

# THE SAFETY OF THE R44 BETWEEN GORDONS BAY AND THE R43

## 1. INTRODUCTION

It is general knowledge that the N2 between Somerset West and Botriver will become a toll road in the near future. It is also a well-known fact that some road users tend to avoid toll roads were ever possible. Especially during the construction period with its intermittent traffic delays, this will be exacerbated. It is consequently fair to assume greatly increased traffic volumes on the scenic coastal road the R44, also called Clarence Drive, between Gordon's Bay and the junction between the R44 and the R43 (between Botriver and Hermanus). The expected increase in traffic volumes will have negative impacts on the safety of this route and the intention of this document will be to point out actual "hot spots" along the route and make recommendations of how the negative impact can be alleviated.

While road safety is the prime concern of this document, there are other safety and security concerns which the increased traffic will bring into the area. These we intend addressing in due course.

In our analysis of the hot spots, we will begin from the Gordon's Bay side.

## 2. ANALYSIS OF HOT SPOTS

### 2.1. Sharp bends between Gordon's Bay and Rooi Els. (Plate 1)

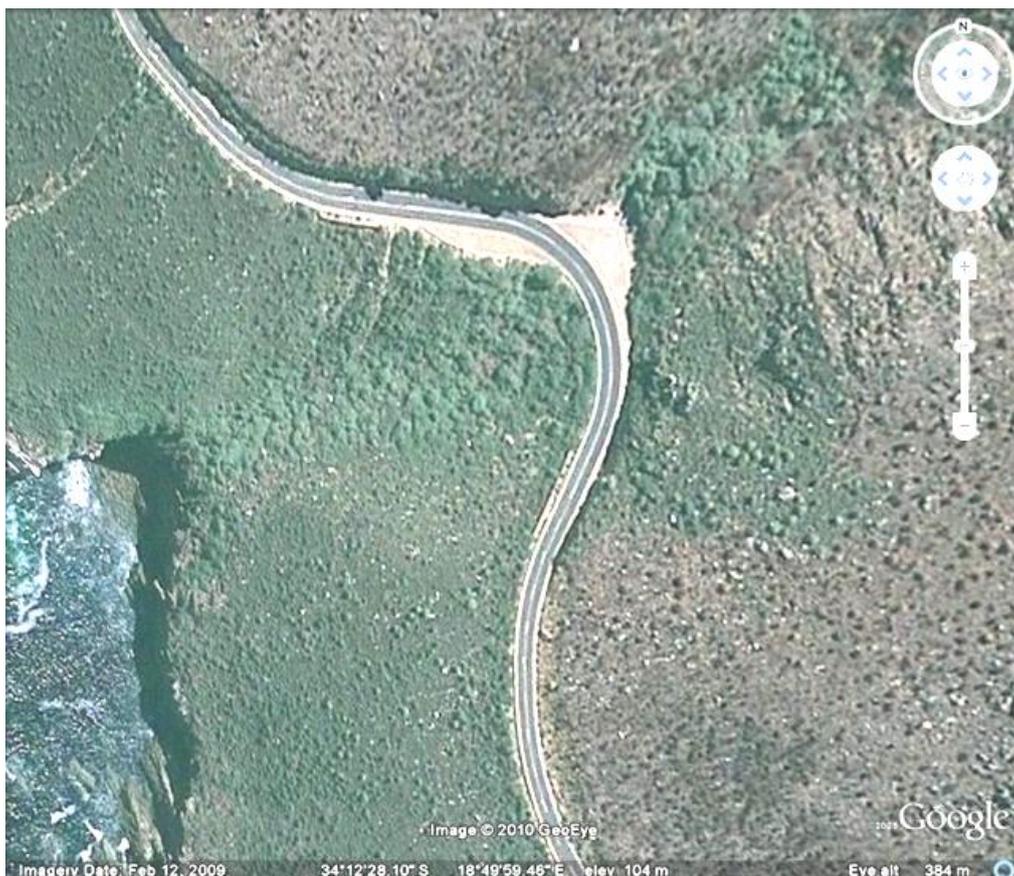


Plate 1

On this winding section of road, there are 3 specific bends on the route which have very short radii and even ordinary cars have to reduce their speed significantly to negotiate these safely. The turning-circles of big articulated trucks are greater than the

average radius of these bends and the only way in which these trucks can negotiate the bends is to encroach onto the “wrong” side of the road. This may lead to fatal accidents because:

- *the actual width of the road which is insufficient; and*
- *the steep drops next to this particular part of the road are such that there is no room to manoeuvre if a big truck is encountered in one of these sharp bends.*
- *Obviously this stretch of road was never therefore designed to carry heavy, articulated vehicles, large buses etc.*

## 2.2. Slope stability. (Plate 2)

The alignment of this road was made possible by cutting deep into the ‘bedrock’ of the mountain in many areas. Some of this bedrock may well be real “rock” but there are many places where the sides of the cutting consists of a conglomerate of round boulders and sand held in a matrix deposited over the geological ages. This material is very unstable and can under conditions of heavy rains, wind and vibrations from heavy traffic, collapse onto the road and this is already starting to occur on a regular basis. The angle of the sides of some of these cutting is close to 90 degrees. Similar problems were encountered at Chapman’s Peak and Kaaimans River near George – and everyone is aware of the complexity, cost and difficulty of solving such problems when exacerbated by heavy traffic.



Plate 2

## 2.3. Rooi Els. (Plate 3)

The road (which runs right through Rooi Els township) makes a sharp turn as it approach the hills above the town. In addition to the sharp turn it is also on a steep incline. This combination of a sharp turn and a steep incline creates high-risk road conditions which has already resulted in many accidents and deaths due to:

- *High speed around a potentially dangerous curve with limited visibility*

- *The potentially disastrous impact of run-away (heavy) vehicles as they descend into Rooi-Els from Betty's Bay side.*
- *As can be seen, there are 5 entrances/exits into Rooi-Els on this dangerous section, some of which are 'blind' due to the bends and cuttings.*

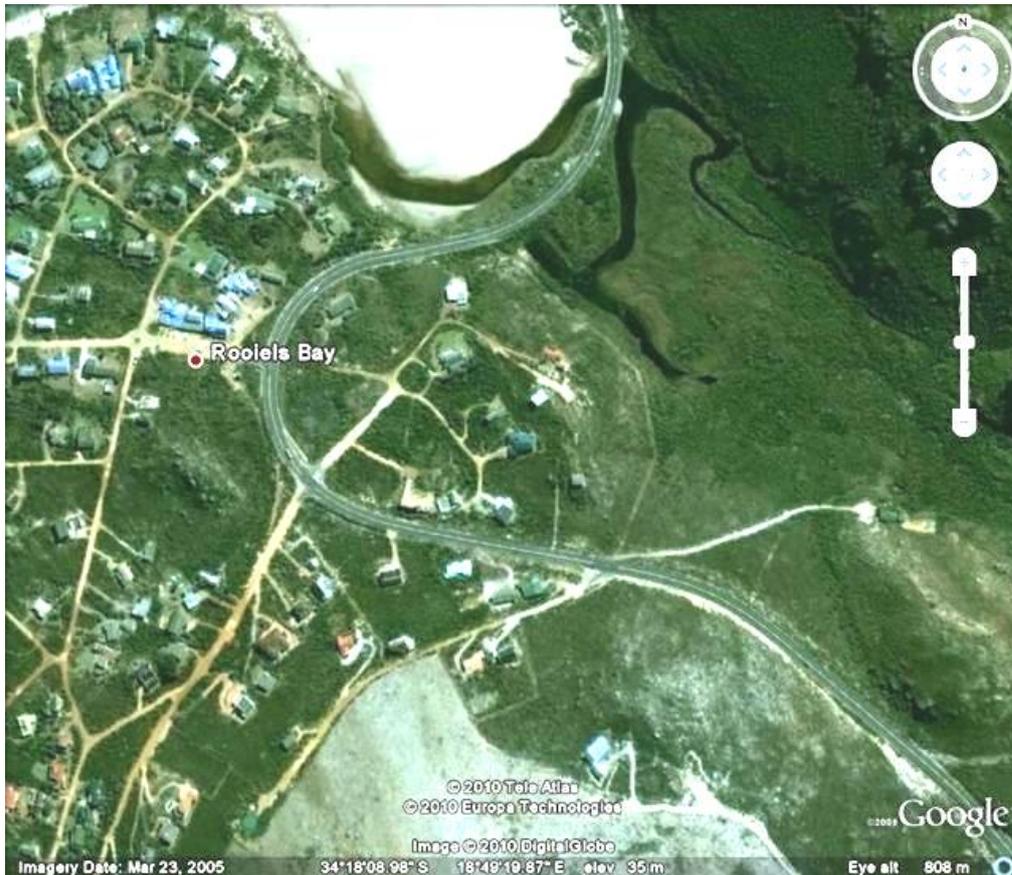


Plate 3

#### 2.4. Turn-off from R44

There are several dangerous exits from the R44 into adjacent towns. The problems regarding these **exits** are similar. One particular exit will be discussed in more detail, but the circumstances as well as the potential dangers are the same for each of these. The relevant exits are:

- *Rooi-Els – 5 exits*
- *Pringle Bay*
- *Western Side of Betty's Bay (Where speed limit still 100 kph)*
- *Heuningkloof on the eastern side of Kleinmond.*

The exit to Pringle bay already has a poor reputation regarding safety the and the most recent fatal vehicle accident (16 April 2010) illustrates the danger associated with this exit.

The problem is that traffic from Rooi Els turning into Pringle bay, must wait for oncoming traffic to pass before proceeding. Since there are no merging lanes, the vehicles behind can use the shoulder of the road to pass or wait for the turning vehicle. The speed limit on this part of the road is 100 kmph and under adverse conditions it has happened that a speeding vehicle crashes into the rear of waiting car. This scenario is even worse when a car coming from Betty's Bay wants to turn left into Pringle Bay. In this instance the following car must wait or overtake the turning vehicle on a solid white line, which is

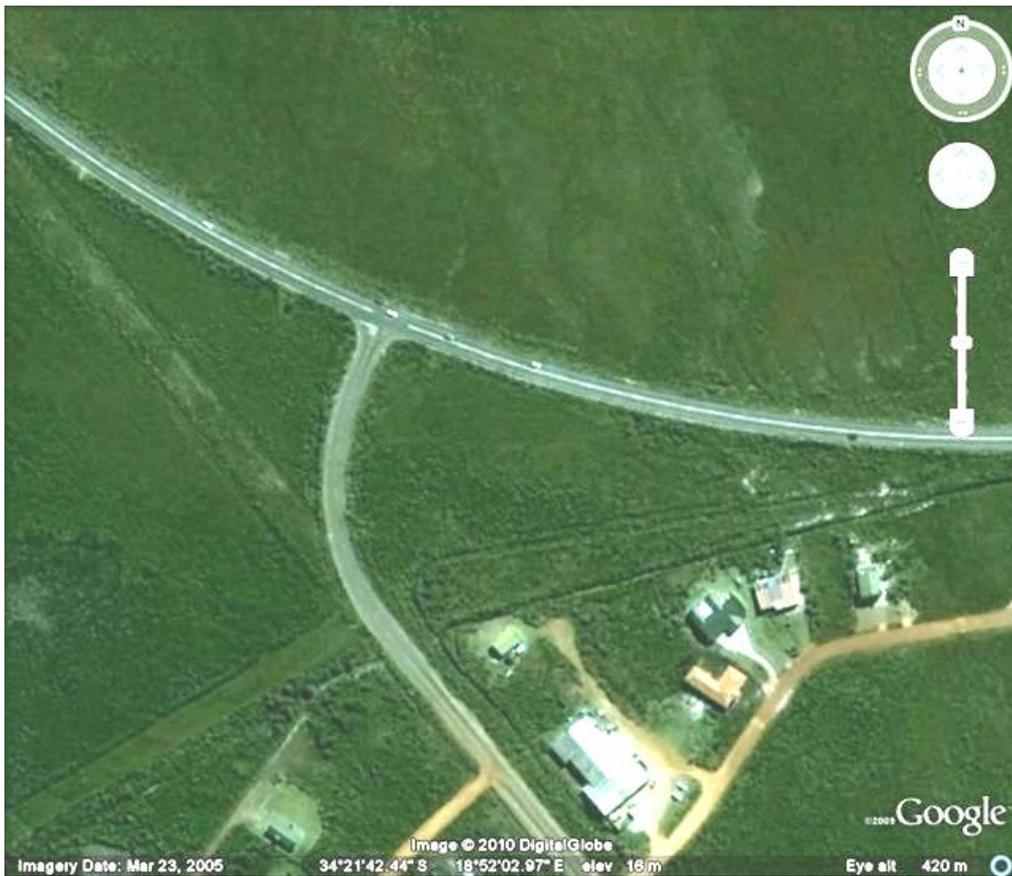
illegal. Again, with oncoming traffic, this is really a very dangerous spot. With the expected increase in traffic volumes, this will really become an extremely dangerous hot spot.

Bad visibility is also a problem at the turn-offs at Rooi-Els, Pringle Bay and Betty's bay.

Photo's, Pringle Bay, Betty's Bay and Heuningkloof.



Pringle Bay



Betty's Bay



Heuningkloof

## 2.5. Business Areas, Betty's Bay.

The general speed limit within the borders of Betty's Bay is 80 kph. In the past, the section at the municipal offices and close to Harold Porter Gardens was 60 kph. This made a lot of sense since these two sections can be regarded as the business nodes of Betty's Bay and lots of cars turn off or cross the main stream of traffic. With vehicles moving across and alongside the road, an increase in traffic will also increase in the potential for serious accidents.

## 2.6. Traffic congestion in Kleinmond. (Plate 4)



Plate 4

Because the R44 is generally be regarded as very attractive alternative for the N2 when driving towards Hermanus, many holiday-makers prefer to use this road during the summer holiday season. This leads to high traffic volumes in Kleinmond as well. Kleinmond has its own influx of visitors and is the shopping centre of the Hangklip area. We accept the fact that no one can prevent lighter traffic from using the R44, but once again, big trucks with longer braking distances and limited acceleration can cause serious problems in an already congested traffic like that in Kleinmond during peak traffic

## 2.7. Junction of R44 with R43. (Plate 5)

The R43 between Bot River and Hawston (at the outskirts of Hermanus) has a speed limit of 120 kph. The R44 turn-off from the R43 towards Kleinmond is about 10 km from Bot River. The R43 carries high volumes of traffic especially during the summer holiday season. Once again we have the same problem as already discussed with regards to Rooi-Els, Pringle Bay, Betty's Bay and Heuningkloof except for the fact that the speed limit is now 120 kph with already much higher traffic volumes. . It must be mentioned that there is a proper widening of the road when driving from Bot River towards

Hermanus, but when coming from Hermanus there again is no room for manoeuvring for the R43 through traffic which is not turning off towards Kleinmond

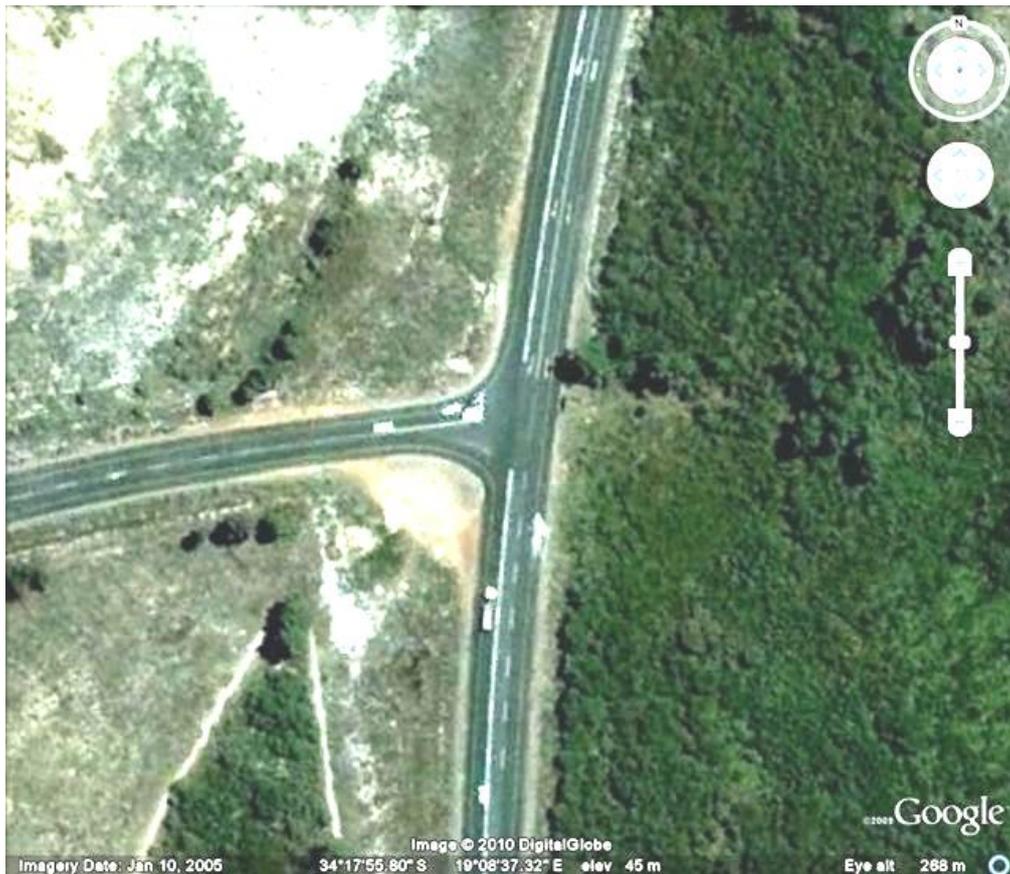


Plate 5

A second problem with this junction is the poor visibility at night and periods of bad light. One cannot see the actual turn-off until one is nearly past it. This leads to sudden hard braking and taking chances to cross the other lane to turn off.

#### 2.8. General.

The part of the R44 under discussion is arguably one of the finest scenic marine drives in the world and is popular with tourists, holidaymakers, motorbikers, cyclists and hikers. It has already proved lethal to many travellers and will become even more dangerous with an increase in heavy traffic. Delays and danger caused by heavy traffic will deter tourists, who are the economic life-blood of the area

There are also concerns about the most likely increase in road-kills of small animals and birds along this road. Due to human carelessness, the risk of veldt fires will definitely increase with the increase in traffic.

### 3. RECOMMENDATIONS

This group therefore submits the following recommendations.

#### 3.1. Heavy vehicles

We recommend that a weight limit be imposed on the stretch of the R44 between Gordon's Bay and Pringle Bay, and propose a 10-ton limit on all vehicles using that part of the road.

NB. It is also important that the restriction sign-boards be situated so that heavy vehicles can turn back before they enter that particular stretch of road.

### 3.2. Turn-offs from the R44

To alleviate the risk of accidents, additional lanes be constructed at both sides of all the turn-offs as mentioned above. Traffic aids to identify the actual turn-off must also be considered. In the case of Kleinmond it is also recommended that the speed limit of 60 kph be extended to the eastern border of the town. This will help to reduce the speed of traffic entering and leaving the town.

### 3.3. Betty's Bay business Area's

In the past, there were 2 zones along the R44 through Betty's Bay where a 60 kmh applied. These were near the municipal offices and the turn-off to the botanical gardens. We want to propose that these zones be re-introduced.

### 3.4. Traffic congestion in Kleinmond

We are not sure how to deal with this problem and we believe it is not a simple matter to get the right solutions. We want to recommend that an in-depth traffic impact study be done to analyse the potential traffic volumes and look at possible solutions for the problems.

### 3.5. R43-R44 Junction

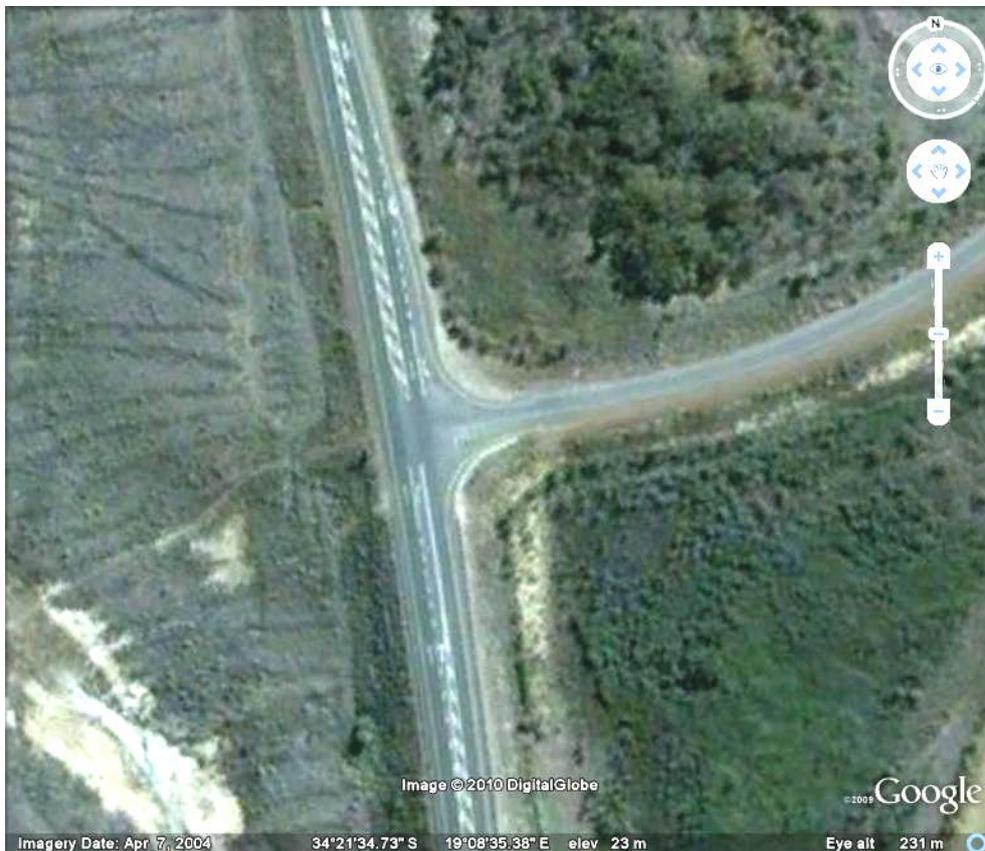


Plate 6

It is imperative that there must be an additional lane on the left side of the road when one is travelling towards Bot River. This will assist the safety of all traffic turning left towards Kleinmond. We are not sure how to deal with the problem of visibility but one possible way may be to use the “blinkers” which normally mark the centre of the road, to indicate the impending turn-off. Another possibility is to install lights at the junction to illuminate the area at night or in bad visibility. Plate 6 is a photo of the exit from the R43 to Karwyderskraal which shows the ideal configuration of a safe exit from the main road.

### 3.6. Policing the R44

All these suggestion/recommendations will be futile if sufficient effective policing does not support it. People who are using the N2 on a regular basis do not speed between Grabouw and Sir Lowry’s Pass because they know there is a high probability of speed traps. We want to establish the same awareness on our part of the R44.

### 3.7 General security of the R44-related area

NB: The establishment of a tollgate at each entrance to the Kogelberg Biosphere Reserve has also been considered and is highly recommended. One tollgate to be strategically situated between Gordon’s Bay and Rooi-Els and the other near the R43/44 junction. These will help ease the load of traffic-control on the authorities, provide local jobs and a source of income for road maintenance etc. They will greatly assist in the reduction of local crime, including poaching by providing a check-point.