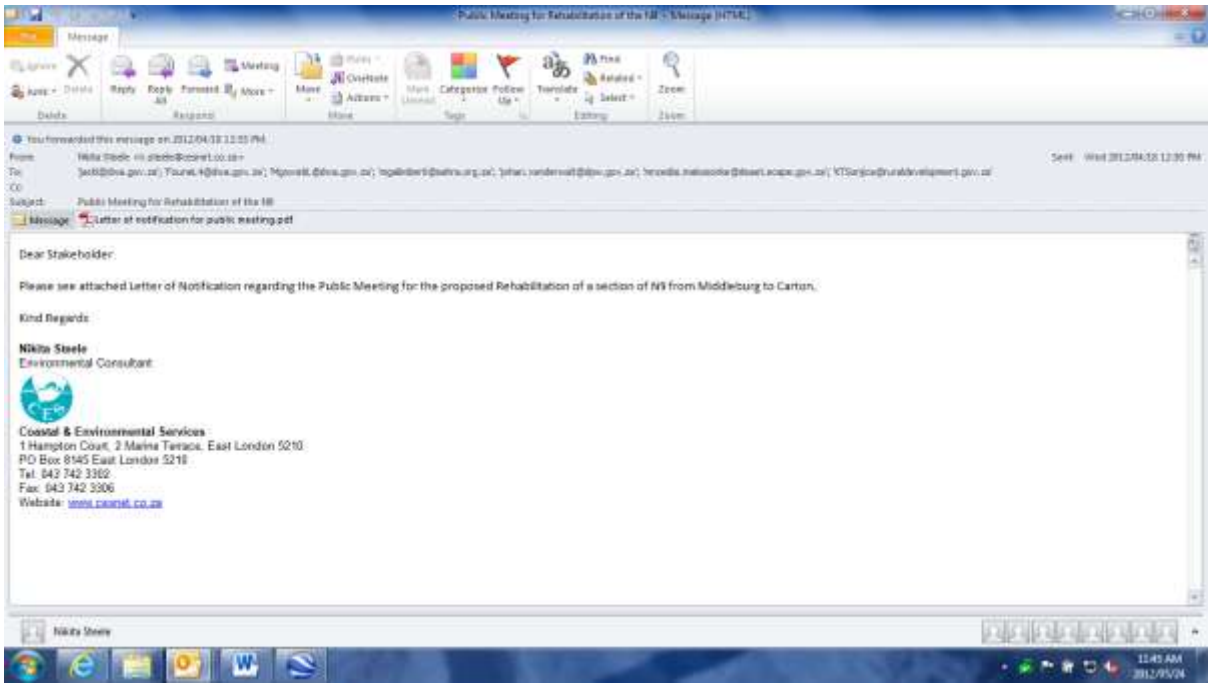
Dear Landowners and Interested and Affected Parties

Please see attached Letter of Notification regarding the Public Meeting for the proposed Rehabilitation of a section of N9 from Middelburg to Carlton.

Kind Regards

Nikita Steele
Environmental Consultant

Coastal & Environmental Services
1 Hampton Court, 2 Marine Terrace, East London 5210
PO Box 8145 East London 5210
Tel: 043 742 3302
Fax: 043 742 3306
Website: www.cesnet.co.za



Dear Stakeholder

Please see attached Letter of Notification regarding the Public Meeting for the proposed Rehabilitation of a section of N9 from Middelburg to Carlton.

Kind Regards

Nikita Steele
Environmental Consultant

Coastal & Environmental Services
1 Hampton Court, 2 Marine Terrace, East London 5210
PO Box 8145 East London 5210
Tel: 043 742 3302
Fax: 043 742 3306
Website: www.cesnet.co.za

ATTANDANCE REGISTER:

ATTENDANCE REGISTER
Rehabilitation of the N9, Middelburg
25 April 2012

NAME	CONTACT	EMAIL	SIGNATURE
BP. Erasmus	Posbus 62 Middelburg 5900	bpe@intekom.co.za	
J Moore	Bus 441 Middelburg 5900	wolwekop@gmail.com	
Bradley Gibbons	PO Box 40 Middelburg, 5900	bradleyg@ewt.org.za	
Gerhard Fourie		gfourie@gibb.co.za	
Stefan Erasmus	Posbus 62 Middelburg 5900	stefanfontein@gmail.com	
Roy de Kock	Po Box 8145 Nahoon 5210	r.dekock@cesnet.co.za	

MINUTES OF MEETING HELD:

Coastal & Environmental Services

East London
2 Marine Terrace, Hampton Court
East London, 5201
Tel: +27 (43) 742 3302;
Fax: +27 (43) 742 3306
Email: cesel@cesnet.co.za

Also in Grahamstown
www.cesnet.co.za

MEETING MINUTES

CLIENT	Arcus Gibb
DATE	25 April 2012
VENUE	Carlton Heights, Middelburg
TIME OF MEETING	17h30
MINUTES BY	Roy de Kock
CIRCULATION DATE	

ATTENDED BY		
NAME	**ASSOCIATION**	**EMAIL ADDRESS**
Pieter Erasmus	Landowner	bpe@intekom.co.za
John Moore	Landowner	wolwekop@gmail.com
Bradley Gibbons	EWT	bradleyg@ewt.org.za
Stefan Erasmus	Landowner	stefanfontein@gmail.com
Gerhard Fourie	Arcus Gibb	gfourie@gibb.co.za
Roy de Kock	CES	r.dekock@cesnet.co.za

Name	Issue	Response
Pieter Erasmus	– Pieter mentions that security at both the quarry site and along the	**Gerhard Fourie:** – Gerhard states that security is always

	road should be looked at as contract workers are catching sheep illegally to slaughter. – He is proposing that all work camps must be placed close to town (Middelburg) and that the client (SANRAL) should invest in employing 1-2 full time guards patrolling the road section. These guards should be trusted locals.	a problem on this type of development (road upgrades). As it is in fact a national issue and not just happening locally. – Both proposals are valid and will be forwarde to the client (SANRAL) for consideration.
Pieter Erasmus	– Pieter tried for a period of 2 years to make contact with someone relevant to discuss the road upgrade. He contacted the appointed land surveyors, SANRAL Port Elizabeth office and various others. No one was able to assist him. – Pieter has a major objection against the proposed Ludlow stream deviation. Not only will the proposed deviation have an obscure and unnatural angle (90°) but a pristine area that stream will be deviated through will be affected. According to Pieter stated that pristine and natural Karoo veld is very scarce and should be preserved. – Pieter feels that it is possible to widen the existing Ludlow bridge and avoid the unnecessary impact on the stream by permanently deviating it.	**Gerhard Fourie**: – Gerhard noted that the existing weir has changed the properties of the stream and that it is not considered "natural" anymore. Also, the bridge is 70 years old and it will be structurally problematic to add on to the bridge by widening it. It has been agreed to replace the existing bridge with a new one. – According to Gerhard the bridge is already at the end of its structural life (in engineering terms); the concrete is old; steel rusted etc. – Also, widening the existing bridge will cause bank erosion on the west side and thus requires gabions etc to stabilise the bank.3 – Water flow is strong in the stream bed when the river comes down and this makes it dangerous (if not impossible) to construct a bridge in the current position. – (P. Erasmus disagreed). – Gerhard is proposing to line new channel to avoid erosion and install energy reducing structures like gabions, as well as rehabilitating the old stream – Replacing the Ludlow Bridge and the 3 Tweefontein culverts further down with 1 structure (the new Ludlow Bridge) will result in a significant cost reduction as well as solve the issue of the Tweefontein culverts overtopping during excessive rains.
	– Pieter states that the weir now slows down the water flow in the Ludlow stream when water flows at high speed and reduces the erosional effect of the stream. – Pieter agrees that there is a need for new culverts at Tweefontein because N9 is already overflowing.	**Roy de Kock** – Noted
	– Combining the Ludlow stream	**Gerhard Fourie**

	bridge with the Tweefontein stream basically merges 2 sources of water. This is dangerous as you now have more water to deal with and this should not be so.	– The engineers have planned for and are of the opinion that the increase stream flow and velocity are accounted for. – Gerhard reminds everyone again of the cost reduction implications of this option. **Roy de Kock** – Roy reminds everyone that DWA was consulted and has indicated that they will consider and assess the Ludlow stream deviation as an alternative. It does not necessary mean that they will approve such an option, merely that they will consider it.
	– What is meant by a No-Go alternative?	**Roy de Kock:** – A general No-Go as an alternative option to the development as a whole refers to the fact that there is always the possibility that the project does not go ahead. – A No-Go as a third alternative to the Ludlow stream deviation refers to no development on Ludlow Bridge. It is required that the EAP looks at this as an alternative and assess the implications of a No Go.
	– Still feels that erosion will be initiated at sharp bends in the proposed Ludlow stream deviation.	**Roy de Kock:** – Noted
Stefan Erasmus	– The existing Ludlow stream does not currently erode. The weir was built to reduce force of the water. Why change something that is currently working perfectly with something that can be considered an "unknown'?	**Roy de Kock:** – Noted
Gerhard Fourie	(Describes and shows the proposed road upgrade and re-alignments at Wolwekop and Flonkers rail-over-road bridge on a map) – Gerhard indicates that the design plans will be left with the landowners. He states that the plans are not the final design layout and are only for information purposes. – Gerhard confirms that the new Flonkers rail-over-road bridge will be constructed to the east of the existing bridge and not to the west as Roy showed in his presentation.	**John Moore:** – Indicates that this makes better sense and he is happy with this.

Pieter Erasmus	Pieter requests that Gerhard and he visit the Ludlow Bridge to discuss the issue of widening the existing bridge.	**Gerhard Fourie:** Gerhard indicates that this will not be required as the engineers have already done this and determined that to replace the existing bridge with a new one will be the best solution.
	Pieter hands Roy a written request of various smaller issues (Inserted at the back) that was not discussed in the meeting.	**Roy de Kock:** – Received
Roy de Kock	Requests Bradley to give comment on this development on behalf of EWT.	**Bradley Gibbons:** – Will do so.
	Thanked everyone for coming and showing an interest in the proposed development. Roy states that the minutes of the meeting will be circulated to all I&APs.	

5. COMMENTS AND RESPONSE REPORT

The practitioner must record all comments and respond to each comment of the public before the application 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 this application. The comments and response report must be attached under Appendix E.

6. AUTHORITY PARTICIPATION

Authorities are key interested and affected parties in each application and no decision on any application will be made before the relevant local authority is provided with the opportunity to give input. The planning and the environmental sections of the local authority must be informed of the application at least 30 (thirty) calendar days before the submission of the application.

List of authorities informed:

- DWA
- SAHRA
- Municipal Manager (Inxuba Yethemba Local Municipality)
- Dept. of Public Works, Eastern Cape
- DEDEA, Queenstown

List of authorities from whom comments have been received:

DWA

7. CONSULTATION WITH OTHER STAKEHOLDERS

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

Any stakeholder that has a direct interest in the site or property, such as servitude holders and service providers, should be informed of the application at least 30 (thirty) calendar days before the submission of the application and be provided with the opportunity to comment.

Has any comment been received from stakeholders?	YES	NO

If "YES", briefly describe the feedback below (also attach copies of any correspondence to and from the stakeholders to this application):

DWA commented the following:

- Activities that will require a water use authorization include the construction and expansion of bridges along the N9 route and the removal or riparian vegetation to accommodate the project activities.
- A wetland specialist should be appointed to determine the presence of wetlands in the affected areas and the boundaries of all wetlands thereof.
- The description of the affected watercourses as well as the assessment of potential impacts of the proposed project and mitigation measures thereof.

EAP comment:

A Wetland specialist was appointed to delineate any wetland and recommend mitigations on any impact on these wetlands. All mitigations and findings were incorporated into this report.

Water use licences are being applied for and will be submitted to the DWA for consideration.

SECTION D: IMPACT ASSESSMENT

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

1. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

List the main issues raised by interested and affected parties.

1. Ludlow stream deviation will cause excessive erosional damage to the surrounding environment. The bridge should be upgraded and no stream deviation should be allowed.
2. Onsite security during the construction phase is a National problem. Contract workers kill and remove sheep from the farm at an alarming rate.

Response from the practitioner to the issues raised by the interested and affected parties (A full response must be given in the Comments and Response Report that must be attached to this report):

1. The issue were forwarded to DWA for decision making. The engineers (Arcus Gibb) is of the opinion that this is the best (fastest, economical and environmentally safe) option. (see minutes of meeting for a detailed description)
2. Arcus will recommend to SANRAL to employ security to patrol the affected area during construction. Unfortunately this is a National problem with no definite solution to the problem.

2. 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

List the potential direct, indirect and cumulative property/activity/design/technology/operational alternative related impacts (as appropriate) 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.

Alternative S1 (Only alternative):

PLANNING AND DESIGN PHASE
POLICY COMPLIANCE
Impact: The proposed development may not be consistent with relevant environmental policy and/or spatial guideline documents.
SOCIAL
Impact: Temporary job creation and skills development.
STORMWATER
Impact: Traffic problems and safety risks may arise as a result of inadequate storm water drainage planning due to inappropriate road design.
Impact: Inappropriate routing of storm water will lead to stream sedimentation and erosion of the surrounding area.
ROAD DESIGN
Impact: Inappropriate road design and alignment of the new Flonkers bridge road section may lead to stream sedimentation and erosion of the Wolwekop Stream.

BRIDGE DESIGN
Impact: Upgrading and widening of bridges over rivers may result in water flow problems such as hampering flow or bank erosion.
Impact: Widening of the bridge over Ludlow stream will result in permanently deviating stream flow.
HERITAGE
Impact: Re-routing of road section at Flonkers rail-over-road bridge will affect a Late Stone Age site identified in the Heritage Assessment.
Impact: Re-use of the borrow pit along the N9 (coordinates: 31° 23.729'S; 25° 1.846'E) will result in damage to a Late Stone Age site identified in the Heritage Assessment.
Impact: Modification/upgrade/destruction of both the Ludlow Spruit and the Seligman Spruit bridge will result in damage to heritage sites older than 60 years.
PALAEONTOLOGY
Impact: Road upgrade may affect possible fossils found in some of the surrounding sedimentary layers.
TRAFFIC
Impact: Inadequate planning for high volume construction vehicles on the surrounding roads will impact traffic flow.
WASTE MANAGEMENT
Impact: Failure to plan for waste management storage can lead to unsanitary conditions & poor waste management practices.
QUARRY SITE
REFER TO THE MINING EMPr IN APPENDIX G

CONSTRUCTION PHASE
AIR POLLUTION
Impact: Dust (air) pollution caused by grading and levelling exposed land can cause a nuisance to neighbouring residential areas and businesses close to Middelburg.
NOISE POLLUTION
Impact: Noise pollution caused during construction could potentially be a nuisance to neighbouring residential areas and businesses close to Middelburg.
VISUAL
Impact: Impact on existing views of sensitive visual receptors caused by the presence of construction activities.
HAZARDOUS SUBSTANCE STORAGE & USAGE
Impact: Concrete, tar and bitumen mixing techniques and diesel/oil spillage occurring as a result of poorly maintained machinery can lead to soil pollution.
Impact: Spillage of any hazardous substances such as fuel, chemicals, paint, etc. that can contaminate ground and groundwater.
Impact: Inappropriate responses to petrochemical or hazardous spill
Impact: Inappropriate hazardous material storage can lead to spillages and contamination of ground water.
WORKER HEALTH AND SAFETY
Impact: Inadequate attention to fire safety awareness and fire safety equipment could result in unsafe working environment and loss of property.
Impact: Failure to provide adequate onsite sanitation and clean drinking water may result in runoff transferring contaminants into the surrounding environment.
WASTE MANAGEMENT
Impact: Construction rubble left onsite may attract vermin and encourage the growth of opportunistic

alien vegetation.
Impact: Littering on site may attract vermin, detract from the visual appeal of the area, and pollute the surrounding areas.
Impact: Hazardous waste e.g. used oils, offcuts, etc., could pollute surface and groundwater resources if not properly contained.
TRAFFIC
Impact: High amount of construction vehicles will impact traffic flow.
SOCIAL
Impact: Temporary job creation during the construction phase.
RIVERS & STREAMS
Impact: Potential negative impacts (e.g. Bulldozers, rubble etc.) on the various rivers and streams crossing the N9.
ROAD RE-ROUTING
Impact: Dumping construction rubble into or close to the Wolwefontein Stream may cause stream blockage, erosion, stream diversion etc.
STORM WATER MANAGEMENT
Impact: Runoff of stormwater containing contaminants, silt, sand and litter may contaminate the surrounding environment.
QUARRY SITE
REFER TO THE MINING EMPr IN APPENDIX G
WATER QUALITY
Impact: Decrease in groundwater infiltration.
Impact: Increase in water flow velocity.
WATER QUANTITY
Impact: Contamination of aquatic environment.
Impact: Increase in solid waste**.**
Impact: Loss of arable land.

OPERATIONAL PHASE
MAINTENANCE
Impact: Toxicants (such as heavy metals, hydrocarbons, surfactants and oils) spilled from vehicles may negatively impact the surrounding environment and biodiversity.
Quarry site
REFER TO THE MINING EMPr IN APPENDIX G

NO-GO OPTION
If the development does not proceed, none of the impacts identified will take place.

3. ENVIRONMENTAL IMPACT STATEMENT

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

Alternative S1 (only alternative)

Table 3.1: Issues and Impacts during the Planning and Design Phase: Pre- and post-mitigation assessment

PLANNING AND DESIGN PHASE								
		Pre mitigation					Post mitigation	
Nature of impact	Impact Description	Temporal	Spatial	Likelihood	Severity	Significance	Mitigation	Significance
POLICY COMPLIANCE								
Legal & policy compliance	The proposed development may not be consistent with relevant environmental policy and/or spatial guideline documents.	Permanent	Localised	Possible	Severe	MODERATE NEGATIVE	Development should coincide with relevant legislation and/or policy, e.g. ECBCP, Municipal By-laws, SDFs, etc.	LOW NEGATIVE
SOCIAL								
Job creation during the proposed development's lifespan.	Temporary job creation and skills development.	Long Term	Project Level	Probable	Very Beneficial	HIGH POSITIVE	N/A	HIGH POSITIVE
STORMWATER								
Inadequate planning of drainage	Traffic problems and safety risks may arise as a result of inadequate storm water drainage planning due to inappropriate road design.	Long term	Project Level	Possible	Moderate Severe	MODERATE NEGATIVE	Flood attenuation and storm water management plans must be drawn up by a qualified engineer and approved by DEA and DWA.	LOW NEGATIVE
Inappropriate routing	Inappropriate routing of storm water will lead to stream sedimentation and erosion of the surrounding area.	Long term	Project Level	Possible	Moderate Severe	MODERATE NEGATIVE	Flood attenuation and storm water management plans must be drawn up by a qualified engineer and approved by DEA and DWA.	LOW NEGATIVE
ROAD DESIGN								
Environmental damage to the surrounding area	Inappropriate road design and alignment of the new Flonkers bridge road section may lead to stream sedimentation and erosion of the Wolwekop Stream.	Long term	Project Level	Possible	Moderate Severe	MODERATE NEGATIVE	Ensure that there is proper drainage of surface water away from the new road and that it does not cause any erosion. Ensure that the new road is more than 32m from the Wolwekop stream.	LOW NEGATIVE
BRIDGE DESIGN								
Impacting various Streams & Rivers along the road upgrade.	Upgrading and widening of bridges over rivers may result in water flow problems such as hampering flow or bank erosion.	Long term	Project Level	Definite	Moderately severe	HIGH NEGATIVE	Ensure that the bridge design does not impede the flow of water or cause erosion in these rivers/streams.	MODERATE NEGATIVE

							Ensure there is proper drainage of stormwater away from these bridges.	
Deviating stream flow	*Widening of the bridge over Ludlow stream will result in permanently deviating stream flow.*	*Long term*	*Localised*	*Definite*	*Moderately severe*	*HIGH NEGATIVE*	*Ensure that the new course layout does not cause major erosion or structural damage to the bridge or road infrastructure*	*MODERATE NEGATIVE*
HERITAGE								
Late Stone Age site close to Flonkers bridge.	*Re-routing of road section at Flonkers rail-over-road bridge will affect a Late Stone Age site identified in the Heritage Assessment.*	*Permanent*	*Localised*	*Definite*	*Moderately severe*	*LOW NEGATIVE*	*The site will need to be sampled if affected, and SANRAL will need to apply for a permit to destroy or damage these sites.*	*LOW NEGATIVE*
Late Stone Age site close to identified existing borrow pit.	*Re-use of the borrow pit along the N9 (coordinates: 31o 23.729'S; 25o 1.846'E) will result in damage to a Late Stone Age site identified in the Heritage Assessment.*	*Permanent*	*Localised*	*Definite*	*Moderately severe*	*LOW NEGATIVE*	*The site will need to be sampled if affected, and SANRAL will need to apply for a permit to destroy or damage these sites.*	*LOW NEGATIVE*
Bridges older than 60 years are protected by NHRA.	*Modification/upgrade/destruction of both the Ludlow Spruit and the Seligman Spruit bridge will result in damage to heritage sites older than 60 years.*	*Permanent*	*Localised*	*Definite*	*Moderately severe*	*LOW NEGATIVE*	*Modifying, or destroying and rebuilding these bridges in any manner requires a SAHRA Built Environment permit.*	*LOW NEGATIVE*
PALAEONTOLOGY								
Possible fossils present is some of the affected sedimentary layers	*Road upgrade may affect possible fossils found in some of the surrounding sedimentary layers.*	*Permanent*	*Project level*	*Possible*	*needs to be assessed by a palaeontologist*	*NEEDS TO BE ASSESSED BY A PALAEONTOLOGIST*	*A Phase 1 paleontological survey should be undertaken to identify possible fossil sites, and mitigated accordingly.*	*NEEDS TO BE ASSESSED BY A PALAEONTOLOGIST*
TRAFFIC								
Construction vehicles impacting traffic flow,	*Inadequate planning for high volume construction vehicles on the surrounding roads will impact traffic flow.*	*Short Term*	*Localised*	*Definite*	*Moderately severe*	*MODERATE NEGATIVE*	*A Traffic Impact Assessment is required.*	*LOW NEGATIVE*
WASTE MANAGEMENT								
Storage	*Failure to plan for waste management storage can lead to unsanitary conditions & poor waste management practices.*	*Permanent*	*Localised*	*Definite*	*Moderately severe*	*MODERATE NEGATIVE*	*Ensure that a proper Waste Management Plan is designed and implemented.*	*LOW NEGATIVE*
QUARRY SITE								

REFER TO THE MINING EMPr IN APPENDIX G

Table 3.2: Issues and Impacts during the Construction Phase: Pre- and post-mitigation assessment

CONSTRUCTION PHASE								
		Pre mitigation					Post mitigation	
Nature of Impact	Impact Description	Temporal	Spatial	Likelihood	Severity	Significance	Mitigation	Significance
AIR POLLUTION								
Dust nuisance	Dust (air) pollution caused by grading and levelling exposed land can cause a nuisance to neighbouring residential areas and businesses close to Middelburg.	Short Term	Localised	Probable	Moderately severe	MODERATE NEGATIVE	• Cleared surfaces must be dampened whenever possible and especially in dry and windy conditions to avoid excessive dust generation. • Any soil excavated, and not utilised for rehabilitation, must be removed from site or covered and no large mounds of soil should be left behind after construction.	LOW NEGATIVE
NOISE POLUTION								
Nuisance	Noise pollution caused during construction could potentially be a nuisance to neighbouring residential areas and businesses close to Middelburg.	Short Term	Localised	Possible	Slight	MODERATE NEGATIVE	• Construction activity close to Middelburg, which includes the movement of construction vehicles, must be restricted to normal working hours (7:00am – 17:00pm).	LOW NEGATIVE
VISUAL								
Construction activities impacting on visual receptors.	Impact on existing views of sensitive visual receptors caused by the presence of construction activities.	Short Term	Localised	Definite	Moderately Severe	LOW NEGATIVE	• Limited mitigation to contain the impact of auxiliary activities such as clearance of vegetation, road construction and control of waste and littering on camp sites.	LOW NEGATIVE
HAZARDOUS SUBSTANCE STORAGE & USAGE								
Site contamination due to hazardous substance usage	Cement, tar and bitumen mixing techniques and diesel/oil spillage occurring as a result of poorly maintained machinery can lead to soil pollution.	Short Term	Localised	Possible	Moderately severe	MODERATE NEGATIVE	• Concrete should not be mixed directly on the ground, or during rainfall events when the potential for transport to the stormwater system is the greatest (as per the EMPr). • Concrete must be mixed only in the area demarcated for this purpose and on an impermeable substratum. • Oil trays must be placed under the machinery to avoid soil contamination. All areas affected during the Construction Phase should be rehabilitated	LOW NEGATIVE
Site contamination due to spillage of hazardous substances	Spillage of any hazardous substances such as fuel, chemicals, paint, etc. that can contaminate ground and groundwater.	Short Term	Localised	Possible	Severe	HIGH NEGATIVE	• Hazardous Chemical Substances Regulations promulgated in terms of the Occupational Health and Safety Act 85 of 1993 and the SABS Code of Practise must be adhered to. This applies to solvents and other chemicals possibly used in the construction process. • Depending on the nature and extent of the spill, contaminated soil must be either excavated or treated on-site.	LOW NEGATIVE

							• *The ECO must determine the precise method of treatment of polluted soil.* • *This could involve the application of soil absorbent materials or oil-digestive powders to the contaminated soil.* • *If a spill occurs on an impermeable surface such as cement or concrete, the surface spill must be contained using oil absorbent materials.* • *Contaminated remediation materials must be carefully removed from the area of the spill so as to prevent further release of petrochemicals to the environment, and stored in adequate containers until appropriate disposal.*	
	Inappropriate responses to petrochemical or hazardous spill	***Long Term***	*Localised*	*Possible*	*Severe*	*MODERATE NEGATIVE*	• *The individual responsible for or who discovers the petrochemical spill must report the incident to the Project Coordinator, ECO and or Contractor as soon as reasonably possible.* • *The problem must be assessed and the necessary actions required will be undertaken.* • *The immediate response must be to contain the spill.*	*LOW NEGATIVE*
Site contamination due to inappropriate storage of hazardous substances	*Inappropriate hazardous material storage can lead to spillages and contamination of ground water.*	***Long Term***	*Localised*	*Possible*	*Severe*	*MODERATE NEGATIVE*	• *Staff that will be handling hazardous materials must be trained to do so.* • *Hazardous Chemical Substances Regulations promulgated in terms of the Occupational Health and Safety Act 85 of 1993 and the SABS Code of Practise must be adhered to. This applies to solvents and other chemicals possibly used in the construction time.* • *All hazardous chemicals must be properly stored in a secure, bunded and contained area.*	*LOW NEGATIVE*
WORKER HEALTH AND SAFETY								
Health risk associated with fires	*Inadequate attention to fire safety awareness and fire safety equipment could result in unsafe working environment and loss of property.*	***Long Term***	*Project Level*	*Possible*	*Very Severe*	*MODERATE NEGATIVE*	• *Fire fighting equipment should be present on site at all times as per Occupational Health and Safety Act.* • *All construction foremen must be trained in fire hazard control and fire fighting techniques.* • *All flammable substances must be stored in dry areas which do not pose an ignition risk to the said substances.* • *No open fires will be allowed on site unless in a demarcated area identified by the ECO.* • *No smoking near flammable substance.* • *All cooking shall be done in demarcated areas that are safe in terms of runaway or uncontrolled fires.* • *The Contractor shall have operational fire-fighting equipment available on site at all times. The level of fire fighting equipment must be assessed and evaluated thorough a typical risk assessment process.*	*LOW NEGATIVE*

Sanitation and water	*Failure to provide adequate onsite sanitation and clean drinking water may result in runoff transferring contaminants into the surrounding environment.*	*Short Term*	*Localised*	*Possible*	*Moderately Severe*	*MODERATE NEGATIVE*	• *Adequate sanitary and ablutions facilities must be provided for construction workers* • *The facilities must be regularly serviced to reduce the risk of surface or groundwater pollution.* • *Contaminated wastewater must be managed by the Contractor to ensure existing water resources on the site are not contaminated. All wastewater from general activities in the camp shall be collected and removed from the site for appropriate disposal at a licensed commercial facility.*	*LOW NEGATVE*
WASTE MANAGMENT								
Building construction rubble	*Construction rubble left onsite may attract vermin and encourage the growth of opportunistic alien vegetation.*	*Short Term*	*Localised*	*Possible*	*Slight*	*LOW NEGATIVE*	• *Construction rubble shall be disposed of in pre – agreed, demarcated spoil dumps that have been approved by Inxuba Yethemba Municipality.*	*LOW NEGATIVE*
Littering	*Littering on site may attract vermin, detract from the visual appeal of the area, and pollute the surrounding areas.*	*Short Term*	*Localised*	*Possible*	*Slight*	*LOW NEGATIVE*	• *Littering by the employees of the Contractor shall not be allowed under any circumstances. The ECO shall monitor the neatness of the work sites as well as the Contractor campsite.* • *All waste must be removed from the site and transported to the licenced landfill site in Queenstown.*	*LOW NEGATIVE*
Hazardous waste	*Hazardous waste e.g. used oils, offcuts, etc., could pollute surface and groundwater resources if not properly contained.*	*Short Term*	*Localised*	*Possible*	*Moderately Severe*	*LOW NEGATIVE*	• *All waste hazardous materials must be carefully stored as advised by the ECO, and then disposed of offsite at the licensed hazardous landfill site in Port Elizabeth.* • *Contaminants to be stored safely to avoid spillage* • *Machinery must be properly maintained to keep oil leaks in check.*	*LOW NEGATIVE*
TRAFFIC								
Construction vehicles impacting on the traffic flow	*High amount of construction vehicles will impact traffic flow.*	*Short Term*	*Localised*	*Definite*	*Moderately severe*	*MODERATE NEGATIVE*	• *A Traffic Management Plan must be implemented.*	*LOW NEGATIVE*
SOCIAL								
Job creation	*Temporary job creation during the construction phase.*	*Short Term*	*Localised*	*Definite*	*Beneficial*	*BENEFICIAL*	*N/A*	*BENEFICIAL*
RIVERS & STREAMS								
Rivers/Streams impacted by proposed development	*Potential negative impacts (e.g. Bulldozers, rubble etc.) on the various rivers and streams crossing the N9.*	*Short term*	*Project level*	*definite*	*Moderately severe*	*MODERATE NEGATIVE*	• *Ensure that no construction rubble is left in these rivers and streams after completion of work..* • *The river/stream must be returned to its natural state after construction.* • *Assessment from a specialist is required after completion of the bridge upgrades and must be included in the final ECO report.*	*LOW NEGATIVE*

ROAD RE-ROUTING								
Environmental damage to Wolwefontein Stream	*Dumping construction rubble into or close to the Wolwefontein Stream may cause stream blockage, erosion, stream diversion etc.*	*Short term*	*Localised*	*Possible*	*Moderate Severe*	*MODERATE NEGATIVE*	• *No building rubble may be dumped into the Wolwefontein Stream.*	*LOW NEGATIVE*
WETLANDS								
Wetland water quantity impacted by proposed development	*Decrease in groundwater infiltration*	*Long term*	*Localised*	*Probable*	*Slight*	*MODERATE NEGATIVE*	• *Stormwater (and road-surface run-off) should be redirected towards remaining wetland features to increase groundwater infiltration, thereby providing sufficient soil moisture to support wetland species.*	*LOW NEGATIVE*
	Increase in surface water flow velocity	*Long term*	*Localised*	*Definite*	*Moderate Severe*	*MODERATE NEGATIVE*	• *The diameters of stormwater pipes should be sufficiently large so as to not result in overly high flow velocities during rainfall events.* • *The flow of stormwater onto the wetland features should be moderated.*	*LOW NEGATIVE*
Wetland water quality impacted by proposed development	*Contamination of aquatic environment*	*Medium term*	*Study area*	*Probable*	*Moderate Severe*	*MODERATE NEGATIVE*	• *The contractor must notify the CM and ECO immediately of any pollution incidents on site* • *Wash areas must be placed and constructed in such a manner so as to ensure that the surrounding areas, which include groundwater, are not polluted* • *A Method Statement is required for all wash areas where hydrocarbon, hazardous materials and pollutants are expected to be used. This includes but is not limited to, vehicle washing, workshop wash bays, paint wash and cleaning.* • *The contractor must prevent discharge of any pollutants, such as cements, concrete, lime, chemicals and fuels into any water sources.* • *Runoff from fuel depots/workshops/truck washing areas and concrete swills must be directed into a conservancy tank and disposed off at a site approved by the CM.* • *The contaminated water, contaminated runoff, or effluent may also require analysis prior to disposal.* • *Avoid releasing untreated effluent.*	*LOW NEGATIVE*
	Increase in solid waste	*Long term*	*Study area*	*Definite*	*Severe*	*HIGH NEGATIVE*	• *All solid waste must be adequately stored and disposed of during construction.* • *Ensure that structures like berms are built to prevent soil from entering wetlands during construction as this can result in sedimentation.* • *No dumping of waste is to be allowed on site either during*	*LOW NEGTATIVE*

							• *construction.* • *Littering and any dumping of waste must be discouraged, especially within any wetland areas.*	
	Loss of arable land	*Short term*	*Study area*	*Probable*	*Severe*	*HIGH NEGATIVE*	• *The diameters of stormwater pipes should be sufficiently large so asto not result in overly high flow velocities during rainfall events.* • *The flow of stormwater onto the wetland features should be moderated.*	*LOW NEGATIVE*
STORM WATER MANAGEMENT								
Offsite contamination due to runoff	*Runoff of stormwater containing contaminants, silt, sand and litter may contaminate the surrounding environment.*	*Long Term*	*Localised*	*Probable*	*Severe*	*HIGH NEGATIVE*	• *The site must be managed in a manner that prevents pollution of drains, downstream watercourses or groundwater, due to suspended solids, silt or chemical pollutants.* • *Temporary cut-off drains and berms may be required to capture storm water and promote infiltration.* • *The area must be monitored by an ECO on a regular basis as described in the EMPr.*	*LOW NEGATIVE*
QUARRY SITE								
REFER TO THE MINING EMPr IN APPENDIX G								

Table 3.3: Issues and Impacts during the Operation Phase: Pre- and post-mitigation assessment

OPERATIONAL PHASE								
	Pre mitigation						*Post mitigation*	
Nature of Impact	*Impact Description*	*Temporal*	*Spatial*	*Likelihood*	*Severity*	*Significance*	*Mitigation*	*Significance*
MAINTENANCE								
Toxicants spilling from vehicles	*Toxicants (such as heavy metals, hydrocarbons, surfactants and oils) spilled from vehicles may negatively impact the surrounding environment and biodiversity.*	*Medium term*	*Project level*	*Possible*	*Moderately severe*	*MODERATE NEGATIVE*	*No mitigation proposed.*	*MODERATE NEGATIVE*
QUARRY SITE								
REFER TO THE MINING EMPr IN APPENDIX G								

No-go alternative (compulsory)

NO-GO OPTION
If the development does not proceed, none of the negative impacts identified will take place.

SECTION E. RECOMMENDATIONS 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~~
Is an EMPr attached?	YES	~~NO~~

The EMPr must be attached as Appendix F.

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:

SUMMARY OF THE PROPOSED DEVELOPMENT

The South African National Roads Agency (SANRAL) is proposing to upgrade the 27km section of National Road (N9) between Middelburg and Carlton Heights in the Eastern Cape Province. Arcus Gibb has been appointed by the SANRAL as the project managers who subcontracted Coastal & Environmental Services (CES) as Environmental Assessment Practitioner (EAP).

The proposed activity includes widening the existing road and reconstructing the road to provide the requisite level of service both in terms of geometrics and pavement structure, and reinforcing the existing pavement. The Flonkers "rail over road bridge" will be demolished and reconstructed and the road deviated to accommodate the new "rail over road bridge". A number of other "river crossing bridges" will be reconstructed, widened and rehabilitated. The road will not result in the widening of road reserve boundaries and should not intrude into private-owned land at any point.

In addition to the EIA process, a water use license application will be undertaken in accordance to the requirements of the National Water Act of 1998 (Act No. 36 of 1998) regulated by the Department of Water Affairs (DWA) for the upgrade and widening of 11 bridges within the road section.

A mining license application will also be submitted for an existing quarry site (called Wolwekop) in accordance with the regulations pertaining to the Minerals and Petroleum Resources Development Act (Act No.28 of 2002) regulated by the Department of Mineral Resources.

As this development entails the upgrade of existing infrastructure (road and bridges), the only alternative considered will be the "no development option".

It is mandatory to consider the no development (no-go) alternative in the EIA process. In context of this project it implies the consideration that the road upgrade will not take place.

The bridge over Ludlow Stream needs to be upgraded and widened to suit the new road alignment; however it is impossible to widen the bridge at the current angle which the stream runs below. SANRAL engineers have therefore suggested a realignment of the Ludlow Spruit as shown in Figure 1 below. There are two alternatives proposed. In the preferred alternative, the current spruit will be diverted to run parallel to the road to where it will cross at Tweefontein

Culvert 3 and re-join with the original Ludlow Spruit. A new bridge at Tweefontein culvert 3 will be build and the existing stream bed will be rehabilitated. The existing bridge will be demolished. The existing bridge will act as a river crossing for traffic until completion of the new bridge.

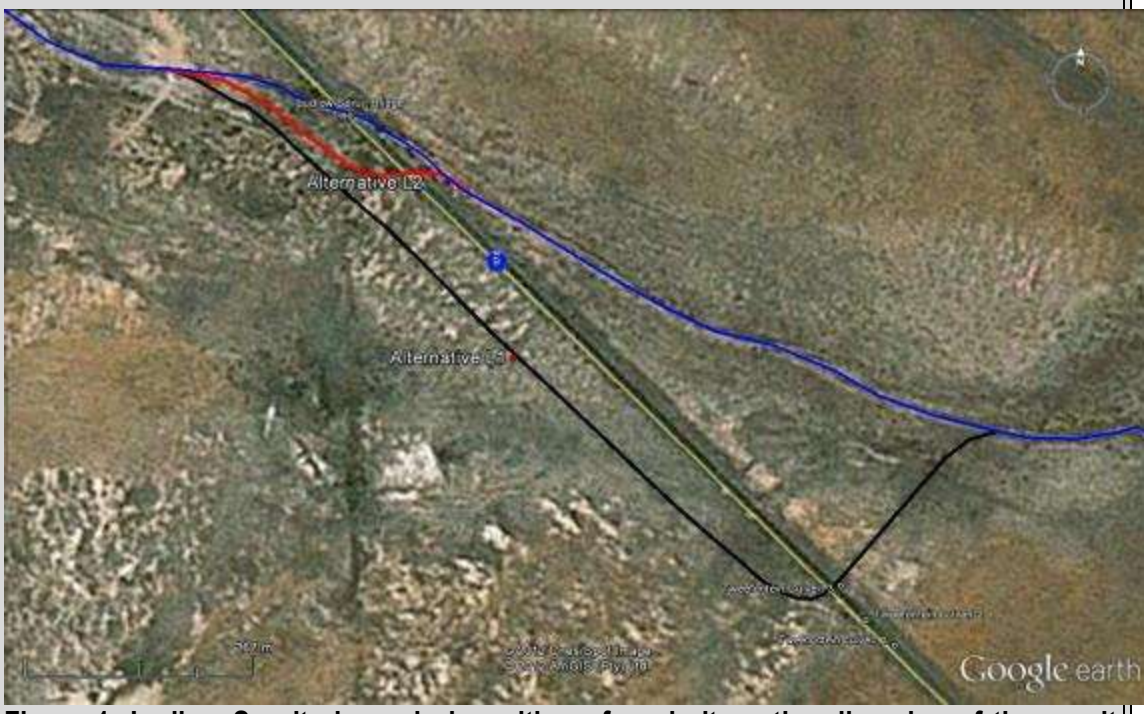


Figure 1: Ludlow Spruit shown in lue with preferred alternative diversion of the spruit (L1) shown in black and alternative L2 shown in red.

Alternative L2 will be diverting the Ludlow Stream to a new Bridge under the N9 (see Figure 1). The existing stream bed will be rehabilitated, and the existing bridge demolished. The existing bridge will act as a river crossing for traffic until completion of the new bridge.

The road will be re-aligned at two places namely Wolwekop pass and the Flonkers rail over road.

Flonkers rail over bridge

The railway line runs parallel to the N9 at some places, but is still outside the road reserve and will not be impacted. The railway line crosses the N9 through a bridge over the road at Wolwekop.

This bridge will be upgraded and possibly re-aligned to the new road layout.

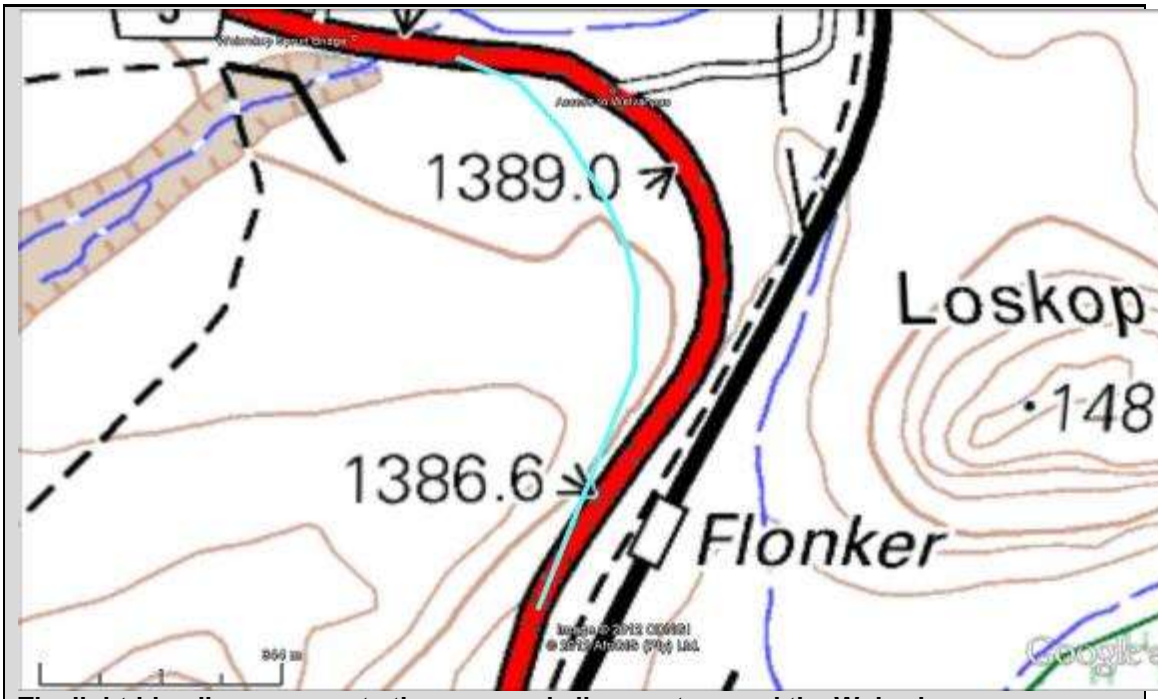
New road alignment at the Flonkers Rail over Road bridge.

SANRAL is proposing the decommissioning and subsequent removal of the existing Flonkers Bridge, and the construction of a new upgraded bridge allowing for the proposed road widening, at a new site next to the existing bridge.

The main reason for this alteration is current height clearance problems coinciding with a major storm water drainage problem. Deepening the existing Flonkers Bridge to solve the current height problem, will only enhance the current drainage problem as this section is already lying in a low lying area that does not allow storm water to flow away from the road. The only viable solution is to build a new bridge underneath the railway line in a higher lying area slightly to the west.

Wolwekop pass

The curve of the road around Wolwekop will be re-aligned to allow for a less sharp and saver curve of the road. All extra rock and sediment from this road cutting will be used as road fill for the rest of the project area.

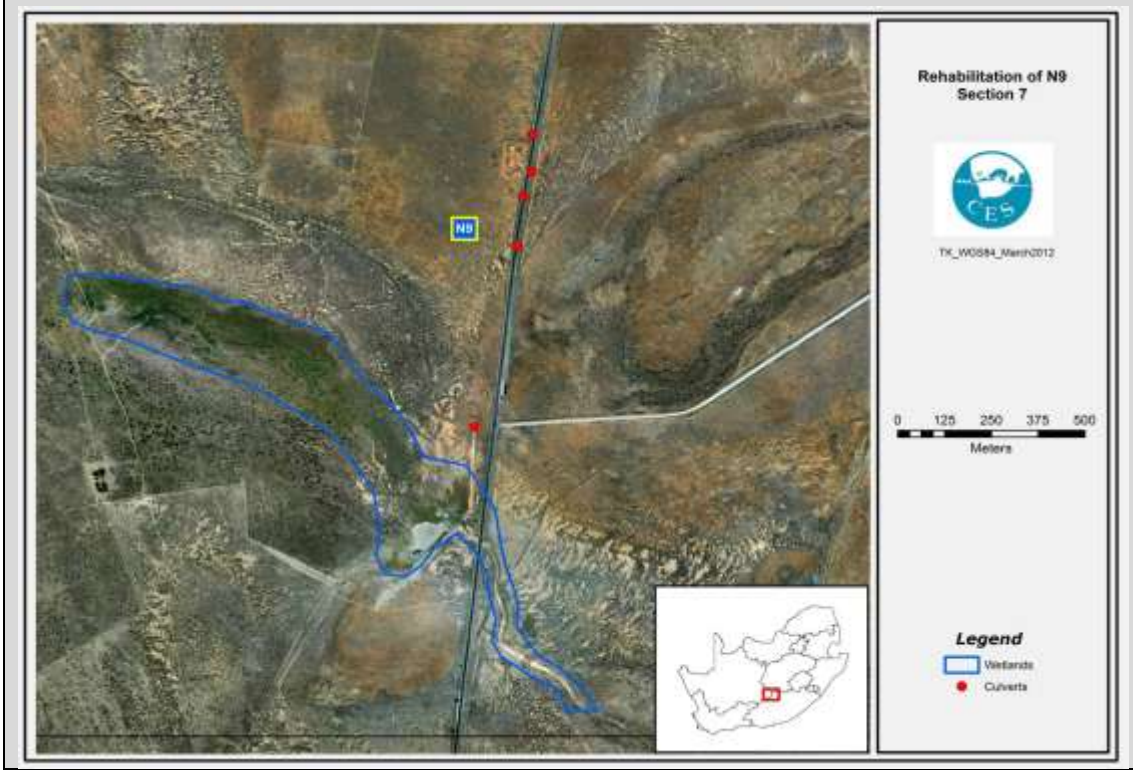


The light-blue line represents the new road alignment around the Wolwekop pass.

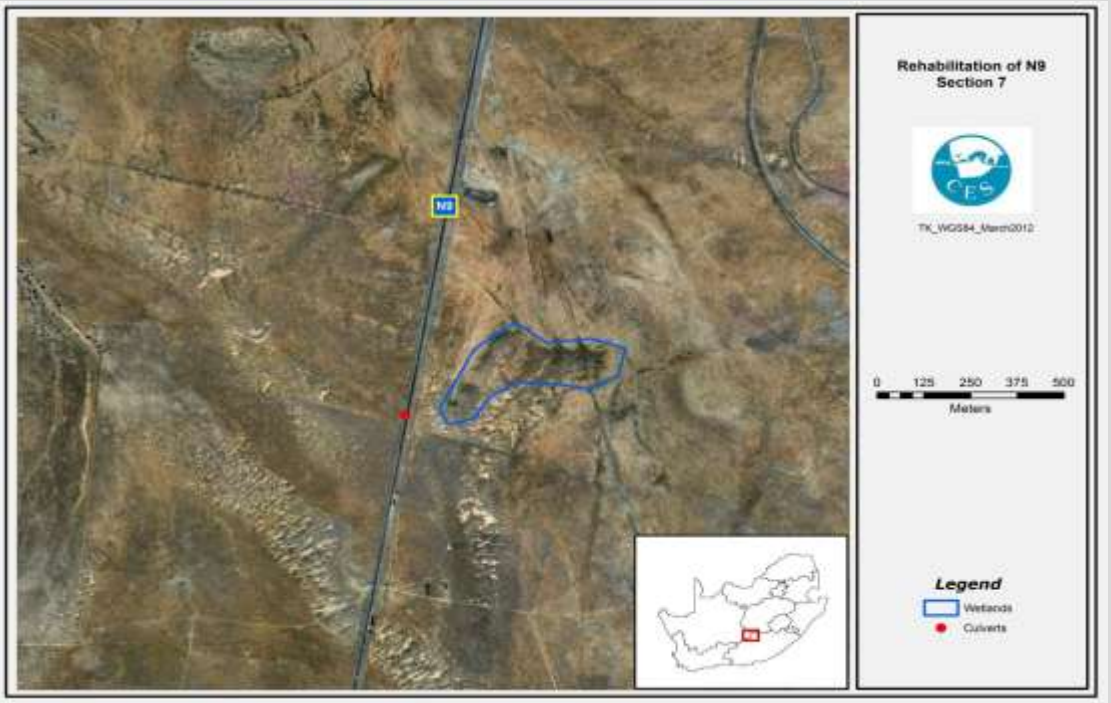
Wetlands

Four man-made wetlands were identified and delineated along the impacted section of the N9:

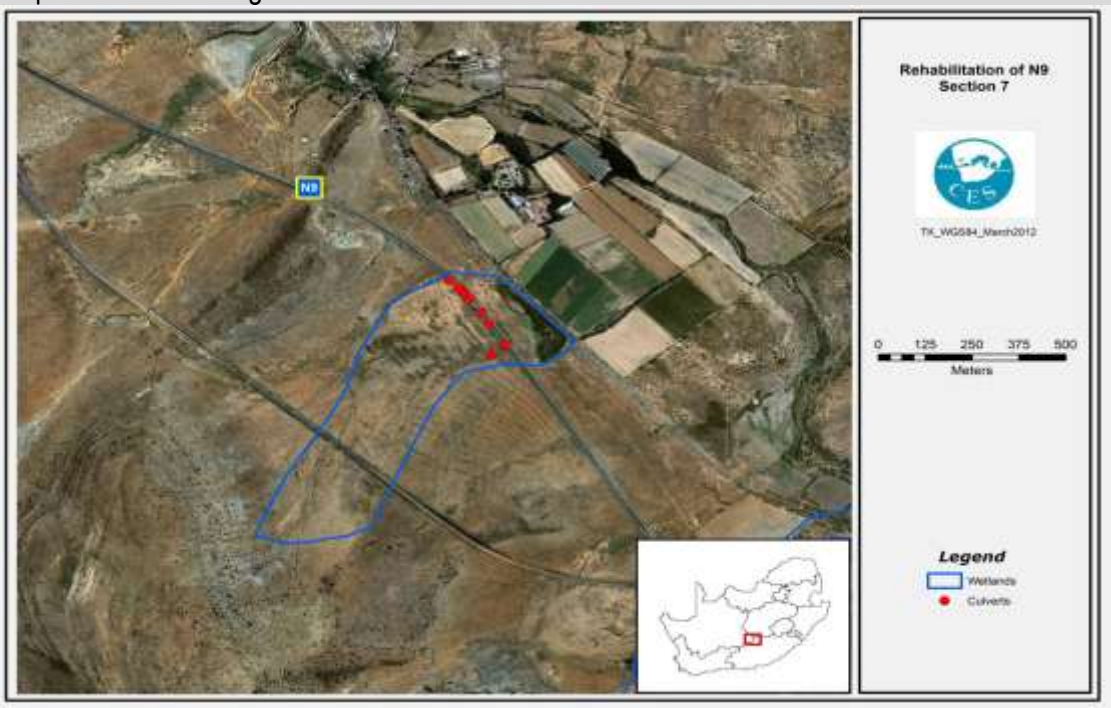
1. Elandskloof wetland
2. Borehole along N9
3. Elandskloof wetland
4. Wolwekop wetland



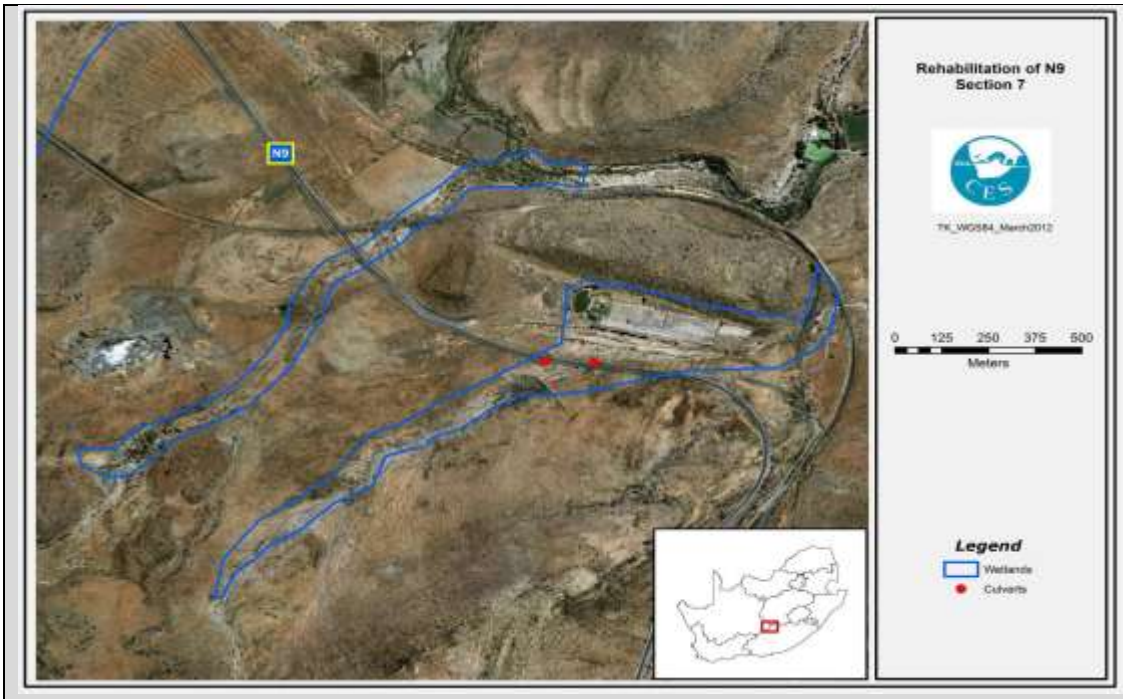
Map 1: Elandskloof wetland.



Map 2: Borehole along the N9



Map 3: Southernwood wetland



Map 4: Wolwekop wetland

No natural wetlands were identified along the affected area of the N9. All areas identified occurred as a result of human intervention. These are mostly in drainage channels or small streams. Two of the identified wetlands are formed by weirs built on rivers west of the road. These two wetlands can be regarded as 'valley bottom with a channel' type wetland. Both are within a 100 meter distance from the roadThese wetlands are dominated by *Phragmites australis* and *Typha capensis*, which prefer permanent water sources. Overall the present ecological state of these wetlands falls within a category 'D', indicating that these wetlands have been largely modified. Thus, a large change in ecosystem processes and loss of natural habitat and biota has occurred.

The hydrology of both these wetlands falls within a category E. This means that the change in ecosystem processes and loss of natural habitat and biota is great but some remaining natural habitat features are still recognizable. However, this is not likely to worsen or improve in the next five years.

The state of the vegetation of the wetland falls within a category D. The vegetation of the wetland is largely modified. This may be caused by the drainage of the areas around the streams and rivers in the area to make way for arable fields. A large change in ecosystem processes and loss of natural habitat and biota has occurred. However, this is not likely to worsen in the next five years, provided no development takes place within the 15m buffer of the wetland. The deep flooding by the man-made dams within the wetland has caused the greatest impact on the wetland, and the wetland vegetation. This has resulted in a situation where flooding is too deep for emergent vegetation to grow.

A detailed list of plant species is indicated in Appendix 2 of the Wetland specialist report. No species of conservation concern were found.

The greatest proportion of animals included mostly Grebes, Ducks, Geese, Cormorants and Herons. All species found have no conservation concern.

The highest number of faunal species was observed in the Southernwood wetland with the highest number of habitats, i.e. reed / sedge cover, as well as shallow and deep water areas. This wetland also had the highest number of plant, bird and amphibian species.

Biophysical environment

Vegetation types found in the area includes Eastern Upper Karoo vegetation and Tarkastad Montane Scrubland). Over 95% of the affected and surrounding area makes up Eastern Upper Karoo vegetation that consists of gently sloping plains dominated by dwarf microphyllous scrubs and 'white' grasses of the genera Aristata and Eragrostis. Tarkastad Montane Scrubland is found on ridges and hills characterised by high surface rock cover. The vegetation is low, semi-open mixed scrubland with grasses and dwarf scrubs. Both vegetation types are considered Least Threatened by SANBI.

Conservation status

According to ECBCP, two different CBA's were identified in the study site. The largest section of the study area, including the proposed Wolwekop quarry site falls under CBA 3, classifying it as functional landscape. Recommended land use management involves managing this area for sustainable development. This involves keeping all natural habitats intact in wetlands (including wetland buffers) and riparian zones.

The area around the town of Middelburg classifies as transformed landscape, classifying it as 'towns & settlements' (CBA 4). Recommended land use management involves managing the environment for sustainable development.

SUMMARY OF SIGNIFICANT IMPACTS (all impacts that are High pre-mitigation)

The proposed development will result in a number of impacts, both positive and negative, during the Planning and Design, Construction and Operation Phases (see table below). The phase with the highest number of impacts is the construction phase; however these impacts are not rated as significant. The following table provides a summary of the pre-mitigation impacts that were ranked as **HIGH.**

PLANNING & DESIGN PHASE		
Impacts	**Significance pre-mitigation**	**Significance post-mitigation**
BRIDGE DESIGN		
Impacting various Streams & Rivers along the road upgrade – Upgrading and widening of bridges over rivers may result in water flow problems such as hampering flow or bank erosion.	HIGH NEGATIVE	MODERATE NEGATIVE
Deviating stream flow – Widening of the bridge over Ludlow stream will result in permanently deviating stream flow.	HIGH NEGATIVE	MODERATE NEGATIVE
SOCIAL		

Job creation during the proposed development's lifespan. – Temporary job creation and skills development.	HIGH POSITIVE	HIGH POSITIVE

CONSTRUCTION PHASE		
Impacts	**Significance pre-mitigation**	**Significance post-mitigation**
HAZARDOUS SUBSTANCE STORAGE & USAGE		
Site contamination due to spillage of hazardous substances – Spillage of any hazardous substances such as fuel, chemicals, paint, etc. that can contaminate ground and groundwater.	HIGH NEGATIVE	LOW NEGATIVE
STORM WATER MANAGEMENT		
Offsite contamination due to runoff. – Runoff of stormwater containing contaminants, silt, sand and litter may contaminate the surrounding environment.	HIGH NEGATIVE	LOW NEGATIVE
WETLAND WATER QUALITY		
Wetlands impacted by proposed development – Increase in solid waste	HIGH NEGATIVE	LOW NEGATIVE
Wetlands impacted by proposed development – Loss of arable land	HIGH NEGATIVE	LOW NEGATIVE

Summary of impact assessment significance, pre- and post-mitigation

	PRE-MITIGATION			POST-MITIGATION		
	LOW	MODERATE	HIGH	LOW	MODERATE	HIGH
Planning and Design	3	7	1	11	0	0
Construction	4	10	4	18	0	0
Operation	0	1	1	0	1	0
TOTAL	7	18	6	29	1	0

CONSIDERATION OF ALTERNATIVES

The following alternatives were assessed as part of the Basic Assessment:

- No-Go or no development option.
- Alternative L1 (preferred alternative) for the re-alignment of the Ludlow stream
- Alternative L2 for the re-alignment of the Ludlow stream

OPINION OF THE EAP

Coastal and Environmental Services (the EAP) hereby provides the following opinion concerning the proposed rehabilitation of the N9 between Middelburg and Carlton Heights.

It is the opinion of Coastal and Environmental Service that NO FATAL FLAWS are associated with the proposed rehabilitation of the N9 and that all impacts can be adequately mitigated to reduce the risk or significance of impacts to an acceptable level.

Most of the road upgrade takes place within the existing road reserve. The only section falling outside the road reserve is the road deviation and alteration of the Flonkers "rail over road" bridge and the Ludlow stream deviation. At Flonkers Bridge, SANRAL is proposing the decommissioning and subsequent removal of the existing Flonkers Bridge, and the construction of a new upgraded bridge allowing for the proposed road widening, at a new site next to the existing bridge. The main reason for this alteration is current height clearance problems coinciding with a major storm water drainage problem. Deepening the existing Flonkers Bridge to solve the current height problem, will only enhance the current drainage problem as this section is already lying in a low lying area that does not allow storm water to flow away from the road. The only viable solution is to build a new bridge underneath the railway line in a higher lying area slightly to the west.

Upgrading and widening all the bridges crossing various rivers and streams are a high impact activity as all these structures are situated within these rivers and streams. CES believes that effective planning; mitigation and monitoring (during the construction and operation phases) will result in significantly smaller impacts on these rivers and streams.

Both the Rossmead "road bridge" and the Rossmead "rail crossing bridge" will also be improved with a service/replacement of all joint seals and new wearing course. These 2 bridges does not cross any rivers/streams, thus the impact will be very low.

The bridge over Ludlow Stream will to be upgraded and widened to suit the new road alignment; however it is impossible to widen the bridge at the current angle which the stream runs below. Two alternatives are proposed namely L1 and L2. CES does not object to any of the two alternatives as we (CES) believes that effective planning; mitigation and monitoring (during the construction and operation phases) will result in significantly smaller impacts on these rivers and streams. CES do recommend that a Water Use Authorisation be obtained for this re-alignment of the Ludlow stream before any construction commences.

All identified wetlands within the study area are man-made. The Southernwood wetland is the most sensitive and should be retained in its current form as it has natural value and the species in this wetland are adapted to inundation fluctuations. The existing stormwater culverts supporting this wetland should be retained in their current state so as not to alter water flows or volumes of water entering into the wetland.

At the completion of the construction, impacted areas within 100 meters of any identified wetlands should be re-vegetated using natural grass and sedges species that can tolerate moist to dry conditions. In areas containing large hard substrates or near irrigated areas, where significant surface water runoff is expected, stormwater features should be reduced. This will prevent direct pollution of groundwater systems while allowing vegetation to trap and filter excess nutrients.

Care should be taken during construction as the land along the road is privately owned, no stormwater culverts should be constructed such that they will increase the flow of water entering private property.

The proposed Wolwekop quarry is an existing quarry site that is currently not in use. The quarry is filled with storm water, and will need to be pumped out before quarrying commences. Mitigation of this process is discussed in the mining EMPr attached in Appendix G.

All the existing rest areas found in the study site will be improved to SANRAL standards. These sites are all within the existing road reserve and should not impact the natural environment.

All intersections along the study site (namely the R56 loop, Municipal road in Middelburg, access to the Agricultural College, gravel road intersections, Welvanpas Guest House Access road and the Sherborne farm Access road) will be improved to appropriate standards.

Additionally, the Municipal road access, the R56 loop, and the Agricultural College access will be improved with tapers, acceleration/deceleration lanes, and exclusive turns. The access road to Sherborne farm will also be moved to a safer access as this is currently a “blind” turn access.

It is the opinion of CES that this Basic Assessment Report contains sufficient information to allow DEA to make an informed decision. CES therefore recommends that the application for Authorisation should be approved on condition **that the recommended mitigation measures stated herein are effectively implemented.**

MITIGATION MEASURES

Design And Planning Phase

POLICY COMPLIANCE
- Development should coincide with relevant legislation and/or policy, e.g. ECBCP, Municipal By-laws, SDFs, etc.

STORMWATER
- Flood attenuation and storm water management plans must be drawn up by a qualified engineer and approved by DEA and DWA.
- Flood attenuation and storm water management plans must be drawn up by a qualified engineer and approved by DEA and DWA.

ROAD DESIGN
- Ensure that there is proper drainage of surface water away from the new road and that it does not cause any erosion.
- Ensure that the new road is more than 32m from the Wolwekop stream.

BRIDGE DESIGN

- Ensure that the bridge design does not impede the flow of water or cause erosion in these rivers/streams.
- Ensure there is proper drainage of stormwater away from these bridges.
- Ensure that the new course layout does not cause major erosion or structural damage to the bridge or road infrastructure

HERITAGE

- The site will need to be sampled if affected, and SANRAL will need to apply for a permit to destroy or damage these sites.
- The site will need to be sampled if affected, and SANRAL will need to apply for a permit to destroy or damage these sites.
- Modifying, or destroying and rebuilding these bridges in any manner requires a SAHRA Built Environment permit.

PALAEONTOLOGY

- A Phase 1 paleontological survey should be undertaken to identify possible fossil sites, and mitigated accordingly.

TRAFFIC

- A Traffic Impact Assessment is required.

WASTE MANAGEMENT

- Ensure that a proper Waste Management Plan is designed and implemented.

Construction Phase

AIR POLLUTION

- Cleared surfaces must be dampened whenever possible and especially in dry and windy conditions to avoid excessive dust generation.
- Any soil excavated, and not utilised for rehabilitation, must be removed from site or covered and no large mounds of soil should be left behind after construction.

NOISE POLUTION

- Construction activity close to Middelburg, which includes the movement of construction vehicles, must be restricted to normal working hours (7:00am – 17:00pm).

VISUAL

- Limited mitigation to contain the impact of auxiliary activities such as clearance of vegetation, road construction and control of waste and littering on camp sites.

HAZARDOUS SUBSTANCE STORAGE & USAGE

- Concrete should not be mixed directly on the ground, or during rainfall events when the potential for transport to the stormwater system is the greatest (as per the EMPr).
- Concrete must be mixed only in the area demarcated for this purpose and on an impermeable substratum.
- Oil trays must be placed under the machinery to avoid soil contamination. All areas affected during the Construction Phase should be rehabilitated

- Hazardous Chemical Substances Regulations promulgated in terms of the Occupational Health and Safety Act 85 of 1993 and the SABS Code of Practise must be adhered to. This applies to solvents and other chemicals possibly used in the construction process.
- Depending on the nature and extent of the spill, contaminated soil must be either excavated or treated on-site.
- The ECO must determine the precise method of treatment of polluted soil.
- This could involve the application of soil absorbent materials or oil-digestive powders to the contaminated soil.
- If a spill occurs on an impermeable surface such as cement or concrete, the surface spill must be contained using oil absorbent materials.
- Contaminated remediation materials must be carefully removed from the area of the spill so as to prevent further release of petrochemicals to the environment, and stored in adequate containers until appropriate disposal.
- The individual responsible for or who discovers the petrochemical spill must report the incident to the Project Coordinator, ECO and or Contractor as soon as reasonably possible.
- The problem must be assessed and the necessary actions required will be undertaken.
- The immediate response must be to contain the spill.
- Staff that will be handling hazardous materials must be trained to do so.
- Hazardous Chemical Substances Regulations promulgated in terms of the Occupational Health and Safety Act 85 of 1993 and the SABS Code of Practise must be adhered to. This applies to solvents and other chemicals possibly used in the construction time.
- All hazardous chemicals must be properly stored in a secure, bunded and contained area.

WORKER HEALTH AND SAFETY
- Fire fighting equipment should be present on site at all times as per Occupational Health and Safety Act.
- All construction foremen must be trained in fire hazard control and fire fighting techniques.
- All flammable substances must be stored in dry areas which do not pose an ignition risk to the said substances.
- No open fires will be allowed on site unless in a demarcated area identified by the ECO.
- No smoking near flammable substance.
- All cooking shall be done in demarcated areas that are safe in terms of runaway or uncontrolled fires.
- The Contractor shall have operational fire-fighting equipment available on site at all times. The level of fire fighting equipment must be assessed and evaluated thorough a typical risk assessment process.
- Adequate sanitary and ablutions facilities must be provided for construction workers.
- The facilities must be regularly serviced to reduce the risk of surface or groundwater pollution.
- Contaminated wastewater must be managed by the Contractor to ensure existing water resources on the site are not contaminated. All wastewater from general activities in the camp shall be collected and removed from the site for appropriate disposal at a licensed commercial facility.

WASTE MANAGMENT
- Construction rubble shall be disposed of in pre – agreed, demarcated spoil dumps that have been approved by Inxuba Yethemba Municipality.
- Littering by the employees of the Contractor shall not be allowed under any circumstances.
- The ECO shall monitor the neatness of the work sites as well as the Contractor campsite.

- All waste must be removed from the site and transported to the licenced landfill site in Queenstown.
- All waste hazardous materials must be carefully stored as advised by the ECO, and then disposed of offsite at the licensed hazardous landfill site in Port Elizabeth.
- Contaminants to be stored safely to avoid spillage.
- Machinery must be properly maintained to keep oil leaks in check.

TRAFFIC
- A Traffic Management Plan must be implemented.

RIVERS & STREAMS
- Ensure that no construction rubble is left in these rivers and streams after completion of work.
- The river/stream must be returned to its natural state after construction.
- Assessment from a specialist is required after completion of the bridge upgrades and must be included in the final ECO report.

ROAD RE-ROUTING
- No building rubble may be dumped into the Wolwefontein Stream.

STORM WATER MANAGEMENT
- The site must be managed in a manner that prevents pollution of drains, downstream watercourses or groundwater, due to suspended solids, silt or chemical pollutants.
- Temporary cut-off drains and berms may be required to capture storm water and promote infiltration.
- The area must be monitored by an ECO on a regular basis as described in the EMPr.

WETLANDS
- Stormwater (and road-surface run-off) should be redirected towards remaining wetland features to increase groundwater infiltration, thereby providing sufficient soil moisture to support wetland species. - The diameters of stormwater pipes should be sufficiently large so as to not result in overly high flow velocities during rainfall events.- The flow of stormwater onto the wetland features should be moderated.
- The contractor must notify the CM and ECO immediately of any pollution incidents on site.
- Wash areas must be placed and constructed in such a manner so as to ensure that the surrounding areas, which include groundwater, are not polluted.
- A Method Statement is required for all wash areas where hydrocarbon, hazardous materials and pollutants are expected to be used. This includes but is not limited to, vehicle washing, workshop wash bays, paint wash and cleaning.
- The contractor must prevent discharge of any pollutants, such as cements, concrete, lime, chemicals and fuels into any water sources.
- Runoff from fuel depots/workshops/truck washing areas and concrete swills must be directed into a conservancy tank and disposed off at a site approved by the CM.
- The contaminated water, contaminated runoff, or effluent may also require analysis prior to disposal.
- Avoid releasing untreated effluent.
- A solid waste must be adequately stored and disposed of during construction, ensure that all structures like berms are built to prevent soil from entering wetlands during construction as this can result in sedimentation.

- No dumping of waste is to be allowed on site during construction, littering and dumping of waste must be discouraged, especially with any wetland areas.

Operational Phase

MAINTENANCE
- No mitigation proposed.

SECTION F: APPENDICES

The following appendixes must be attached as appropriate:

Appendix A: Site plan(s)

Appendix B: Photographs

Appendix C: Facility illustration(s)

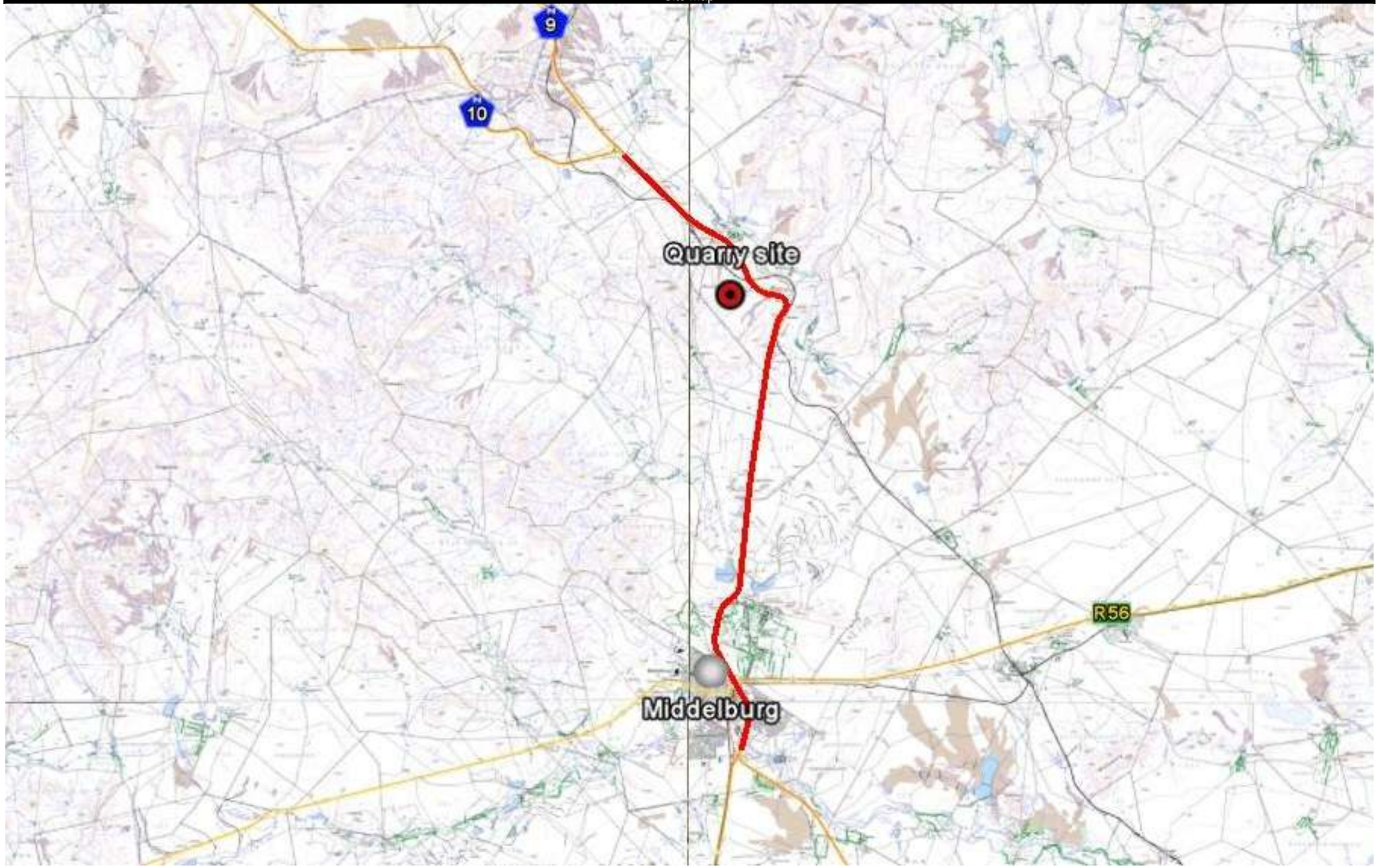
Appendix D: Specialist reports

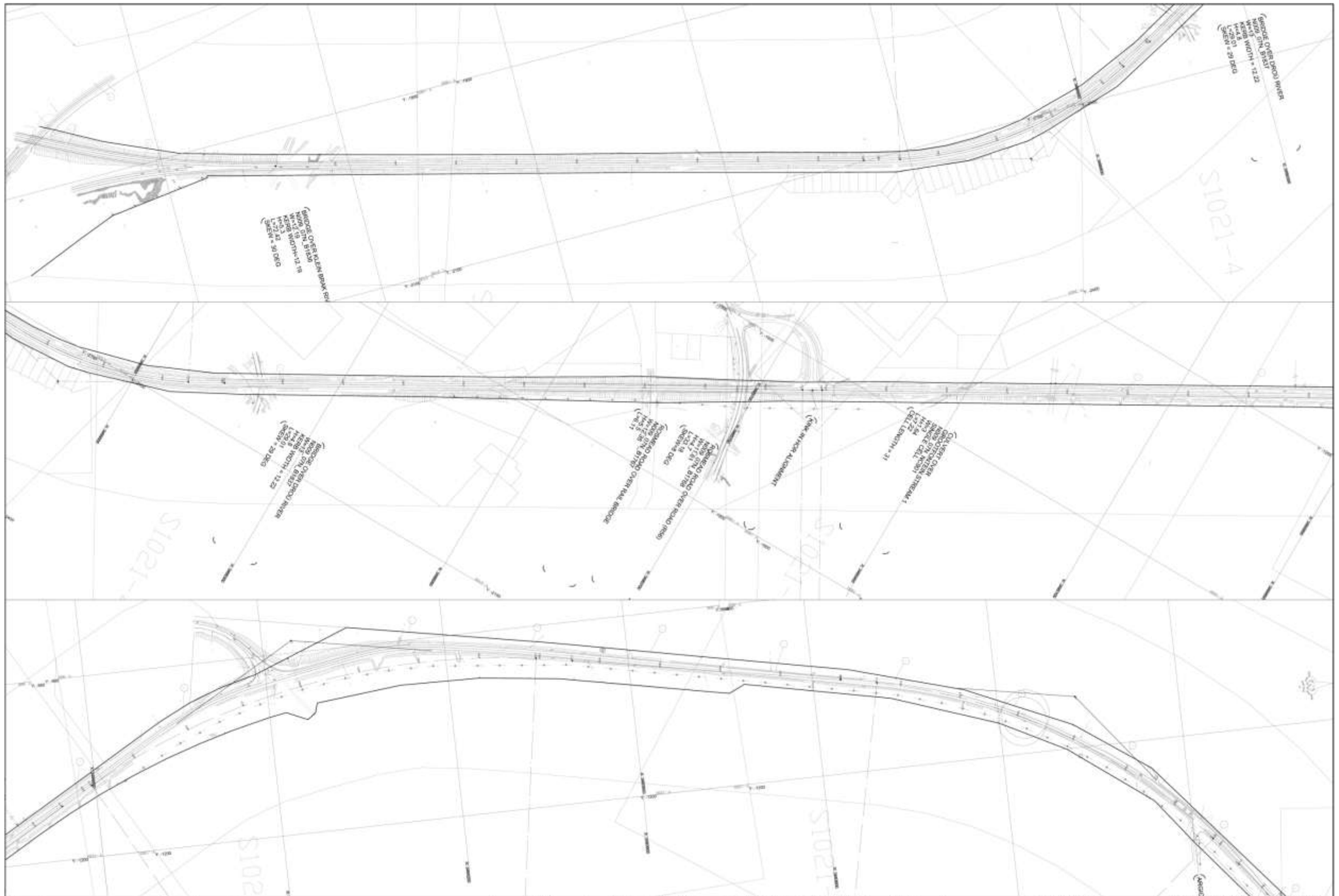
Appendix E: Comments and responses report

Appendix F: Environmental Management Programme (EMPr)

Appendix G: Other information

Appendix A
Site map





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Prof. Reg. No: [illegible]

CONSULTANT APPROVAL
Name: [illegible]
Prof. Reg. No: [illegible]
Date: [illegible]
THE ABOVE SIGNATORY CERTIFIES THAT THE DESIGNERS AND CHECKERS HAVE CONSENTED TO THEIR NAMES BEING INSERTED ON THIS DRAWING AND THAT THEY HAVE SEEN AND APPROVED THE DRAWING.

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THE SOUTH AFRICAN NATIONAL ROADS AGENCY LTD

SOUTHERN REGION
NRA House
Southern Life Gardens
70 2nd Avenue
Newton Park
Port Elizabeth
6045
PO Box 27230
Greenacres
6057
Tel: (041) 398 3200

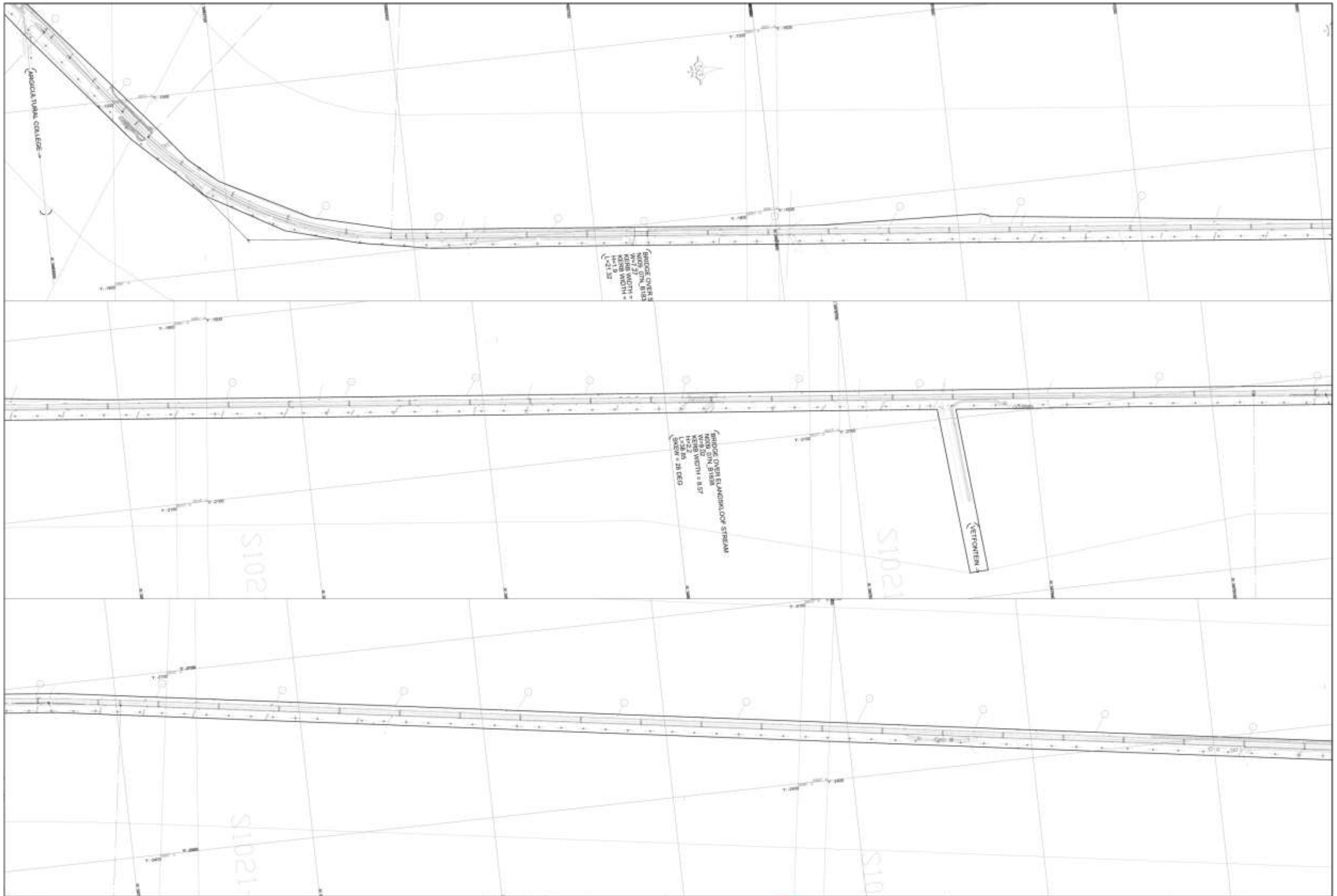
ACCEPTANCE
THIS ACCEPTANCE IS FOR PROCEDURAL AND ADMINISTRATIVE REVIEW PURPOSES ONLY AND DOES NOT ATTRACT LEGAL LIABILITY OR [illegible] OF ANY KIND FROM WHATSOEVER CAUSE OR HOWEVER ARISING
for CEO: SA NATIONAL ROADS AGENCY LTD.
Date:

PROJECT DESCRIPTION
THE REHABILITATION OF NATIONAL ROUTE 9, SECTIONS BETWEEN MIDDLEBURG (KM 0.0) AND CARLTON HEIGHTS (KM 29.0)

DESCRIPTION
PROPOSED HORIZONTAL ALIGNMENT

SCALE : 1:2000
SHEET : OF 4

PROJECT NUMBER	NRA N009-070-2005/1		
DRAWING LOCATION DATA	START	END	
ROUTE	N009	N009	
SECTION	7	7	
DRAWING km DISTANCE	N/A	N/A	
DRAWING TYPE	ROADS - LAYOUT PLANS		
BRIDGE/STRUCTURE No.	N/A		
CONSULTANT DRAWING No.	PD	J30177/ LP 001	VER
SANRAL DOC #			V1



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PROJECT DESCRIPTION

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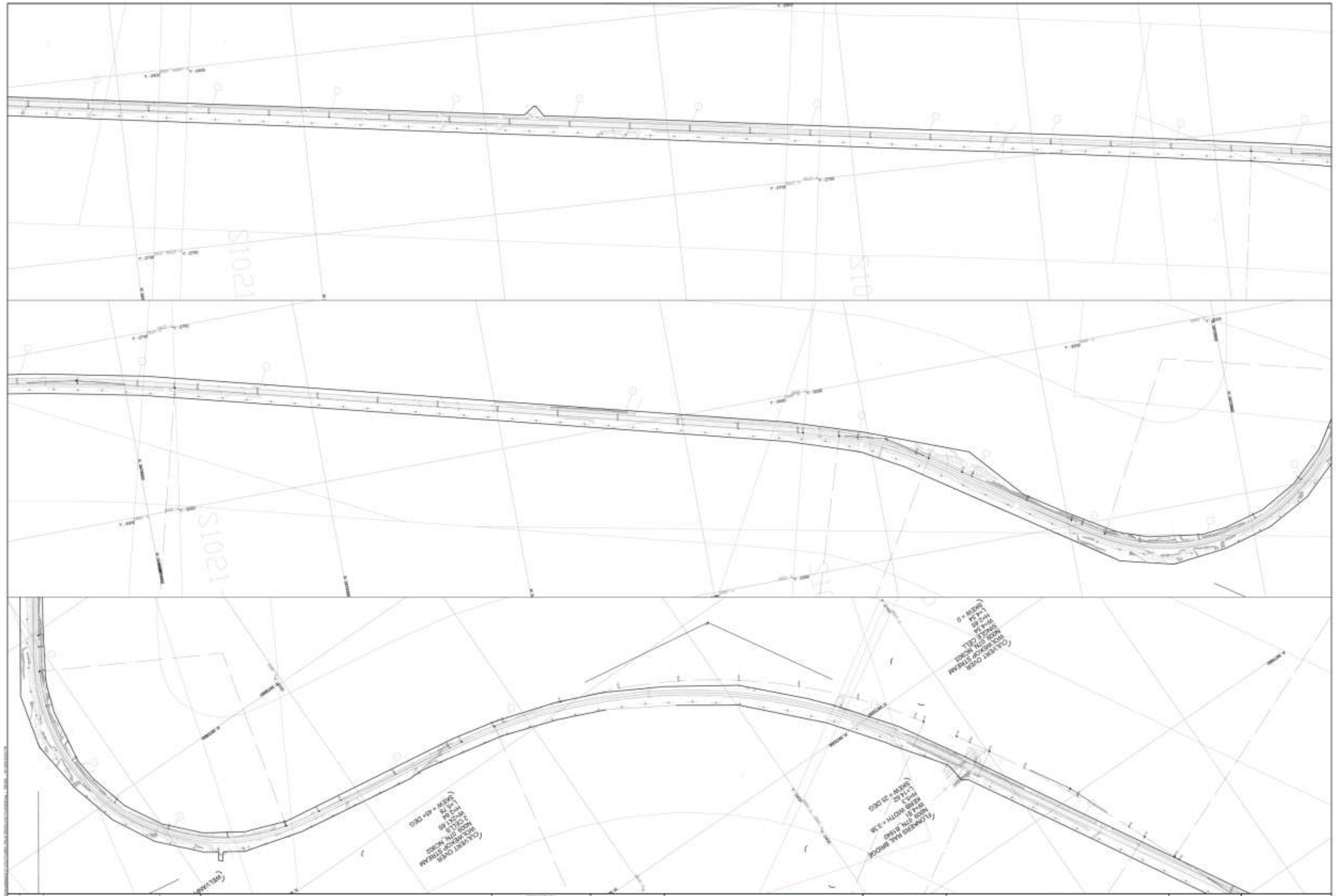
DESCRIPTION

PROPOSED HORIZONTAL ALIGNMENT

SCALE: 1:2500 | SHEET : OF 4

PROJECT NUMBER	NRA N009-070-2005/1	
DRAWING LOCATION DATA	START	END
ROUTE	N009	N009
SECTION	7	7
DRAWING km DISTANCE	N/A	N/A
DRAWING TYPE	ROADS - LAYOUT PLANS	
BRIDGE/STRUCTURE No.	N/A	
CONSULTANT DRAWING No.	PD J30177/ LP 001	VER
SANRAL DOC #		V1



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ACCEPTANCE

PROJECT DESCRIPTION

THE REHABILITATION OF NATIONAL ROUTE 9, SECTIONS BETWEEN MIDDLEBURG (KM 0.0) AND CARLTON HEIGHTS (KM 29.0)

DESCRIPTION

PROPOSED HORIZONTAL ALIGNMENT

SCALE : 1:2000 | SHEET 1 OF 4

PROJECT NUMBER	NRA N009-070-2005/1		
DRAWING LOCATION DATA	START	END	
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SECTION	7	7	
DRAWING km DISTANCE	N/A	N/A	
DRAWING TYPE	ROADS - LAYOUT PLANS		
BRIDGE/STRUCTURE No.	N/A		
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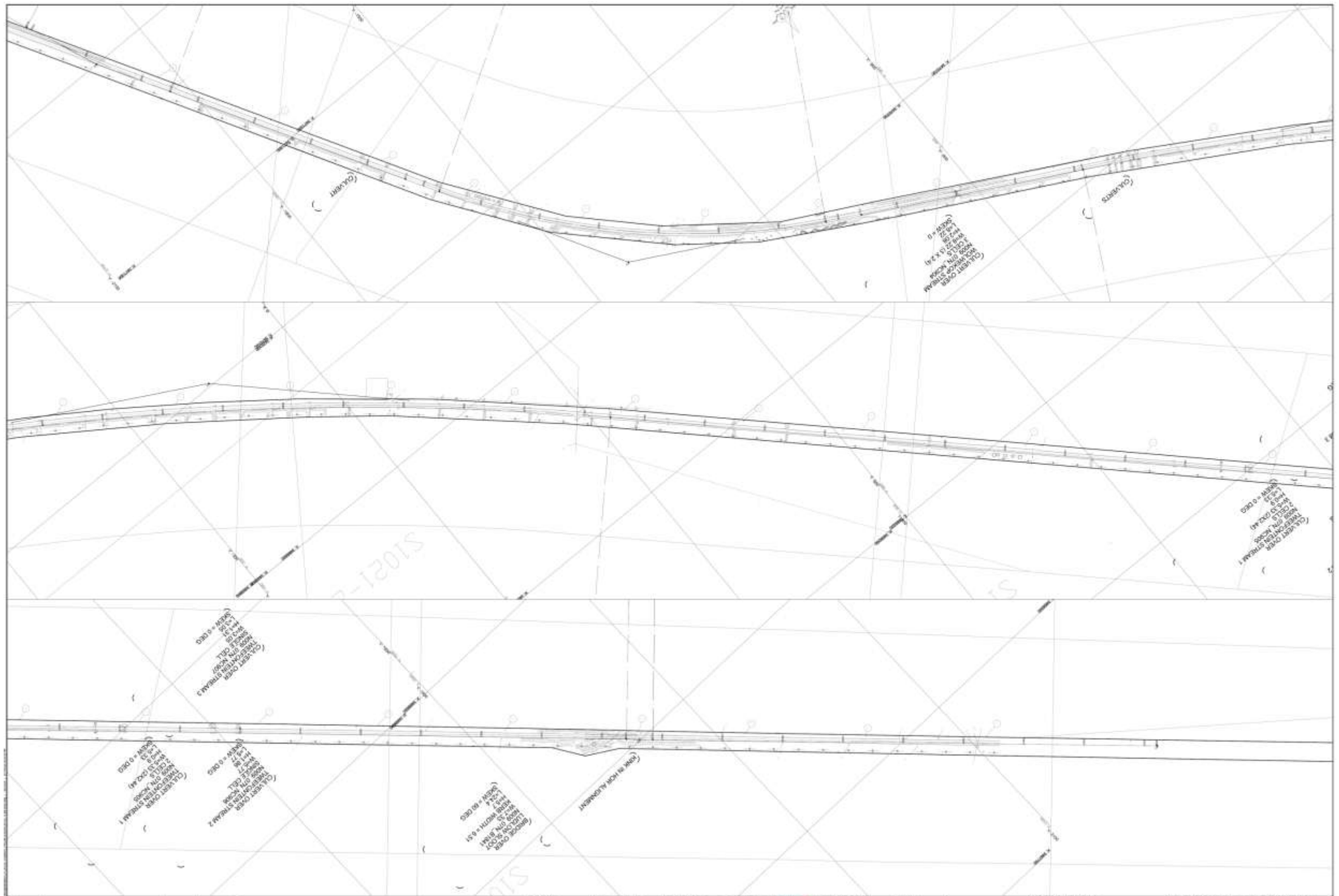
SANRAL DOC #			V1



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for CEO: SA NATIONAL ROADS AGENCY LTD
Date:

PROJECT DESCRIPTION

THE REHABILITATION OF NATIONAL ROUTE 9, SECTIONS BETWEEN MIDDLEBURG (KM 0.0) AND CARLTON HEIGHTS (KM 29.0)

DESCRIPTION

PROPOSED HORIZONTAL ALIGNMENT

SCALE : 1:2000 SHEET 1 OF 4

PROJECT NUMBER	NRA N009-070-2005/1		
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SECTION	7	7	
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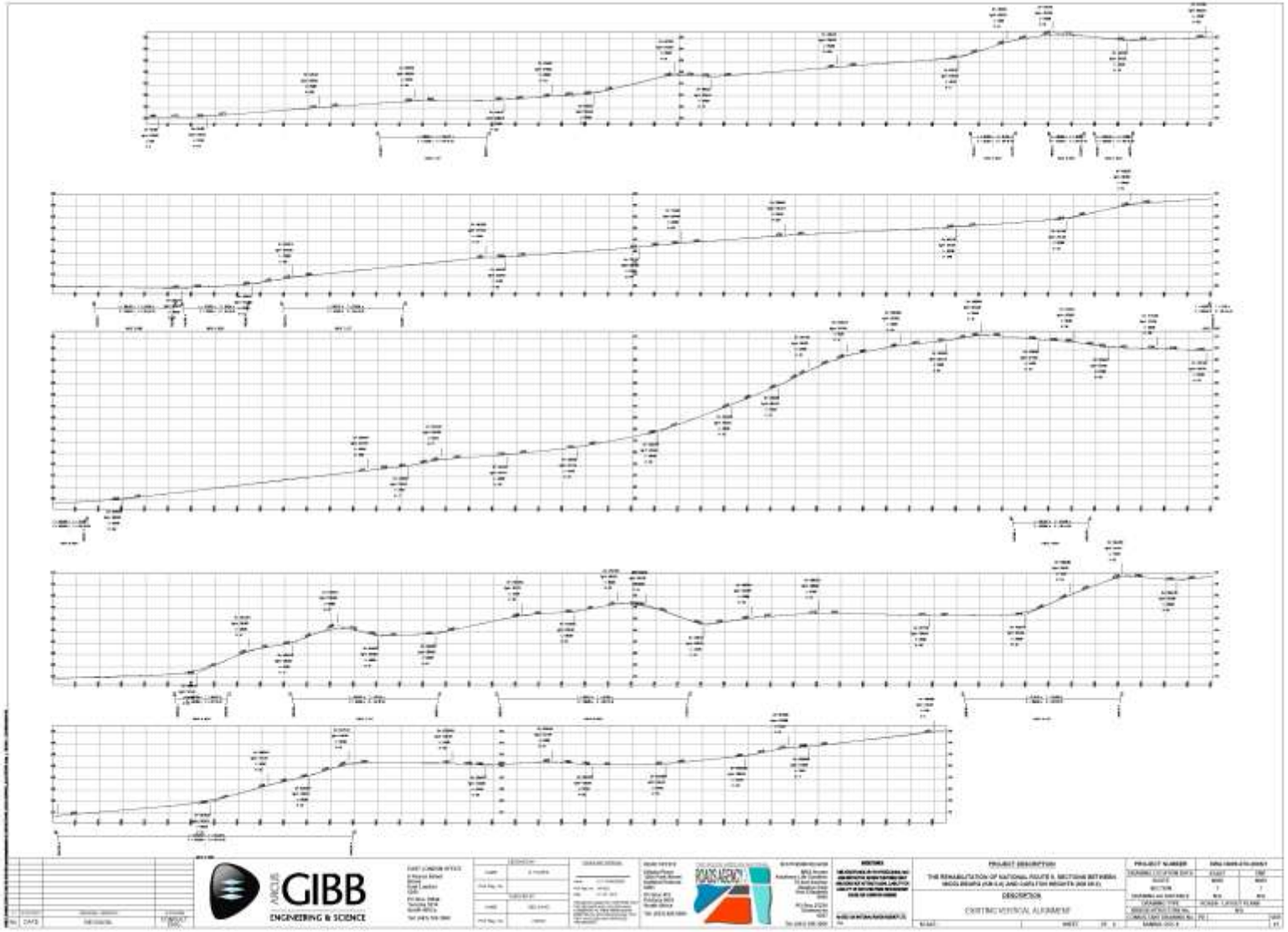
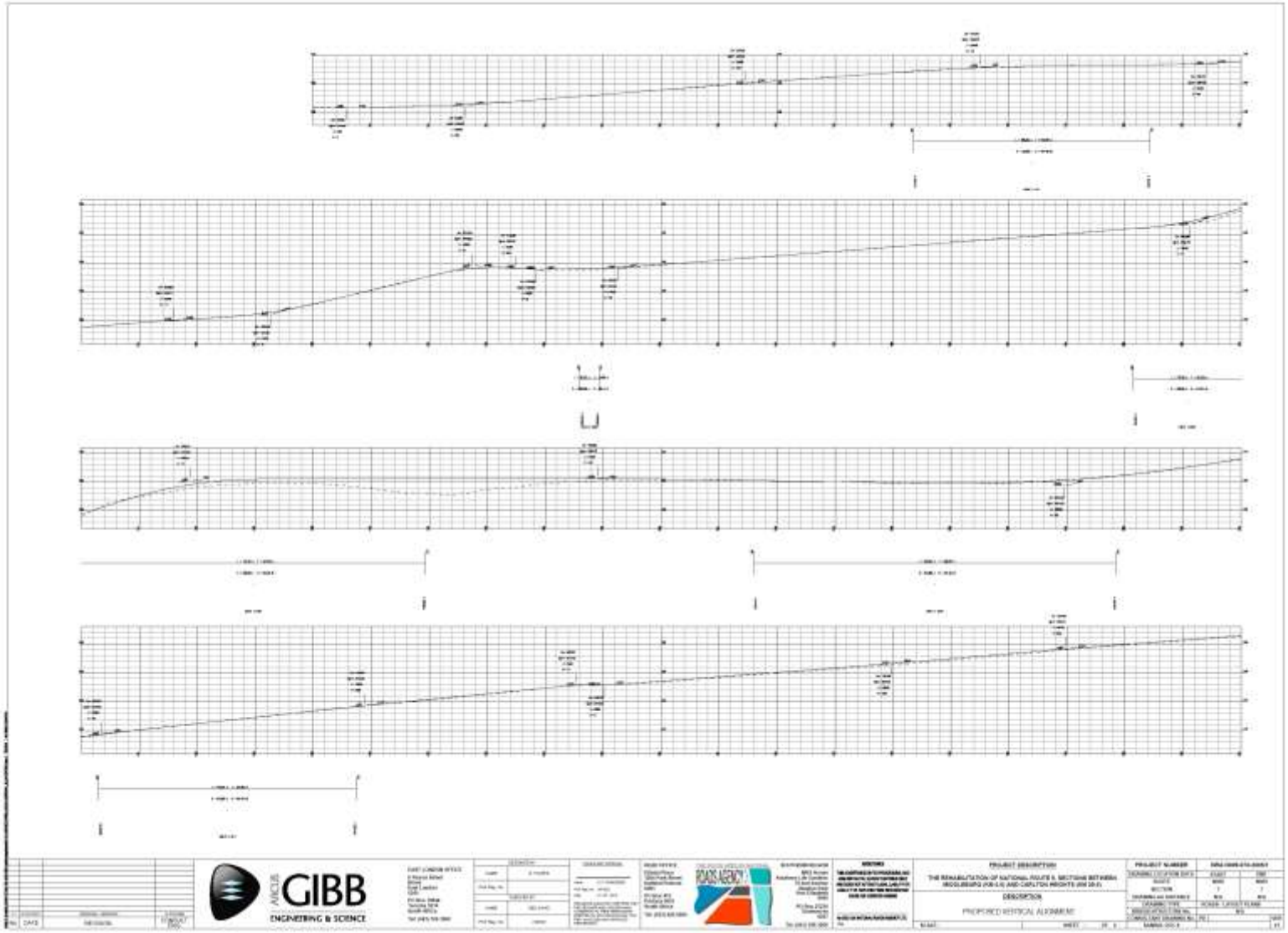
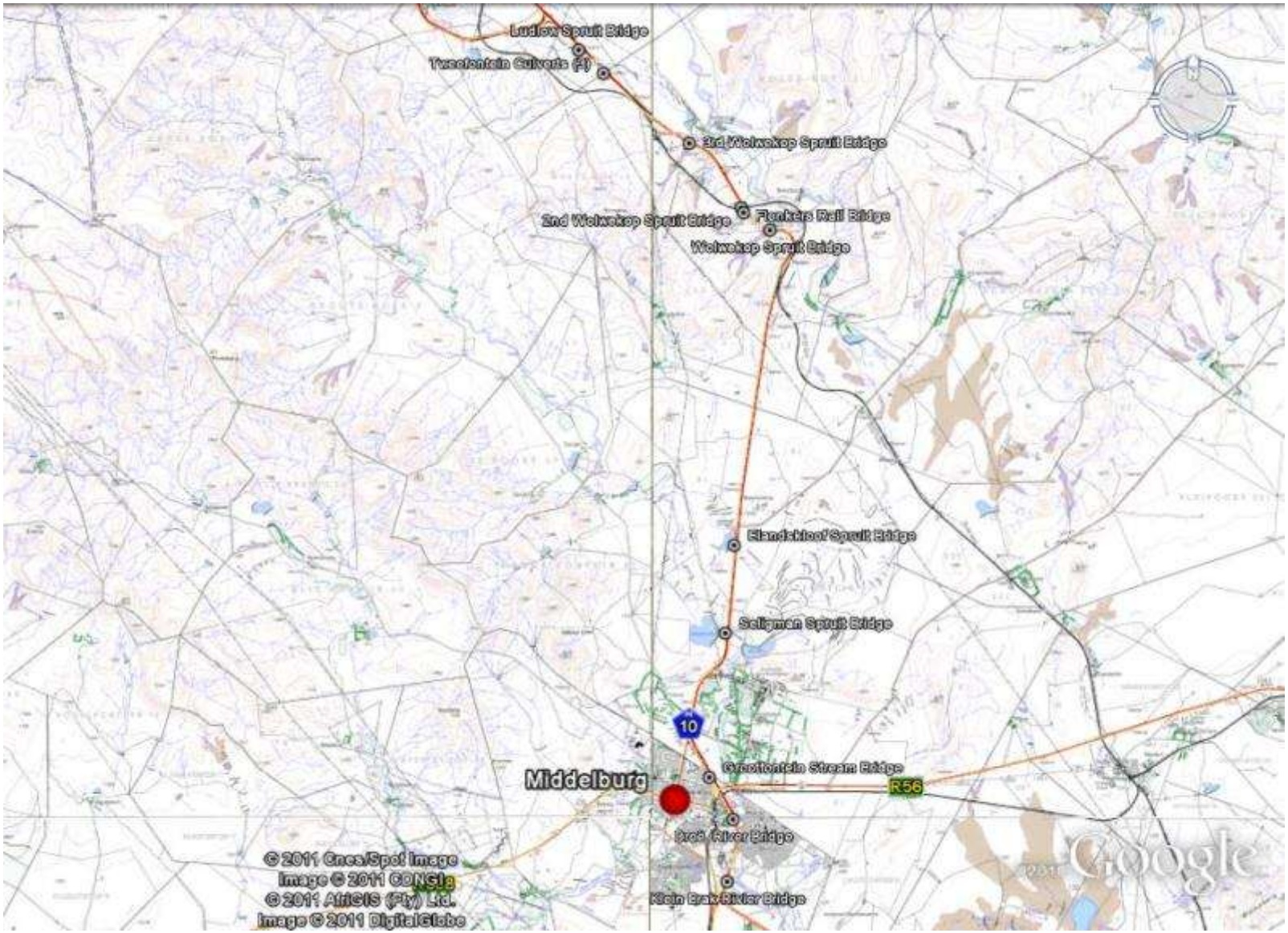
DRAWING TYPE	ROADS - LAYOUT PLANS		
BRIDGE/STRUCTURE No.	N/A		
CONSULTANT DRAWING No.	PD J31777/ LP 001		VER
SANRAL DOC #			V1



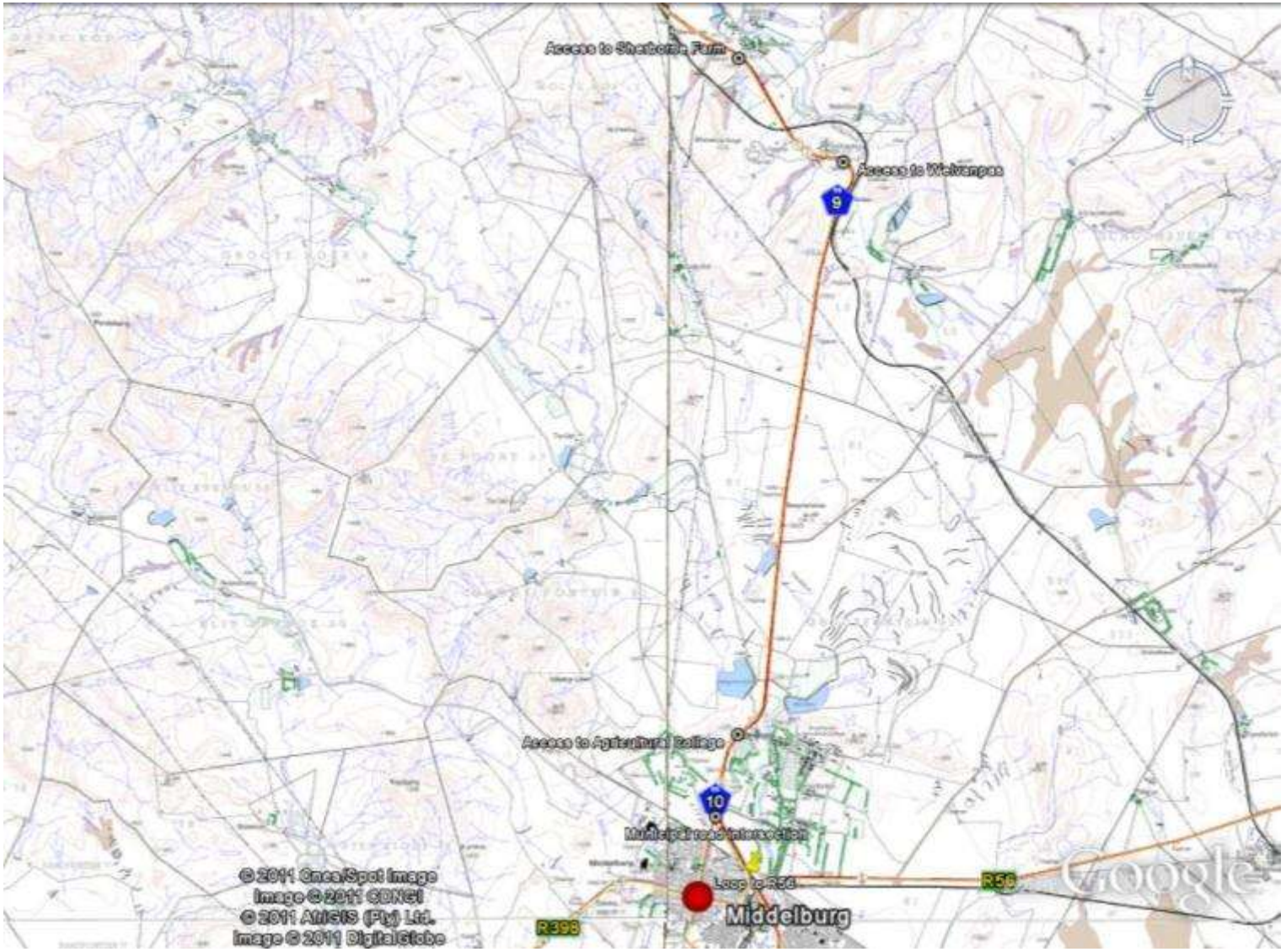
A-1: The vertical alignment of the N9 Road upgrade before construction.



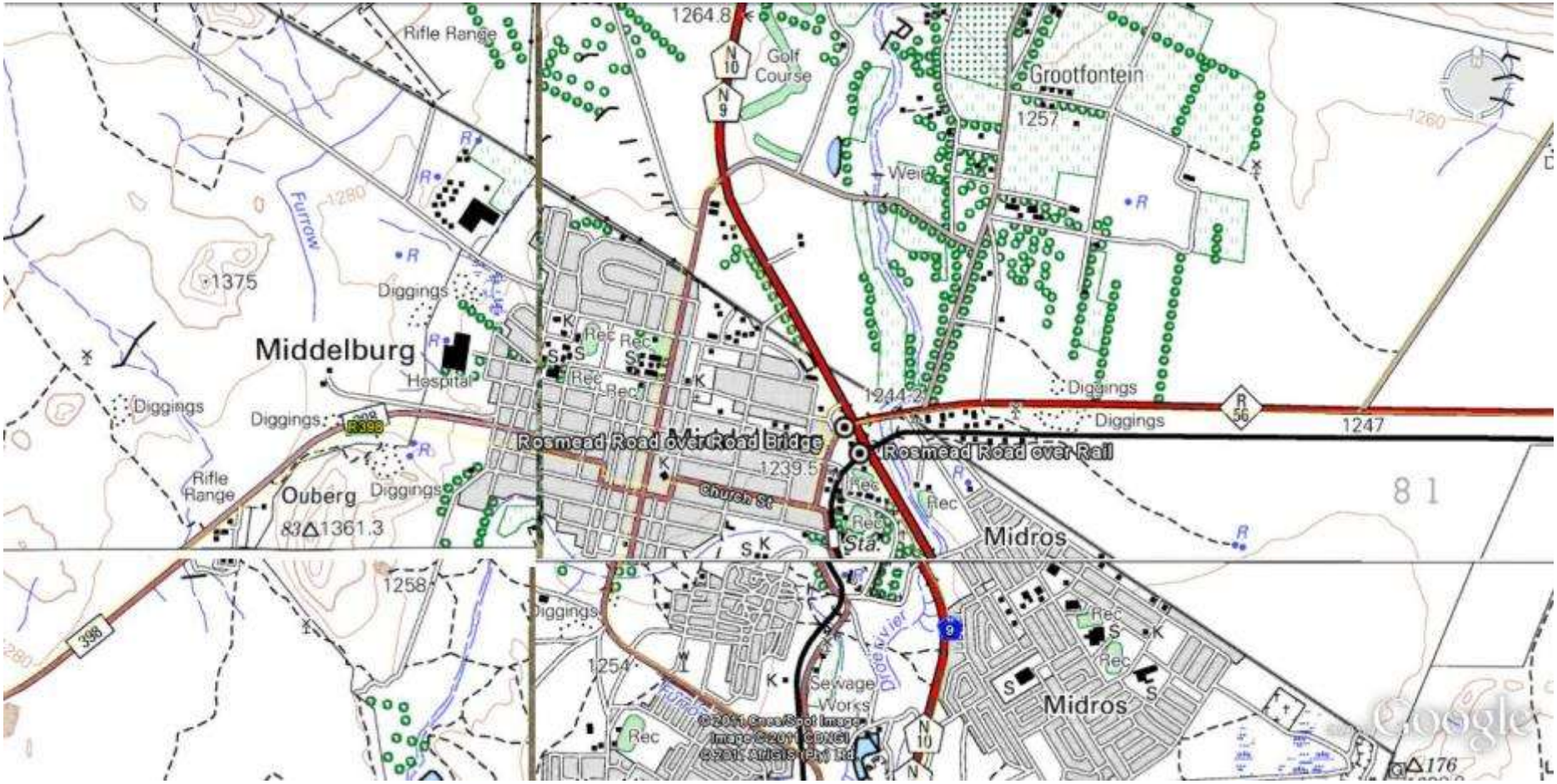
A-2: Showing the proposed vertical alignment of the N9 Road upgrade after construction.



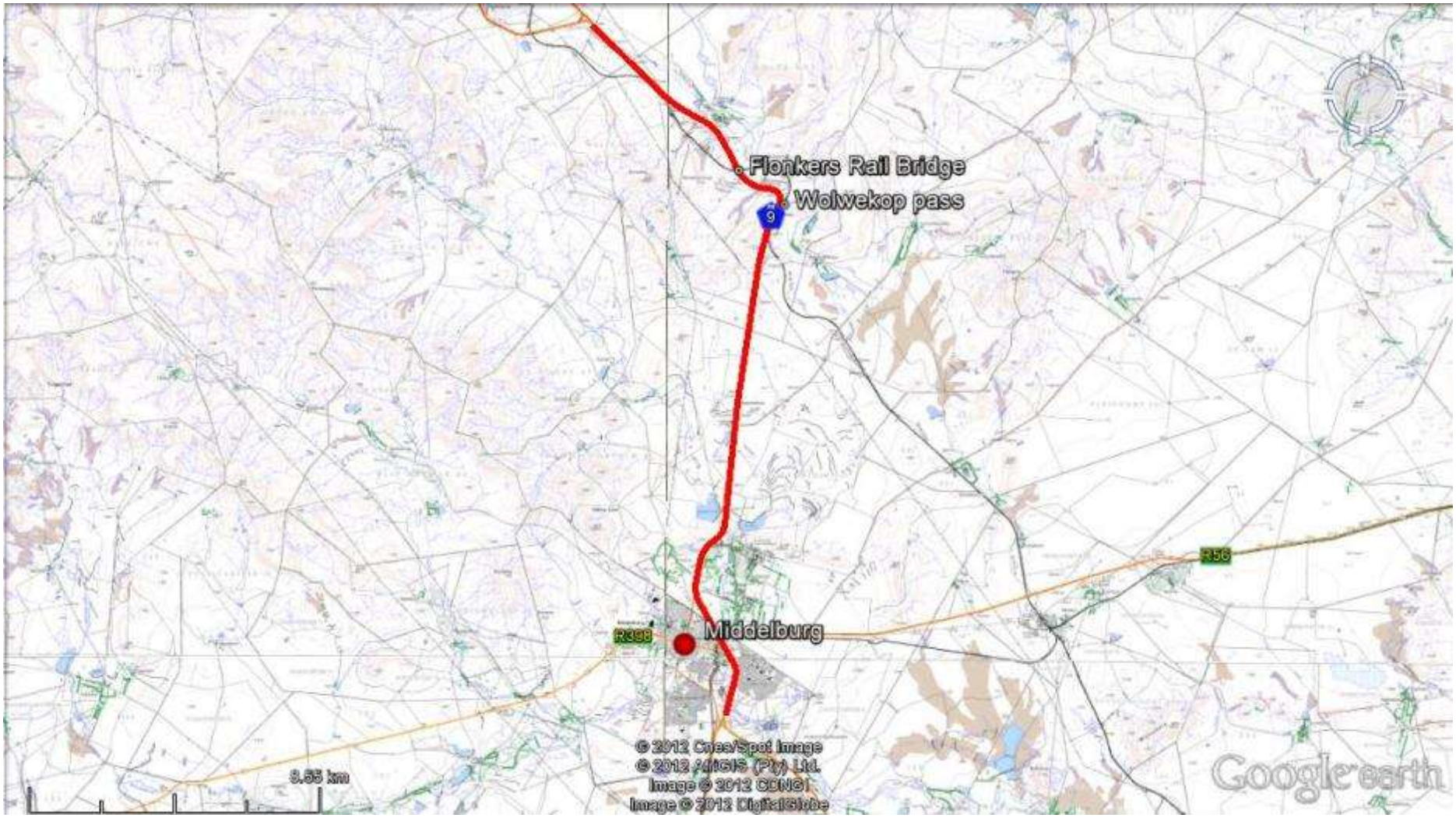
A-3: Locations of the different bridges within the study site.



A-4: Location of the different intersections that will be upgraded within the study site.



A-5: Location of the Rosemead road and rail bridges that will be improved in Middelburg.



A-6: Location of the two road re-alignments along the route.

Appendix B
Site photographs

Photographs were taken every few kilometers from the starting point in Middelburg.

Photo 1: Starting point in Middelburg showing the Klein Brak River bridge.

Photo 2: the N9 through Middelburg. The road reserve in clearly seen devoid of vegetation other than dry grass.

Photo 3: 4km from the starting point.

Photo 4: 10km from starting point.

Photo 5: showing the road twisting before Wolwekop, 10km north of Middelburg.

Photo 6: Flonkers rail over road bridge that will be replaced with a new bridge to the left.

Photo 7: Access to the Wolwekop quarry.

Photo 8: The existing Wolwekop quarry which is filled with surface water.

	
Photo 9: the final section of road before Carlton Heights.	Photo 10: The endpoint of the proposed road upgrade.

Photographs of all the bridges proposed for upgrading (Bridge locations are shown in Figure A-3 above):


Klein Brak River bridge: Upgrading involves a new wearing course, service/replace joint seals, and replacing balustrades with standard SANRAL detail.


Droe River bridge: Upgrading involves a new wearing course, service/replace joint seals, and replacing balustrades with standard SANRAL detail.


Grootfontein Stream: Widen/replace culvert to suit new cross section. Capacity improvements.


Seligman Spruit bridge: Widen/replace the existing bridge to suit new road alignment and cross section.


Elandskloof Spruit bridge: Widen/replace the existing bridge to suit new road alignment and cross section.


Wolwekop Stream bridge: Widen/replace the existing bridge to suit new road alignment and cross section. Capacity improvements.


2nd Wolwekop Spruit bridge: Replace with a new culvert.


3rd Wolwekop Spruit bridge: Widen/replace the existing bridge to suit new road alignment and cross section. Capacity improvements.


Ludlow Stream bridge: Widen/replace the existing bridge to suite new road alignment and cross section. 2 possible permanent stream deviation alternatives proposed.

GPS Co-ordinates of the River Crossings:

River crossings	GPS Co-ordinates
1. Droe River Bridge	S 31° 30.006” E 26° 01.264”
2. Klein Brak River Bridge	S 31° 30.800” E 25° 01.178”
3. Culvert over Grootfontein Stream	S 31° 29.464” E 25° 00.905”
4. Bridge over Elandskloof Spruit	S 31° 26.508” E 25° 01.274”
5. Bridge over Seligman Spruit	S 31° 27.627” E 25° 01.145”
6. Culvert1 over Tweefontein Stream	S 31° 20.569” E 24° 59.366”
7. Culvert1 over Tweefontein Stream	S 31° 20.540” E 24° 59.331”
8. Culvert1 over Tweefontein Stream	S 31° 20.524” E 24° 59.312”
9. Culvert 1 over Wolwekop Stream	S 31° 22.500” E 25° 01.795”
10. Culvert 2 over Wolwekop Stream	S 31° 22.288” E 25° 01.393”
11. Culvert 3 over Wolwekop Stream	S 31° 21.403” E 25° 00.587”
12. Ludlow Stream Bridge	S 31° 20.214” E 24° 58.949”

Appendix D
Specialists Reports

- Summary of Specialist Reports
- Heritage Impact Assessment
- Palaeontological Impact Assessment
- Wetland Delineation Report

Appendix E
Comments and responses report

Appendix F
Environmental Management Programme (EMPr)

Appendix G
Other information

- Background Information Document (BID)
- Proof of notification of all stakeholders and I&Aps of project initiation
- Copy of the DWA comments
- I&AP Database
- Wolwekop quarry EMPr (Submitted to DMR as part of the Mining Licence Application)

BACKGROUND INFORMATION DOCUMENT & INVITATION TO COMMENT: Proposed rehabilitation of Section 7 on the N9 National Road between Middelburg and Carlton Heights, Eastern Cape.

AIM OF THIS DOCUMENT

The aim of this Background Information Document is to provide people affected by and interested in the proposed project with information about this project, the process being followed and to provide them with an opportunity to be involved in the EIA process.

Interested and Affected Parties (I&APs) may raise issues of concern. These will be examined and included in the Reports.

The findings of the EIA will be provided to DEA (Provincial, East London) for final decision making, as to whether or not the project should go ahead and if so under what conditions.

Return address for comments:

Roy de Kock
1 Hampton Court
2 Marine Terrace
P.O Box 8145
Nahoon, 5210

Tel: (043) 742 3302
Fax: (043) 742 3306
Email:
r.dekock@cesnet.co.za

Your involvement in this process is critical, and will help ensure that all relevant issues are raised and assessed in the EIA process

BACKGROUND

SANRAL (South African National Roads Agency Ltd) is proposing the rehabilitation of Section 7 on the N9 National Road between Middelburg and Carlton Heights.

PROJECT DESCRIPTION

Notice is hereby given in terms of Regulation 54(2) published in Government Notice No. R543 under Chapter 5 of the National Environmental Management Act (Act 107 of 1998) (NEMA), of the intent to submit an application for an Environmental Impact Assessment (EIA) to the Department of Environmental Affairs (DEA). The process will also include a Water Use License application at regulated by the National Water Act (Act No. 36 of 1998), and a quarry mining license as regulated by the Minerals and Petroleum Resources Development Act (Act No. 28 of 2002).

Coastal & Environmental Services has been commissioned to undertake the Environmental Impact Assessment. You are hereby invited to register as an Interested & Affected Party (I&AP). Please submit your name, contact information and any comments to the contact person below within 30 days.

RELEVANT LEGISLATION

The Government Notice R.543 in terms of the National Environmental Management Act (Act No 107 of 1998) identifies activities in terms of 24(2) (a) and (d) which may not commence without an authorisation from the competent authority Department of Environmental Affairs (DEA). In order to apply for authorisation for the investigation, assessment and communication of potential impacts of the activities must follow the procedure as described in regulations 27 to 36 of the Environmental Impact Assessment Regulations, (2010), promulgated in terms of section 24(5) of the Act.

The proposed project is subject to a **Basic Impact Assessment** in terms of the following listed activities:

GN R 544: 11 (iii)	The construction of… bridges, where such construction occurs within a watercourse or within 32 meters of a watercourse, measured from the edge of a watercourse, where such expansion will result in an increased development footprint but excluding where such expansion will occur behind the setback line.
GN R 544: 39 (iii)	The expansion of… bridges, where such construction occurs within a watercourse or within 32 meters of a watercourse, measured from the edge of a watercourse, excluding where such a construction will occur behind the setback line
GN R 544: 47 (i & ii)	The widening of a road by more than 6 meters, or the lengthening of a road by more than 1 kilometre- (i) Where the existing reserve is wider than 13.5 meters (ii) Where no reserve exists, where the existing road is wider than 8 meters.

A Heritage Impact will be conducted as part of the Basic Assessment Report to identify any sensitive impacted heritage areas and recommend possible mitigation.

HOW CAN YOU BE INVOLVED?

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

- Advertisement in the local newspaper
- Notice board on site
- Circulation of the BID (this document) to all identified I&APs
- Comments period
- Review of the report by all registered I&APs and DEA (National)
- A public meeting

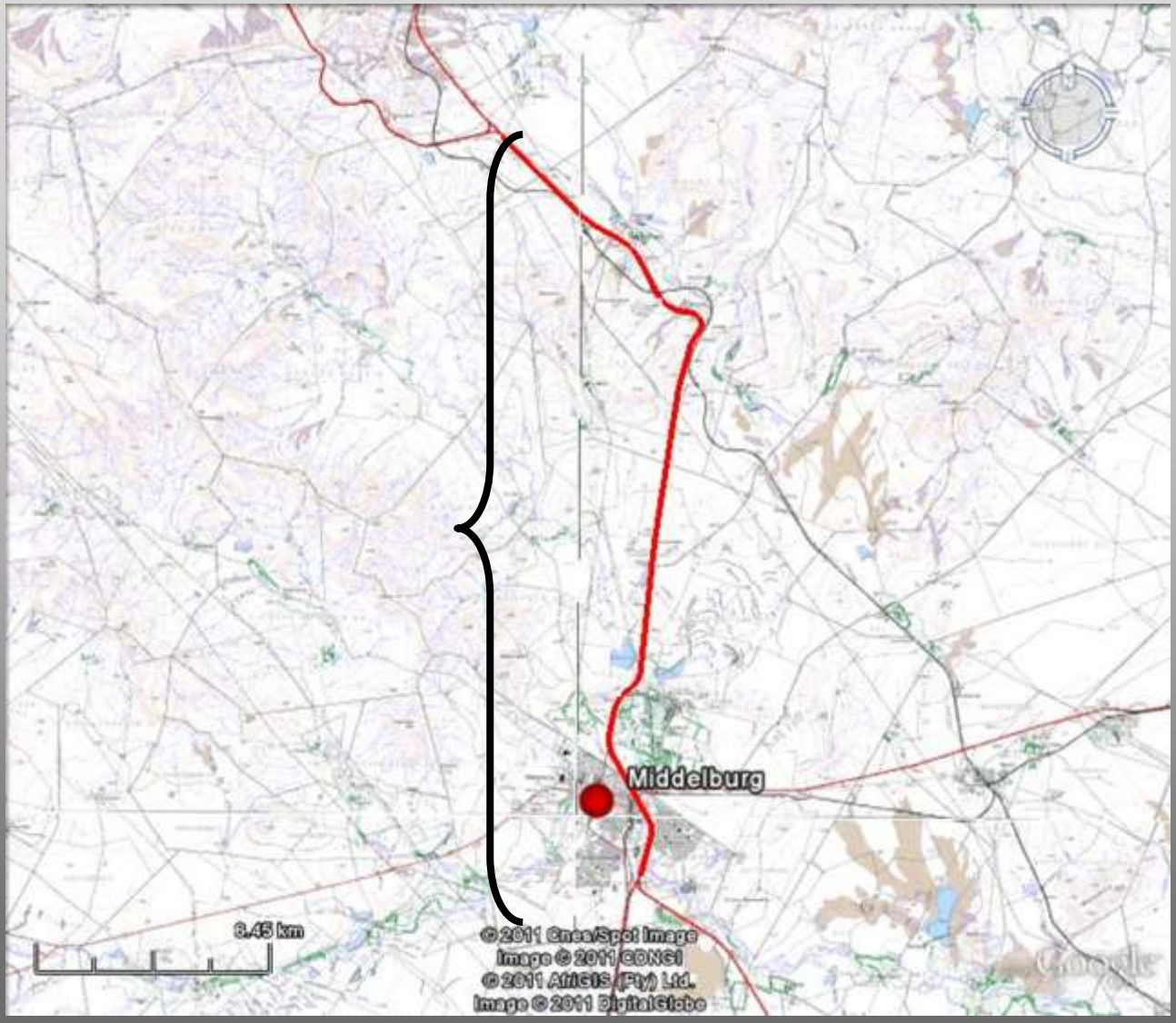


Figure 1. Map showing the affected 23 kilometres of road known as Section 7 of the N9 that will be rehabilitated.

APPROACH TO THIS BASIC ASSESSMENT REPORT

The process required for the proposed project is a Basic Environmental Assessment. This process serves primarily to inform the public and relevant authorities about the proposed project and to determine any impacts. Should all impacts and issues be adequately addressed in the report, it will serve as the final document. However, if not, the process will proceed into the next stage which is a full Environmental Impact Assessment.

Basic Assessment Process

Review of previous studies

↓

Advertisement & Registration of I&APs

↓

Distribution of BID Document to I&APs for comment

↓

Review of Draft Basic Assessment Report by I&APs

↓

Public Meeting

↓

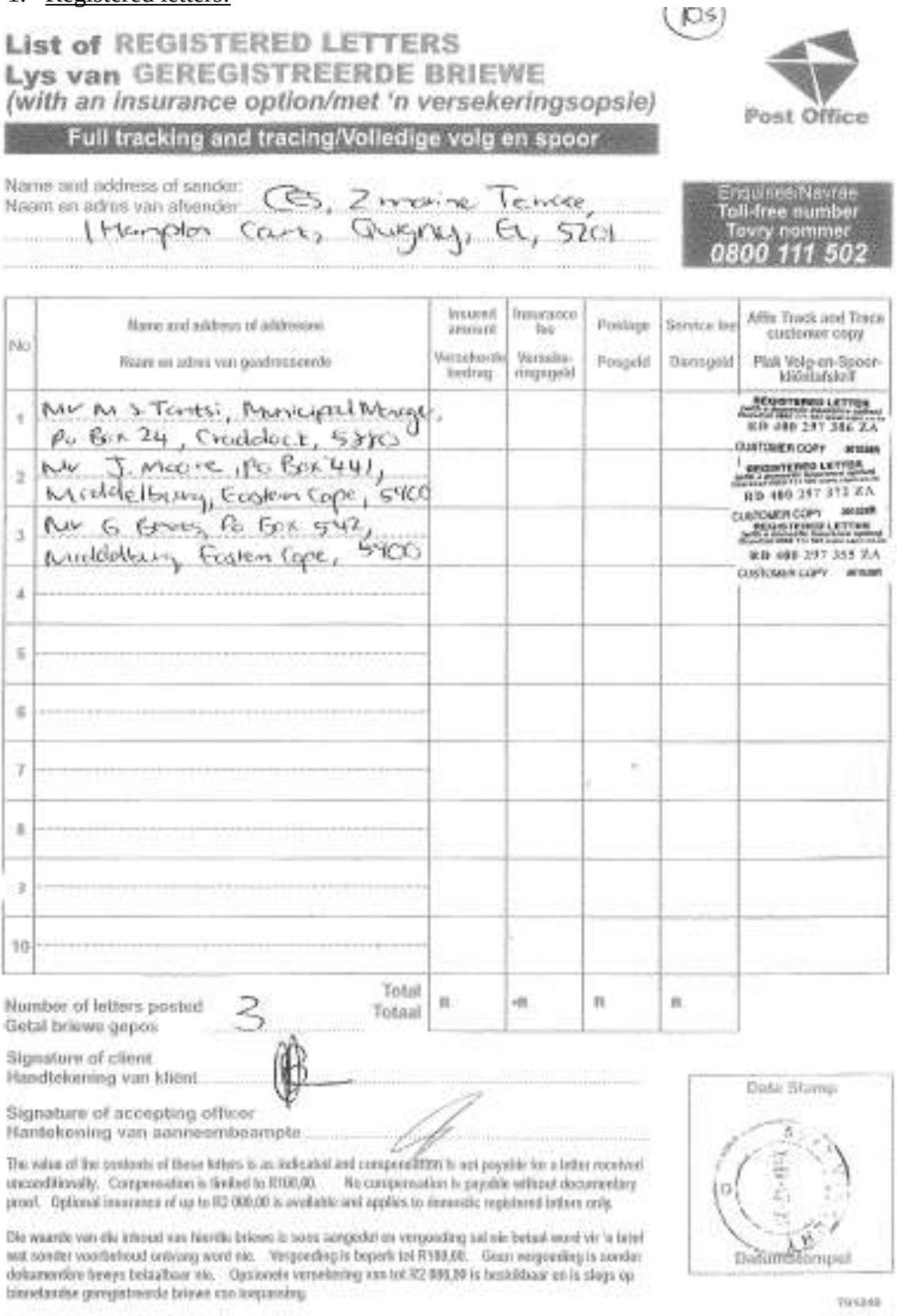
Compilation of I&AP comments

↓

Submission of Basic Assessment Report to DEA

Proof that Notification letters were sent:

1. Registered letters:



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Naam en adres van afsender: CS, Zinnaine Terrace, 1 Hampton Court, Quigney, EL, 5201

Enquiries/Navrae
Toll-free number
Tolvry nommer
0800 111 502

No	Name and address of addressee / Naam en adres van geadresseerde	Insured amount / Versekerde bedrag	Insurance fee / Versekeringsgeld	Postage / Posgeld	Service fee / Diensgeld	Affix Track and Trace customer copy / Plak Volg-en-Spoor-kliëntafskrif
1	Mr M S Tantsi, Municipal Manager, Po Box 24, Cradock, 5330					REGISTERED LETTER RD 480 297 386 ZA CUSTOMER COPY
2	Mr J. Moore, PO Box 441, Middelburg, Eastern Cape, 5900					REGISTERED LETTER RD 480 297 372 ZA CUSTOMER COPY
3	Mr G Bowes, Po Box 542, Middelburg, Eastern Cape, 5900					REGISTERED LETTER RD 480 297 355 ZA CUSTOMER COPY
4						
5						
6						
7						
8						
9						
10						
	Total / Totaal	R	+R	R	R	

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2. <u>e-mail to Stakeholders:</u>

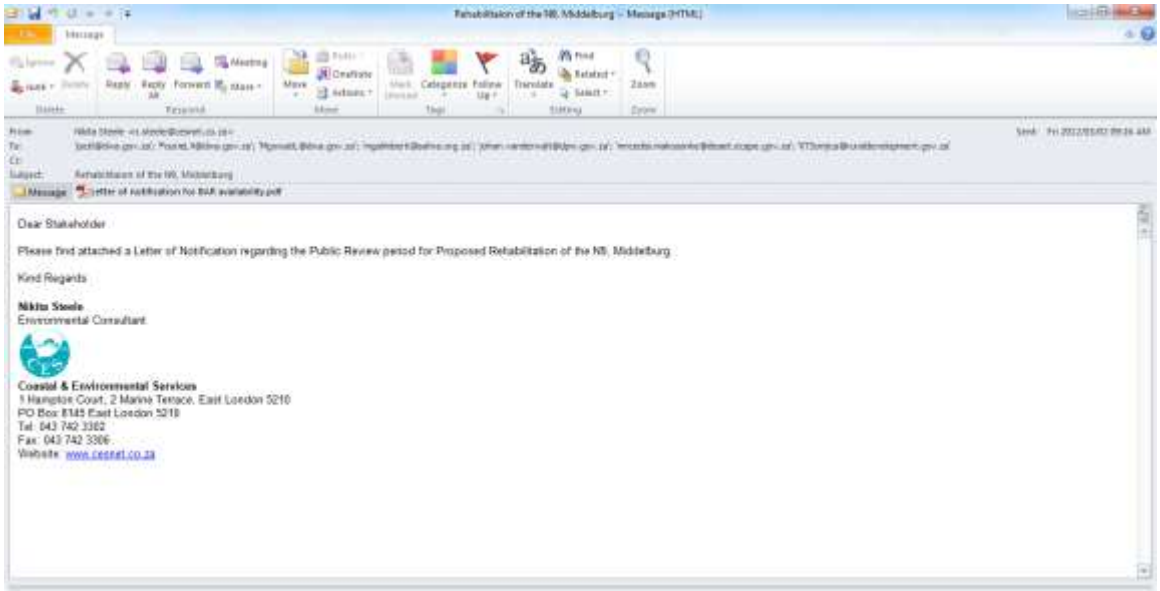
Dear Stakeholder

Please take note that CES as been appointed to do an Environmental Impact Assessment of a proposed rehabilitation of Section 7 on the N9 National Road between Middelburg and Carlton Heights, Eastern Cape. The process will also include a Water Use License application at regulated by the National Water Act (Act No. 36 of 1998), and a quarry mining license as regulated by the Minerals and Petroleum Resources Development Act (Act No. 28 of 2002). Please see attached Background Information Document and Notification letter.

Please contact me for more information or to register as an Interested and Affected Party.

Roy de Kock
Environmental Consultant
Coastal and Environmental Services
www.cesnet.co.za
Email r.dekock@cesnet.co.za
Tel: 043 742 3302
Fax: 043 742 3306
Cell: 0782819660
1 Hampton Court
2 Marine Terrace
Quigney
East London
5210

3. <u>Email notification of Public Review Period</u>:



Dear Stakeholder

Please find attached a Letter of Notification regarding the Public Review period for Proposed Rehabilitation of the N9, Middelburg

Kind Regards

Nikita Steele
Environmental Consultant

Coastal & Environmental Services
1 Hampton Court, 2 Marine Terrace, East London 5210
PO Box 8145 East London 5210
Tel: 043 742 3302
Fax: 043 742 3306
Website: www.cesnet.co.za

4. Notification Letter sent to all Stakeholders and I&APs:

COASTAL & ENVIRONMENTAL SERVICES
Environmental Management and Impact Assessment

67 African Street P.O. Box 934
Grahamstown 6140 SOUTH AFRICA
Tel: 046-622 2364 Fax: 046-622 6564
International: +27-46-622 2364
Email: info@cesnet.co.za
Website: www.cesnet.co.za

2 Marine Terrace P.O. Box 8145
East London 5210 SOUTH AFRICA
Tel: 043-722 5812 Fax: 043-742 3306
International: +27-43-722 5812
Email: cesel@cesnet.co.za
Website: www.cesnet.co.za

2 March 2012

Dear Stakeholder and Interested and Affected Party

NOTICE: NOTIFICATION OF AVAILABILITY OF THE DRAFT BASIC ASESSMENT REPORT THE PROPOSED REHABILITATION OF SECTION 7 ON THE N9 BETWEEN MIDDELBURG AND CARLTON HEIGHTS AND THE DRAFT MINING EMPR FOR THE WOLWEKOP QUARRY LICENCE, EASTERN CAPE

The Draft Basic Assessment Report for the Rehabilitation of the N9 and the Draft Mining EMPr for the Wolwekop Quarry License is now available for public review.

The reports can be downloaded from the CES website (www.cesnet.co.za) on the Public Documents page. Hard copies will also be available at the Middelburg Library. All comments should be submitted in writing via the methods indicated below. The report will be available for review from Monday 5 March 2012 to Friday 13 April 2012.

For more information, registration as an Interested and Affected Party (I&AP), or submission of written comments, please contact by phone, fax, post or email the person below.

Coastal & Environmental Services
Attn: Mr Roy De Kock
PO Box 8145
East London
Tel: 043 742 3302
Fax: 043 742 3306
E-mail: r.dekock@cesnet.co.za

We would like to emphasise that should you consider yourself an interested and/or affected party, we request that you register by simply contacting our office at the details given above. This will ensure that all correspondence and progress with regards to the Environmental Impact Assessment are made available to you in a timeous and transparent manner.

We look forward to hearing from you.

Kind regards

Roy De Kock
Environmental Consultant

5. Proof of comments received from DWA:

water affairs

Department:
Water Affairs
REPUBLIC OF SOUTH AFRICA

Water Use Authorization, Private Bag X6041, **Port Elizabeth**, 6000

Tel: 041 586 4884 **Fax:** 086 560 5042 **E-mail:** bloemm@dwa.gov.za
Enquiries: M. Bloem **Ref:** N9 National Road –Middelburg and Carlton Heights

CES
P.O. Box 8145
Hahoon
EAST LONDON
5210

Attention Mr. R. de Kock

COMMENTS: BACKGROUND INFORMATION DOCUMENT FOR THE PROPOSED REHABILITATION OF SECTION 7 ON THE N9 NATIONAL ROAD BETWEEN MIDDELBURG AND CARLTON HEIGHTS, EASTERN CAPE.

The Department of Water Affairs acknowledges receipt of the Background Information Document (BID) for the above-mentioned proposed development from the Water Use Authorization Unit.

Comments from Resource Protection Unit

Water Use Entitlements

As indicated in the BID, some of the proposed development activities fall within the extent of the watercourse i.e. 1:100 year floodline or riparian habitat, whichever is the greatest.

Any proposed development which may take place within the extent of a watercourse as defined above constitutes a Section 21 water use in terms of Chapter 4 of the National Water Act, 1998 (Act No. 36 of 1998) (the Act) and requires a water use authorization obtained from this department.

Therefore, the following activities will require a water use authorization:

- The construction and expansion of bridges along the N9 route will require a water use authorization in terms of Section 21 (c) & (i) of the Act for impeding or diverting flow of water and altering the bed, banks, course or characteristics of a watercourse.
- The removal of riparian vegetation to accommodate the project activities will also require a water use authorization in terms of Section 21 (i) of the Act.

Additional information required

- A wetland specialist should be appointed to determine the presence of wetlar in the affected areas and the boundaries of all wetlands thereof. Therefore, wetlands, if any, must be delineated and a technical report reflecting such sh be submitted to this department. Please note that any activities that fall within 500 meter radius from the boundary of any wetland constitute a water use license in terms of Section 21 (c) & (i) of the Act.

- The description of the affected watercourse/s as well as the assessment of potential impacts of the proposed project and mitigation measures thereof.

Comments from Water Quality Management Unit

According to Regulation 704 (GN 704), every person in control of a mine or activity must:

- Design, modify, locate, construct and maintain all water systems, including residu deposits, in any area so as to prevent the pollution of any water resource through operation or use thereof through erosion or sedimentation.

- Cause effective measures to be taken to minimise the flow of any surface water o floodwater into mine workings, opencast workings, other workings or subterranea caverns, through cracked or fissured formations, subsided ground, sinkholes, outcrop excavations, exits, entrances or any other openings.

- Implement control measures that will prevent the pollution of any water resource b oil, grease, fuel or chemicals.

Yours Faithfully

Acting CHIEF DIRECTOR: EASTERN CAPE

Date: 21 NOV 2011

Proof that DEDEA was given a copy of the Draft BAR to review and comment on:

COASTAL & ENVIRONMENTAL SERVICES

Environmental Management and Impact Assessment

67 African Street P.O. Box 934
Grahamstown 6140 SOUTH AFRICA
Tel: 046-622 2364 Fax: 046-622 6564
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Website: www.cesnet.co.za

2 Marine Terrace P.O. Box 8145
East London 5210 SOUTH AFRICA
Tel: 043-722 5812 Fax: 043-742 3306
International: +27-43-722 5812
Email: cesel@cesnet.co.za
Website: www.cesnet.co.za

5 March 2012

Dear Mr Makosonke

NOTICE: NOTIFICATION OF AVAILABILITY OF THE DRAFT BASIC ASESSMENT REPORT THE PROPOSED REHABILITATION OF SECTION 7 ON THE N9 BETWEEN MIDDELBURG AND CARLTON HEIGHTS AND THE DRAFT MINING EMPR FOR THE WOLWEKOP QUARRY LICENCE, EASTERN CAPE

The Draft Basic Assessment Report for the Rehabilitation of the N9 and the Draft Mining EMPr for the Wolwekop Quarry License is now available for public review.

Please find enclosed a hard copy of the BAR and the Mining EMPr. The reports will be available for review from Monday 5 March 2012 to Friday 13 April 2012.

For more information, or submission of written comments, please contact by phone, fax, post or email the person below.

Coastal & Environmental Services
Attn: Mr Roy De Kock
PO Box 8145
East London
Tel: 043 742 3302
Fax: 043 742 3306
E-mail: r.dekock@cesnet.co.za

We look forward to hearing from you.

Kind regards

Roy De Kock
Environmental Consultant

RTT TRANSPORTATION

Cnr. Springbok and Jones road
Bartlett
Boksburg
P.O. Box 27284
Benrose 2011
Tel: 0861 FOR RTT or 0861 367 788
Home Page: http://www.rtt.co.za

DOMESTIC WAYBILL
(NOT NEGOTIABLE) - SENDER'S COPY

COL0017241418

COURIER						EXPRESS ROAD							CONSUMER			
301 SAME DAY - DASH	302 SAME DAY - DRIVE AWAY	302 CARGO - OVER NIGHT	303 NEXT DAY	333 NEXT DAY TIME DEFINITE	372 DEDICATED	313 C/BORDER	404 OVER NIGHT ROAD	405 48 HRS ROAD	406 ECONOMY 3-5 DAYS	444 TIME DEFINITE	471 DEDICATED	411 C/BORDER	532 SCHEDULED	533 BOOKED	534 EXPRESS	535 ECONOMY
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UNLESS INDICATED WITH AN X THE NORMAL RTT ECONOMY SERVICE WILL APPLY

TRANSIT TIMES ONLY AVAILABLE AS SHOWN ON OUR BROCHURES

SENDER	CONSIGNEE
COMPANY CES	COMPANY Att: Mr M. Makosonke
EXACT STREET ADDRESS 2 Marine Terrace, 1 Hampton Court	EXACT STREET ADDRESS DEDEA, 101 Cathcart Rd
SUBURB CITY East London	SUBURB CITY Queenstown
POSTAL CODE 5201	POSTAL CODE 5319
TELEPHONE NO. 043 7123302	TELEPHONE NO. 045 808 4000

SPECIAL INSTRUCTIONS

SATURDAY DELIVERY	INC. HAZ CARGO	AAA SERVICE	FRIDGE LINE

CHARGES PAYABLE

SENDER ☐ CONSIGNE ☐

DETAILS OF COLLECTING PERSON

NAME AND SURNAME		FROM BRANCH	
Vincent Gwera		EL	
EMPLOYEE NUMBER 8365	ID NUMBER	VEHICLE REG. No. SRD441 GP	
COLLECTING SIGNATURE	SENDER SIGNATURE	DATE COLLECTED 5/03/12	TIME 12:36

QUANTITY	DESCRIPTION OF CONTENTS	VOLUMETRICS LENGTH	WIDTH	HEIGHT	ACTUAL WEIGHT
		x		x	KG
		x		x	KG
	1 x envelope	x		x	KG
		x		x	KG
		x		x	KG
			TOTAL		103 KG

RTT reserves the right to complete the volume above if not declared by the sender, no claim for discrepancy will be entertained.
ALL CHARGES ARE FOR THE SENDERS ACCOUNT UNLESS THE CONSIGNEE ACCOUNT NO. IS CLEARLY INDICATED. SHOULD THE CONSIGNEE REFUSE TO PAY, THE SENDER WILL BE DEBITED.

TERMS: Strictly 30 Days Nett

...s 16 printed on reverse. Insurance cover provided only if prior written arrangements have been made and is calculated on value declared.
...charged as per tariff. No claim will be honoured unless RTT is notified of any discrepancy within 30 days of collection of goods. No C.O.D.'s will be accepted.

No comment received from DEDEA on this proposed development.

I&AP database:

Organisation/association	Name/contact person	Address	e-mail	Tel:	Fax:	cell
Identified Stakeholders						
DWA	Landile Jack (WQM)		jackl@dwa.gov.za	(043) 748 5340		082 887 6458
	Lizna Fourie (Licensing & WMA 12)		FourieL4@dwa.gov.za			
	Mgxwati Lungiswa (WMA 15)		MgxwatiL@dwa.gov.za			
SAHRA	M Galimberti		mgalimberti@sahra.org.za			
Municipal Manager (IYM)	Mr Mzwandile Sydney Tantsi	PO Box 24, CRADOCK, 5880		(048) 801 5000	(048) 881 1421	
Dept of Public Works	Mr Johan van der Walt	Private Bag X3913, Port Elizabeth, 6056	johan.vanderwalt@dpw.gov.za	041 408 2003	041 484 4226	
DEDEA	Mr M Makosonke	PO Box 9636 Queenstown, 5320	mncedisi.makosonke@deaet.ecape.gov.za			
Dept of Rural Development & Land Reform	Communication Officer: Mr Kholekile Sonjica	Block F, Ocean Terrace Cnr Moor Street/Quigney, EAST LONDON, 5200 P.O BOX 1958, EAST LONDON, 5200	KTSonjica@ruraldevelopment.gov.za	(043) 700 7030/082 419 5253	(043) 743 4786	
Surrounding Landowners						
F12/3, F12/5	John Moore (Wolwekop)	PO Box 441 Middelburg		049 842 3011		0825716544
F12/11	Gerhard Beetge (Ebenhaeser)	PO Box 542 Middelburg		498421240		0725917452
Beskuitfontein trust	B.P. ERASMUS (Pieter)	P.O. BOX 62 Middelburg 5900	bpe@intekom.co.za	049842 2017	049842 2017	0825587178

Organisation/association	Name/contact person	Address	e-mail	Tel:	Fax:	cell
Peet Hough Family Trust	Peet Hough (F12/2)					0829276486
RSA	F81/0					
	Jacobus Moore					0827723227
I&AP's						
African Crane Conservation Programme, Endangered Wildlife Trust	Bradley Gibbons	P O Box 40, Middelburg, Eastern Cape, 5899	bradleyg@ewt.org.za			