

**ROAD PAVEMENT FORUM
N2/N3 FREEWAY UPGRADING PROGRESS REPORT**

DATE: 16 MAY 2023

SANRAL



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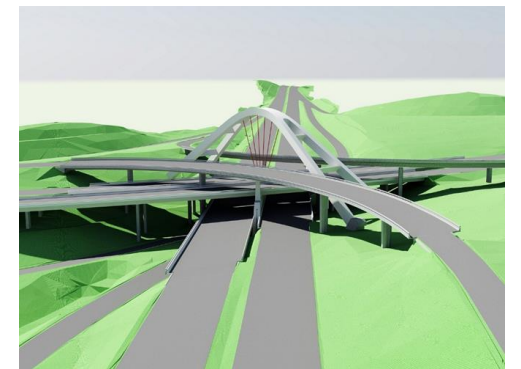
06 → **COMMUNITY
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The background is a stylized, white-line-art illustration on a dark teal background. It depicts a city street at night. In the foreground, a large truck with its headlights on is driving towards the viewer. To its right, a smaller truck is driving away. On the right side of the road, there are silhouettes of people walking. The background features a city skyline with various skyscrapers, some with glowing windows. The sky is dark with a few clouds, stars, and a shooting star. A large, curved structure, possibly a bridge or overpass, is visible on the right side of the image.

01.

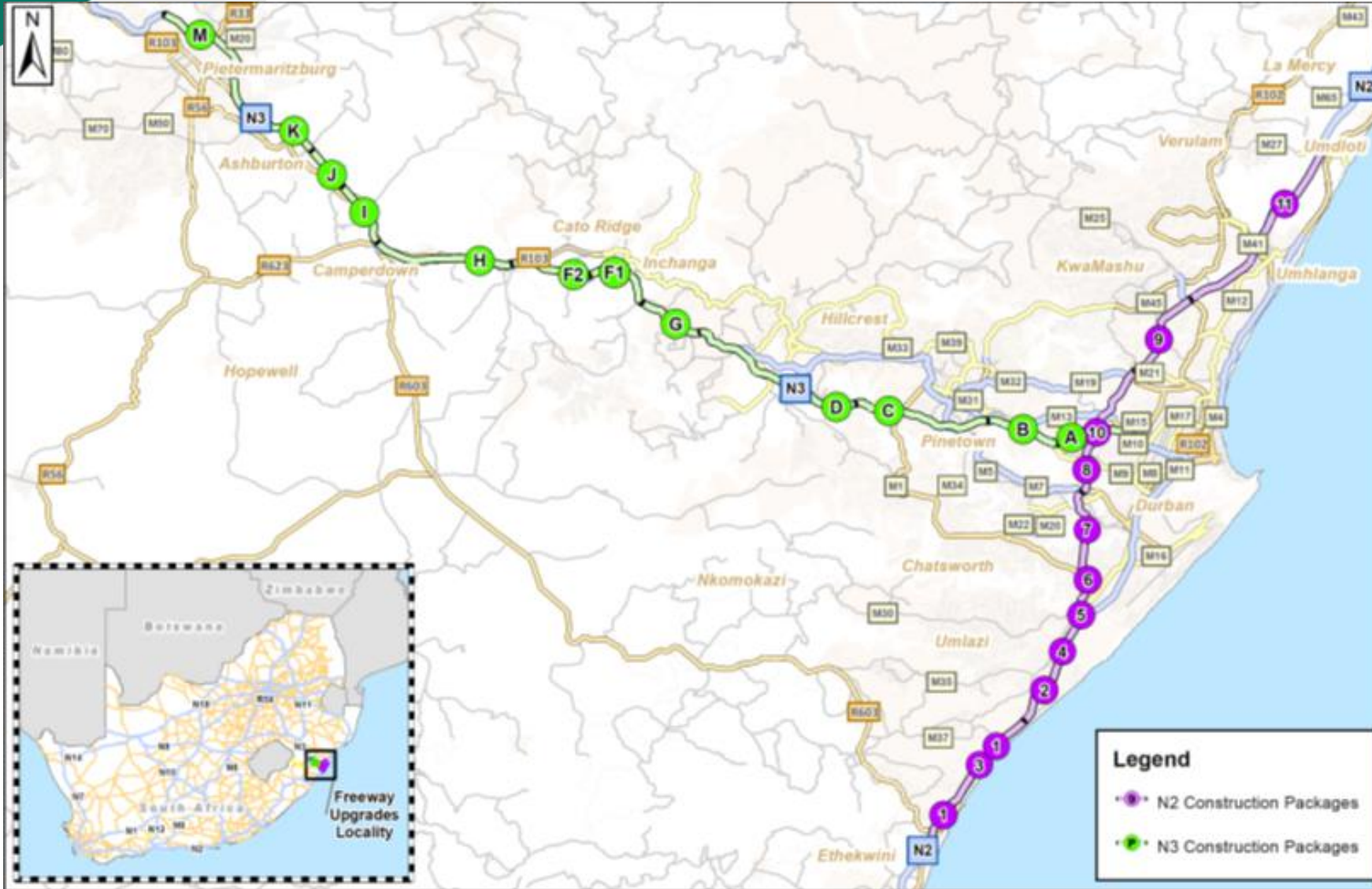
BACKGROUND

BACKGROUND

SANRAL



BUILDING SOUTH AFRICA
THROUGH BETTER ROADS



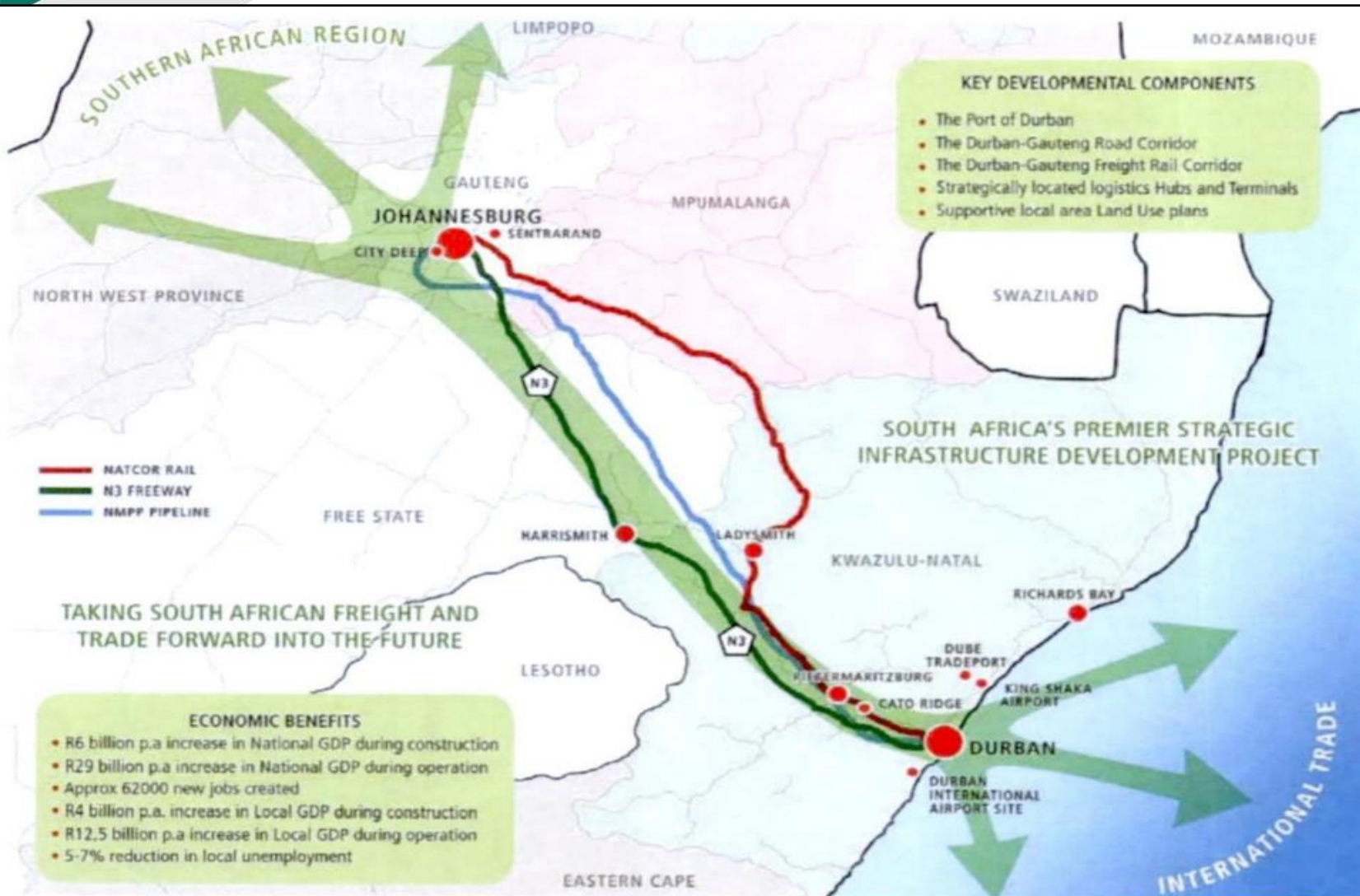
N2 Upgrades

- 55km of upgrades
- From Lovu River on the South Coast, to uMdloti on the north coast.
- 11 work packages in total.
- 2 of 9 Packages currently in construction stage - R6,6billion
- Estimate- R19billion

N3 Upgrades

- 80km of upgrades
- From Pietermaritzburg to Durban.
- 15 work packages in total (Excl PMB RR).
- 9 packages currently in construction stage – R18,3billion
- Estimate R33 billion (Excl PMB RR)

BACKGROUND (continue)



Strategic Integrated Project 2 (SIP2) – N3

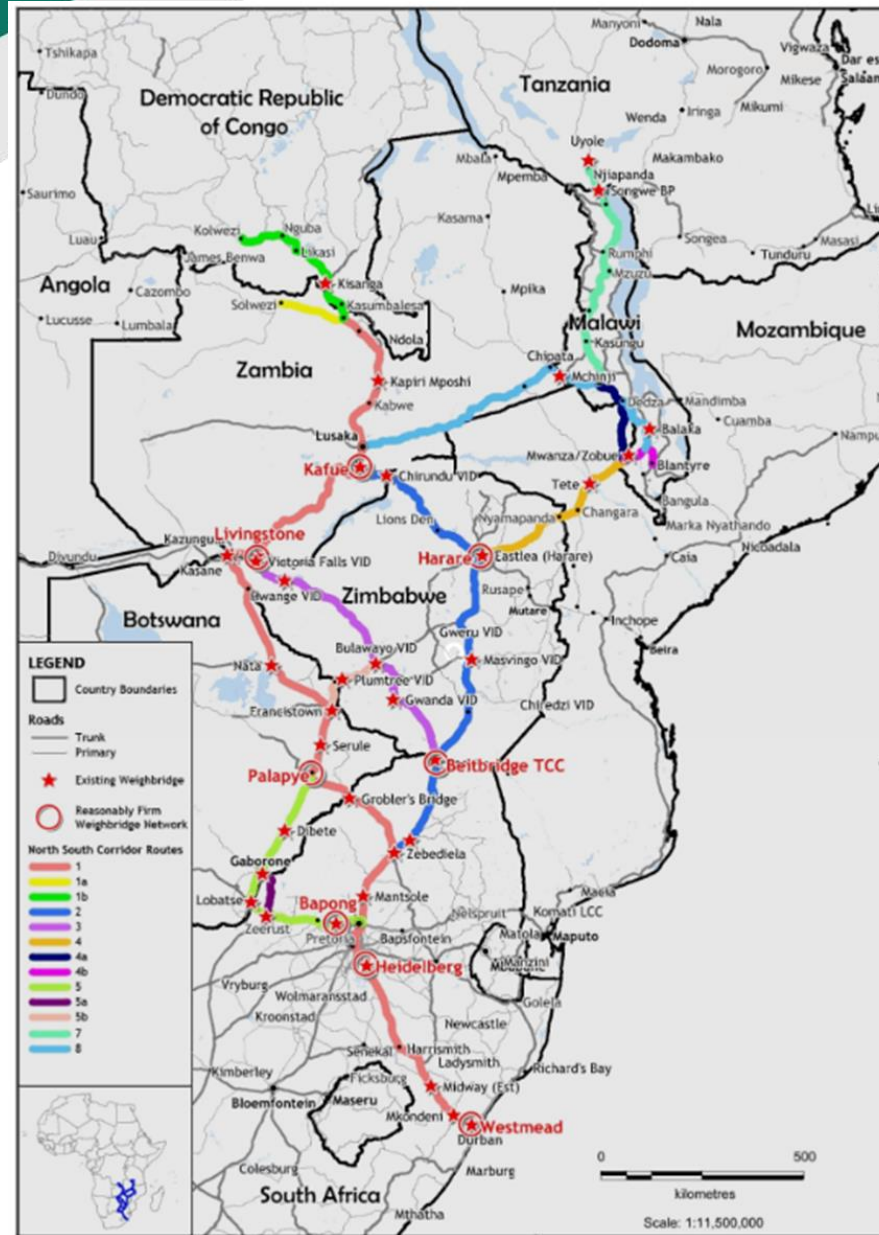
- Economic Growth
 - Increase (4% Target, Current < 1%)
 - Reduce Logistics and Transport Costs
 - Improve Global Competitiveness
 - Create Jobs
- Infrastructure Investment
 - Create Jobs
- Eliminate Bottlenecks

BACKGROUND (continue)

SANRAL



BUILDING SOUTH AFRICA
THROUGH BETTER ROADS

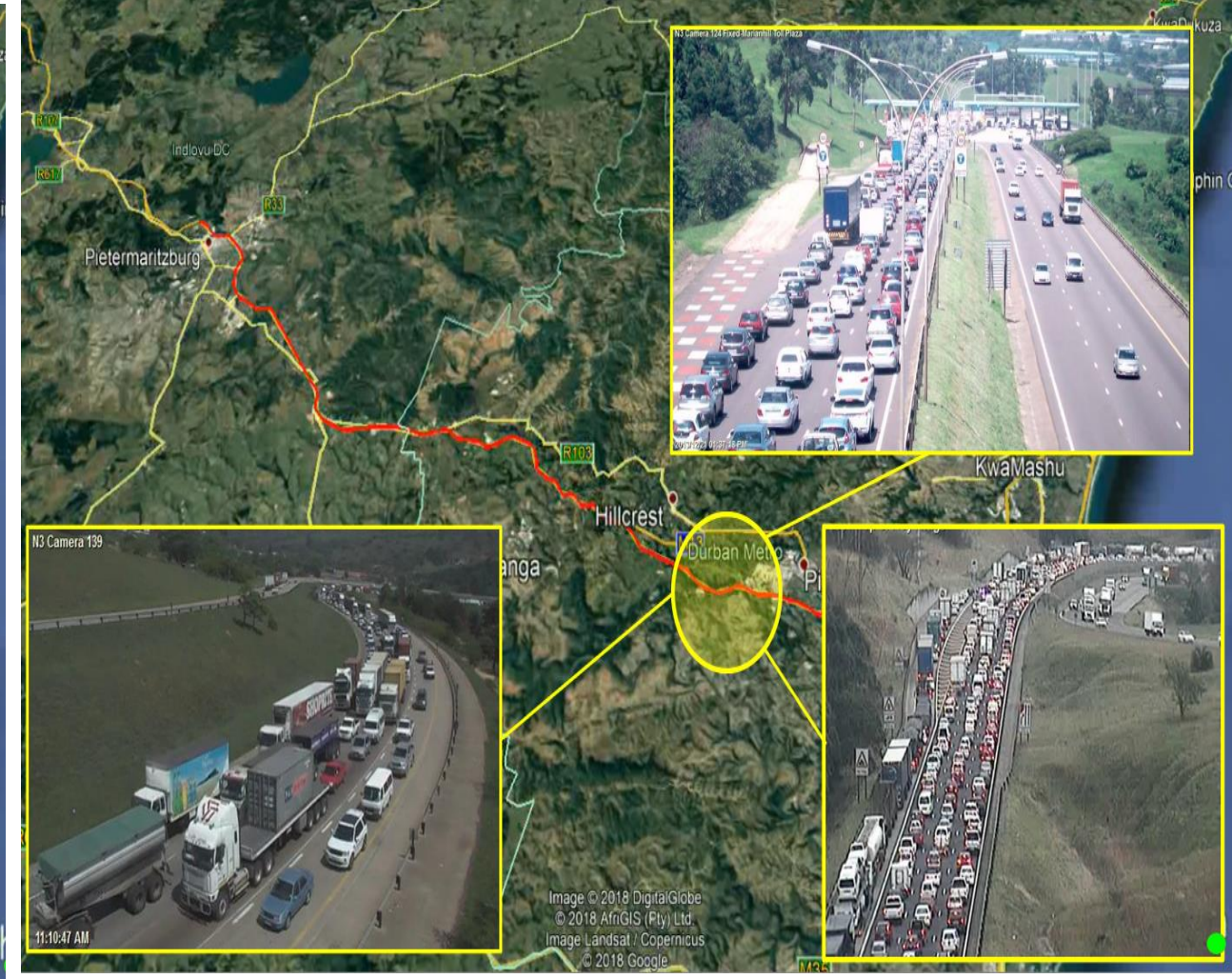
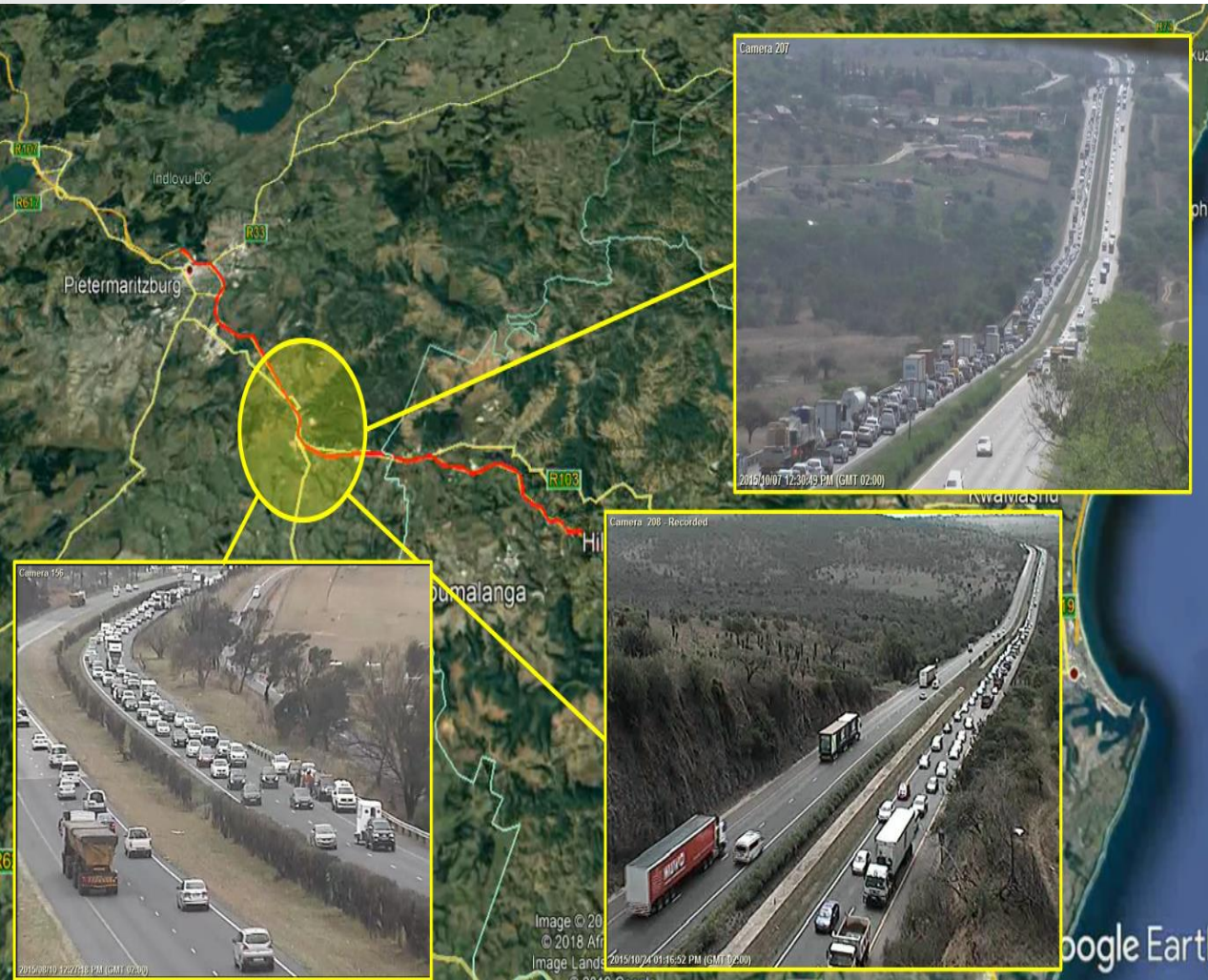


In addition, the N3 forms part of the SADC North-South Freight Corridor linking South Africa (Durban Port) to various African countries including Botswana, Zambia, Zimbabwe, Mozambique, Malawi, Tanzania and the DRC. The various countries have agreed to ensure unimpeded movement of road freight through the various countries.

The following map highlights the countries in the Eastern and Southern African (EA-SA) region that are members of the Tripartite formed by COMESA (Common Market for Eastern and Southern Africa), EAC (East African Community) and SADC (Southern African Development Community).

NEED FOR THE N2/N3 UPGRADE

CONGESTION ON THE N3



NEED FOR THE N2/N3 UPGRADE

SAFETY CONCERN AND BOTTLENECKS

SANRAL



BUILDING SOUTH AFRICA
THROUGH BETTER ROADS



NEED FOR THE N2/N3 UPGRADE

PORT CONGESTION AND FLOODING ON THE N2

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BUILDING SOUTH AFRICA
THROUGH BETTER ROADS



NEED FOR THE N2/N3 UPGRADE

CONGESTION ON THE N2

SANRAL



BUILDING SOUTH AFRICA
THROUGH BETTER ROADS



The background is a stylized, white-line-art illustration on a dark teal background. It depicts a city skyline at night with various skyscrapers, some with glowing windows. In the foreground, a multi-lane highway is shown with dashed white lines. Two large trucks are driving on the highway: one in the left lane moving towards the viewer, and another in the right lane moving away. On the right side of the highway, there are silhouettes of people walking on a sidewalk or bridge. The sky is dark with a few clouds, stars, and streaks of light, possibly representing satellites or meteors. A white horizontal banner with teal and orange accents is positioned across the middle of the image, containing the section header.

02. N3 PROGRAM PROGRESS

N3 Upgrade Packages

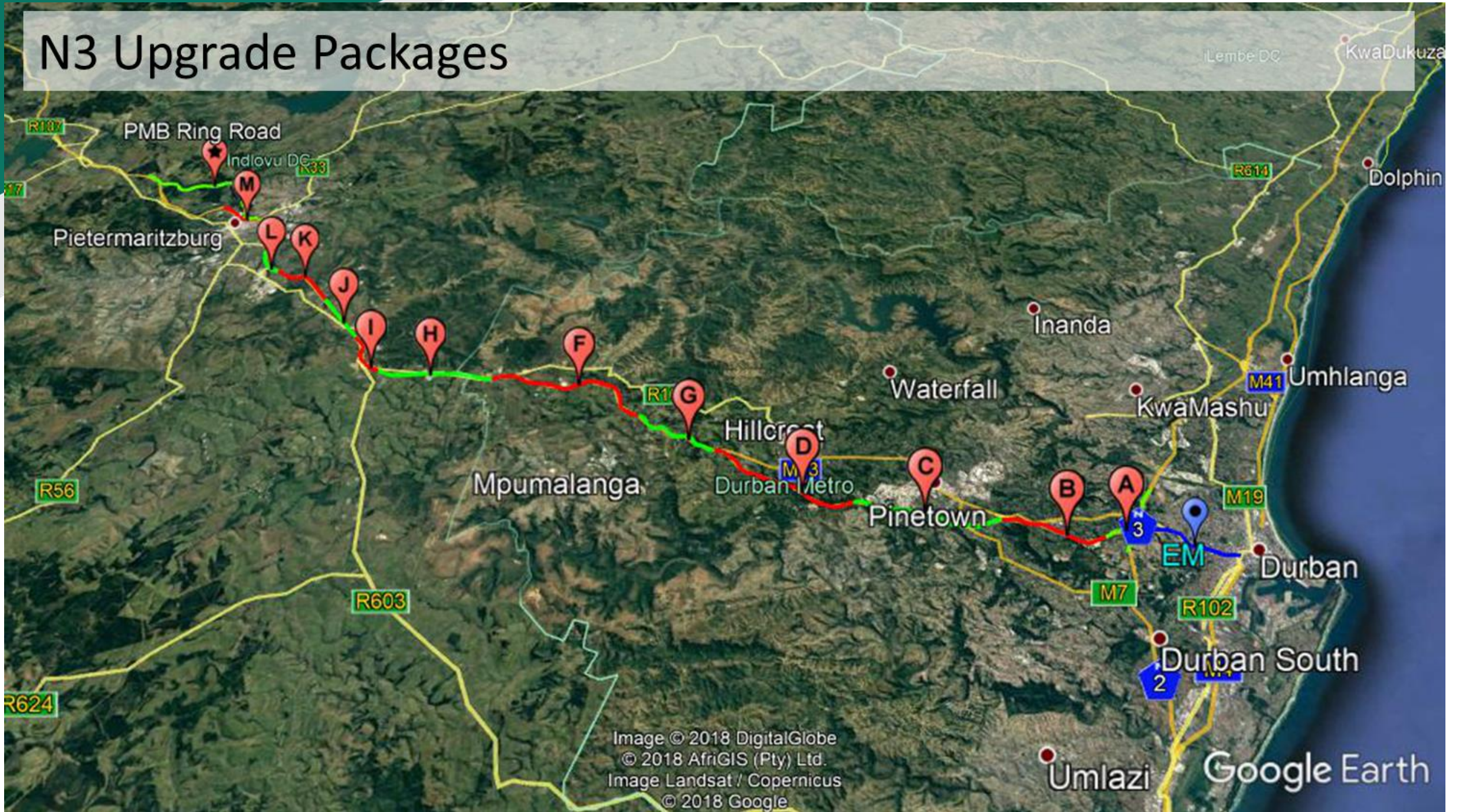


Image © 2018 DigitalGlobe
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Image Landsat / Copernicus
© 2018 Google

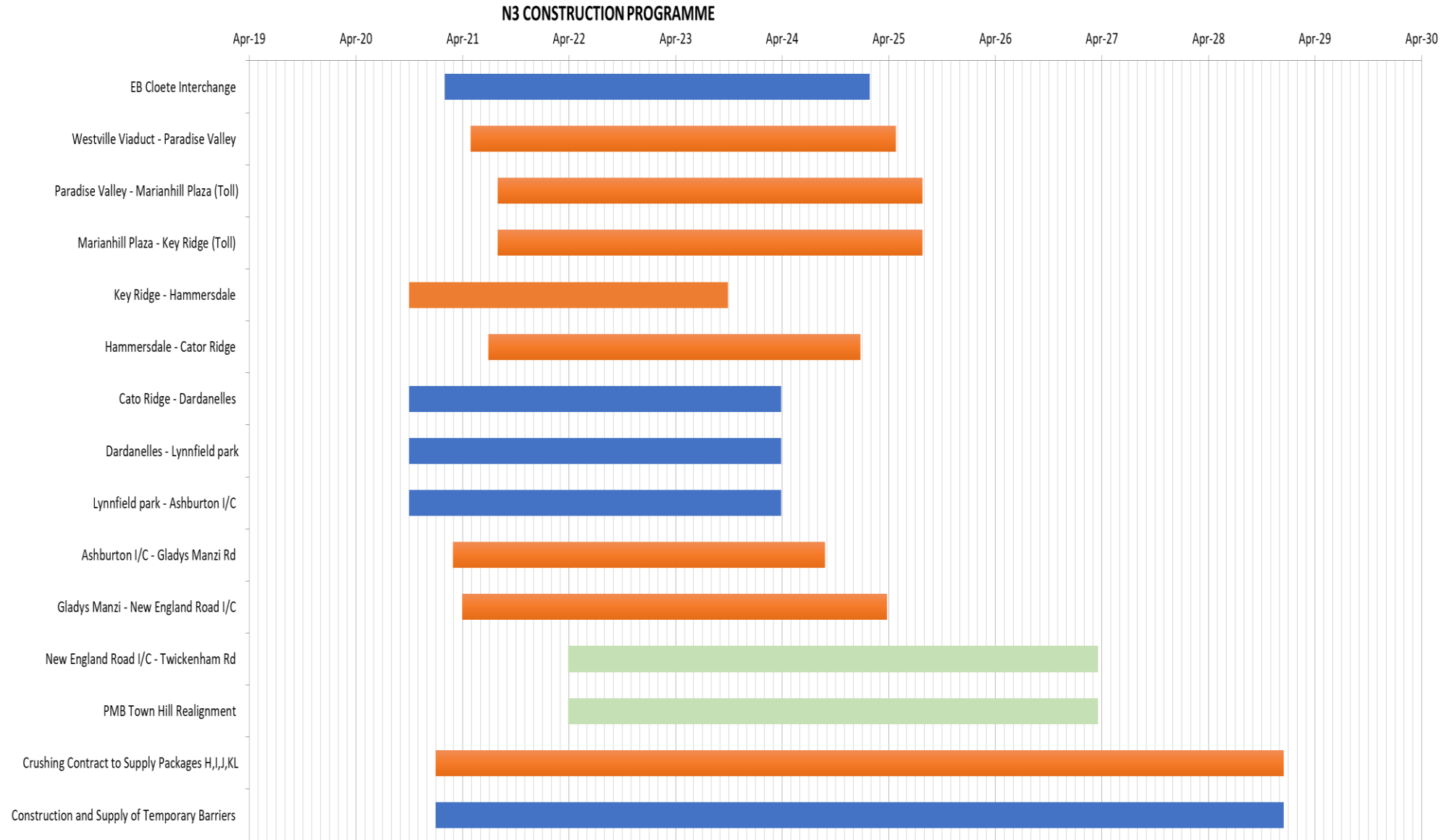
Google Earth

N3 PROGRAM STATUS

SANRAL

| PACKAGE | DESCRIPTION | ENVISAGED CONSTRUCTION START (After 3 months mobilisation) | ENVISAGED CONSTRUCTION COMPLETION | Duration (months) | Actual Construction Start date | Contractor | Status |
|---------|---|--|-----------------------------------|-------------------|------------------------------------|--------------------------|---|
| B | Westville Viaduct to paradise Valley | October 2023 | October 2027 | 51 | To be finalised | Aqua/EXR JV | Tender award approved in mid May 2023 |
| C | Paradise Valley to Marianhill Toll Plaza | January 2024 | July 2027 | 42 | - | - | Finalizing construction tender documents |
| CC | Upgrade to Marianhill Toll Plaza | January 2025 | July 2027 | 30 | - | - | Design |
| D | Marianhill Toll Plaza to Key Ridge | January 2024 | January 2028 | 51 | - | - | Finalizing construction tender documents |
| F1 | Harmmarsdale to Uitkoms | January 2024 | January 2027 | 40 | - | - | Tender Evaluation |
| F2 | Uitkoms to Cato Ridge | September 2024 | September 2027 | 36 | - | - | Design |
| G | Key Ridge to Hammarsdale | September 2023 | January 2027 | 51 | Handover scheduled for 17 May 2023 | WBHO | Tender award approved beginning of April 2023 |
| H | Cato Ridge to Dardanelle I/C | January 2021 | January 2025 | 50 | April 2021 | Raubex | Construction – 45% |
| I | Dardenelles I/C into Lynnfield park | January 2021 | August 2024 | 45 | January 2021 | Raubex | Construction – 48% |
| J | Lynnfield park to Ashburton I/C | January 2021 | May 2024 | 40 | April 2021 | RumdelCape | Construction – 48% |
| K | Ashburton I/C to Murray Road | January 2023 | January 2027 | 48 | March 2023 | Base Major/CSC | Construction – one month in construction |
| L | Murray Road to New England Rd | September 2023 | February 2027 | 44 | Handover scheduled for June 2023 | Grinaker LTA/Teichman JV | Tender award approved beginning of April 2023 |
| M | New England Rd I/C to Twickenham Road | January 2025 | January 2030 | 60 | - | - | Design |
| | Crushing contract to supply package H,I,J,K,L | January 2021 | January 2027 | 72 | January 2022 | T&BB | Construction |
| | Construction and supply of Temporary Barriers | January 2021 | July 2023 | 27 | January 2021 | Martin & East | Construction |
| N | PMB Ring road (N3 re-alignment) | January 2026 | January 2030 | 48 | - | - | Prelim design |

N3 Upgrade: Construction Programme Planning





Nyeleti



Thabiso Dladla



RAUBEX

H

Cato Ridge to Dardanelles

N.003-020-2017/8



6.4 km



Addition of lanes
Bridge widenings



April 2021



48 Months



DESIGN

100%



TENDER

100%



DURATION

49%



CONSTRUCTION

36%



EXPENDITURE

40%

SOCIO-ECONOMIC/ PUBLIC PARTICIPATION

Progress

- Targeted CPG: R 375 510 591.96
- CPG expenditure to date: R 157m
- CPG expenditure % to date: 51%
- No. of jobs created to date: 452 labours
- Total Exp to date Labour: R 28m of R100m
- No. of SMMEs sub-contracted to date: 48 Suppliers and Enterprises
- No. of SMMEs trained to date: 19 (finance, business admin, HR, tendering)
- CSDG (Graduates, TVET, P1/P2): 54 (37 additional commenced Feb 23)
- CD Project: Traffic circle design in progress, construction planned in April 2023
- CSI: Uniform handout done in 29 Sep 2022 – engaging Municipality for new proposal

Challenges & Interventions

- Meeting 8% labour target.

Risks

Delay in rolling out CSDG Program

LAND ACQUISITION

Progress

- Completed.
- Expro's outstanding (not delaying construction)
- Landowner's awaiting payments

Challenges & Interventions

- Trident: Problem resolved.
- Transnet: Problem resolved
- Eskom late with moving of services but now on site.
- R103 realignment and access road to be re-aligned.
- Payments outstanding to some landowners

Risks

- None.

DESIGN & CONSTRUCTION

Progress

- Design 100% complete
- Construction 36% complete
- Expenditure to date: R 550m
- Delays – 35 days.
- EOT Approved – 21 days.
- Achieved milestones: Complete Contraflow achieved 5 Oct 2022 from Cato Ridge to Dardanelles. Umgeni subcontractor for pipe relocation commenced 1 Nov 2022. R103 new link subcontractor appointed and work commenced 4 Oct 22. Transnet issues resolved, widening of rail underpass completed. Reconstruction of NB in progress.

Challenges & Interventions

- None

Risks

| Description | Cause |
|------------------------|----------------------------------|
| • Constructability | Occupation at Camperdown Rail |
| • Constructability | Bitumen Supply |
| • Constructability | Material Restrictions - shortage |
| • Constructability | Barriers (exit/ entry positions) |
| • Construction program | Business forums |
| • Construction program | SMME low Expenditure |
| • Construction Program | Local labour related to CPG |

Environmental & OHS

- Envr Audit rating: **96%** Compliant
- OHS Audit rating: **97%** Compliance

Claims

- # of Claims submitted : **9 (5 withdrawn)**
- # of claims approved by NCC: **2**
- # of claims referred to DAB: **2**

PROCUREMENT

Construction Tender

- RBEC : 29 August 2020
- RBAC : 7 September 2020
- MBAC : 25 September 2020
- Board approval : 26 October 2020
- Contract Award: R 1 439 457 269.19

Construction Tender

- Advert date: 20 Sep 2019
- Closing date: 13 Nov 2019
- Appointment: Nov 2020
- Mobilisation period: 13 Jan 2021 to 12 Apr 2021
- Construction period: 48 months



PACKAGE H:CONSTRUCTION PROGRESS PICTURES



GIBB



Corne Roux



RAUBEX

I

Dardanelles to Lynnfield Park

N.003-020-2017/9



4 km



Addition of lanes
Bridge widenings



January 2021



48 Months



DESIGN

100%



TENDER

100%



DURATION

41%



CONSTRUCTION

51%



EXPENDITURE

50%

SOCIO-ECONOMIC/ PUBLIC PARTICIPATION

Progress

- Targeted CPG: Labour - R 103 727 086
- TE : R 492 703 659,26
- CPG expenditure to date: Labour – R 36 998 622, TE – R 210 799 003
- CPG expenditure % to date: 35,7% and 42,9%
- # of jobs created to date: 443
- # of SMMEs sub-contracted to date: 45 Suppliers and Enterprises.
- # of SMMEs trained to date: 25 Candidates
- CSDG (Graduates, TVET, P1/P2): 7 WIL

Challenges & Interventions

- TVET Candidate identification – Not all required disciplines available

Risks

- Delay in rolling out CSDG Program.

LAND ACQUISITION

Progress

- 1 x Property without access - await Expropriation Approval
- 1 x expropriation approved – Access obtained effective 15 August 2022

Challenges & Interventions

- 1 Outstanding property report to be received from the consultant.
- KZN DoT Application submitted, awaiting approval.
- 2x Transnet Application submitted, awaiting approval. SIP assistance required.

Risks

- Delay Cost.

DESIGN & CONSTRUCTION

Progress

- Design: 100% complete.
- Construction: 51% complete.
- Expenditure to date: R 997 789 546
- Delays – 285 days.
- EOT Approved – 285 days.
- Achieved milestone: Contra=flow March 2022

Challenges & Interventions

Risk

- Community interferences - 80
- Land Expropriation (Dave Bishop) - 48
- Damage of Unknown Services - 32
- Bitumen Shortage - Dormant
- Environmental Issues - 32
- RCL 9 Material - 32
- Transnet Railway - Prevented

Environmental Issues

- Enviro Audit rating: 100% Compliance. (RCL 1 = 94% and RCL 9 = 100%)
- OHS Audit rating: 99% Compliance

Claims

- # of Claims submitted : 8
- # of claims approved : 8
- # of claims referred to DAB: 1

PROCUREMENT

Construction Tender

- RBEC : 2 July 2020
- RBAC : 17 July 2020
- MBAC :3 August 2020
- Board approval : 18 August 2020
- **Contract Award: R 1 478 997 670.17**

Construction Tender

- Advert date : 20 Sep 2019
- Closing date : 7 Nov 2019
- Appointment : 18 Aug 2020
- Mobilisation period : 22 Oct 2020 to 21 Jan 2021



PACKAGE I: CONSTRUCTION PROGRESS PICTURES



NME-
Leporogo
JV



Ayanda
Chagwe



RUMDEL

J

Lynnfield Park to Ashburton

N.003-023-2017/9



4.6 km



Addition of lanes
Bridge widenings



April 2021



40 Months



DESIGN

99%



TENDER

100%



DURATION

64%



CONSTRUCTION

62%



EXPENDITURE

60%

SOCIO-ECONOMIC/ PUBLIC PARTICIPATION

Progress

- Targeted CPG expenditure: R 342 188 579.89
- CPG expenditure to date: R 178 331 309.60
- CPG expenditure % to date: 52%
- # of jobs created to date: 395 labours from Suppliers and Targeted Enterprises.
- # of SMMEs sub-contracted to date: 8 Suppliers, 68 Targeted Enterprises and 15 domestic Enterprises.
- # of SMMEs trained to date: 42
- CSDG (Graduates, TVET, P1/P2): Grad = 4, TVET = 5, P1/P2 = 4, NQF4 = 22, Pr Eng. = 2
- CSI: Not started

Challenges & Interventions

- Business forums requiring scope change - The project team is liaising with PLC to address the matter.

Risks

- Material availability from suppliers and RCL9
- Community unrest.
- Business Forums

PROCUREMENT

Construction Tender

- RBEC : 1 July 2020
- RBAC : 7 July 2020
- MBAC : 25 September 2020
- Board approval : 26 October 2020
- **Contract Award: R 1 228 039 035.91**

LAND ACQUISITION

Progress

- Road Reserve acquired along N3, 1 outstanding on NBC, some outstanding on R103
- Critical properties outstanding – Mr Hardman, Mr Rigby, Mr Easthorpe

Challenges & Interventions

- Few land acquisition properties not finalized, PropSol attending to these, contract document indicated the Contractor to have access after 12 months from handover – claim already sent for delays i.e., 15 January 2022).

Risks

- Progress delays from outstanding land (Mr Rigby), contractor submitted standing time claim

DESIGN

Progress

- Design 99% complete.
- Construction 62%
- Expenditure to date: R 838 323 692,20
- Delays - 60 days.
- EOT Approved – 45 days.
- Achieved milestone: Contraflow achieved.

Challenges & Interventions

- Relocation of Umgeni water pipeline – employer is reviewing other options due to land challenges.
- Acquisition of land. – Employer liaising with PropSol and landowners

Risks

Description

- Poor performance: (Consultant/Contractor)
- Scope changes
- Construction Programme
- Wildlife (Zebra)

Cause

Poor performance
Inadequate Bill of Quantities and conditions discovered on site
Uncoordinated activities
Unrestricted Zebra

Environmental Issues

- Audit findings: Water management, Stormwater management + Soil erosion – Resolved. Some records are not filed: training, landowners concerns, sewer safe disposal – resolved.
- Audit rating: RCL9-96% Compliant, SITE-98% Compliant
- OHS Audit finding: 97% Compliance

Claims

- **# of Claims submitted:23**
- **# of claims approved by NCC: 5**
- **# of claims referred to DAB: 0**



PACKAGE J: CONSTRUCTION PROGRESS PICTURES



HHO



Salome Naicker



TRENCH & BULK BLASTING

AB

Materials Provision

N.003-023-2019/9



Materials Supply



January 2022



72 Months



DESIGN

100%



TENDER

100%



DURATION

24.7%



CONSTRUCTION

23%



EXPENDITURE

24.7%

SOCIO-ECONOMIC/ PUBLIC PARTICIPATION

Progress

- Targeted CPG expenditure: R 108 494 628
- CPG expenditure to date: R 140 839
- CPG expenditure % to date: 0.04%
- # of jobs created to date: 35
- # of SMMEs sub-contracted to date: 5
- # of SMMEs trained to date: 0
- CSDG (Graduates, TVET, P1/P2): 0
- WP's 3, 5-8, 10-12 APPOINTED

Challenges & Interventions

- Community Development Project requires coordination between the various community leaders.

Risks

- The community will not allow the CD project to continue if not correctly marketed and aligned in the community.
- The delayed CD project will initiate community disruptions

LAND CLAIM / ACQUISITION

Progress

- RCL 9 Land Claim currently being managed as separate process with Land Claim Commissioner

Challenges & Interventions

- The RCL 9 Land Claim was never disclosed at the time of the sale of the land – the project was allowed to continue while the land claim process was being followed.

Risks

- Possible community stoppages when the land claim process is completed.

DESIGN & CONSTRUCTION

Progress

- Construction 23% complete
- Expenditure to date: R 109 766 016.87
- Delays – Delay in mobilization period, April Flood, Power Supply, Geology
- EOT – 0 days.
- Achieved milestone: G4/G5 Production

Challenges & Interventions

- Production schedule challenges
- Electricity Supply by Eskom – Contractor using more diesel than anticipated. DAB rejected additional costs. Notice of dissatisfaction submitted.
- Timing of the implementation of the crushing package – difficult to catch up to works packages.
- MHS – One-way traffic for the entrance, Mech Eng reqs
- Delayed WULA – WA is currently being approved

Description

Risks

Cause

- | | |
|---|-------------------------------|
| • Community interferences | Community action |
| • Constructability | Material restrictions |
| • Poor performance: (Consultant/Contractor) | Poor performance |
| • Scope changes | Inadequate Bill of Quantities |
| • Construction Programme | Uncoordinated activities |

Environmental Issues

- Audit findings: 1
- Audit rating: 100%

Claims

- # of Claims submitted : 6
- # of claims approved by NCC: 0
- # of claims referred to DAB: 2

PROCUREMENT

Construction Tender

- RBEC : 3 March 2020
- RBAC : 20 March 2020
- MBAC : 17 April 2020
- Board approval : 29 April 2020
- CONTRACT AWARD: R 416 935 814.19

Construction Tender

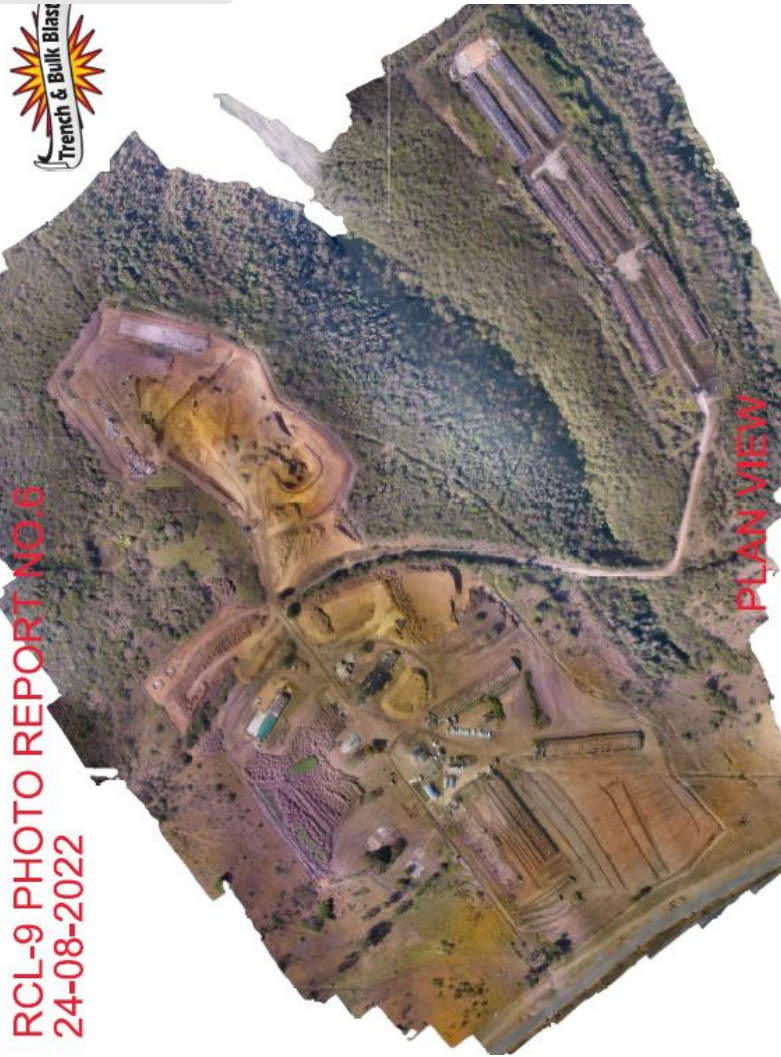
- Advert date : 29 Nov 2019
- Closing date : 13 Feb 2020
- Appointment : 8 Sept 2021
- Mobilisation date : 6 October 2021 to 7 Jan 2022

SANRAL

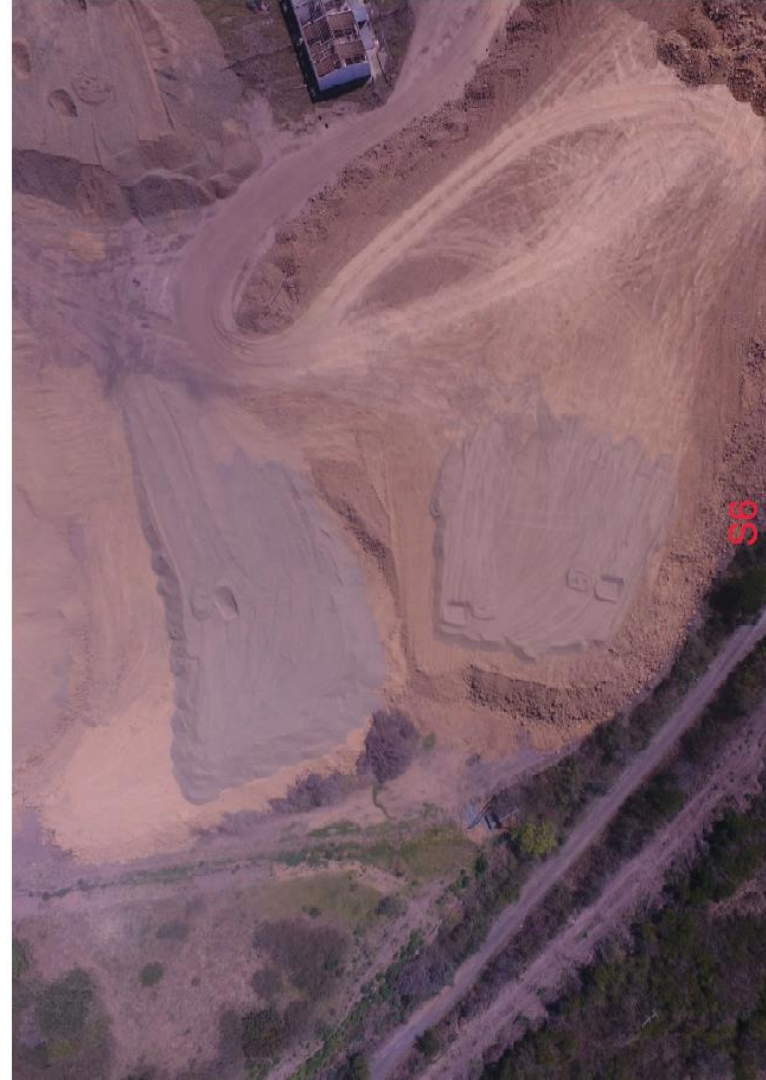


BUILDING SOUTH AFRICA
THROUGH BETTER ROADS

CRUSHING CONTRACT PROGRESS PICTURES



RCL-9 PHOTO REPORT NO.6
24-08-2022





Naidu Consulting



Mpho Nephembani



MARTIN AND EAST

AC

Barriers Supply

N.003.014-2023/9



Barriers Supply



September 2021



24 Months



DESIGN

0%



TENDER

100%



DURATION

70%



CONSTRUCTION

70%



EXPENDITURE

78%

SOCIO-ECONOMIC/ PUBLIC PARTICIPATION APPROVALS

Progress

- Targeted CPG expenditure: R 65 504 344,27
- CPG expenditure to date: R 30 136 892.41
- CPG expenditure % to date: 36.00%
- # of jobs created to date: 148
- # of SMMEs sub-contracted to date: 15
- # of SMMEs trained to date: 3
- CSDG (Graduates, TVET, P1/P2): 3

Challenges & Interventions

- None

Risks

- Interference by business forums

LAND ACQUISITION

Progress

- None required

Challenges & Interventions

- None

Risks

- None.

DESIGN & CONSTRUCTION

Progress

- Construction 70%
- Design N/A
- Expenditure to date: R 128 766 604,54
- Delays – 20 days.
- EOT – 24 days.
- Achieved milestones: 65 000 meters

Challenges & Interventions

- Financial ability of Targeted Enterprises
- Achieving CPG targets

Risks

Description

Cause

- Business forums interference Disgruntled Business Forums

Environmental Issues

- Audit findings: Fully compliant
- Audit rating: 100%

Claims

- # of claims submitted: 12
- # of claims approved by NCC: 0
- # of claims referred to DAB: 7

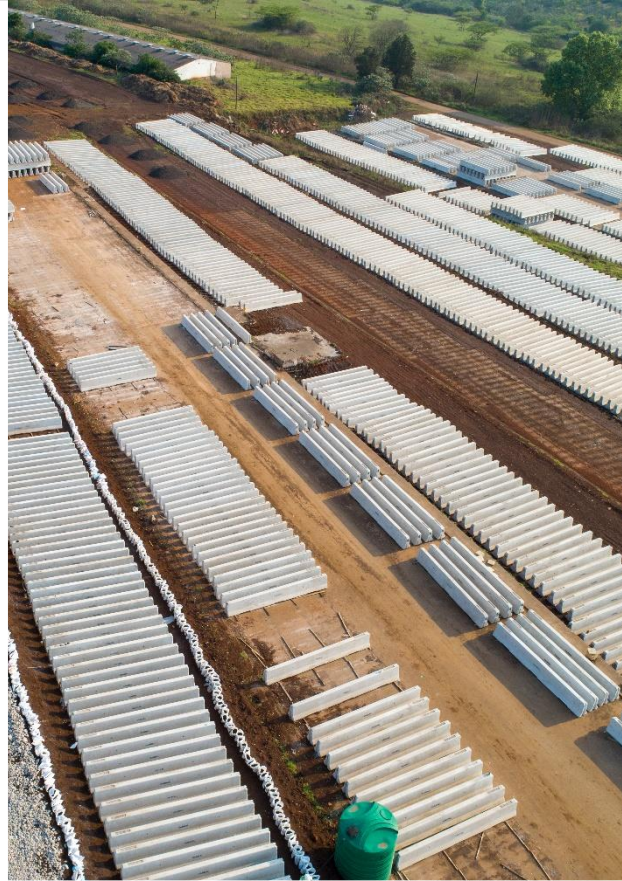
PROCUREMENT

Construction Tender

- RBEC : 11 March 2020
- RBAC : 11 March 2020
- MBAC : 25 September 2020
- Board approval : 26 October 2020
- **CONTRACT AWARD: R 185 000 000.00**

Construction Tender

- Advert date : 15 Nov 2019
- Closing date : 24 Jan 2020
- Appointment : 16 April 2021
- Mobilisation date : 20 April 2021



BARRIER MANUFACTURING PROGRESS PICTURES

N3 SMME AND JOB CREATION



Direct Job Opportunities - Actual Individuals per ID No on site - Based on SANRAL average over time -
262 per R100 million project value

Direct Jobs Full Time Equivalent - Actual Hours Worked on site by Individuals divided by 1840 hours/year - Based on SANRAL average over time .- **114 per R100 million project value.**

The total Full time Equivalent (FTE) direct jobs to be created is **33,500**. An estimated **R2,3 billion** will be spent on **local labour wages** while **R8,8 billion** will be spent on **Targeted Black Owned Enterprises (SMME's)** over the next 8 years.

To Date:

Total Spend on SMMEs to date: **R542 million (6,5%)**

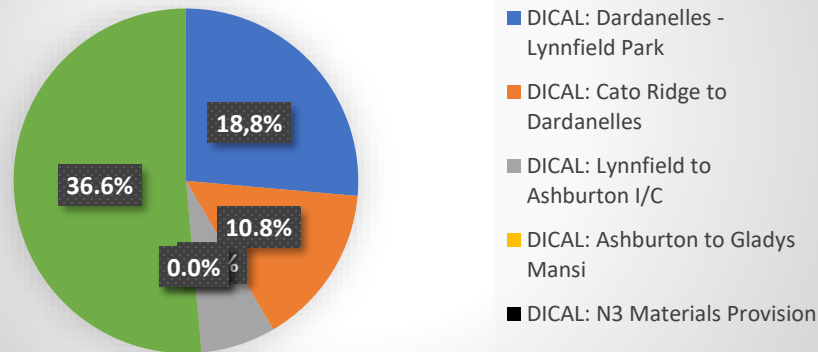
No of SMME's to date: **171**

Total Spend on Targeted Labour to date: **R126million (5%)**

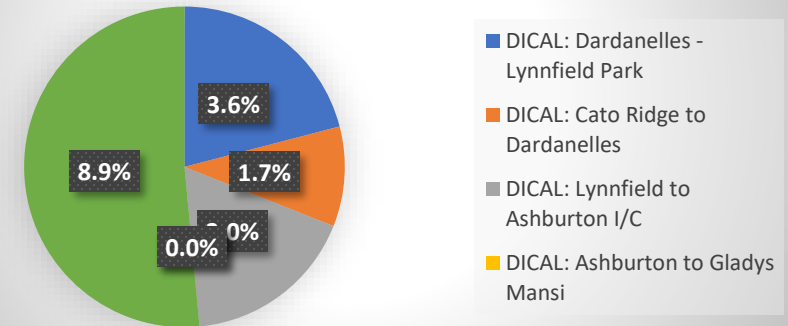
Max no of Jobs created to date: **1,473**

CPG TARGETS MONITORING (N3 PROGRAM)

SMME Expenditure per Project
Total: 542 097 44.49



LABOUR Expenditure to date
Total: 126 997 577.28

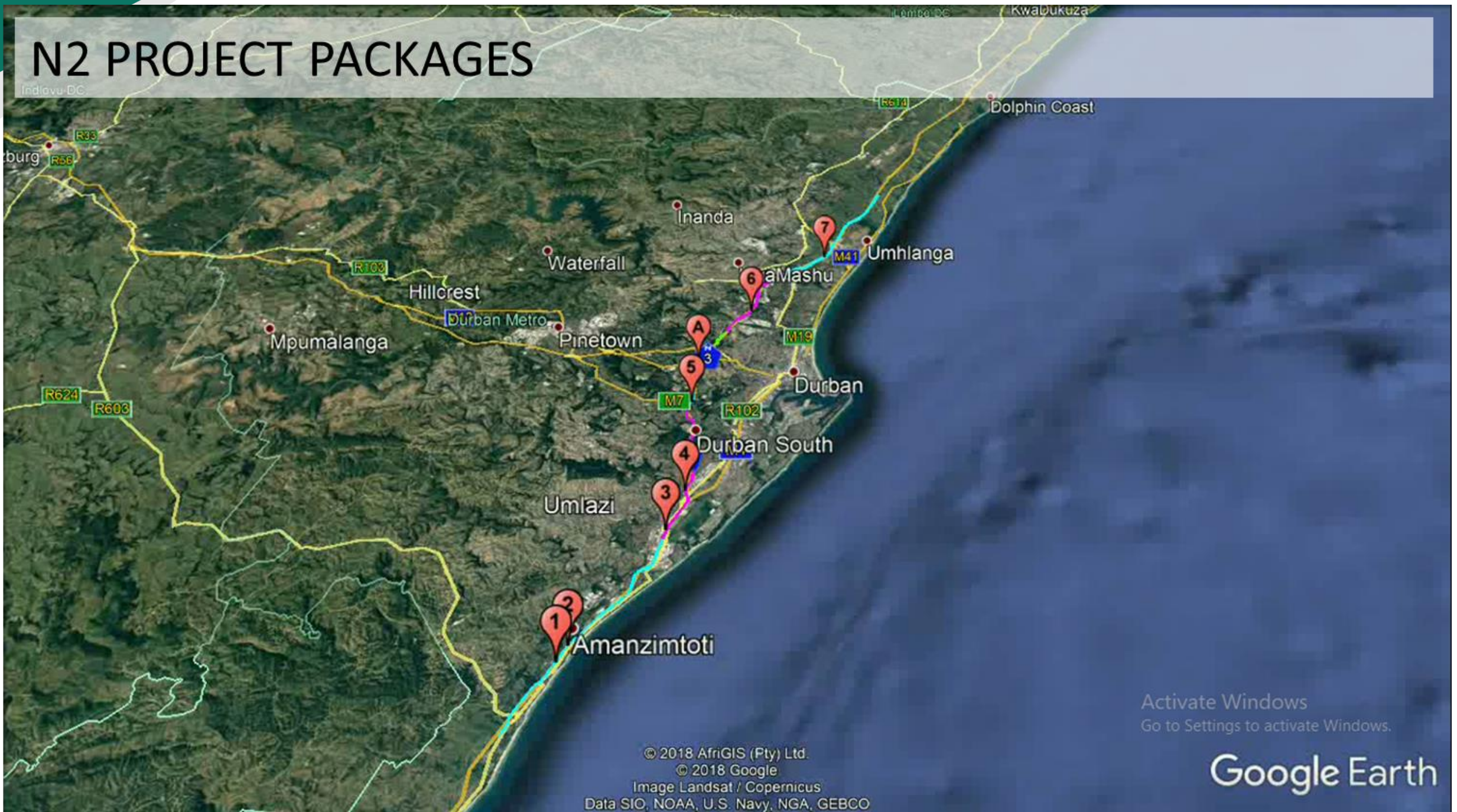


| NUMBER | DESCRIPTION | START DATE | END DATE | DURATION (MONTHS) | PROJECT VALUE | CPG TARGET | | | | ACTUAL | | | |
|------------------|-------------------------------------|------------|----------|-------------------|-------------------|------------|-----------------|---------------------|-----------------|-----------------------|----------------|-----------------------|-----------------|
| | | | | | | LABOUR | | TARGETED ENTERPRISE | | LABOUR | | TARGETED ENTERPRISE | |
| | | | | | | Target % | Amount (R) | Target % | Amount (R) | % expenditure to date | Amount | % expenditure to date | Amount (R) |
| N.003-020-2017/9 | DICAL: Dardanelles - Lynnfield Park | Jan-21 | Oct-24 | 45 | R1 478 997 670,17 | 8,0% | R118 319 813,61 | 30,0% | R443 699 301,05 | 3,6% | R53 373 077,00 | 18,8% | R277 791 642,00 |
| N.003-020-2017/8 | DICAL: Cato Ridge to Dardanelles | Apr-21 | Jun-25 | 50 | R1 439 457 269,19 | 8,0% | R115 156 581,54 | 30,0% | R431 837 180,76 | 1,7% | R25 000 000,00 | 10,8% | R155 100 000,00 |
| N.003-023-2017/9 | DICAL: Lynnfield to Ashburton I/C | Apr-21 | Aug-24 | 40 | R1 228 039 035,91 | 8,0% | R98 243 122,87 | 30,0% | R368 411 710,77 | 3,0% | R36 998 622,00 | 5,0% | R61 254 842,76 |
| N.003-030-2017/7 | DICAL: Ashburton to Gladys Mansi | Feb-23 | Feb-27 | 48 | R2 442 332 651,60 | 10,0% | R244 233 265,16 | 30,0% | R732 699 795,48 | 0,0% | R0,00 | 0,0% | R0,00 |
| N.003-023-2019/9 | DICAL: N3 Materials Provision | Feb-22 | Feb-28 | 72 | R416 935 814,19 | 4,0% | R16 677 432,57 | 30,0% | R125 080 744,26 | 0,0% | R0,00 | 0,0% | R0,00 |
| N003-014-2023/9 | DNURS: New Jersey barriers | Apr-21 | Jun-23 | 27 | R131 008 688,54 | 8,0% | R10 480 695,08 | 50,0% | R65 504 344,27 | 8,9% | R11 625 878,28 | 36,6% | R47 950 956,73 |

The background is a stylized, white-line-art illustration on a dark teal background. It depicts a city skyline at night with various skyscrapers, some with glowing windows. In the foreground, a multi-lane highway is shown with dashed white lines. Two large trucks are driving on the highway: one in the left lane moving towards the viewer, and another in the right lane moving away. On the right side of the highway, there are silhouettes of people walking on a sidewalk or bridge. The sky is filled with stars, clouds, and streaks of light, suggesting a night scene.

03. N2 PROGRAM PROGRESS

N2 PROJECT PACKAGES



Activate Windows
Go to Settings to activate Windows.

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© 2018 Google

Image Landsat / Copernicus

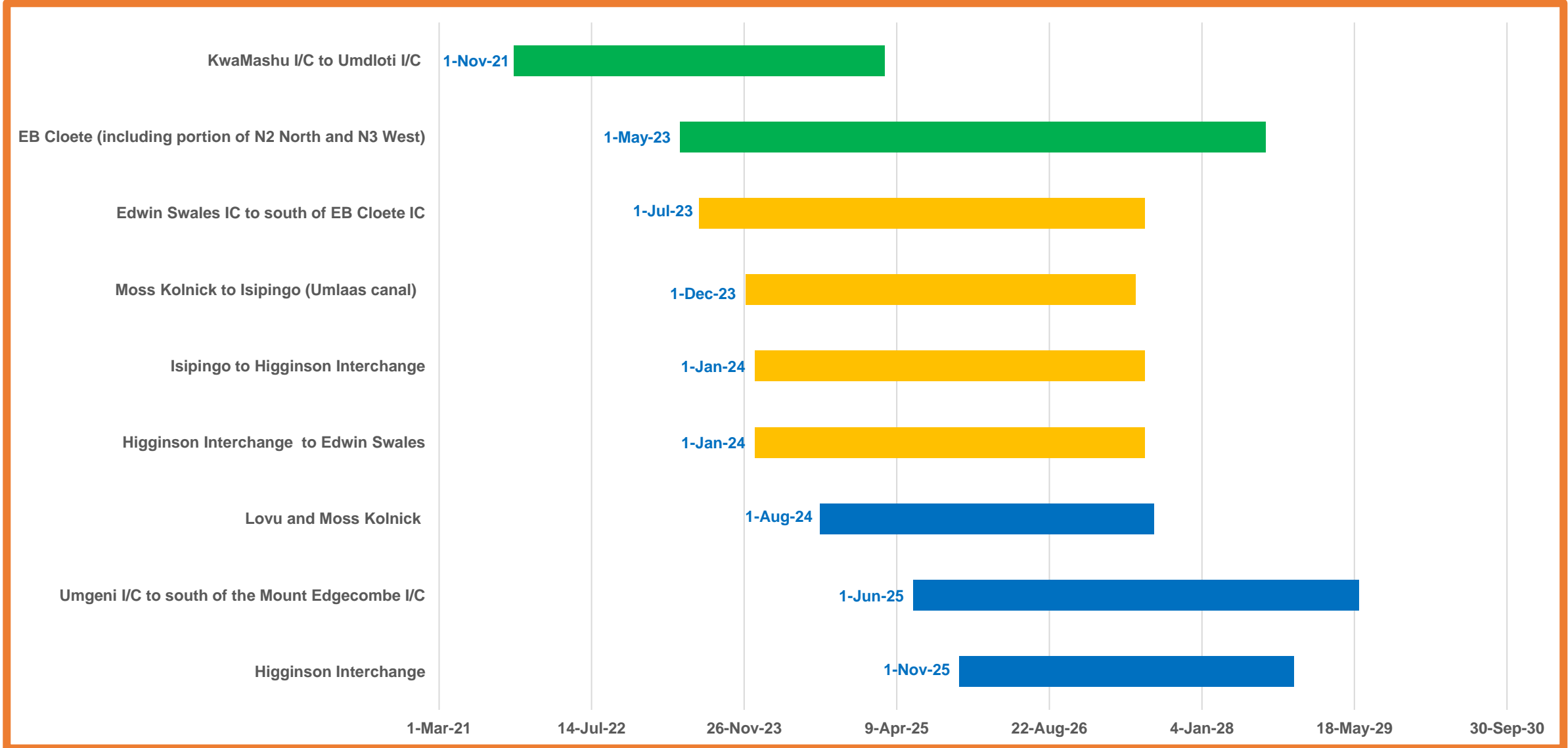
Data SIO, NOAA, U.S. Navy, NGA, GEBCO

Google Earth

N2 PROGRAM STATUS

| PACKAGE | DESCRIPTION | SCOPE OF WORK | STATUS | DURATION (MONTHS) | CONTRACTOR | ENVISAGED CONSTRUCTION START (after) mobilisation) |
|---------|---|--|--------------------------------------|-------------------|-------------------|--|
| 1 | DICAL: Lovu and Moss Kolnick 24 km 12 to km 21 – Package 2 | Addition of lanes, Bridge widenings | Design (80%) | 36 | - | Sept 2024 |
| 2 | DICAL: Moss Kolnick to Isipingo (Umlaas canal) incl. Isipingo I/C -Package 1 | Addition of lanes, Bridge widenings | To be advertised in May 2023 | 42 | - | March 2024 |
| 3 | DICIC: Adams Road Interchange | Upgraded Interchange | Design complete | TBA | - | Future |
| 4 | DICIC: Isipingo Interchange | Upgraded Interchange | Design complete | n/a | - | Included under Package 1 |
| 5 | DICAL: Isipingo to Higginson Interchange | Addition of lanes, Bridge widenings, Higginson Interchange | Draft tender document | 36 | - | June 2024 |
| 6 | DICIC: Higginson Interchange | Upgraded Interchange | Tender – prelim/detail design | 36 | - | Nov 2025 |
| 7 | DICAL: Higginson Interchange to Edwin Swales (Section 25 km 6.10 to km 12.80) | Addition of lanes, Bridge widenings, Higginson Interchange | Draft tender document | 36 | - | June 2024 |
| 8 | DICAL: Edwin Swales IC (km 12.3) to south of EB Cloete IC (km 16.0) | Addition of lanes, Bridge widenings | Construction tender Under evaluation | 48 | - | Aug 2023 |
| 9 | DICAL: Umgeni Interchange (km 20.72) to south of the Mount Edgecombe Interchange (km 30.45) | Addition of lanes, Bridge widenings | Detail design | 48 | - | June 2025 |
| 10 | EB Cloete (including portion of N2 North and N3 West) N2 Section 25 between Wiggins Rd (KM 16.0) to Umgeni Rd I/C (km 20.7) and N3 Section 1 between Sherwood I/C (KM 8.4) to Westville viaduct (km 11.8) | Addition of lanes, Bridge widenings, Major Steel Arch | Construction (May 2023) | 63 | Base Major/CSC JV | May 2023 |
| 11 | DICAL: KwaMashu I/C (km -2.0) to Umdloti I/C (km 11.6) | Addition of lanes, Bridge widenings | Construction: 12% | 40 | Raubex Constr | Nov 2021 |

N2 ROLLOUT GANTT CHART





Naidu Consulting



Trevor Zumani



Raubex Construction

AC

Upgrading of N 2 from KwaMashu I/C, Section 25 (km 28.6) to Umdloti River Bridge, Section 26 (km 14.0)



14 km



Upgrade



August 2021



40 Months



DESIGN

100%



TENDER

100%



DURATION

40%



CONSTRUCTION

5%



EXPENDITURE

9%

SOCIO-ECONOMIC/ PUBLIC PARTICIPATION APPROVALS

Progress

- Targeted CPG expenditure: R 93 682 618
- CPG expenditure to date: R 8 524 811,55
- CPG expenditure 30% to date: 2,4%
- # of jobs created to date: 126
- # of SMMEs sub-contracted to date: 13
- # of SMMEs trained to date: 9
- CSDG (Graduates, TVET, P1/P2): 5

Challenges & Interventions

- Rampant theft of materials by locals
- Delays in appointing CPG contractors
- CPG Hub almost ready for TE's

Risks

- Wide range of tender prices received

LAND ACQUISITION

Progress

- None required

Challenges & Interventions

- Not applicable

Risks

- Not applicable

DESIGN & CONSTRUCTION

Progress

- Construction 16%
- Design N/A
- Expenditure to date: R 238 899 232,37 (incl. escalation and VAT)
- Delays – 329 days.
- EOT – 0 days.
- Achieved milestones: Culvert rehab, median barrier wall bases, earthworks

Challenges & Interventions

- Reinstatement of Mount Edgecombe mini-substation
- Some drawings still outstanding

Risks

| Description | Effect | Cause |
|-----------------------------|------------------------|-------------------------------------|
| • Very high-speed traffic | Danger to others | Bad driving habits |
| • Moving into rainy season | Construction delays | Natural |
| • Possible bitumen shortage | Delays to paving | Refinery closures |
| • Quality of TE's | Quality of workmanship | Intense training programme required |
| • Very tight programme | Late completion | Various delays |

Environmental Issues

- Audit findings: Fully compliant
- Audit rating: 100%

Claims

- # of claims submitted: 14
- # of claims approved by NCC: 0
- # of claims referred to DAB: 3

PROCUREMENT

Construction Tender

- RBEC : 23 October 2020
- RBAC : 27 November 2022
- MBAC : 28 May 2021
- Board approval :
- CONTRACT AWARD: R 1 422 175 686.44

Construction Tender

- Advert date : 13 Sept 2019
- Closing date : 6 Nov 2019
- Appointment : 2 August 2021
- Mobilisation date : 2 August 2021

**N2 KWAMASHU
TO MDLOTI
PROGRESS
PICTURES**



**N2 KWAMASHU
TO MDLOTI
PROGRESS
PICTURES**





IX Engineers



Corne Roux



Base Major – CSC JV

9

EB Cloete (including portion of N2 North and N3 West) N2 Section 25 between Wiggins Rd (KM 16.0) to Umgeni Rd I/C (km 20.7) and N3 Section 1 between Sherwood I/C (KM 8.4) to Westville viaduct



8,1km



Addition of lanes
Bridge widenings
Major steel arch



January 2023



63 Months



DESIGN

100%



TENDER

100%



DURATION

0%



CONSTRUCTION

0%



EXPENDITURE

0%

SOCIO-ECONOMIC/ PUBLIC PARTICIPATION APPROVALS

Progress

- Targeted CPG expenditure: R 1 507 037 639,11
- CPG expenditure to date: R 0
- CPG expenditure 30% to date: 0%
- # of jobs created to date: 0
- # of SMMEs sub-contracted to date: 0
- # of SMMEs trained to date: 0
- CSDG (Graduates, TVET, P1/P2): 0

Challenges & Interventions

- Rampant theft of materials by locals
- Delays in appointing CPG contractors
- CPG Hub almost ready for TE's

Risks

- Wide range of tender prices received

LAND ACQUISITION

Progress

- All PTOs received
- All private/trust/company acquisitions are in progress with no issues

Challenges & Interventions

- New encroachment into road reserve at Umgeni I/C

Risks

- Partial access to site.
- No other – All PTOs received.

DESIGN & CONSTRUCTION

Progress

- Construction 0%
- Design 100%
- Expenditure to date: R 0 (incl. escalation and VAT)
- Delays – 0 days.
- EOT – 0 days.
- Achieved milestones: mobilisation period, CPG plan approval

Challenges & Interventions

- ODC vs CSC interface

Risks

- Design & Supervision interface – Potential delays

PROCUREMENT

Supervision Tender

- Advert date : 6 Nov 2020
- Closing date : 15 Jan 2021
- Appointment : Sept 2021
- Start date : Oct 2021

Construction Tender

- Advert date : 26 July 2022
- Closing date : 5 October 2022
- Start date : 30 January 2023
- Contract Award: R5,023,458,797 (Incl. VAT)

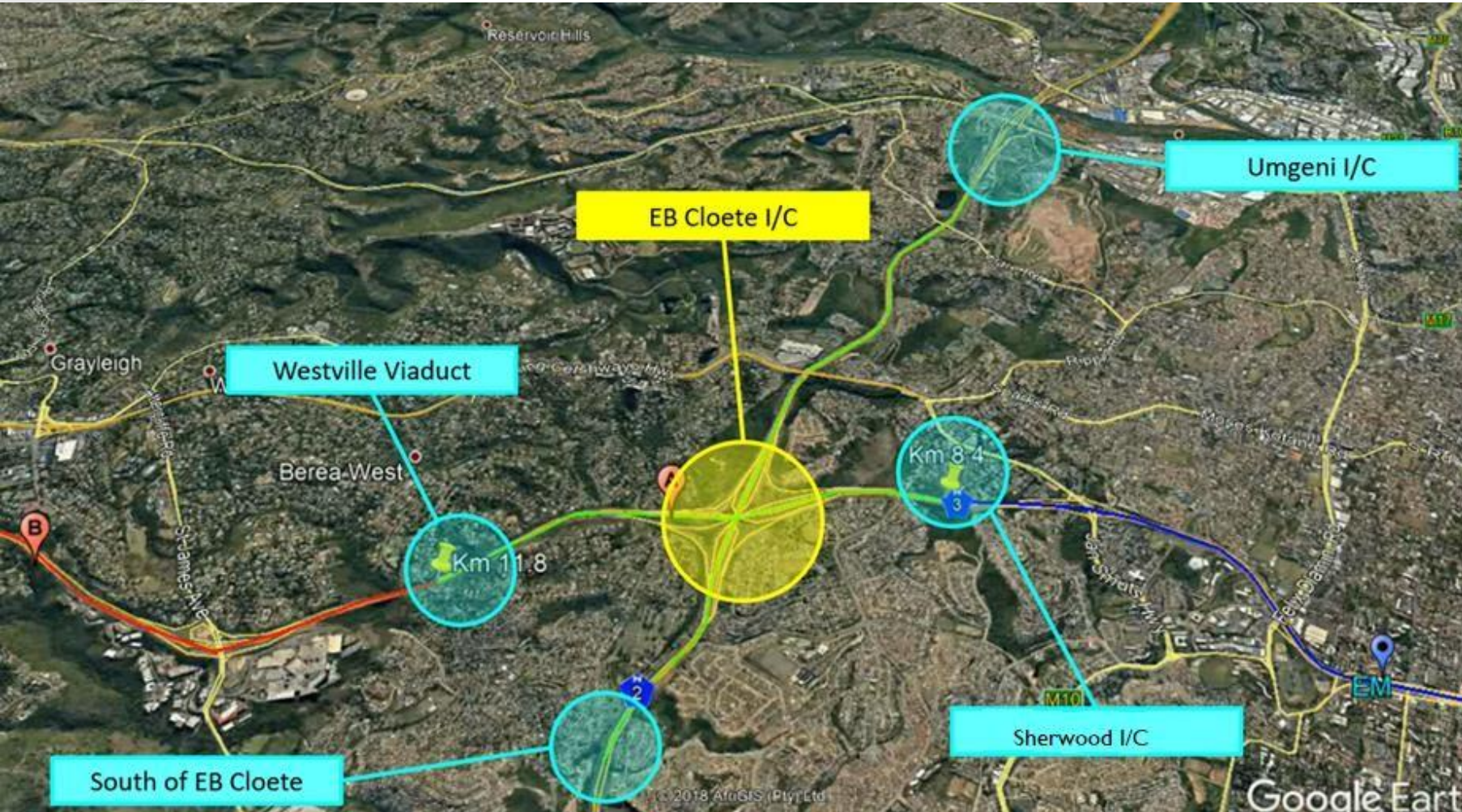
Issues & Interventions required

- PLC establishment.
- Internal demands



05. N2/N3 EB CLOETE INTERCHANGE PACKAGE

LOCALITY PLAN



This project comprises of the upgrading of the:

- EB Cloete Interchange, together with the upgrade of 4.72 km of National Route 2 from km 16.0 (immediately south of the Wiggins Road Underpass) to km 20.72 (immediately south of the Umgeni Road Interchange)
- Upgrade of 3.36 km of National Route 3 from km 8.44 (Sherwood Interchange) to km 11.8 (eastern abutment of the Westville Viaduct).
- The project is located at the intersection between the N2 (km 17.21 on section 25) and N3 (km 9.7 on section 1) in eThekweni Metropolitan Municipality in KwaZulu-Natal Province.

SCOPE OF WORKS



The Works to be carried out under the contract will include the following:

- Accommodation of traffic and construction of temporary widenings and deviations
- Construction of retaining structures for both fill and cut widenings.
- Lengthening of underpass structures (bridges) along the N2 and N3.
- Replacing 4-span overpass structures with 2-span structures to accommodate the additional lanes on the N2 and N3.
- Construction of at least two additional lanes in each direction of the N2 and N3, on either side of the EB Cloete Interchange.
- The provision of an additional lane on all the eight EB Cloete Interchange ramps. This will require a steel arch structure to be constructed over the top of the EB Cloete Interchange to support the existing trestle frame structure carrying the bridges in this interchange due to the geometric constraint on the bottom two ramps.
- Provision of a concrete median barrier along the N2 and N3, to separate traffic.
- Strengthening of the existing N2 and N3 pavement.
- The provision of lighting along the N2 and N3 within the limits of the project, as well as feature lighting for the proposed new arch structure at the EB Cloete Interchange.
- The maintenance of the existing N2 and N3 and deviations.
- Provision of pedestrian walkway facilities along the N2.
- Employment and management of Targeted Enterprises

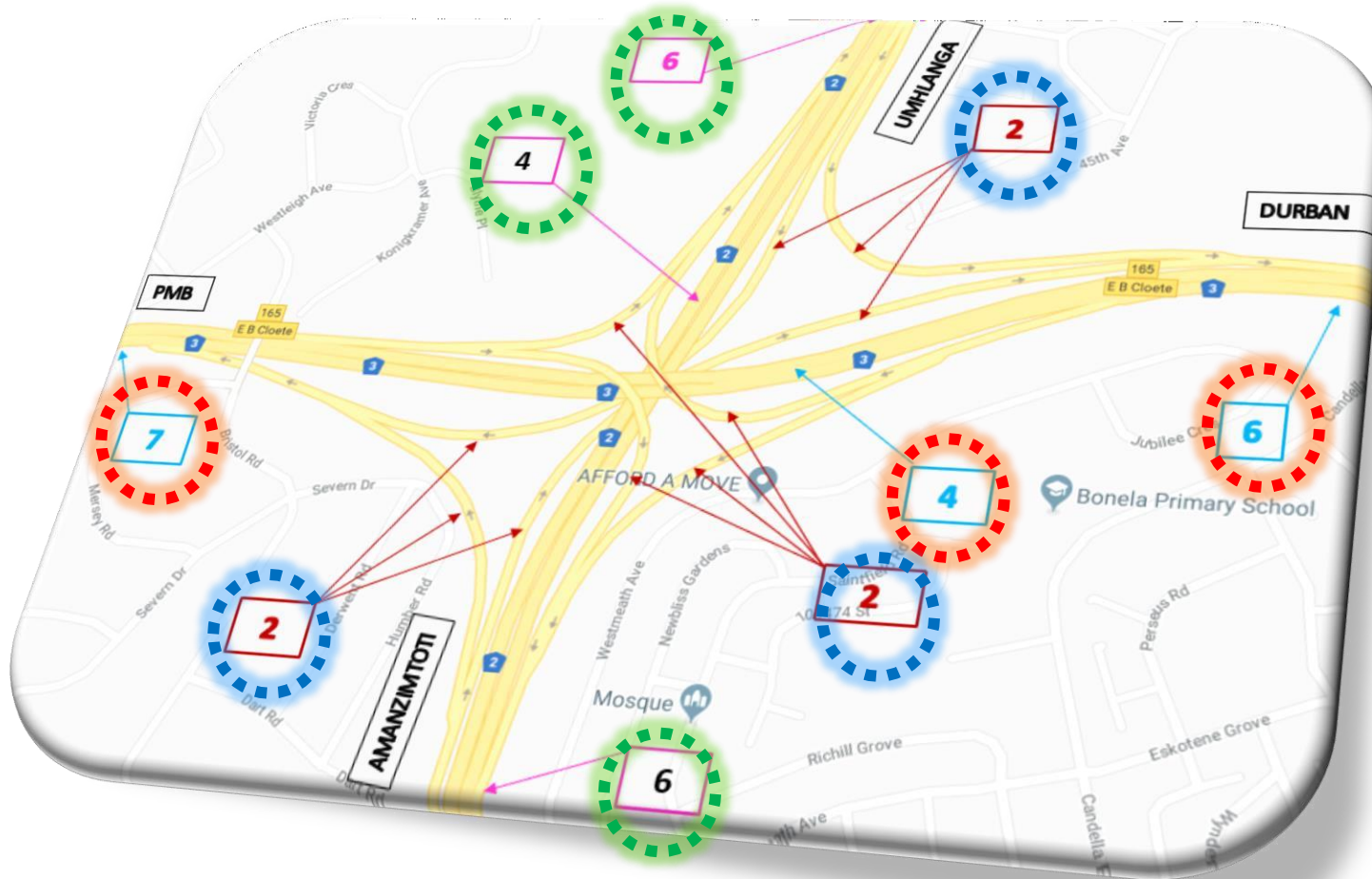
SCOPE OF WORKS..(continue)

SANRAL

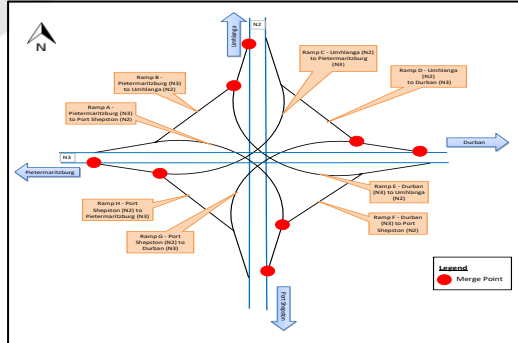


BUILDING SOUTH AFRICA
THROUGH BETTER ROADS

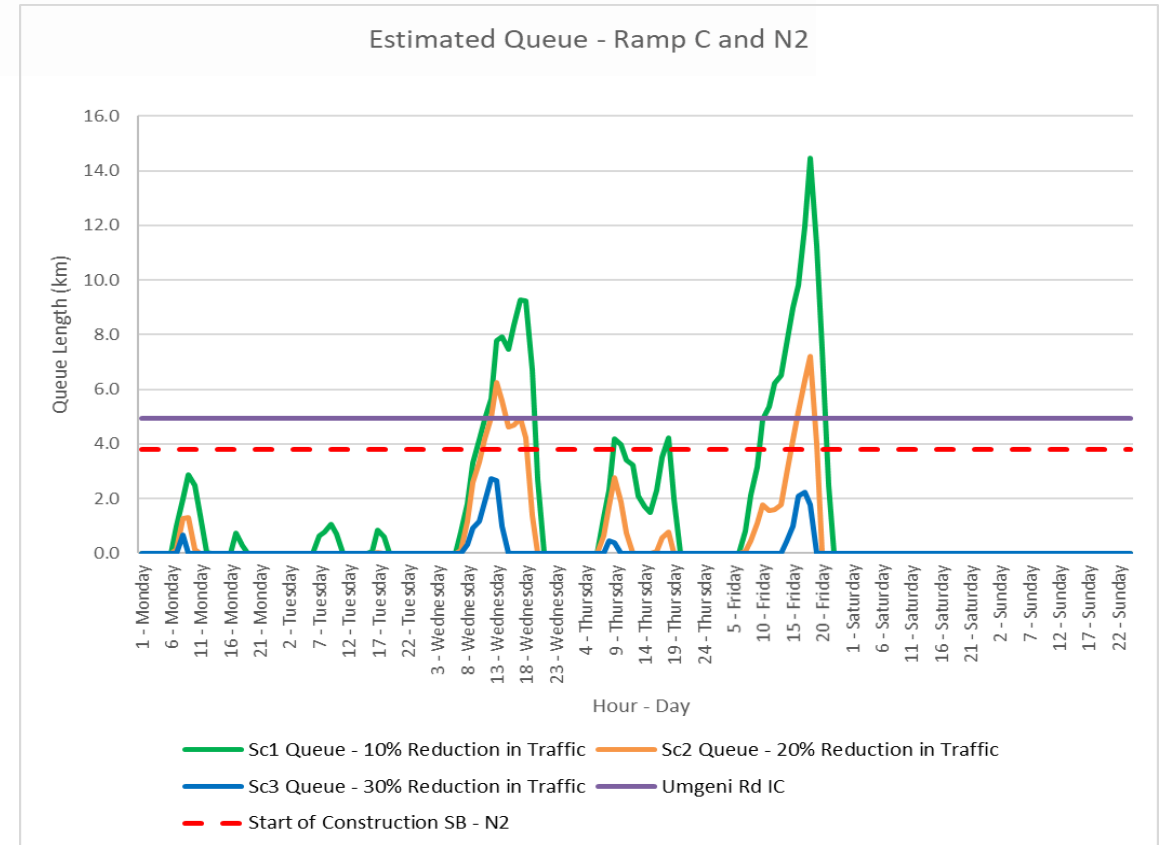
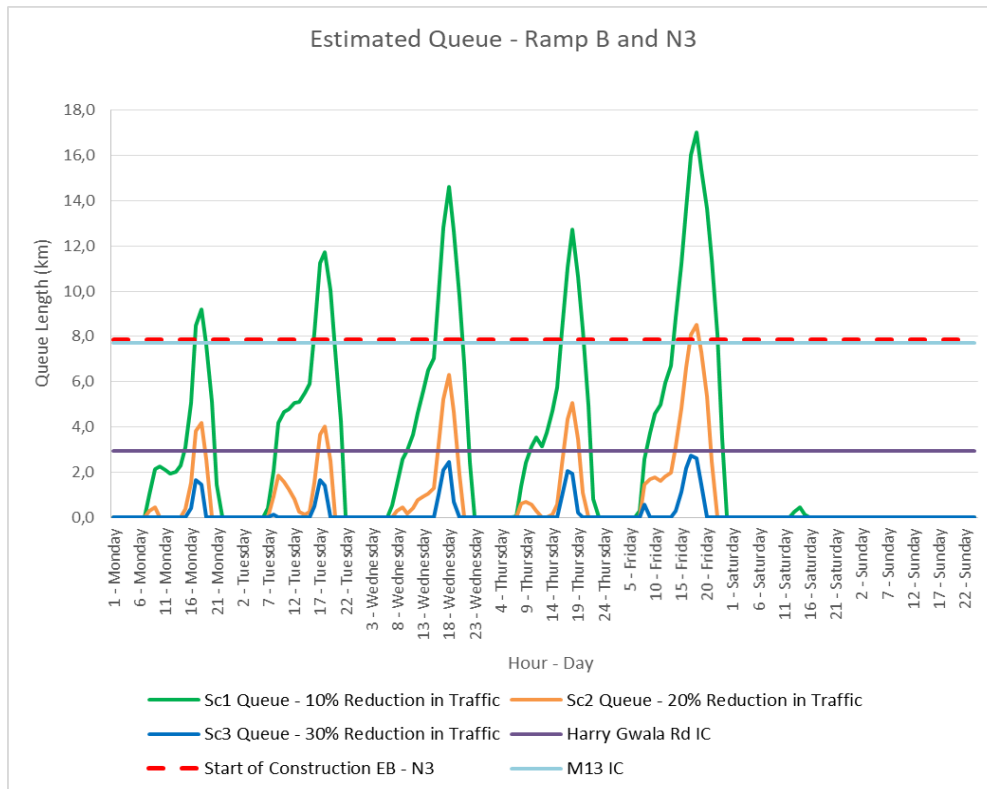
PROPOSED LANES



TMP Analysis – Merge / Diverge Points



- Interchange merge and diverge points will need to be carefully managed.
- Travel demand management will have the most impact in reducing possible congestion and queuing.



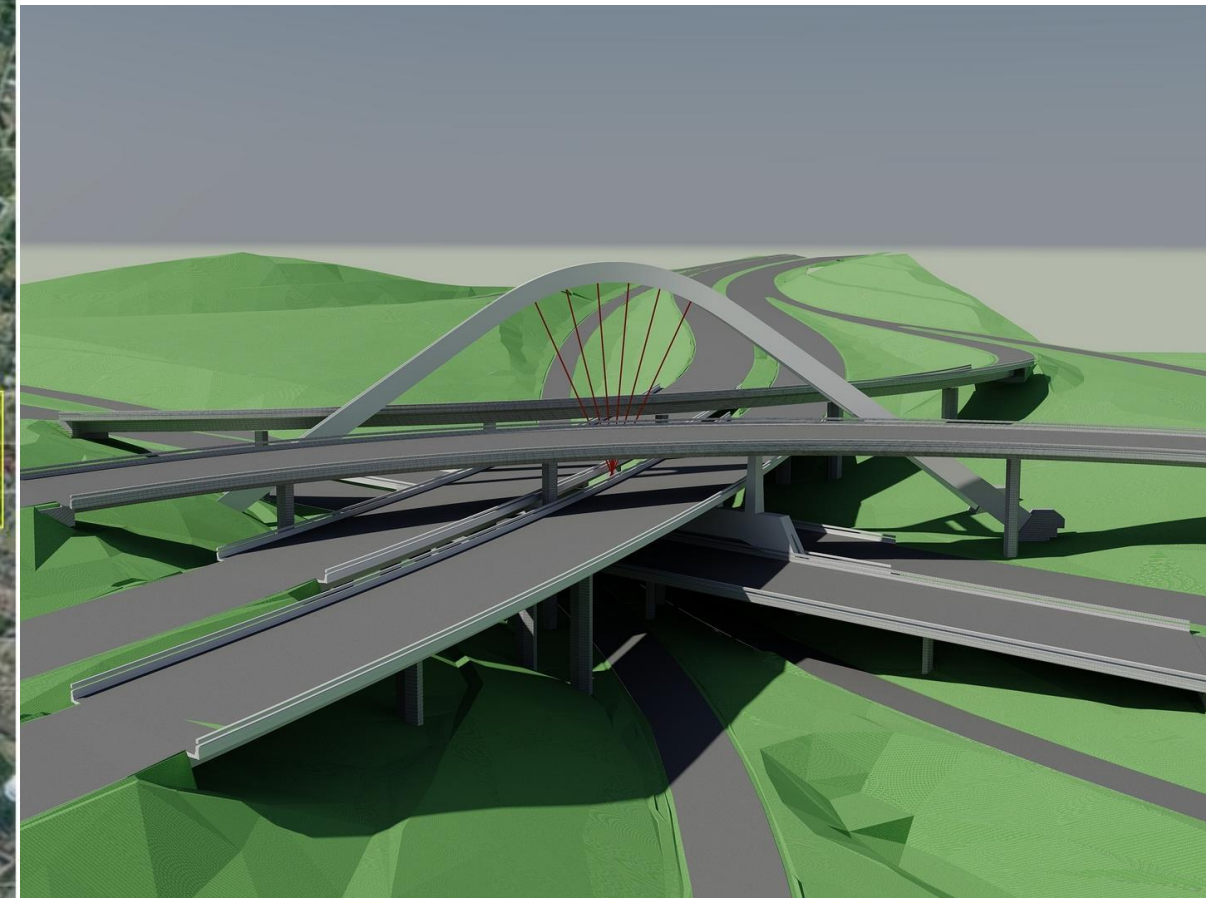
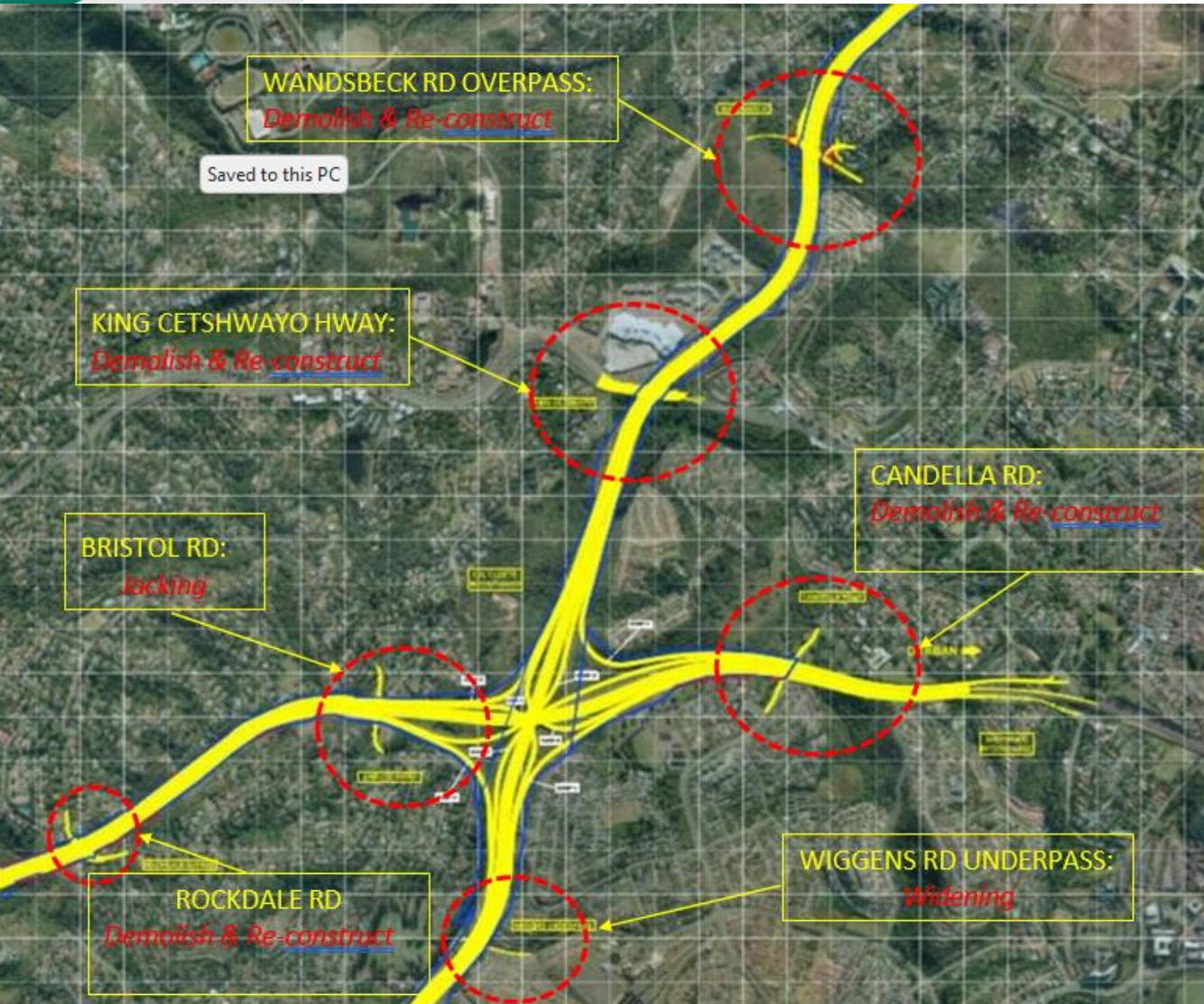
SCOPE OF WORKS..(continue)

SANRAL



BUILDING SOUTH AFRICA
THROUGH BETTER ROADS

BRIDGES



EB Cloete + N2 Section 25 between Wiggins Rd (KM 16.0) to Umgeni Rd I/C (km 20.7) and N3 Section 1 between Sherwood I/C (KM 8.4) to Westville viaduct (km 11.8)



FRICA
OADS



N2 SMME AND JOB CREATION



There is a total of **9 work packages** on the **N2 program** to be executed, with an estimated construction value of **R19 billion**. The total Full time Equivalent (FTE) direct jobs to be created is **21,500**. An estimated **R1,5 billion** will be spent on local labour wages while **R5,7 billion** will be spent on **Targeted Black Owned Enterprises (SMME's)** over the next **8 years**.

To Date:

Total Spend on SMMEs to date: **R20 million (0,3%)**

No of SMME's to date: **13**

Total Spend on Targeted Labour to date: **R9,5 million (0,7%)**

Max no of Jobs created to date: **126**

CPG TARGETS MONITORING (N2 PROGRAM)



| NUMBER | DESCRIPTION | START DATE | END DATE | DURATION (MONTHS) | PROJECT VALUE | CPG TARGET | | | | ACTUAL | | | |
|------------------|--|------------|----------|-------------------|------------------|------------|-----------------|---------------------|-------------------|-----------------------|---------------|-----------------------|----------------|
| | | | | | | LABOUR | | TARGETED ENTERPRISE | | LABOUR | | TARGETED ENTERPRISE | |
| | | | | | | Target % | Amount (R) | Tagert % | Amount (R) | % expenditure to date | Amount | % expenditure to date | Amount (R) |
| N.002-260-2018/9 | DICAL: KwaMashu I/C (km -2.0) to Umdloti I/C (km 11.6) | Aug-21 | Dec-25 | 40 | 1 171 032 732,84 | 8,0% | R93 682 618,63 | 30,0% | R351 309 819,85 | 0,5% | R5 523 226,29 | 5,8% | R20 534 868,25 |
| N.002-250-2009/9 | DICIC: Capacity Improvement - EB Cloete | Jan-23 | Apr-28 | 63 | 5 023 458 797,04 | 8,0% | R401 876 703,76 | 30,0% | R1 507 037 639,11 | 0,0% | R0,00 | 0,0% | R0,00 |



06. TYPICAL PLANNED UPGRADE INTERCHANGES

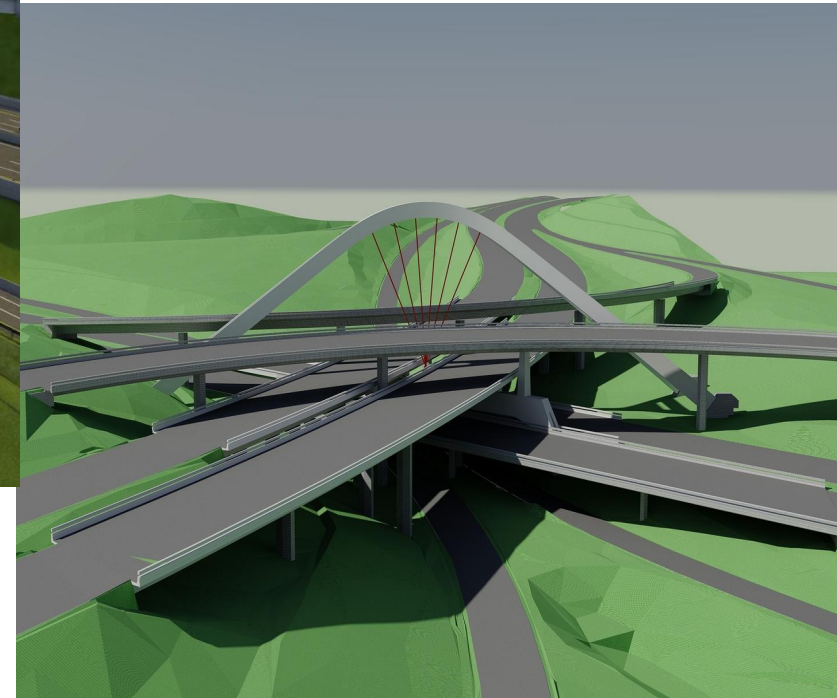
PLANNED UPGRADE INTERCHANGES

HIGGNSON HIGHWAY & EB CLOETE I/C

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BUILDING SOUTH AFRICA
THROUGH BETTER ROADS



PLANNED UPGRADE INTERCHANGES

N3 MARKET ROAD & ASBURTON I/C

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BUILDING SOUTH AFRICA
THROUGH BETTER ROADS



PLANNED UPGRADE INTERCHANGES

N3 MARKET ROAD & ASBURTON I/C

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THROUGH BETTER ROADS



PLANNED UPGRADE INTERCHANGES

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THROUGH BETTER ROADS

N3 SPINE ROAD NETWORK ARCH



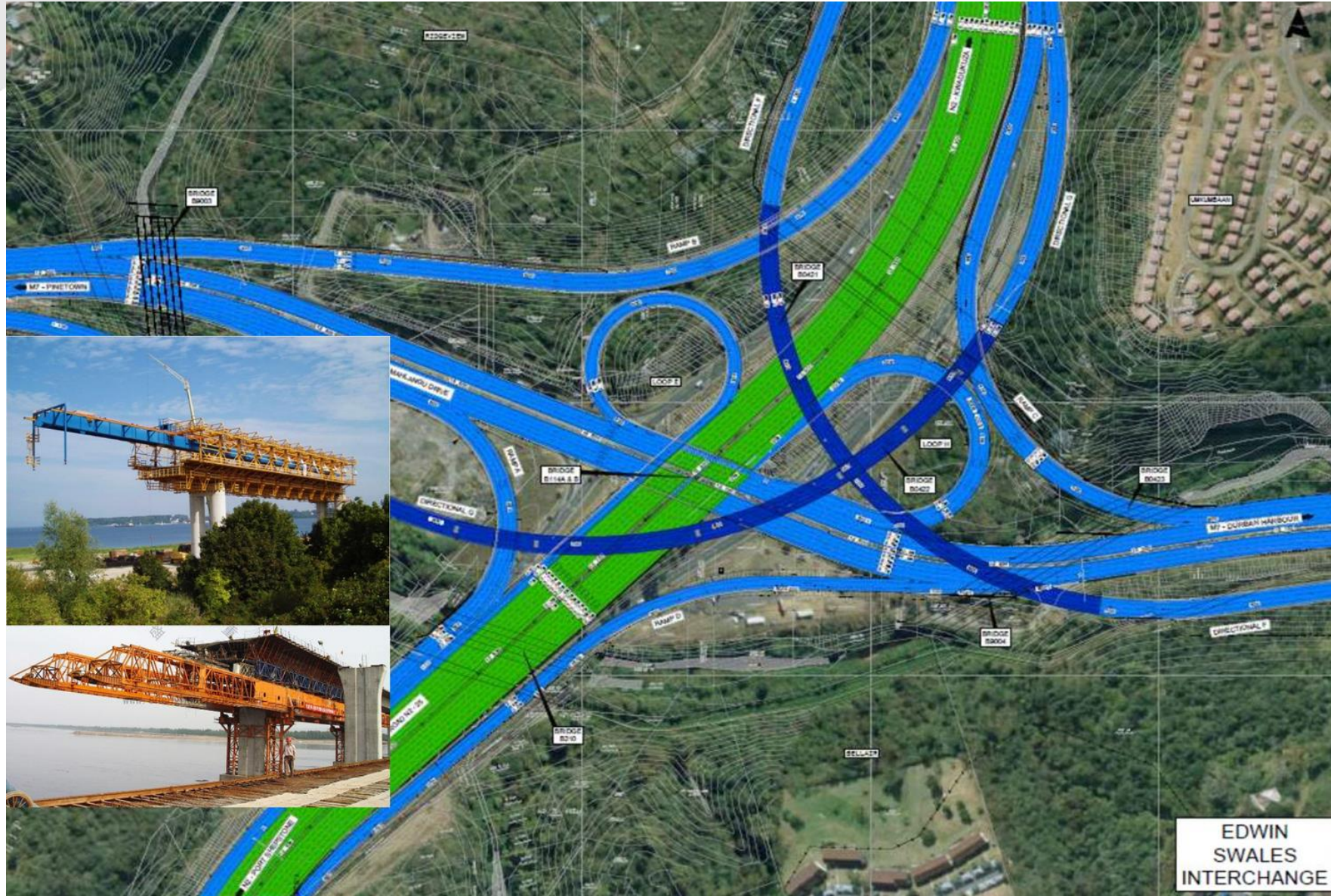
PLANNED UPGRADE INTERCHANGES

N2/M7 INTERCHANGE - MAIN PORT ACCESS

SANRAL



BUILDING SOUTH AFRICA
THROUGH BETTER ROADS





07. INNOVATIONS/SUSTAINABILITY

INNOVATIVE MATERIALS AND SUSTAINABILITY

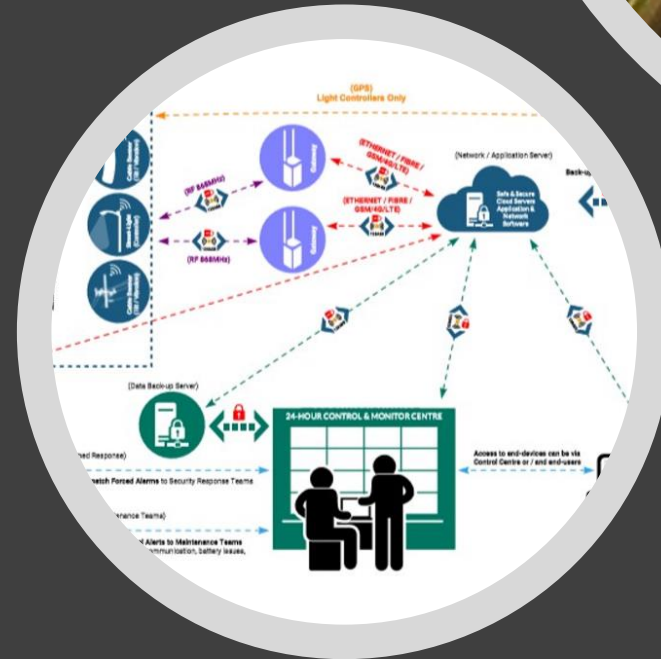
SHORT TERM AND PROJECT SCOPE

- ▶ Use of nano technology in different aspects of permanent and temporary works
- ▶ Concrete barriers and wall surfacings incorporating anti-stain material
- ▶ Highly reflective material for temporary traffic accommodation signage and temporary barriers
- ▶ Use of LED/Solar roadstuds for better visibility during construction works
- ▶ Re-use of existing material for both asphalt and concrete construction
- ▶ Implementation of sustainability monitoring and evaluation tool
- ▶ Efficient use of materials (Earthworks, recycled Asphalt and concrete) within and across adjacent packages depending on program



LIGHTING TECHNOLOGY

- Smart lighting that the luminosity is dependent on traffic volume.
- The linked central management system for antitheft/security on the streetlight infrastructure
- N2/N3 Freeway median and interchange lighting to be constructed between Durban and Pietermaritzburg and Toti to Mhloti incorporating smart technology over 130km



AUGMENTED REALITY AND DRONE TECHNOLOGY

- All construction contracts incorporates usage of Drone footage for monitoring and reporting
- Examples shown are 3D renderings of EB Cloete arch and Key ridge re-alignment





08. COMMUNITY DEVELOPMENT PROJECTS

CD PROJECT IDENTIFICATION



1

ACCESS AND MOBILITY TO NATIONAL ROAD

Address mobility and accessibility challenges . BSC approval required

2

PARTNERSHIP WITH PUBLIC/PRIVATE STAKEHOLDER

Advance development and Address mobility and accessibility challenges. BSC approval required

3

REQUEST BY EXTERNAL STAKEHOLDERS

Advance development and Address mobility and accessibility challenges. BSC approval required

4

ROAD SAFETY CONCERN

Address road safety challenges . BSC approval required

COMMUNITY DEVELOPMENT PROJECT S



| NUMBER | DESCRIPTION | HIGH LEVEL PRELIMINARY SCOPE | MUNICIPALITY |
|-----------------|--|---|---------------------------|
| N3: | | | |
| C004-?? | CD project for N.003-030-2017/3 (N3 New England Road to Twickenham Road - Package M) | New package, CD project not established as yet | Msunduzi Municipality |
| C004-078-2022/1 | CD project under N003-014-2023/9 (N3 barrier contract - Package AC) | The municipality has proposed potential projects to be considered as CD projects. MoU to be drafted in this regard for approval | Mkhambathini Municipality |
| C004-057-2021/1 | CD project under materials provision contract for N3 - RCL 9 (N.003-023-2019/9) - Package AB | The municipality has proposed potential projects to be considered as CD projects. MoU to be drafted in this regard for approval | Mkhambathini Municipality |
| C004-068-2022/1 | CD project under N.003-010-2017/3 (N3/S1 Paradise Valley to Mariannhill Toll Plaza - Package C) | Official request for a list of potential CD projects was send to the municipality, waiting for eThekwini to respond with a list of potential projects for consideration | Ethekweni Municipality |
| C004-?? | CD project under N.003-012-2017/1 (Mariannhill Toll Plaza to Key Ridge -Package D) | Official request for a list of potential CD projects was send to the municipality, waiting for eThekwini to respond with a list of potential projects for consideration | Ethekweni Municipality |
| C004-073-2022/1 | CD project under N.003-010-2019/1 (N3/S1 Mariannhill Toll Plaza capacity and pavement upgrade -Package D1) | Official request for a list of potential CD projects was send to the municipality, waiting for eThekwini to respond with a list of potential projects for consideration | Ethekweni Municipality |
| C004-055-2021/1 | CD project under N003-020-2017/6 (N3/S2 KM 8.825 - BP Garage) | Official request for a list of potential CD projects was send to the municipality, waiting for eThekwini to respond with a list of potential projects for consideration | Ethekweni Municipality |

COMMUNITY DEVELOPMENT PROJECTS



| NUMBER | DESCRIPTION | HIGH LEVEL PRELIMINARY SCOPE | MUNICIPALITY |
|-----------------|--|---|---------------------------|
| N3: | | | |
| C004-056-2021/1 | CD project under N.003-020-2017/1 (Hammarisdale to Cato Ridge - Package F) | Official request for a list of potential CD projects was send to the municipality, waiting for eThekwini to respond with a list of potential projects for consideration | eThekwini Municipality |
| C004-082-2022/1 | CD project under N.003-020-2017/2 (Key Ridge to Hammarisdale - Package G) | Official request for a list of potential CD projects was send to the municipality, waiting for eThekwini to respond with a list of potential projects for consideration | eThekwini Municipality |
| C004-049-2022/1 | CD project under N.003-020-2017/4 (Cato Ridge to Dardanelles - Package H) | The municipality has proposed potential projects to be considered as CD projects. MoU to be drafted in this regard for approval | Mkhambathini Municipality |
| C004-050-2022/1 | CD project under N.003-020-2017/5 (Dardanelles to Lynnfield Park -Package I) | The municipality has proposed potential projects to be considered as CD projects. MoU to be drafted in this regard for approval | Mkhambathini Municipality |
| C004-080-2022/1 | CD project for N.03-023-2017/1 (Lynnfield Park to Ashburton I/C - Package J) | Official request for a list of potential CD projects was send to the municipality, waiting for Msunduzi to respond with a list of potential projects for consideration | Msunduzi Municipality |
| C004-053-2022/1 | CD project under N.003-030-2017/1 (Ashburton I/C to Murray Road - Package K) | Official request for a list of potential CD projects was send to the municipality, waiting for Msunduzi to respond with a list of potential projects for consideration | Msunduzi Municipality |
| C004-083-2022/1 | CD project for N.003-030-2017/2 (N3 Murray Road to New England Road - Package L) | Official request for a list of potential CD projects was send to the municipality, waiting for Msundunzi to respond with a list of potential projects for consideration | Msunduzi Municipality |



09. TRAINING

TRANSFORMATION AND EMPOWERMENT



N2 / N3 SMME TRAINING TENDER

- **Trainees:** 582 SMMEs trained to date

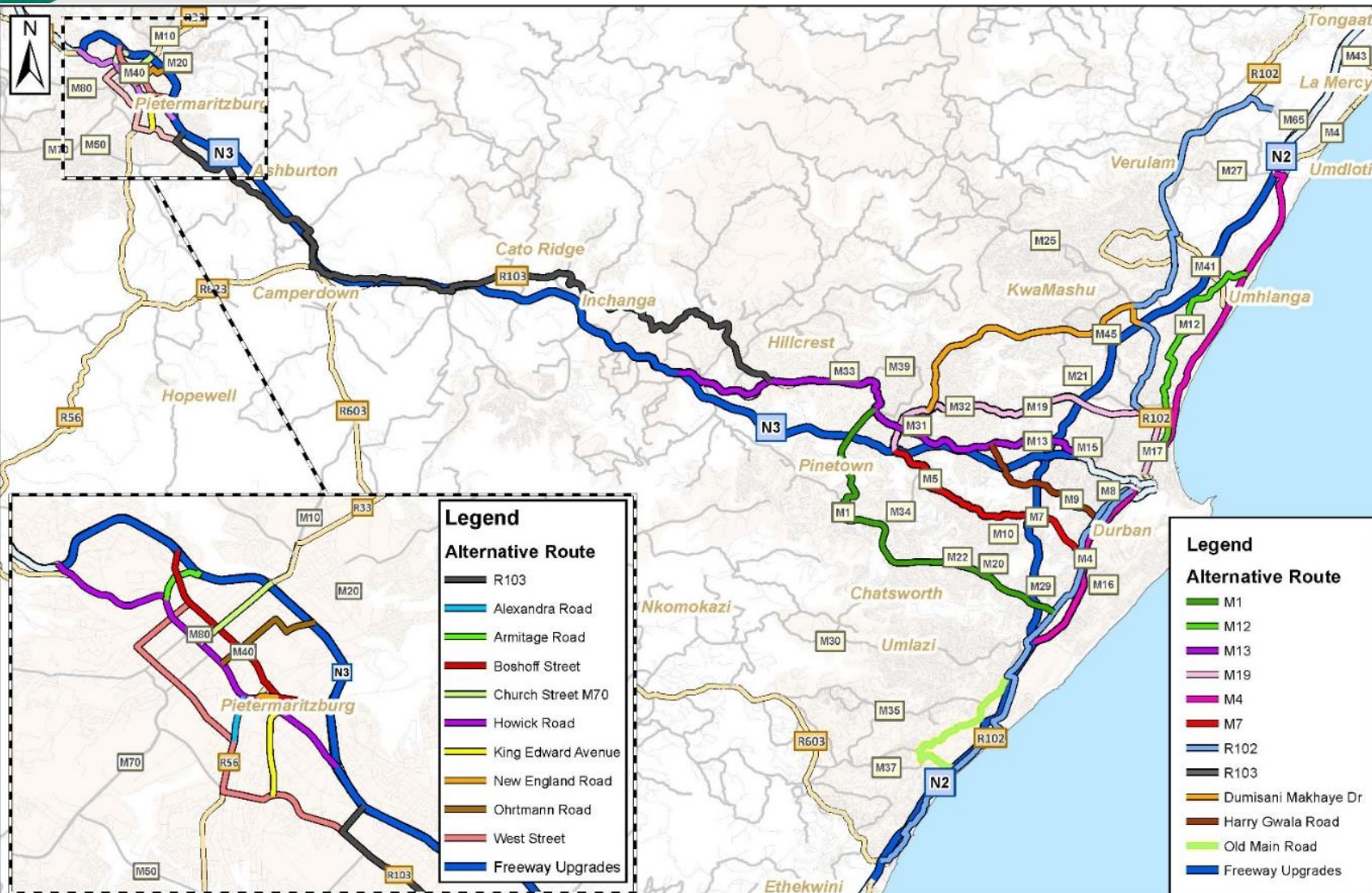
| Municipality | Screened / Eligible SMMEs | N2/N3 Database | SMMEs Trained to date |
|---------------|---------------------------|----------------|-----------------------|
| eThekweni | 667 | 1741 | 437 |
| uMsunduzi | 147 | 360 | 116 |
| Mkhambathini | 39 | 47 | 29 |
| uMgeni | 31 | 1957 | 0 |
| Totals | 884 | 4105 | 582 |

- **Assessments:** First Intake: 320 Portfolios of Evidence submitted, 4 outstanding & 35 Non-compliant. Second Intake of learners recently completed training POE submission date in March 2023.
- **Certificate Issue:** 285 Interim Certificates have been issued to date



10. ALTERNATIVE ROUTES

ALTERNATIVE ROUTES IDENTIFICATION



- The alternate road network identified includes roads under jurisdiction of KwaZulu-Natal Department of Transport (KZNDot), Msunduzi Local Municipality and Ethekwini Metro Municipality
- It must be noted that the intention is not to force national traffic to divert onto the alternative road network under normal traffic operating conditions
- It will only be when an incident forces temporary closures of lanes or a complete carriageway that traffic will be diverted onto the alternative routes.
- In order to ensure these alternatives routes are at an acceptable condition in terms of road safety, general maintenance and road pavement condition, SANRAL had to create partnerships which was guided through service level agreements needing to be concluded with these authorities
- The works to be undertaken on the alternative routes are as follows:

Patching , Pavement Resurfacing where deemed required , Road markings, Road Studs Guardrail erection , Verge clearance to improve site distance and Mobile VMS signs erection



10. KEY CHALLENGES

SUMMARY



- Finding experienced site staff for supervision is becoming a challenge
- We have opportunity to have a direct impact on both regional and national economy - Job creation and reducing unemployment is a key driver
- Once in a lifetime opportunity especially those starting up in industry
- Industry must maximise the opportunities available within the N2/N3 programs over the next number of years



THANK YOU