

# SCOPE OF WORKS PRESENTATION: CONSULTING ENGINEERING SERVICES FOR PERIODIC MAINTENANCE

CLARIFICATION MEETING

WESTERN REGION

12 JULY 2023

**SANRAL**



BUILDING SOUTH AFRICA  
THROUGH BETTER ROADS

# TENDER CLARIFICATION FOR PROJECTS

No.	Contract Number	Description
1	N.001-067-2023/1F	FOR CONSULTING ENGINEERING SERVICES FOR THE PERIODIC MAINTENANCE (RESURFACING) ON NATIONAL ROUTE 1 SECTIONS 6 AND 7 FROM WELTEVREDE (KM 10.60) TO STEYNSTATION (KM 53.00)
2	N.001-080-2024/1F	CONSULTING ENGINEERING SERVICES FOR THE PERIODIC MAINTENANCE (RESEAL) OF NATIONAL ROUTE 1 SECTION 8 FROM BEAUFORT-WEST (KM 4.00) TO NELSPOORT (KM 45.20)
3	N.001-090-2023/1F	FOR CONSULTING ENGINEERING SERVICES FOR THE PERIODIC MAINTENANCE (RESURFACING) ON NATIONAL ROUTE 1 SECTIONS 9 FROM BULTFONTEIN (KM 60.00) TO RICHMOND (KM 104.63)
4	N.002-040-2022/1F	FOR CONSULTING ENGINEERING SERVICES FOR THE PERIODIC MAINTENANCE (RESURFACING) OF NATIONAL ROUTE N2 SECTION 4 FROM RIVIERSONDEREND (KM 0.00) TO SWELLENDAM (KM 56.92)
5	N.010-101-2023/1F	CONSULTING ENGINEERING SERVICES FOR THE PERIODIC MAINTENANCE (RESURFACING) OF NATIONAL ROUTE 10 SECTION 10 FROM KEUKENDRAAI (KM 50.30) TO GROBLERSHOOP (KM 55.59), NATIONAL ROUTE 10 SECTION 11 FROM GROBLERSHOOP (KM 0.00) TO UITKYK (KM 70.00) AND NATIONAL ROUTE 8 SECTION 6 FROM GROBLERSHOOP (KM 0.00) TO ROOISAND (KM 8.18)
6	N.012-090-2024/1F	FOR CONSULTING ENGINEERING SERVICES FOR THE PERIODIC MAINTENANCE (RESURFACING) ON NATIONAL ROUTE 12 ON SECTION 9 FROM HOPE TOWN (KM 0,00) TO KIMBERLEY (KM 117,50)
7	R.027-090-2023/1F	CONSULTING ENGINEERING SERVICES FOR THE . PERIODIC MAINTENANCE (RESURFACING) ON NATIONAL ROUTE R27 SECTION 9 FROM RIETMOND POORT (KM 73) TO BRANDVLEI (KM 147)

# TENDER CLARIFICATION FOR PROJECTS (cont...)

No.	Contract Number	Description
8	R.027-100-2023/1F	FOR CONSULTING ENGINEERING SERVICES FOR THE PERIODIC MAINTENANCE (RESURFACING) ON NATIONAL ROUTE R27 SECTION 10 FROM BRANDVLEI (KM 0.00) TO KENHARDT (KM 141.96)
9	R.027-110-2023/1F	FOR CONSULTING ENGINEERING SERVICES FOR THE PERIODIC MAINTENANCE (RESURFACING) OF NATIONAL ROUTE R27 SECTION 11 FROM KENHARDT (KM 0.00) TO KEIMOES (KM 74.61)
10	R.031-050-2024/1F	FOR CONSULTING ENGINEERING SERVICES FOR THE PERIODIC MAINTENANCE (RESURFACING) ON NATIONAL ROUTE R31 SECTION 5 FROM KURUMAN (KM 0.00) TO DANIELSKUIL (KM 92.50)
11	R.031-070-2024/1F	FOR CONSULTING ENGINEERING SERVICES FOR THE PERIODIC MAINTENANCE (RESURFACING) ON NATIONAL ROUTE R31 ON SECTION 7 FROM DELPORTSHOOP (KM 0.00) TO BARKLY WEST (KM 30.61)
12	R.031-080-2024/1F	CONSULTING ENGINEERING SERVICES FOR THE PERIODIC MAINTENANCE (RESURFACING) OF NATIONAL ROUTE R31 SECTION 8 FROM BARKLY WEST (KM 0.00) TO R31/N12 ROUNDABOUT (KM 36.23)
13	R.325-020-2024/1F	FOR CONSULTING ENGINEERING SERVICES FOR THE PERIODIC MAINTENANCE (RESURFACING) ON NATIONAL ROUTE R325 SECTION 2 FROM POSTMASBURG (KM 0.00) TO JENKINSFARM (KM 50.87)
14	R.382-010-2024/1F	CONSULTING ENGINEERING SERVICES FOR THE PERIODIC MAINTENANCE (RESURFACING) ON NATIONAL ROUTE R382 SECTION 1 FROM ALEXANDER BAY AIRPORT I/S (KM 0.00) TO PORT NOLLOTH (KM 87.96).
15	X.005-060-2024/1F	FOR CONSULTING ENGINEERING SERVICES THE PERIODIC MAINTENANCE (RESURFACING) OF NATIONAL ROUTE R31 SECTION 4 FROM SANTOY (KM 0.00) TO KURUMAN (KM 73.48) AND NATIONAL ROUTE R380 SECTION 2 FROM SANTOY (KM 0.00) TO (KM 8.40)





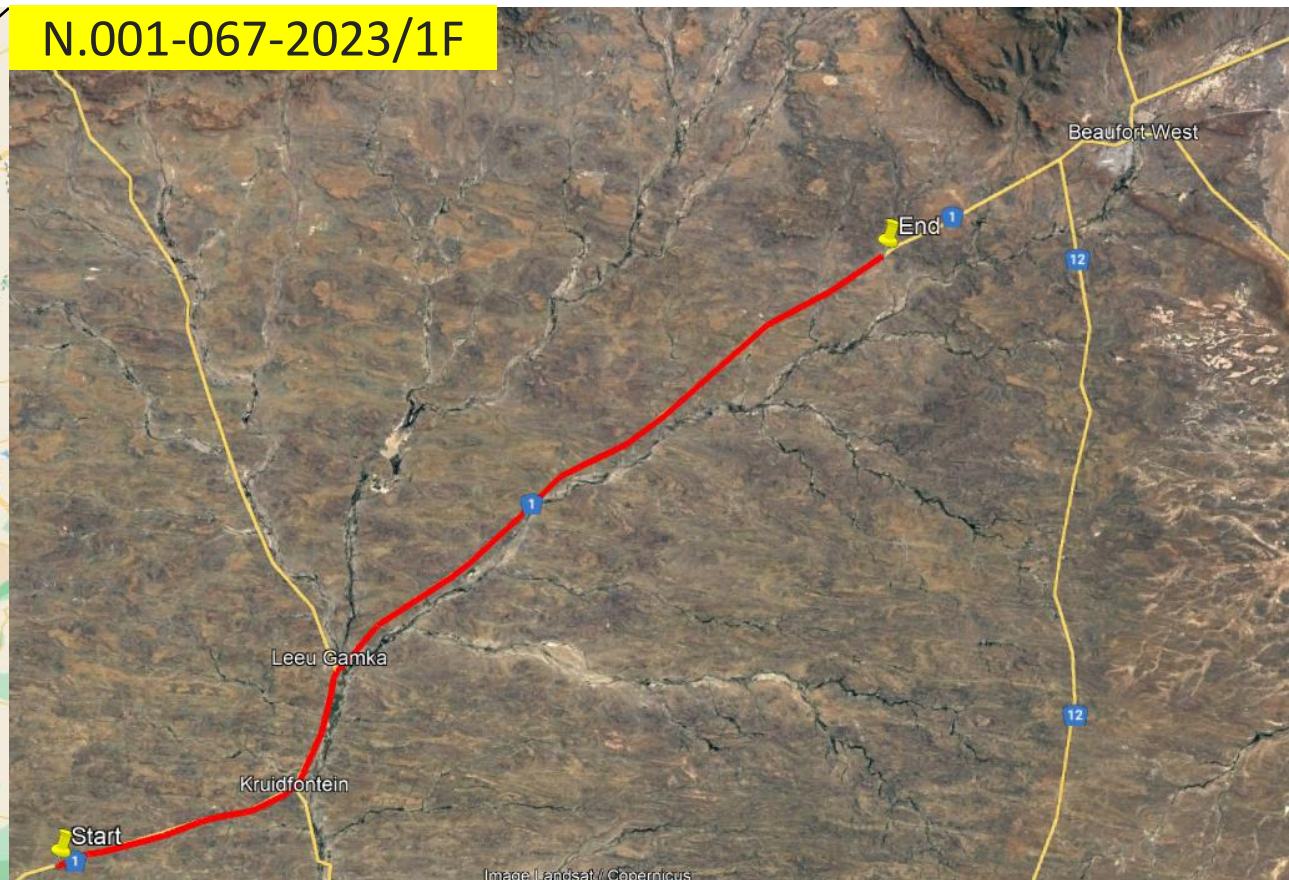
## Part C3: Scope of Works



# C3.1.2. LOCATION OF THE PROJECT



N.001-067-2023/1F



ROUTE	SECTION	FROM KM	TO KM	LENGTH KMS
N1	6	0.00	39.43	28.83
N1	7	0.00	53.00	53.00
Total =				81.83

National Route N1 Section 6 and 7 from Weltevrede (km 10.60) to Steynstation (km 53.00)



### C3.1.2. LOCATION OF THE PROJECT



ROUTE	SECTION	FROM KM	TO KM	LENGTH KMS
N1	8	4.00	45.20	41.2
Total =				41.2

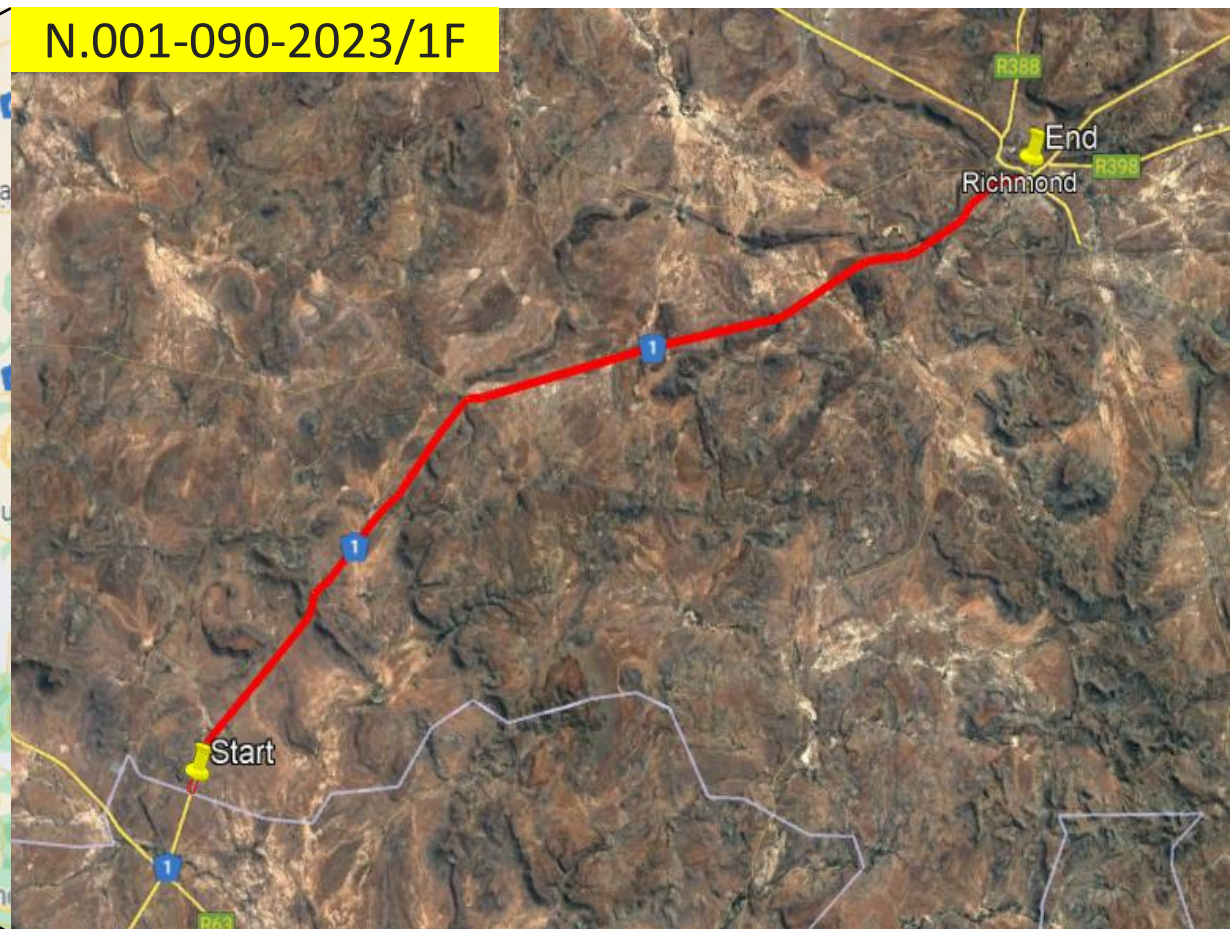
National Route N1 Section 8 from Beaufort-West (km 4.00) to Nelspoort (km 45.20)



## C3.1.2. LOCATION OF THE PROJECT



N.001-090-2023/1F

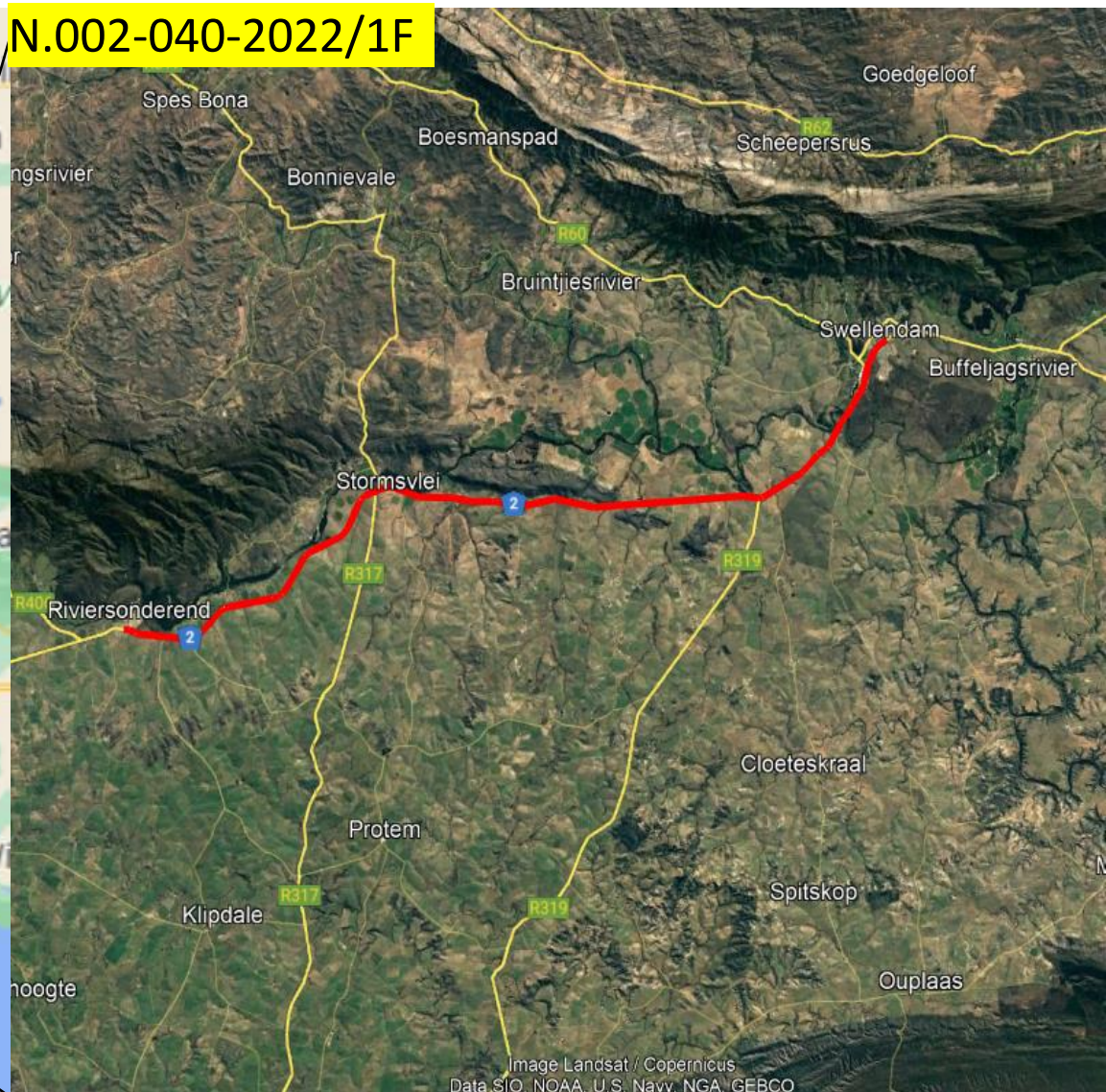
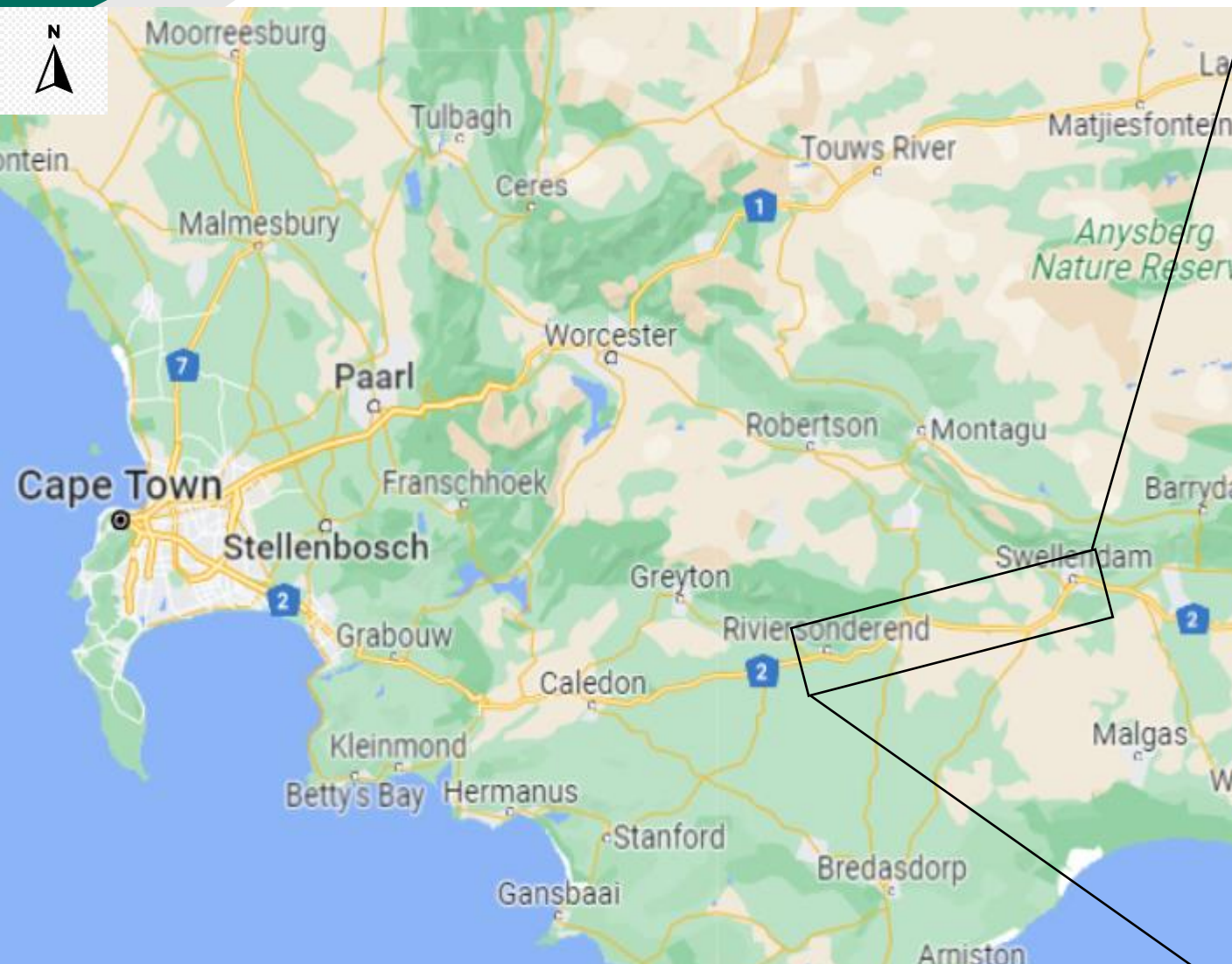


ROUTE	SECTION	FROM KM	TO KM	LENGTH KMS
N1	9	60.00	104.63	44.63
Total =				44.63

National Route N1 Section 9 from Bultfontein (km 60.00) to Richmond (km 104.63)



# C3.1.2. LOCATION OF THE PROJECT

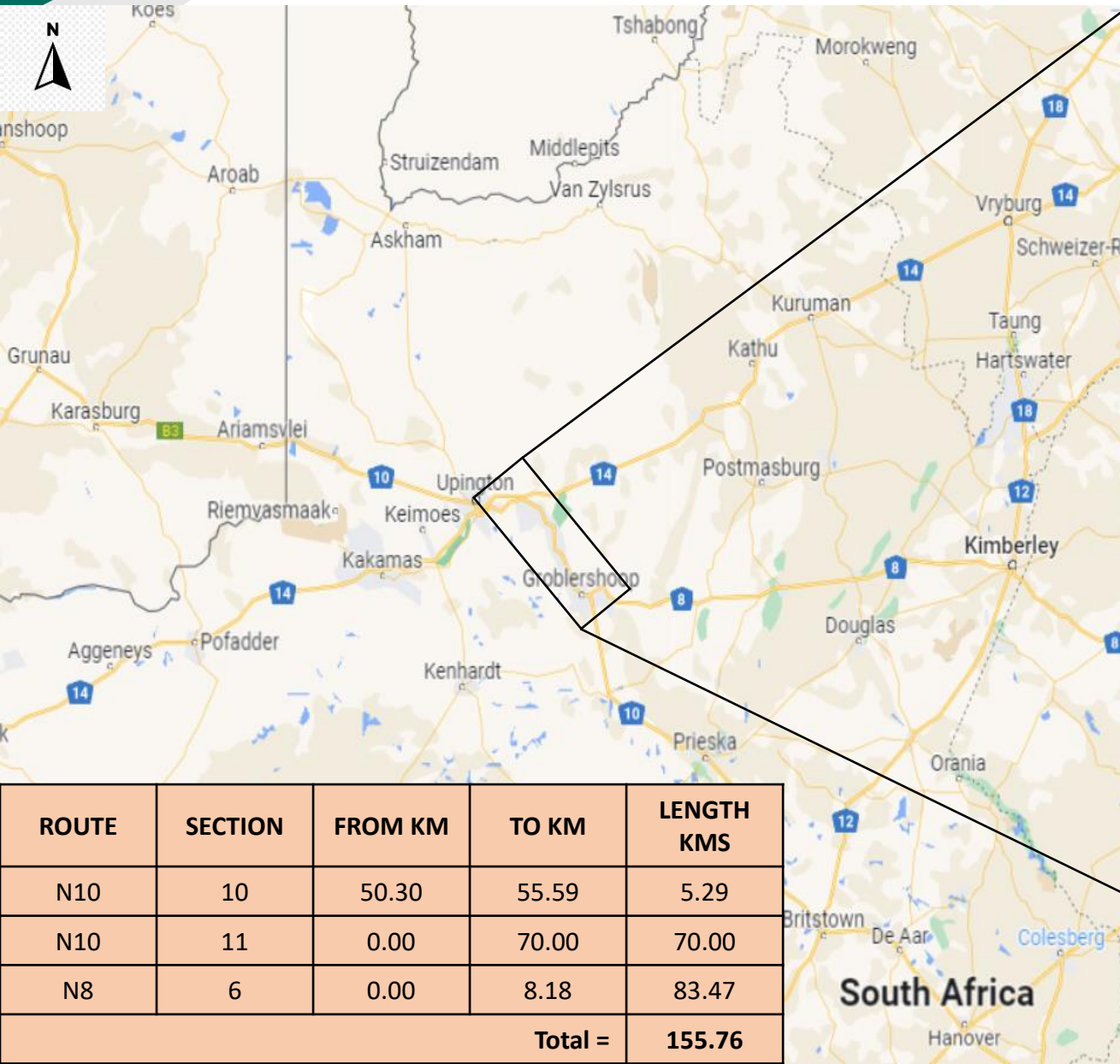


ROUTE	SECTION	FROM KM	TO KM	LENGTH KMS
N2	4	0.00	56.92	56.92
Total =				56.92

National Route N2 Section 4 from Riviersonderend (km 0.00) to Swellendam (km 56.92)



## C3.1.2. LOCATION OF THE PROJECT

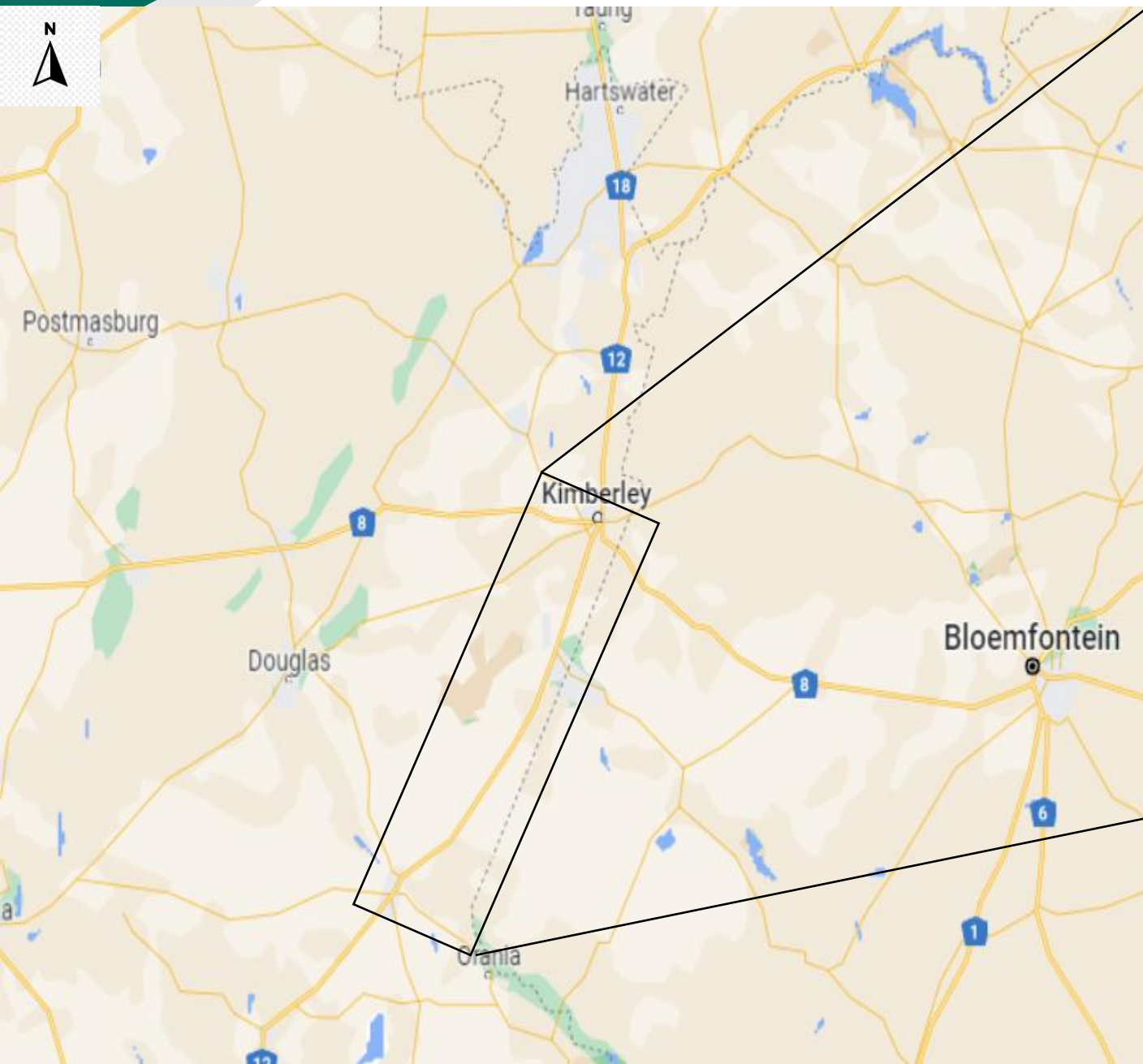


ROUTE	SECTION	FROM KM	TO KM	LENGTH KMS
N10	10	50.30	55.59	5.29
N10	11	0.00	70.00	70.00
N8	6	0.00	8.18	83.47
Total =				155.76

N10 Section 10 from Keukendraai (km 50.30) to Groblershoop (km 55.59) and N10 Section 11 from Groblershoop (km 0.00) to Uitkyk (km 70.00) and N8 Section 6 from Groblershoop (km 0.00) to Rooisand (km 8.18)



# C3.1.2. LOCATION OF THE PROJECT

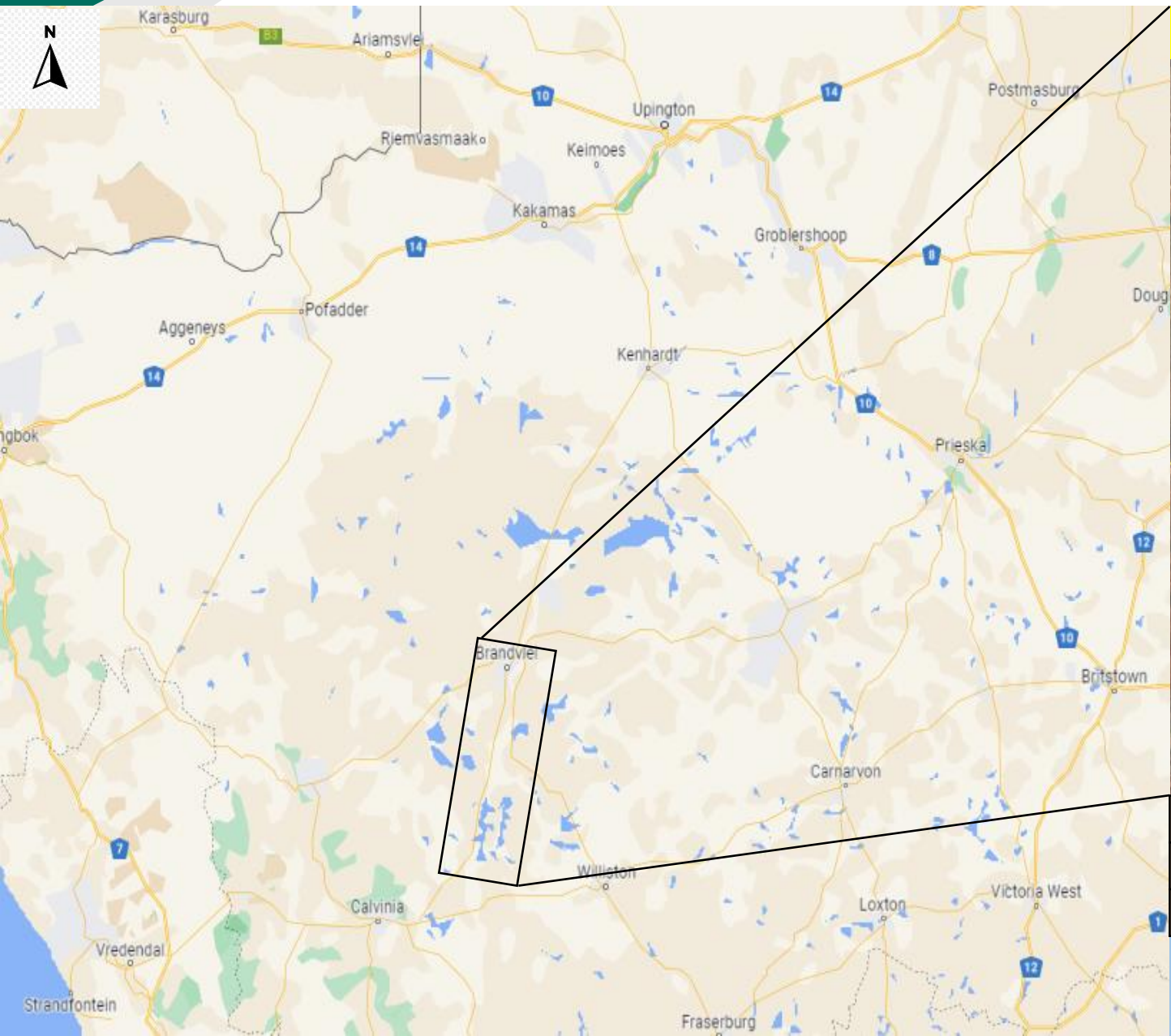


ROUTE	SECTION	FROM KM	TO KM	LENGTH KMS
N12	9	0.00	117.5	117.5
Total =				117.5

National Route N12 Section 9 from Hopetown (km 0.00) to Kimberley (km 117.5)



# C3.1.2. LOCATION OF THE PROJECT



R.027-090-2023/1F



ROUTE	SECTION	FROM KM	TO KM	LENGTH KMS
R27	9	73.00	147.00	74.00
Total =				74.00

National Route R27 Section 9 from Rietmond Poort (km 73.00) to Brandvlei (km 147.00)



# C3.1.2. LOCATION OF THE PROJECT



R.027-100-2023/1F



ROUTE	SECTION	FROM KM	TO KM	LENGTH KMS
R27	10	0.00	141.96	141.96
Total =				141.96

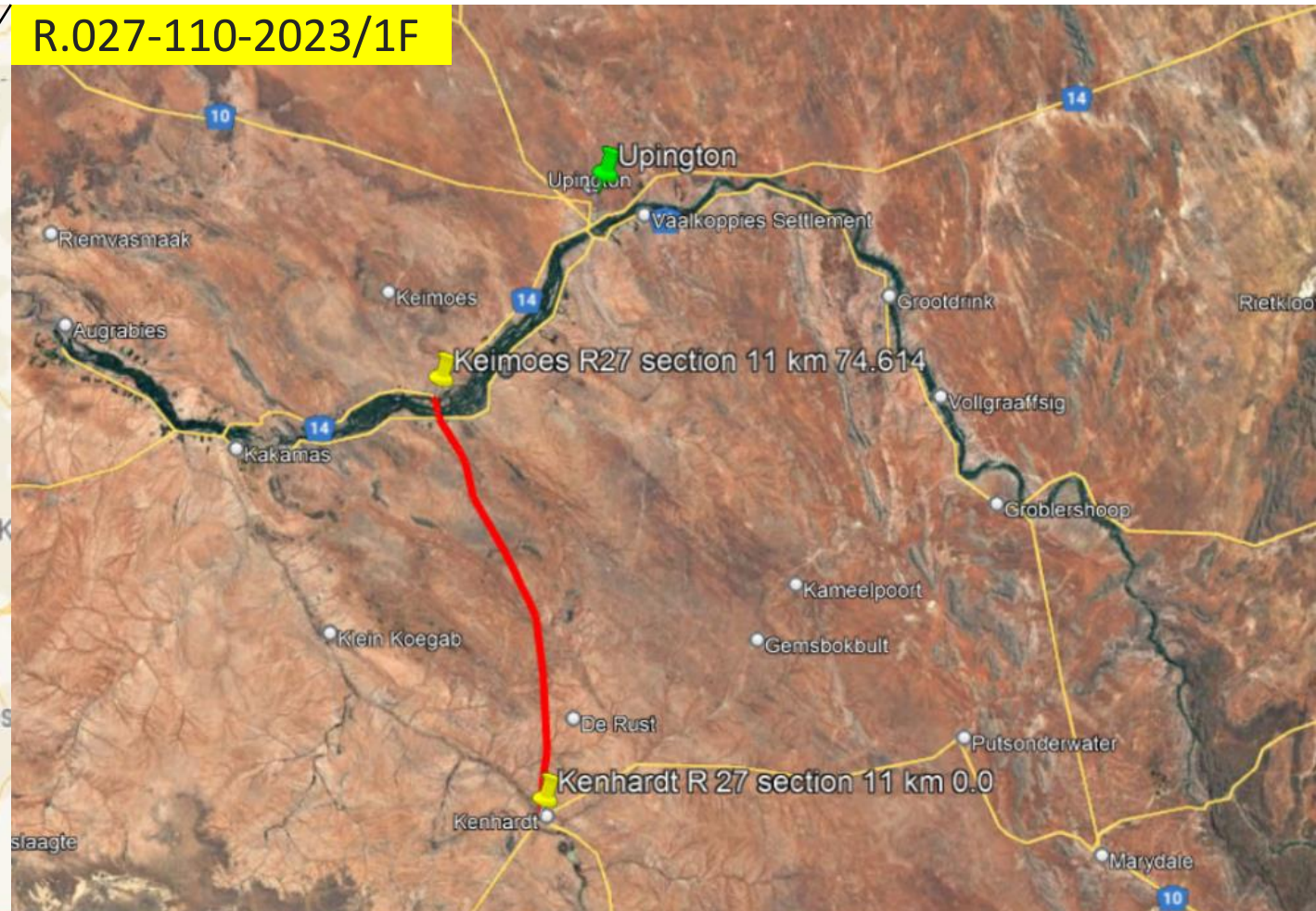
National Route R27 Section 10 from Brandvlei (km 0.00) to Kenhardt (km 141.96)



## C3.1.2. LOCATION OF THE PROJECT



R.027-110-2023/1F

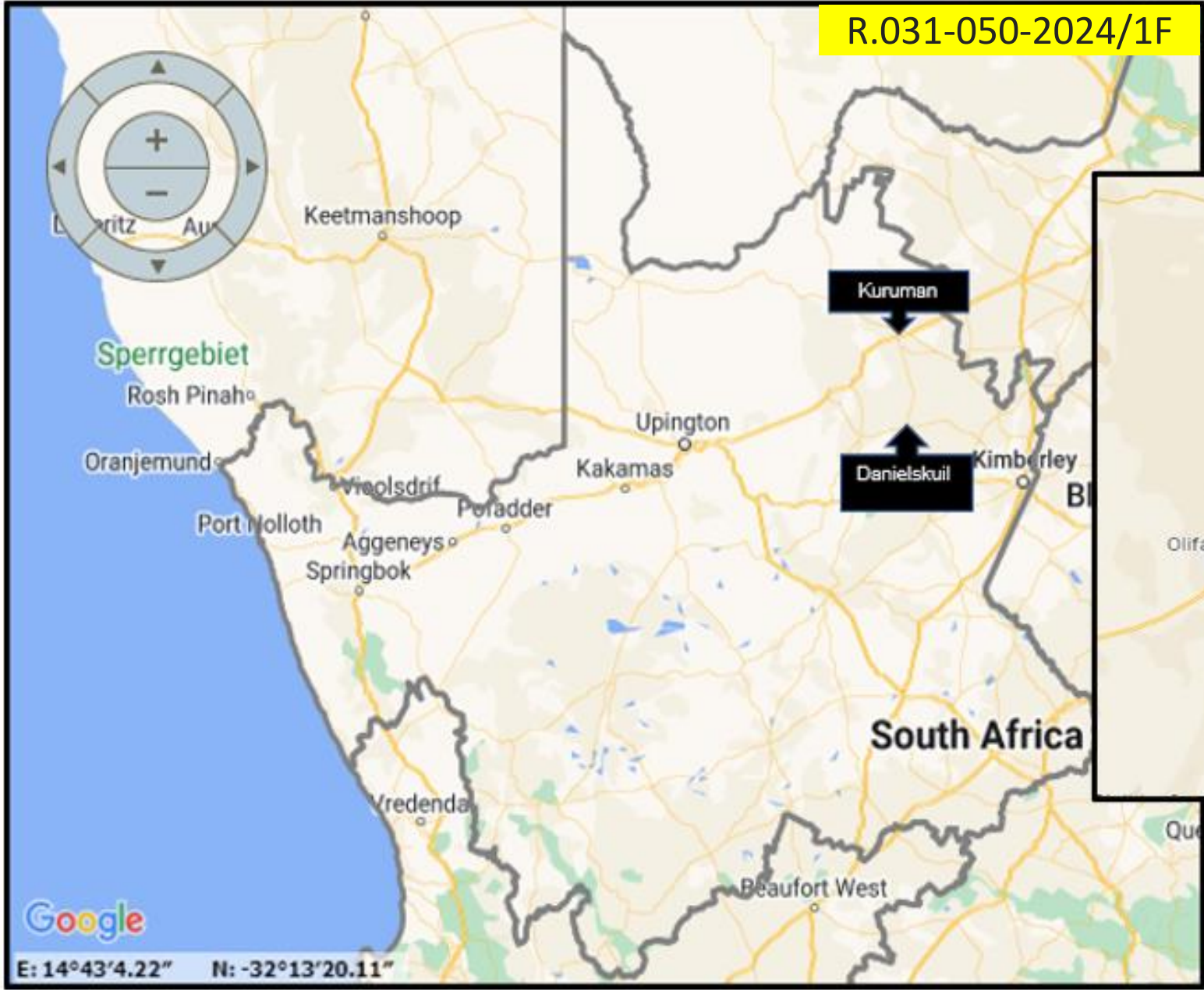


ROUTE	SECTION	FROM KM	TO KM	LENGTH KMS
R27	11	0.00	74.61	74.61
Total =				74.61

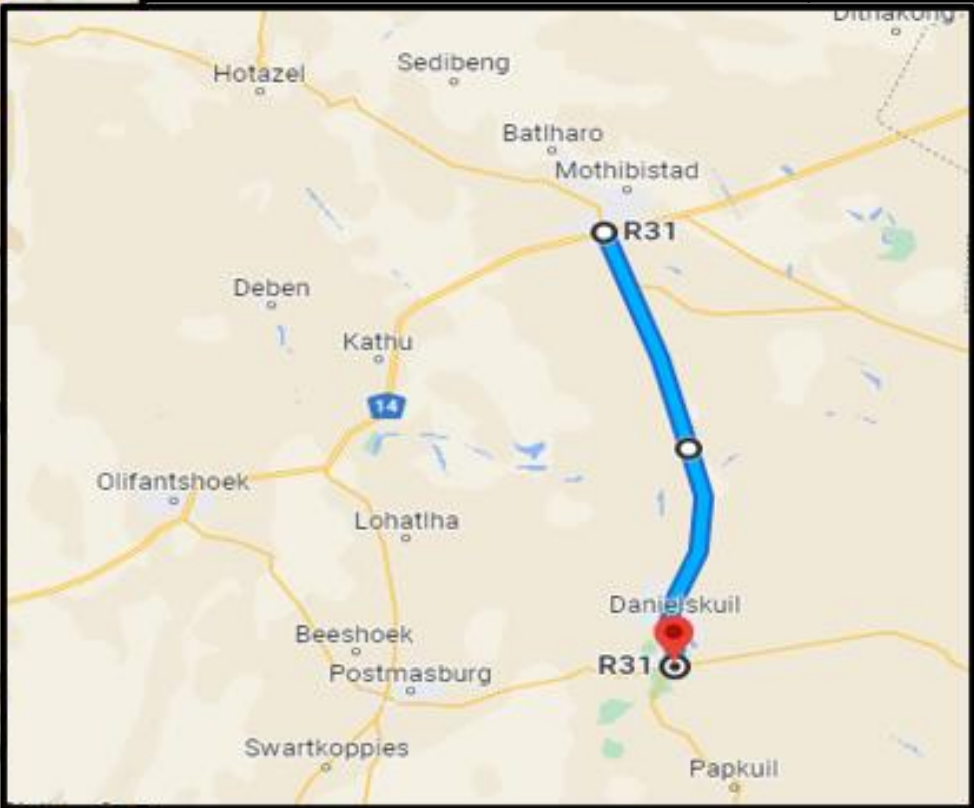
National Route R27 Section 11 from Kenhardt (km 0.00) to Keimoes (km 74.61)



# C3.1.2. LOCATION OF THE PROJECT

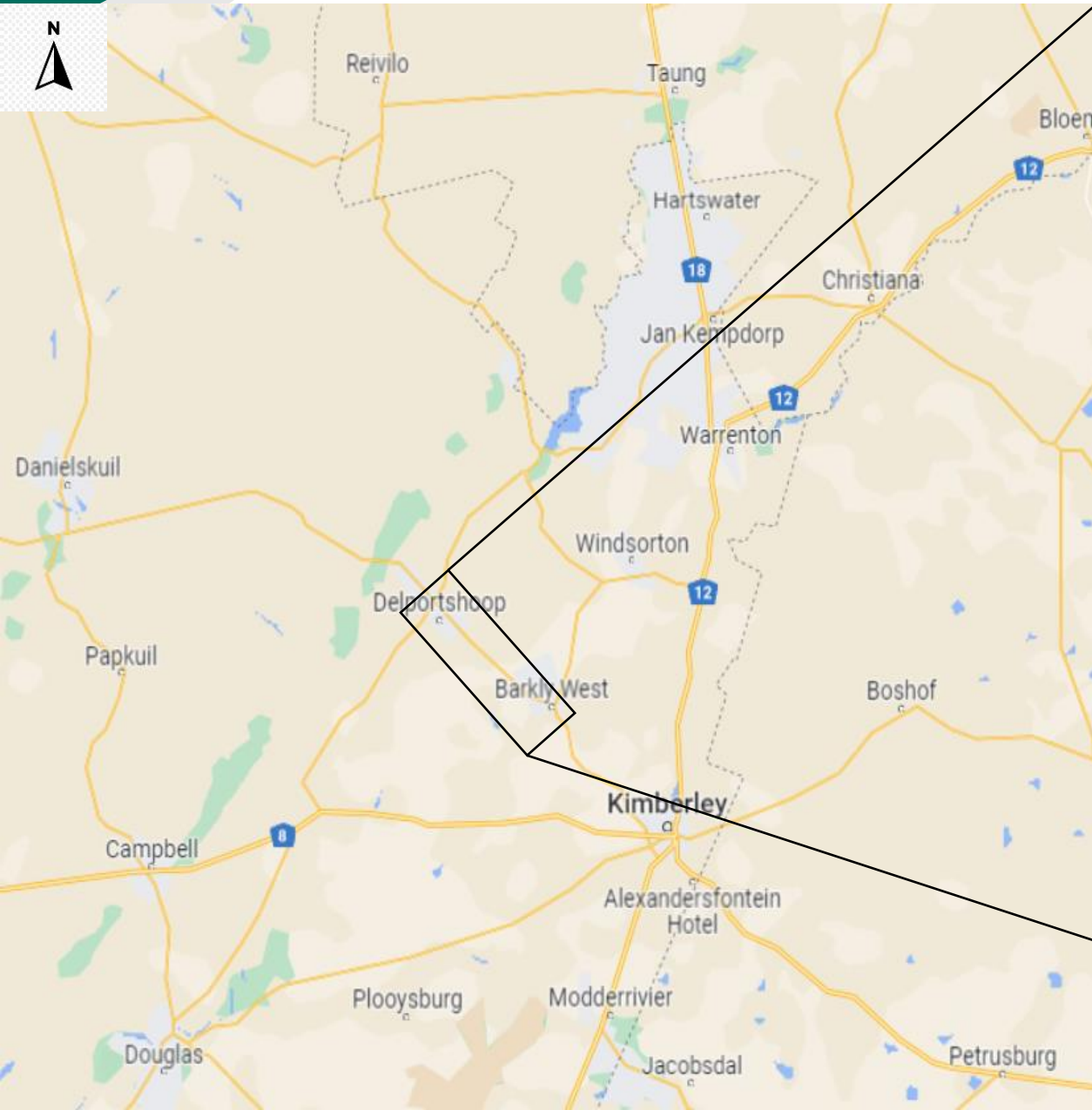


ROUTE	SECTION	FROM KM	TO KM	LENGTH KMS
R31	5	0.00	92.50	92.50
Total =				92.50





# C3.1.2. LOCATION OF THE PROJECT

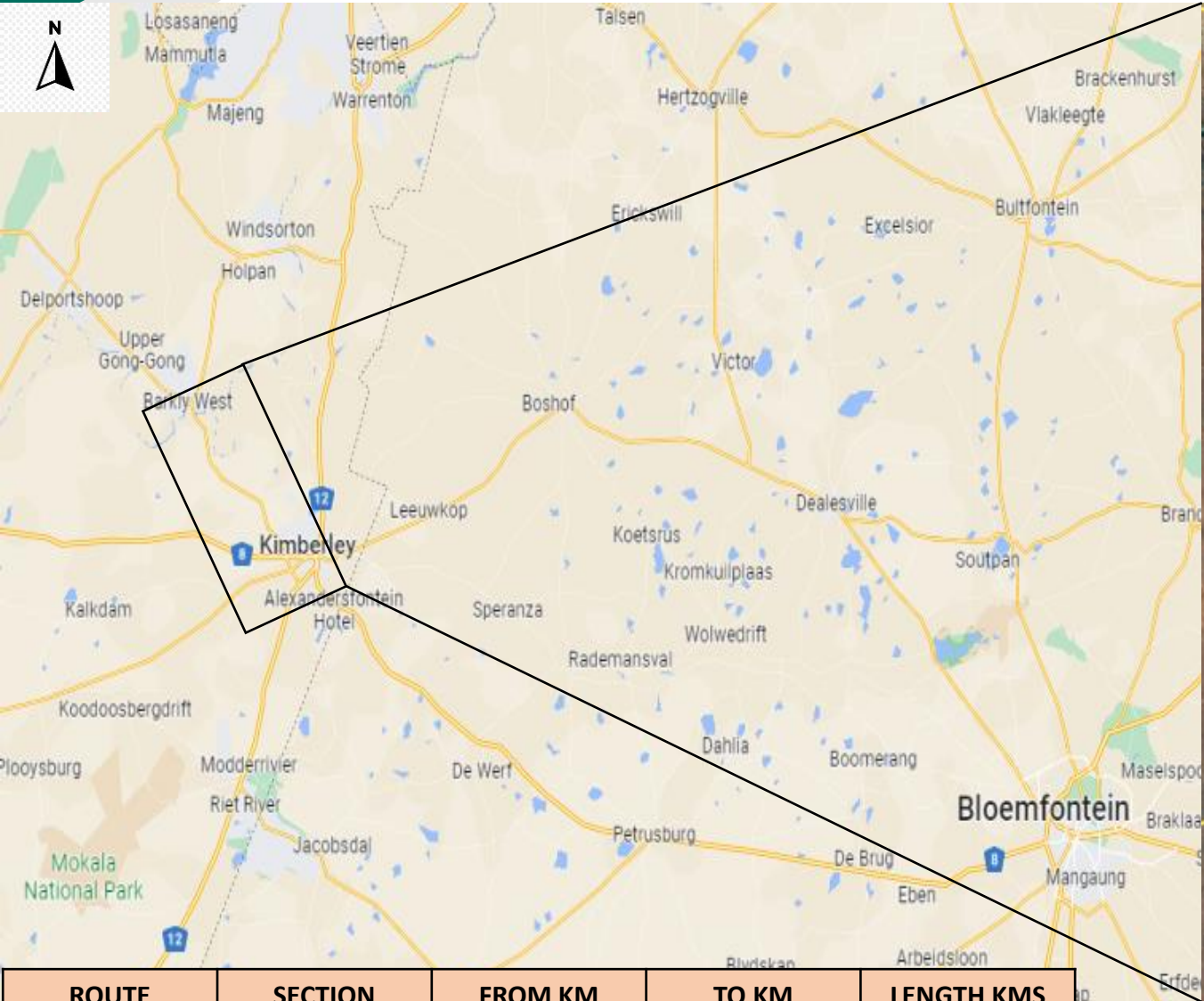


ROUTE	SECTION	FROM KM	TO KM	LENGTH KMS
R31	7	0.00	30.61	30.61
Total =				30.61

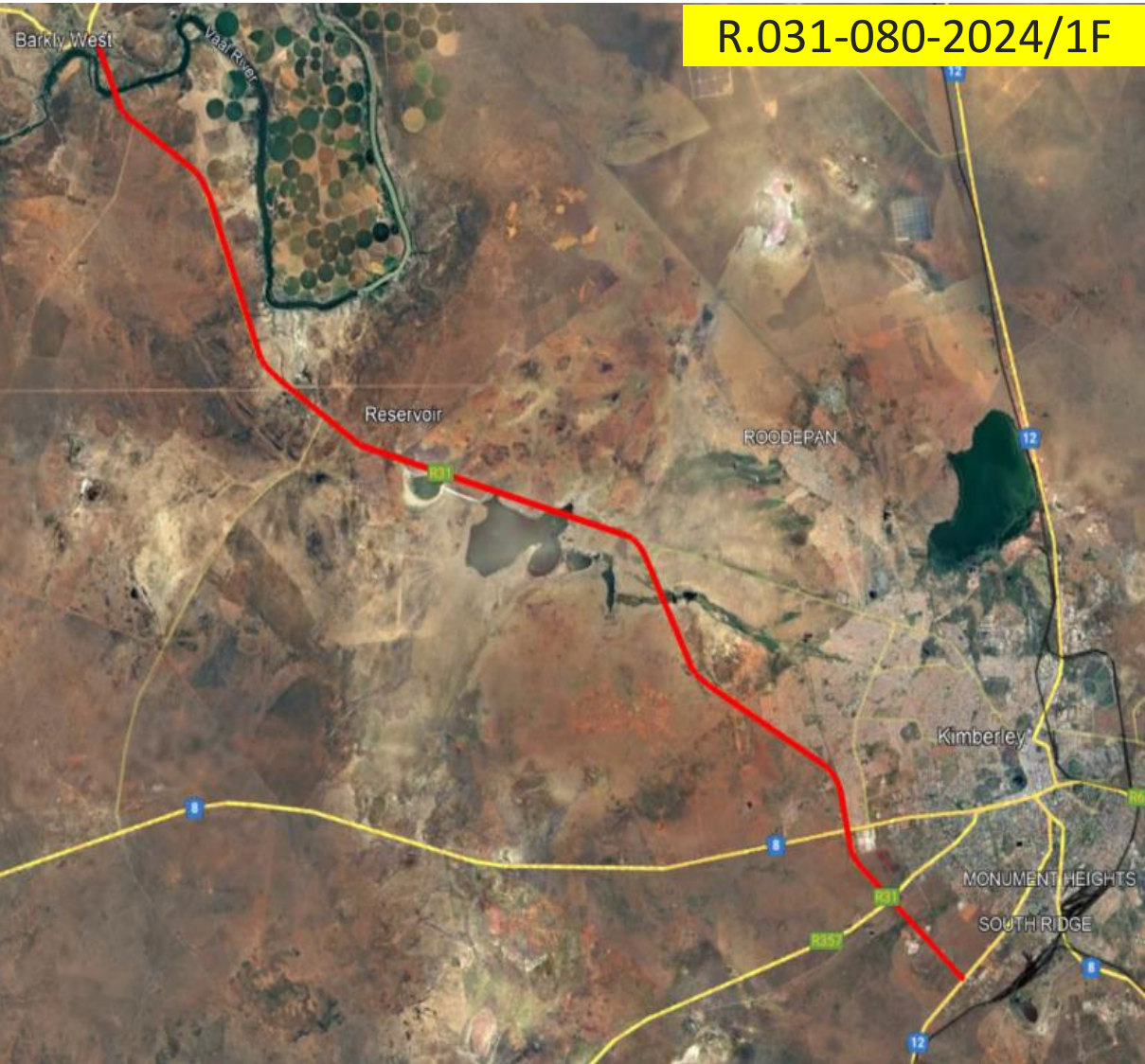
National Route R31 Section 7 from Delportshoop (km 0.00) to Barkly West (km 30.61)



# C3.1.2. LOCATION OF THE PROJECT



ROUTE	SECTION	FROM KM	TO KM	LENGTH KMS
R31	8	0.00	36.23	36.23
Total =				36.23



R.031-080-2024/1F

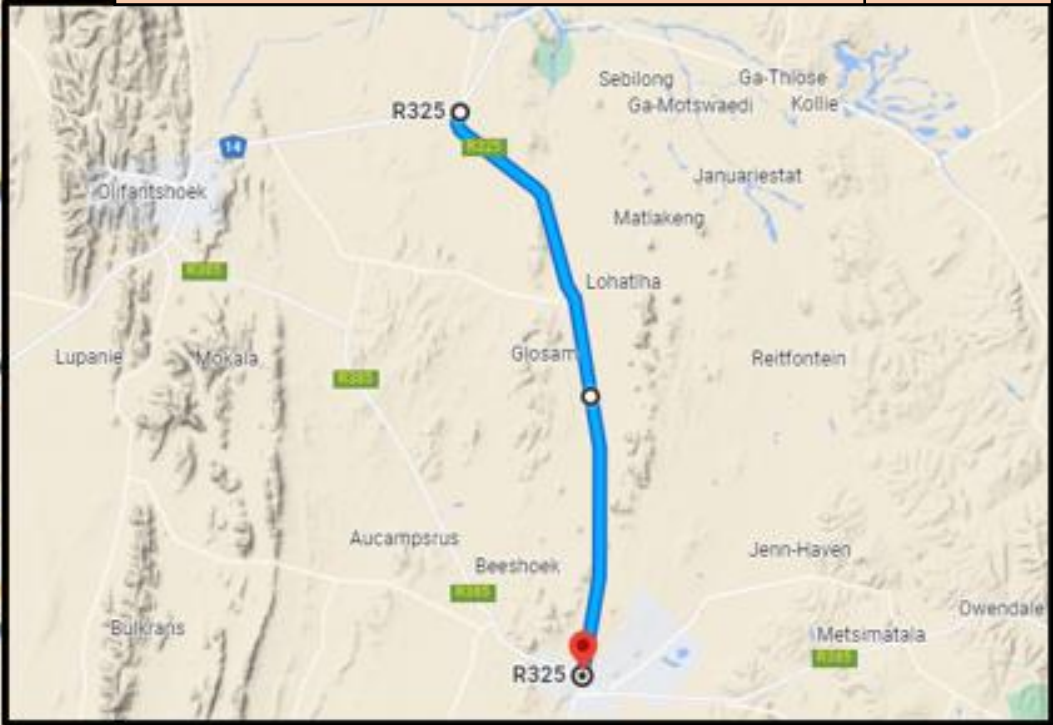
National Route R31 Section 8 from Barkly West (km 0.00) to R31/N12 Roundabout (km 36.23)



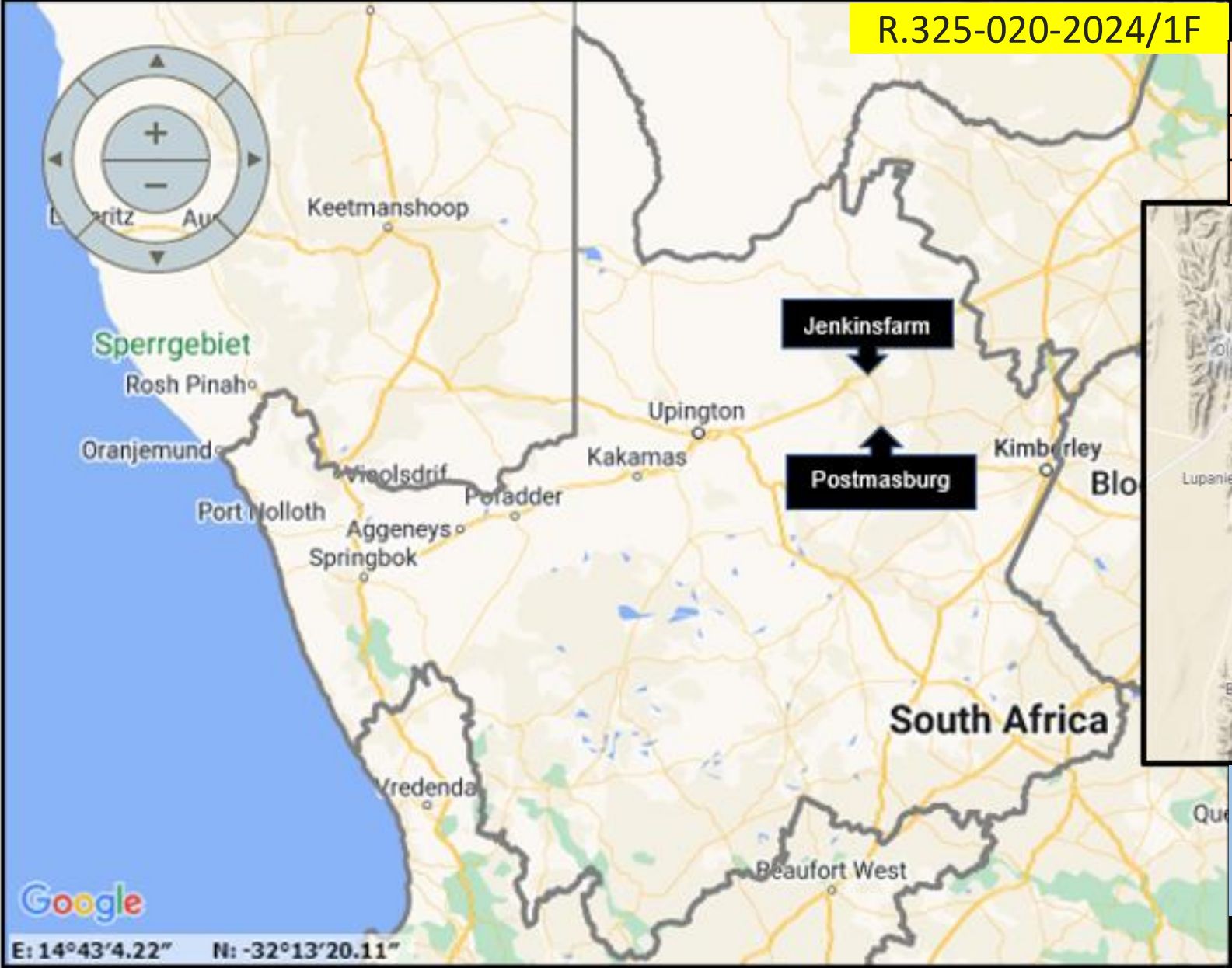
# C3.1.2. LOCATION OF THE PROJECT(S)

R.325-020-2024/1F

ROUTE	SECTION	FROM KM	TO KM	LENGTH KMS
R325	2	0.00	50.87	50.87
Total =				50.87



National Route R325 Section 2 from Postmasburg (km 0.00) to Jenkinsfarm (km 50.87)





# C3.1.2. LOCATION OF THE PROJECT



ROUTE	SECTION	FROM KM	TO KM	LENGTH KMS
R382	1	0.00	87.96	87.96
Total =				30.61

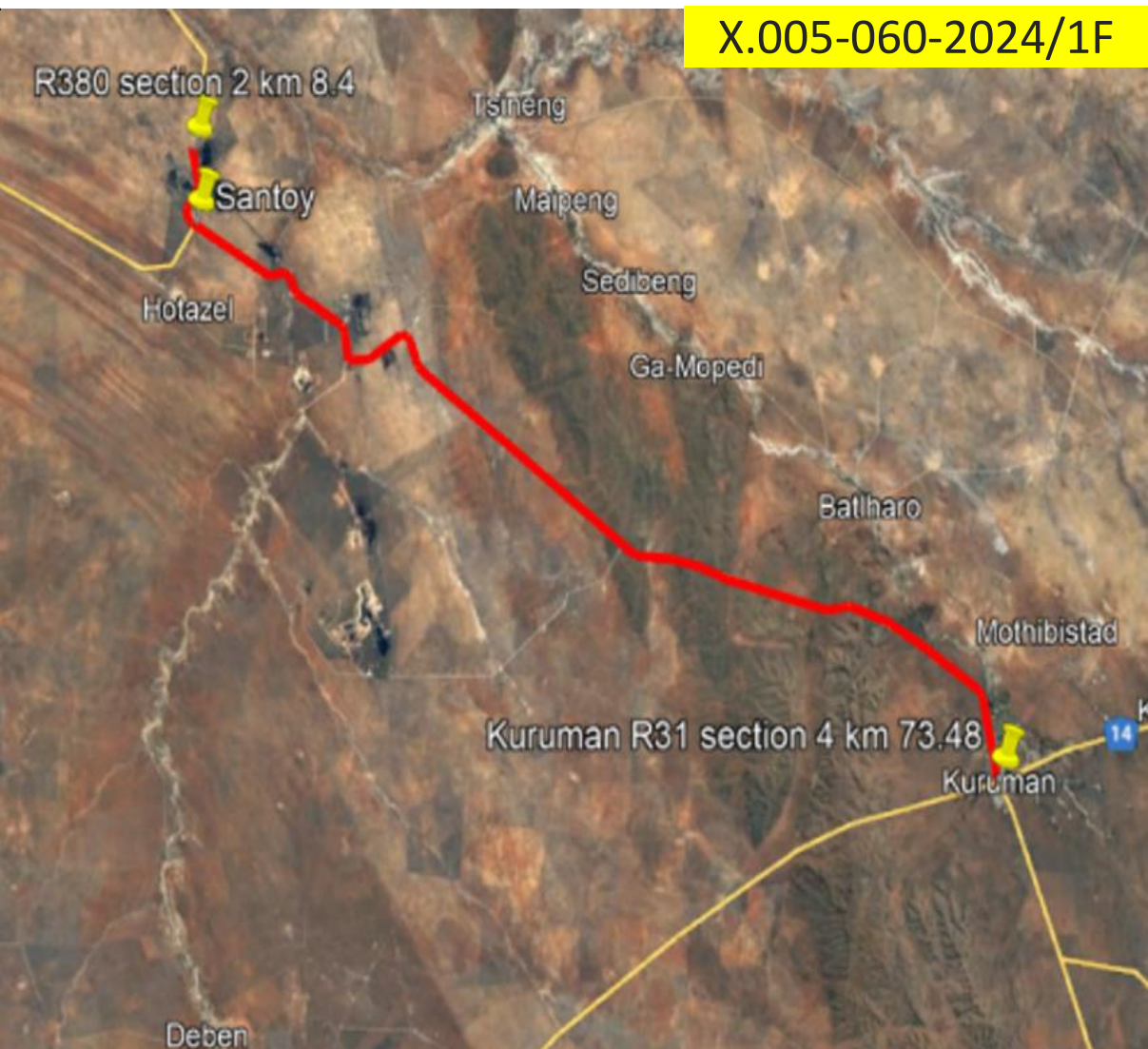
National Route R382 Section 1 from Alexander Bay Airport I/S (km 0.00) to Port Nolloth (km 87.96)



# C3.1.2. LOCATION OF THE PROJECT



ROUTE	SECTION	FROM KM	TO KM	LENGTH KMS
R31	4	0.00	73.48	73.48
R380	2	0.00	8.40	8.40
Total =				81.88



X.005-060-2024/1F

National Route R31 Section 4 from Santoy (km 0.00) to Kuruman (km 73.48) and National Route R380 Section 2 from Santoy (km 0.00) to (km 8.40)



## C3.1 GENERAL REQUIREMENTS

### C3.1.3 Description of the project: Periodic Maintenance Contract

The periodic maintenance will most probably take the form of appropriate **localised repair and pre-treatment** of the existing surface followed by the **construction of an appropriate surface seal and/or asphalt overlay**.

The Services required of the Service Provider are divided into the following distinct phases:

- Project Assessment.
- Investigations for Design Development.
- Design Development which shall include the following phases:
  - Preliminary design
  - Detailed design
- Tender Documentation.
- Clarification Meeting, Tender Period and Tender Evaluation.
- Administration and Monitoring of the Works Contract.
- Additional duties, Special Services and Specialist Advice.
- Quality Control: Works Contract.
- Close Out.



## C3.1 GENERAL REQUIREMENTS

### C3.1.4 Determination of Remuneration

#### (a) Fee determination

Table C3.1.4(b): Percentage points for phases/stages: Road Works, Structures, Building and Other

Type of Service	Concept Design (CD)	Preliminary Design (PD)	Detailed Design (DD)	Administration & Monitoring of works contract (AMW)	Close out (CO)	Total
Full service	5%	21%	42%	27%	5%	100%
CD	100%	0%	0%	0%	0%	100%
CD & PD	20%	80%	0%	0%	0%	100%
CD ,PD& DD	8%	31%	61%	0%	0%	100%
PD	0%	100%	0%	0%	0%	100%
PD & DD	0%	33%	67%	0%	0%	100%
DD, AMW, CO	0%	0%	63%	31%	6%	100%
PD, DD, AMW, CO	0%	22%	44%	28%	6%	100%
AMW & CO	0%	0%	0%	83%	17%	100%



## **C3.1 GENERAL REQUIREMENTS**

### **C3.1.5 Employer's Cost Estimate**

The final cost of the Works will, however, depend on the strategy selected by the Employer based on the most appropriate and cost-effective options identified by the Service Provider during the design phase.

Tenderers shall note that no adjustments to tendered rates will be applicable irrespective of the actual final cost of the Works.



## **C3.1 GENERAL REQUIREMENTS**

### **C3.1.7 Stakeholder and Community Liaison and Social Facilitation**

**(a) Purpose:** To give effect to the need for transparency and inclusion in the process of delivering services, the Service Provider shall liaise with the project Stakeholders and affected Communities for the duration of the contract's life cycle. This shall be achieved through structured engagement with the PLC which was established for this purpose.

**(f) Project Liaison Committee (PLC) and Project Management Team (PMT):** A Project Liaison Committee (PLC) has either been established prior to commencement of the contract or shall be established as soon as possible by the Service Provider. The PLC represents the project's Stakeholders. The PLC consist of representatives of project Stakeholders and affected communities.

Where a PLC has not been established, the Service Provider, under the guidance of the Employer, shall establish such a committee within the boundaries of the Local and/or District Municipality. Allowance has been made for these requirements in the Pricing Schedule under Additional Duties.



## C3.1 GENERAL REQUIREMENTS

### C3.1.9 Project Programme (N.001-067-2023/1F)

	Project Stage/Phase	Stage/Phase Completion Date
A	Submission of Tenders / Proposals	Friday 11 August 2023
B	Appointment of Service Provider	Friday 9 February 2024
C	Project Hand-over meeting	Friday 1 <sup>st</sup> March 2024
D	First Progress meeting	Friday 29 March 2024
E	Submission of draft Assessment Report	Friday 12 April 2024
F	Submission of draft Concept Design Report	n/a
G	Submission of draft Preliminary Design Report	Friday 3 May 2024
H	Submission of Gateway Review Report (if applicable)	n/a
I	Submission of Road Safety Audit Report: Stage 1 <del>Feasibility and Preliminary Design</del>	n/a
J	Submission of draft Detailed Design Report including Structures, Drainage & Geotechnical Reports	Friday 31 May 2024
K	Submission of Road Safety Audit Report: Stage 3: Detail Design	n/a
L	Submission of design information to SANRAL's Property Service Provider (PSP) for land acquisition purposes	n/a
M	Submission of Basic Assessment Report or full EIA report	n/a
N	Submission of WULA to approving authority	n/a
O	Submission of EMP's to approving authority	n/a
P	Submission of Draft Tender Documents for the Works and final Detailed Design Reports	Monday 9 September 2024
Q	Tender Advertisement	Friday 27 September 2024
R	Submission of Final Tender Documents for the Works	Friday 20 September 2024
S	Clarification Meeting	October 2024
T	Tender Closure	Friday 1 November 2024
U	Submission of Tender Evaluation Report	n/a
V	Works Contract Handover	Friday 2 May 2025
W	Submission of draft Contract Report & as-built data	Within 3 months of issue of Taking-over Certificate for the Works
X	Submission of final Contract Reports and as-built data	Within 1 month of issue of Performance Certificate for the Works

The program for each project will vary according to the specify project and scope requirements



## C3.1 GENERAL REQUIREMENTS

### C3.1.11 Personnel Requirements

Minimum Requirements

Position	Minimum Qualification/Registration	Minimum Relevant Experience (years) <sup>3</sup>	Other Requirements
Project Leader	Pr Eng or Pr Tech Eng <sup>1</sup>	10	
Assistant Project Leader	Pr Eng or Pr Tech Eng <sup>1</sup>	<10	In permanent employment of the tendering entity or Targeted Enterprise
Design Specialist	Pr Eng or Pr Tech Eng <sup>1</sup>	10	
Assistant Design Specialist	Pr Eng or Pr Tech Eng <sup>1</sup>	<10	In permanent employment of the tendering entity or Targeted Enterprise
Surveyor	Registered Professional Surveyors, Technologist Surveyors, Technician Surveyors	5	Member of SAGC <sup>7</sup>
Engineering Geologist	Pr Sci.Nat <sup>5</sup>	5	SAIEG <sup>4</sup>
Environmental Practitioner	Refer to sub-service procurement document		
OHS Specialist	Design Phase: SACPCMP <sup>6</sup> registration as a Professional Construction HSE Agent Construction Phase: SACPCMP <sup>6</sup> registration as a Professional Construction HSE Agent or Manager	As required by SACPCMP <sup>6</sup>	
Road Safety Audit Team Leader	Pr Eng or Pr Tech Eng <sup>1</sup>	10	Road safety course (5 CPD) Minimum 2 (two) audits within 3 (three) years
Contract Engineer	Pr Eng <sup>1</sup> or Pr Tech Eng <sup>1</sup>	10	

KEY PERSONS

Personnel requirements will vary depending on each projects specific scope requirements



Personnel requirements will vary depending on each projects specific scope requirements

Position	Minimum Qualification/Registration	Minimum Relevant Experience (years) <sup>3</sup>	Other Requirements
Assistant Contract Engineer	Pr Eng or Pr Tech Eng <sup>1</sup>	<10	In permanent employment of the tendering entity or Targeted Enterprise
Engineer's Representative (RE)	Pr Eng or Pr Tech Eng <sup>1</sup>	5	
	Pr Techni Eng <sup>1</sup>	10	
Assistant RE	Candidate Technician <sup>1</sup>	1	
Senior Materials Technician	None specified	20	
	National Diploma in civil engineering	10	
	Pr Techni Eng <sup>1</sup>	5	
Materials Technician	None specified	10	
	National Diploma in civil engineering	5	
	Pr Techni Eng <sup>1</sup>	2	
Trainee Technician	Candidate Technician	0	

## **C3.1 GENERAL REQUIREMENTS**

### **C3.7.3 Establishment of supervisory personnel on site**

#### **a) Supervisory team**

The Service Provider shall be required to provide a team on site to monitor, administer and measure the Works in accordance with the requirements of the Works Contract, Employer's standard requirements and industry good practice.

Provision has been made in the Pricing Schedule for the envisaged staffing requirement. The establishment of such staff, however, shall be subject to the approval of the Employer. For the envisaged scope of the Works, the supervisory team will consist of at least the following:

- i) Resident Engineer
- ii) Assistant Resident Engineer/s
- iii) Materials Technician
- iv) Trainee Technician
- v) Trainee (student)
- vi) Project Liaison Officer
- vii) Administrative Assistants (data capture)
- viii) Mentors/Coaches for Targeted Enterprises (sub-contractors)

The minimum requirements for qualification and experience of the supervisory team are specified in Clause C3.1.11.





**THANK YOU!**

**END**