



# **TENDER BRIEFING**

## **CONTRACT SANRAL N.001-080-2022/1**

**WESTERN REGION**

**18 APRIL 2024**

**SANRAL**



**BUILDING SOUTH AFRICA  
THROUGH BETTER ROADS**



**N.001-080-2022/1**

**The project is for the Periodic Maintenance (Resurfacing) on National Route 1 Section 8 from Nelspoort (km 45.000) to Three Sisters (km 72.500).**

**DISCLAIMER:**

**IF ANY CONFLICT ARISES BETWEEN THE CONTENTS OF THIS PRESENTATION AND OTHER SECTIONS OF THE CONTRACT DOCUMENTS (VOLUME 3, VOLUME 4 AND THE PRICING SCHEDULE), THE LATTER SHALL TAKE PRECENDENCE**



# SCOPE OF WORKS

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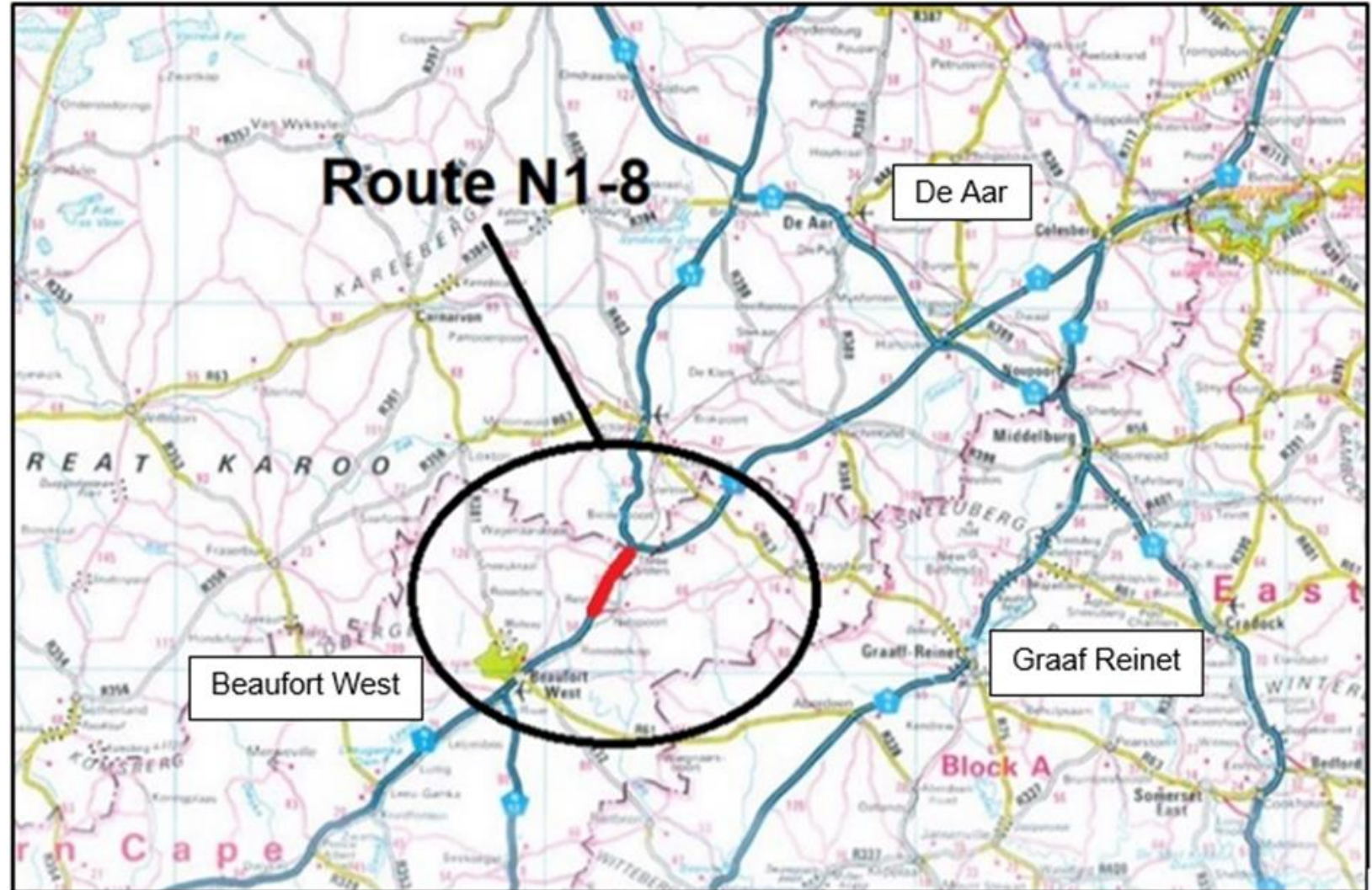
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### **N.001-080-2022/1**

The project is for the Periodic Maintenance (Resurfacing) on National Route 1 Section 8 from Nelspoort (km 45.000) to Three Sisters (km 72.500). This project is in the province of Western Cape and in the Central Karoo District Municipality and Beaufort West Local Municipality.



## LOCALITY PLAN



## DESCRIPTION OF THE PROJECT SITE

### National Route 1 Section 8:

Project Start: On N1 section 8 at km 45 North of Beaufort West.

Project End: ON the N1 at km 72.5 at Three Sisters

Project Length: 27,5km plus 11,1km climbing lanes

Cross section: The N1/8 consists of an undivided surfaced carriageway with 2x3,7 lanes and 2,5m shoulders.

The published speed for the entire section of the road is 120km/h.

There is one major intersection with turning lanes.



## DESCRIPTION OF THE PROJECT SITE

Existing surfacing: Cape Seal

Intersections: 1 at km 57

Rest areas: 2

## DESCRIPTION OF THE WORKS

### **Contract scope of works entails, amongst other activities, the following:**

- Establishment of the Contractor's construction camp at the site and the moving of plant, equipment, materials and personnel to the site.
- Survey of existing road markings prior to commencement with implementation of the works.
- Provision of offices and facilities for the Engineer's staff, including security.
- Provision of a joint site laboratory facility.
- Selected routine maintenance activities for the duration of the contract.
- Accommodation of traffic during construction.
- Pre-treatment of the existing pavement by repairing distressed areas by surface and base patching using asphalt.
- The surfacing cracks with severe pumping need to be milled out and replaced with Surface Asphalt.
- Application of a fine to fine medium texture slurry over the full pavement area within the project limits, excluding areas repaired by asphalt patching.
- Repairs to inlet / outlet structures and clearing of all minor drainage structures and lined drains.
- Installation of guardrails where necessary.



## DESCRIPTION OF THE WORKS

- Resurfacing intersection areas that are subject to turning movements by removing the existing surfacing to a depth of 45 mm and reinstating with asphalt.
- Remedial work at rest / stop off areas.
- Installation of road studs and application of new road markings (retro-reflective and thermoplastic).
- Finishing the road and road reserve.
- Employment of targeted enterprises in terms of section D1000.
- Double seal: 20mm and 7mm Grade A aggregate (Using Bitumen Rubber binder of Class S-R2 for the first application (tack coat); S\_E1 modified binder for the second application (penetration layer)).

Defect	Treatment measure
Current surface texture is not uniform.	Texture Treatment with Fine Texture Slurry (Fine Grade, or Medium Grade).
Rutting up to 12mm. No other defects	Coarse slurry with quickset cationic bitumen emulsion modified with elastomer conforming to AC-E2 specification and the grading limits as per Table A10-1.5-12 for Type II (overlay or rut fill up to 12mm). (Refer Sabita manual 28 page 68)
Surface Defects  Severe Surface Cracks, Base failures	Asphalt for surface patches shall be Asphalt surfacing: Continuously graded, Sand Skeleton, Grade 1 aggregate with NMPS = 14 mm, 64H-16 performance-grade bitumen. Level II mix design. Compaction Density: Max 96% of MVD; Min 93% MVD. 45 to 50mm thick.  Asphalt for Base patches shall be: Continuously graded, Sand Skeleton, Grade 1 aggregate with NMPS of 20mm, 64H-16 performance grade bitumen, Level IB mix design. Compaction Density: Max 96% of MVD; Min 93% of MVD. Layers of 80mm.
Crocodile cracks, pumping	Mill out 45mm and inlay with Surfacing Asphalt.
Potholes/Failures	Mill or excavate failed material up to a depth of 80mm or up to sound base and inlay with base Asphalt in 80mm layers.
Bleeding	Water cutting of the high degree bleeding areas especially in the wheel paths or rolling in of heated aggregate
Permeable current seal	Double seal: 20mm and 7m Grade A aggregate (Using Bitumen Rubber binder of Class S-R2 for the first application (tack coat); S-E1 modified binder for the second application (penetration layer). Cover spray (Cat 65 (Diluted 60%Emulsion/40% Water).

## ASPHALT SURFACE, BASE PATCHING AND CRACK SEALING

### Surface Repair:

- Mill the distressed area (Mainly Surface cracks with severe pumping) to a depth of 45 mm.
- Compact the floor of the patch then broom and apply a bond coat to the exposed underlying pavement.
- Asphalt for surface patches shall be Surfacing Asphalt: Continuously graded, Sand Skeleton, Grade 1 aggregate with NMPS = 14 mm, 64H-16 performance-grade bitumen. Level II mix design. Compaction Density: Max 96% of MVD; Min 93% MVD. 45 to 50mm thick.
- Surfacing Repair will be constructed to a minimum width of 1.2 m.

## ASPHALT SURFACE, BASE PATCHING AND CRACK SEALING

### Base Repair:

- Mill/Excavate the distressed area in layers of 80mm up to sound base.
- Compact the floor of the patch then broom and apply a bond coat to the exposed underlying pavement.
- Asphalt for Base Repair shall be:
- Continuously graded, Sand Skeleton, Grade 1 aggregate with NMPS of 20mm, 64H-16 performance grade bitumen, Level IB mix design. Compaction Density: Max 96% of MVD; Min 93% of MVD. Layers of 80mm



## ANCILARY WORKS

### **Road Markings and Road Studs:**

- The initial markings will be applied using retro-reflective road marking paint (water borne) after construction of the final surfacing.
- The final markings will be applied using thermoplastic road marking paint before expiration of the defect's notification period.
- All permanent road studs will be of Type RSA-1.
- All temporary road studs will be of Type RSA-T.

## **ROUTINE ROAD MAINTENANCE**

The employer currently has a routine road maintenance (RRM) contract in progress along the project route. The contact details of the parties involved in the RRM contracts are as follows:

Consulting Engineer: AVX Consulting Engineers

Route Manager: Bathanda Mankagi

Contact No.: 083 929 1080 E-Mail bathanda@avx.co.za

The contractor shall be responsible for the following maintenance responsibilities:

- Litter Collection at stop/go areas.
- Pothole repairs using cold mix
- Road maintenance work as ordered by the Engineer,

The contractor shall take over the specified maintenance responsibility on the date of Access to site.

Upon issue of the taking-over certificate, the responsibility for road maintenance will revert to the RRM Contractor.

## ACCOMMODATION OF TRAFFIC

### **Traffic accommodation:**

- The maximum permitted length of any half or partial width construction section where the traffic can only pass in one direction at a time shall not exceed 3 km. The maximum number of closures allowed at the same time shall be 3.
- The minimum spacing between consecutive closures shall be 3 km, measured between the end control point of the 1st closure to the start control point of the 2nd closure.
- Where the existing road markings are affected by the works during a work shift, temporary marking or heavy pre-marking and temporary road studs (Type RSA-T) shall be applied before opening the road to traffic. This same strategy will apply on the final surfacing, before application of the road markings.

## CONTRACT PARTICIPATION GOAL (CPG) TARGETS

### Targeted Labour:

Target area:	Nelspoort Local Municipality
Targeted Labour:	<b>6%</b> of final contract value
Target groups :	Youth - <b>40%</b> of targeted labour value Women – <b>30%</b> of targeted labour value Persons with disabilities – <b>0.5%</b> of targeted labour value

### Targeted Enterprises:

Targeted Enterprises:	<b>40%</b> of final contract value
Target groups :	>51% Youth owned - <b>5%</b> of final contract value >51% Women owned – <b>5%</b> of final contract value CIDB 1 and 2 grading – <b>2%</b> of final contract value CIDB 3 and 4 grading – <b>2%</b> of final contract value

**Read and understand requirements as detailed in section D1000 of the specification**



## **ADDITIONAL INFORMATION INCLUDED IN PART C4**

**The following additional and supplementary information can be found in Part C4:**

- Available traffic data and summary.
- Climate data and summary.
- Pavement as-built and maintenance history.
- Visual condition of the existing pavement.
- Instrument and mechanical survey data summary (deflections, IRI, rutting, macro texture).

# THANK YOU

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