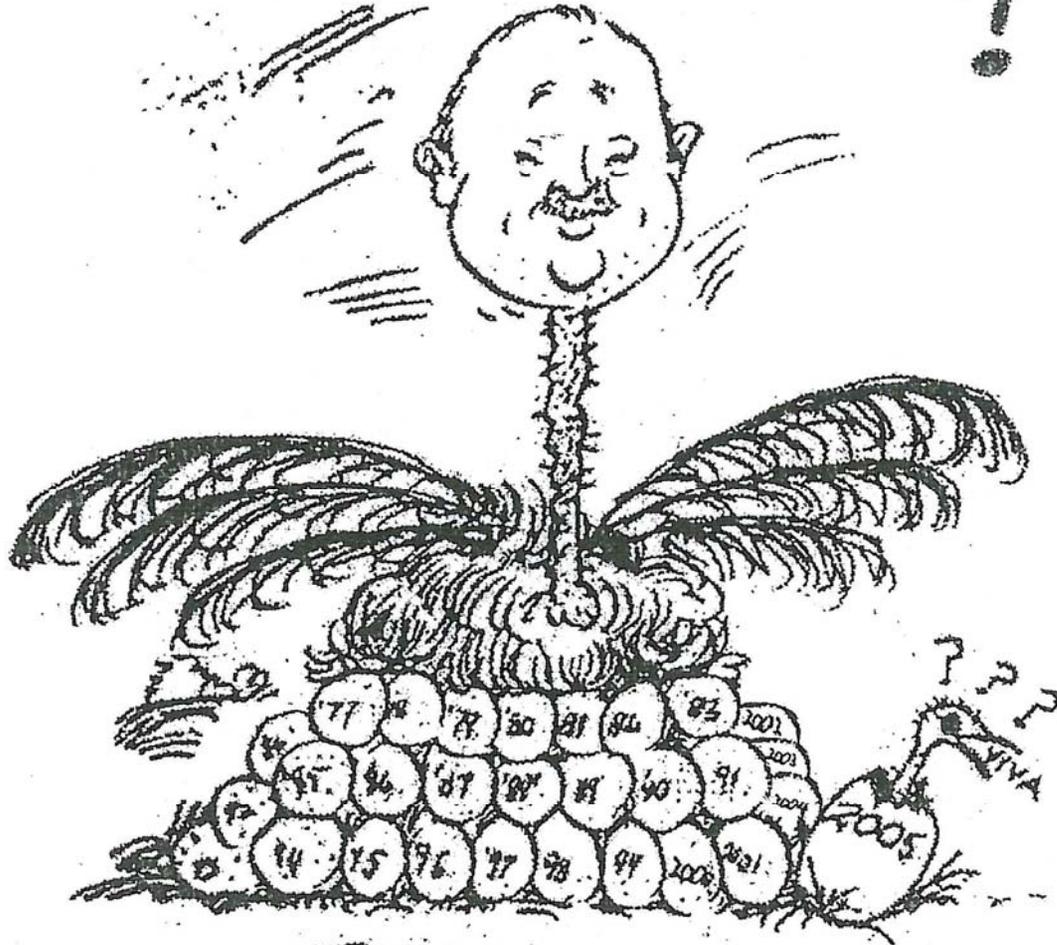


Proposed N2 Knysna Toll Highway



THE YEAR OF THE BYPASS?



—THE KNYSNA BYPASS—
UNHATCHED
AFTER 31 YEARS!

THE PEOPLE WILL DECIDE

CONTENTS

- Need for the Project
- Partners
- Joint Steering Committee
- Alignment Investigations
- Toll Viability Study
- Project Benefits
- Way Forward

Need for the Project

- Address traffic congestions in Knysna
- Improve access to Knysna
- Improve road and pedestrian safety along N2 and TR2
- Improve traffic safety at intersections
- Protection of lagoon, hazardous material spillage risk during accidents
- Maintenance and upgrading of distressed road pavements
- Relocate settlers from the road reserve

Partners

SANRAL

- i. Feasibility studies
- ii. Procurement of Contract
- iii. National Legislation (permits)

Knysna

- i. Housing
- ii. Manage Public Perceptions
- iii. Mobilize Public Support
- iv. Drive EIA

Province

- i. Upgrading of TR2
- ii. Strategic Planning
- iii. Support for Project



Alignment Investigations

- Previous Reports
- Alignment re-investigations
- Preferred Bypass
- Short Bypass Alternative
- Comparison of Preferred Bypass and Short Bypass



Alignment Re-investigations

- Do nothing option (Existing N2 & TR2)
 - Not an option as it does not address needs
- Internal Knysna Bypass (Existing N2 & TR2)
 - Contribution by NDOT of R 7 mil. made for this project
 - Without grade separated interchanges the at-grade intersections and traffic lights will still cause congestions in Knysna CBD

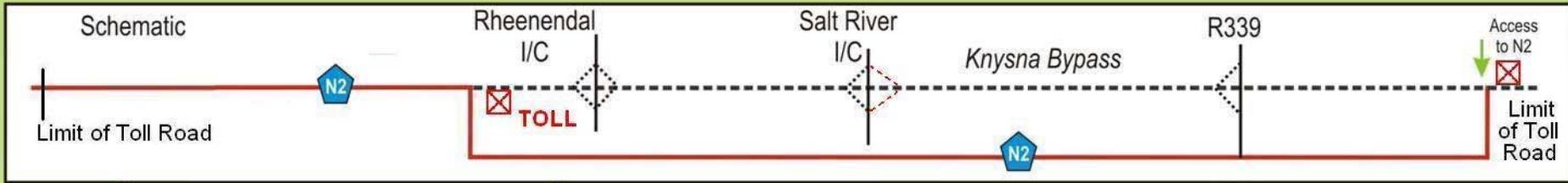
Preferred Alignment

(Limits of Proposed Toll Highway)

Groenvlei to Bracken Hill (31,3 km)

- Groenvlei to Buffels Bay Intersection (8,5 km) – on existing N2 alignment
- Buffels Bay Intersection to Bracken Hill (22,8 km) – on expropriated alignment

N2 KNYSNA - PREFERRED ALIGNMENT



N2 KNYSNA TOLL HIGHWAY : FULL BYPASS

Preferred Alignment

(Limits of Proposed Toll Highway)

Groenvlei to Bracken Hill (31,3 km)

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Project Phases

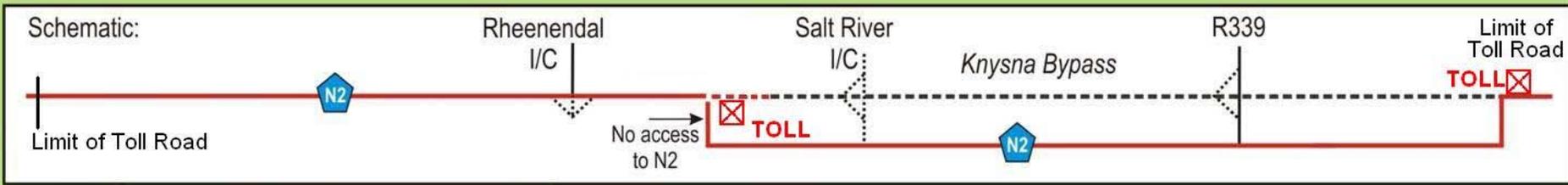
- Initial Phase
- Final Phase (as demand requires)

Alternative Alignment (Limits of Short Toll Bypass)

Groenvlei to Bracken Hill (31,3 km)

- Groenvlei to White Bridge (14,1 km) – on existing N2 alignment
- White Bridge to Bracken Hill (17,2 km) – on part of expropriated alignment

N2 KNYSNA - ALTERNATIVE ALIGNMENT



N2 KNYSNA TOLL HIGHWAY : SHORT BYPASS

Alternative Alignment

(Short Toll Bypass)

Groenvlei to Braken Hill (31,3 km)

- Groenvlei to White Bridge (14,1 km) – on existing N2 alignment
- White Bridge to Braken Hill (17,2 km) – on part of expropriated alignment

Project Phases

- Initial Phase
- Final Phase (as demand requires)

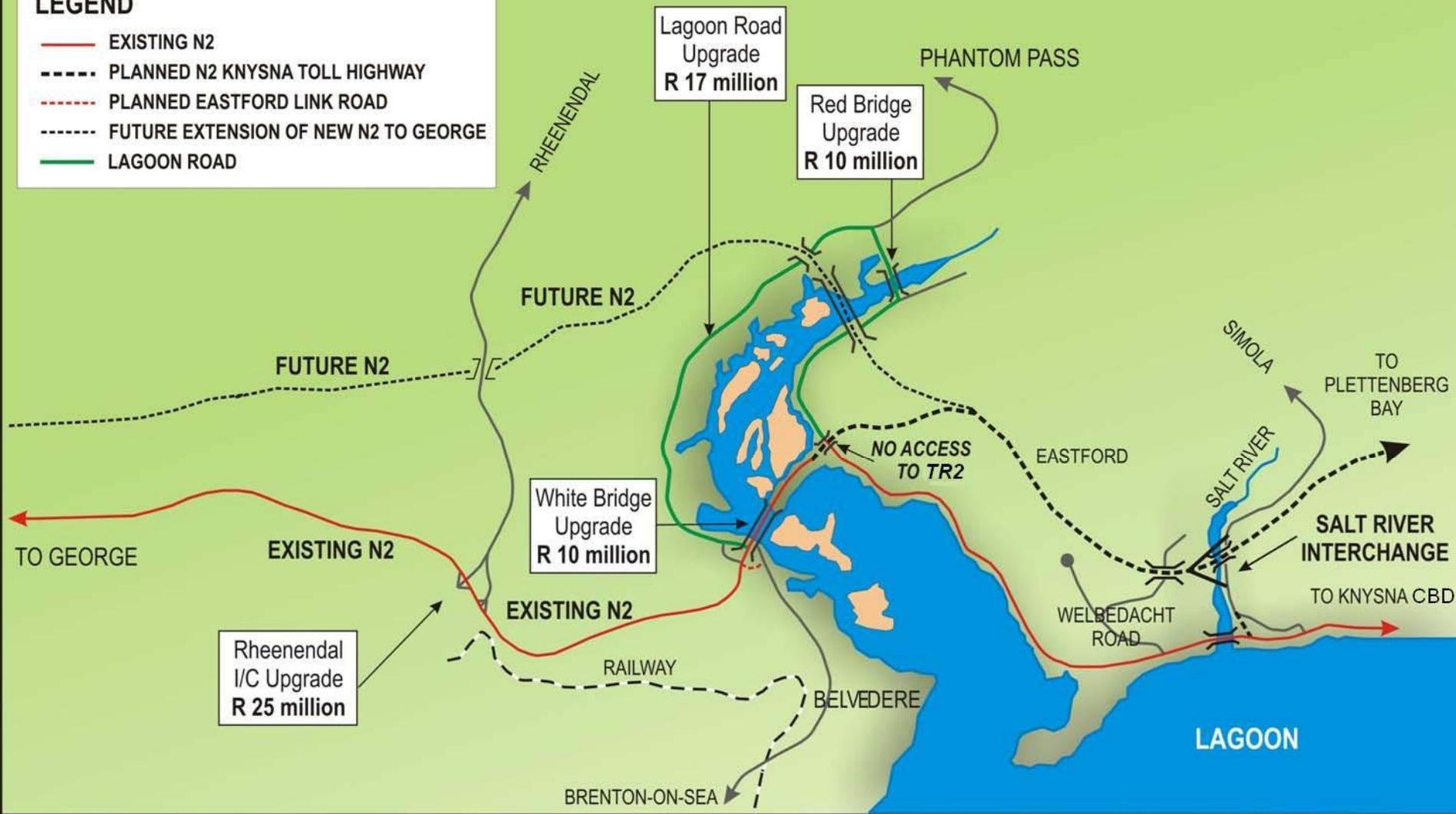
Comparison of Preferred Bypass and Short Bypass

- No difference in road length between the 2 proposals over long term as final phases are the same, but 5,6 km difference over short term
- The preferred alignment will be of a higher standard between Buffelsvermaak and Eastford with a difference in construction cost of R 79 million
- The road user will only pay R1 to R2 more for the benefit of increased convenience and safety

N2 KNYSNA BYPASS

LEGEND

- EXISTING N2
- - - PLANNED N2 KNYSNA TOLL HIGHWAY
- · - PLANNED EASTFORD LINK ROAD
- · - - FUTURE EXTENSION OF NEW N2 TO GEORGE
- LAGOON ROAD



N2 KNYSNA TOLL HIGHWAY : SHORT BYPASS - ADDITIONAL FEATURES

Toll Viability Study

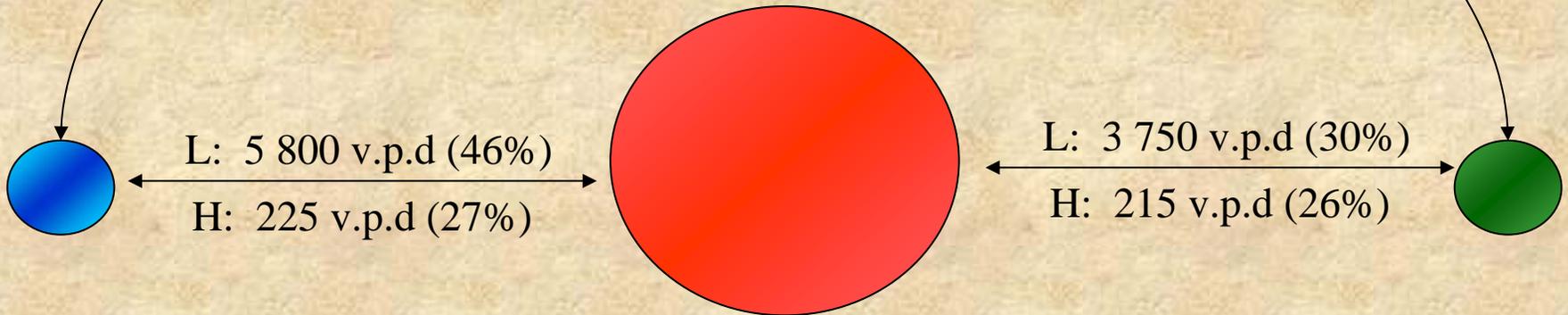
- Traffic
- Toll Strategy
- Proposed Toll Plaza Positions
- Local User Discount Aspects
- Frequent User Discount
- Financial Evaluation Inputs
- Financial Viability Tests
- Estimated Toll Tariffs

Traffic (2004 volumes)

L: 3 050 v.p.d (24%)

H: 395 v.p.d (47%)

Bypass



L: 5 800 v.p.d (46%)

H: 225 v.p.d (27%)

L: 3 750 v.p.d (30%)

H: 215 v.p.d (26%)

Buffelsvermaak

Knysna

Bracken Hill

8850 veh/day

light vehicles

6800 veh/day

620 veh/day

heavy vehicles

610 veh/day

9470 veh/day

total vehicles

7410 veh/day

Traffic

Traffic survey outcome:

- Knysna is an end destination
- Bypass is not going to solve all Knysna's congestion problems but
- Need to upgrade 3 intersections as well as the incorporation of one way system for Knysna
- Need to also address access roads into Knysna

Toll Strategy

- Toll strategies offering the Bypass as a tolled route, with the existing N2 as an alternative toll-free route, were found to be not financially viable
- Investigations indicated that only toll strategies involving toll payment by everybody leaving (or accessing) Knysna are financially viable
- Provision made for discounts to local users



Proposed Toll Plaza Positions

- Positions were selected to:
 - Minimize the impact on local movements in Knysna
 - Limit the number of toll plaza positions and stoppages for the road user
 - Ensure that all road users pay and
 - Comply to geometric requirements for toll plaza layouts
 - Only on newly constructed road
- Toll plaza in out going direction (leaving Knysna) at:
 - Bracken Hill and
 - Between Buffelsvermaak and Rheenendal Interchange or at Eastford

Local User Discount (LUD)

- Local users will enjoy less congestion and heavy vehicle traffic in Knysna
- In many options, local users do not use the new facility at all or only use a part of the road.
- LUD
40-60% for Knysna residents
75-85% for Belvedere,
Rheenendal and Brenton
residents



Frequent User Discount (FUD)

Standard SANRAL System:

- 20% discount for 20 – 39 trips per calendar year
- 40% discount for more than 40 trips

Can be made applicable on top of LUD

Project Benefits

- Bypass road of high standard and 10 min. reduction in travel time and fuel saving.
- Bypass users will also have the benefit of increased comfort, convenience and safety by using toll road.
- Reduction on through-traffic through Knysna making CBD more tourist friendly.
- Improving traffic flow in Knysna with upgrading of 3 intersections and one-way streets (R15 million)

Project Benefits (Conti.)

- Reduction in heavy vehicles through CBD and the lagoon road (TR2) thus improving safety and lowering risk of an ecological disaster in the lagoon during accidents.
- The Bypass route will reduce traffic along TR2; creating a recreational/tourist friendly route along lagoon to benefit of the environment, tourism and job creation.
- Toll plaza locations will not affect local user movement to CBD of Knysna.
- The construction, maintenance and operation of the toll road will create temporary and permanent jobs.

Project Benefits (Conti.)

- Bypass alignment is in line with Knysna municipalities Spatial Development Framework (SDF) and will open up residential development and industrial possibilities for Knysna.
- Settlers in the road reserve will obtain own properties through the Knysna Housing Project.
- Local toll road users will qualify for local and frequent user discounts.
- Pedestrian bridges and walkways will improve accessibility to CBD

Technical Improvements

New Construction

- Length of single carriageway freeway = 23,6km
- Number of major structures = 2
- Number of interchanges = 2
- Number of half interchanges = 2
- Number of toll plazas = 2
- Under passes = 10

Upgrading of Existing Roadway

- Length of existing roadway = 8,5 km
- Upgrading of intersections (Knysna) = 3

Significant Safety Improvements

- Pedestrian bridges = 2
- Pedestrian walkways = to be determined (km)

Way Forward

- Appointment of Consulting Engineers (Preliminary and Final Design)
- EIA Process (Finalizing EIA Report)
- Housing Project (Knysna Municipality)
- Intent to Toll
- Construction

