

# **Social Impact Assessment: N2 (R300) Ring Road Toll Project**

For Chand Ecosense Joint Venture

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# Social Impact Assessment: N2 (R300) Ring Road Toll Project

## 1. Report objective

This report is an assessment of the likely impact of the proposed N21 (R300) Cape Town Ring Road Toll Project on the social fabric of the areas through which the road would be built. The scope of this study did not allow for a detailed assessment of the impact on the broader Cape Town social environment.

## 2. Methodology

The findings of this report are based on

- a) an analysis of the demographic texture of the social environment, based on statistical data from the 1996 Census;
- b) the results of the public participation processes conducted for the scoping and EIA phases of this proposal; and
- c) semi-structured and telephonic interviews with community leaders and other relevant informants, and documents collected from these sources.

## 3. Concepts and definitions

The report focuses on the impacts that the project may have on the livelihoods and the well being of communities in the direct environment of the proposed ring road. The aim of focusing on *sustainable livelihoods* is to ensure development that furthers the livelihood security of all citizens, and especially those who are most vulnerable to external conditions that could threaten their livelihood security. One central question of the report is therefore whether the development of the N21 (R300) as outlined in the current proposal will create conditions that will either threaten or enhance the livelihood security of residents in the communities that are directly affected by the road development.

The sustainability of people's livelihoods is affected by their access to human, social and productive capital. Human capital are assets that enhance the ability of an individual to generate an income, such as environmental conditions, health, education, employment opportunities, safety, cultural resources and amenities and facilities. Social capital is the value we gain from being part of a community or social group or institutional entity (e.g. a municipal area). Productive capital involves the physical assets and resources an individual requires in order to work or access livelihood supporting systems, such as transport, basic services and financial capital.

The second aspect that the report focuses on is the impact of the project on the *well being* of residents in the areas to be developed. Well-being can be described as the experience of a good quality of life. Unlike wealth, well being is open to the whole range of human experience, social, mental, and spiritual as well as material<sup>1</sup>.

Census data used in this report is based on concepts defined by Statistics South Africa. The *racial categories* used from the census data are not meant to reinforce

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<sup>1</sup> Chambers, R. 1997. Whose reality counts? Putting the first last. London: Intermediate technology publishers.

racist understandings but to illustrate levels of inequality and patterns of vulnerability.

The category ***Other***, as used in the census data, comprises Asian, white and Indians. The lack of distinction between these three categories is problematic, since the profiles of these communities are very different. The report cannot give justice to the difference.

The term ***unemployed*** is used to refer to potential labor force that is unemployed looking for work, unemployed not looking for work, not working – housewife/homemakers, not working/ pensioners/ retired persons, not working disabled person, not working and not wishing to work, not working and none of these mentioned categories. Scholars, full time students, institutions and persons 15 years and younger were not included in these categories. The inclusion of pensioners in the category unemployed implies that some persons indicated as unemployed may be receiving pensions. This is a significant factor to consider in interpreting the high levels of unemployment indicated, particularly for 'other' persons in sectors 3 and 4 and 2.

The term ***dependency ratio*** is used to refer to the addition of all the employed and all the unemployed (including children, handicapped and mentally disabled etc.) divided by the total unemployed in the specific enumerator area. This definition of dependency ratio does not reflect the number of dependents that residents may have in other enumerator areas or elsewhere in the country.

#### 4. Limitations and assumptions

- a) The scope of this study did not allow for detailed qualitative fieldwork in all the affected communities. The baseline description of the social environment therefore relies fairly heavily on 1996 census data. The accuracy and usefulness of this information is limited by the fact that it is old and also by the definition of concepts used in the census data as described above. Another factor that influences the accuracy of census data, is the willingness of census respondents to disclose correct information about sensitive issues such as their level of income. To increase the validity of data, triangulation methods were used, such as comparison of data from a source (e.g. levels of income and education levels) as well as comparison of data between sources (e.g. statistical and interview data). This process led to findings which, on the whole, can be expressed with a relatively high degree of confidence.
- b) The public participation process was fairly extensive, but did not allow for detailed consultation with all affected stakeholders. Recommendations are made under "mitigation measures" regarding further consultation with specific communities and interest groups.
- c) The study includes the Philippi link (sector 5) because this road will be affected by tolling. A separate EIA has been done to evaluate the impact of the Philippi link development. The findings of the Philippi link EIA should be considered in conjunction with this report.
- d) The parameters of this report are based on the current position of the developers. For instance, the current position is that the development will not

require the resettlement of any residents. The impact of resettlement is therefore not evaluated. However, the potential impact of significant factors such as this are mentioned, in case they become relevant if changes are made to the plan.

## 5. Baseline description of social environment

### 5.1. General

The proposed N21/R300 toll road cuts through a broad spectrum of metropolitan social environments, some of which are home to relatively stable middle class residents, and some of which accommodate some of the poorest communities in the Cape Peninsula. Of particular importance for this study is the fact that the route runs through or passes by large areas of the Cape Flats. The development of the Cape Flats as a living area for working class coloured and African residents is a legacy of apartheid, which has contributed to unequal access to environmental resources in the city of Cape Town. Sector 1 and 2 of the road passes through some of the poorest communities in Cape Town, where levels of vulnerability are high, and which have far less access to basic services and resources than traditionally white suburbs have. Of importance for this report is the fact that the existing R300 is used extensively by residents of Sector 1 and 2 areas. The Rondevlei and Zeekoeivlei areas, which will be bisected by the proposed highway, are significant open space and environmental resources for these communities. Within the context of the city as a whole, these nature conservation areas provide substantial natural environment within an urban working class environment, and should therefore not be compromised.

### 5.2. Sector 1

The main localities along this section of the proposed road are:

*Kirstenhof*  
*Lavender Hill*  
*Pelican Park*  
*Zeekoeivlei*  
*Lakeside*  
*Marina Da Gama*  
*Muizenberg*  
*Vrygrond*  
*Zerilda Park*  
*Woodlands*  
*Weltevreden Valley<sup>2</sup>*  
*Westridge*  
*Rocklands*  
*Strandfontein*  
*Montagu's Gift*

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<sup>2</sup> Kyamandi (African) and Hyde Park (*coloured*) are both squatter camps in Weltevreden Valley, as well as London Village (*coloured*) and Colorado Park (*coloured*)

Sector 1 of this development has a high population density (166 030 residents) which limits individual access to valuable resources such as work, formal housing and environmental resources. Levels of vulnerability along this phase are high, making it a socially sensitive environment.

Levels of employment are low, with 35% of the 'other', 39% of the coloured and 40% of the African populations being unemployed. The vast majority of residents (81%) are in the coloured category. The dependency ratios are relatively high (2.2 for 'other', 2.37 for coloured and 3.4 for African). A significant majority of residents have a monthly income below R1000 (52% of the 'other', 69% of the coloured and 80% of the African population). Employment mobility is limited, with 76% of the coloured and 54% of the African population having qualifications less than matric. A relatively high percentage of residents are living in informal dwellings, especially in Pelican Park and Vrygrond, where 50% of residents live in shacks.

A significant feature of the social fabric of sector 1 is the high crime level, aggravated by gangsterism, territorialism and racial divisions. Police argue that the seed of crime for the metropole as a whole is located in the Cape Flats, specifically around this section of the proposed development. Crime is mostly gang related and largely territorial. There are 122 reported gangs in the Mitchell's Plain police station area, which covers 18 suburbs from Strandfontein to Mandalay (which falls into the existing R300 section).

There are about 1900 shebeens in the Mitchell's Plain police station area. These feed the majority of crimes, as owners buy stolen goods and sell them at a profit from the shebeens. Alcohol and drug abuse patterns are aggravated by shebeen activities.

Other social conditions, which result from the social and economic vulnerability of these communities, are high levels of teenage pregnancy, woman and child abuse and negative health conditions.

The following areas are particularly vulnerable:

Weltevreden Valley is an informal settlement area, consisting of Hyde Park, London Village and Colorado Park. The majority of residents are African, of whom 88% earn an income below R1000 a month. The dependency ratio is 6, which is exceptionally high.

Vrygrond consists entirely of informal dwellings. The area has a 50% coloured and 50% African population. The majority (51%) of the African population are unemployed. Vrygrond is the target of racism from the Seawind community.

Lavender Hill consists mostly of coloured residents, of whom 49% are unemployed. The vast majority earns an income of less than R1000 a month. There are two significant gangs in Lavender Hill.

Pelican Park has an 'other' (mostly Indian) majority. Unemployment levels are high amongst this category here (44%), as is the dependency ratio (3.2%). The majority of residents (52%) have an income below R1000 per month.

Rocklands is the area with the highest density and the highest dependency ratios amongst the coloured population along this phase. The vast majority earn an income below R1000 a month.

Strandfontein has a high crime rate, which is aggravated by the fact that mothers of gangsters cover up for their sons.

The social fabric of Muizenberg is becoming more vulnerable and volatile as the area degrades. South of the Lavender Hill Sports Field (north side of Muizenberg) and in other parts of Muizenberg communities of African immigrants have high incidences of unemployment, overcrowding, drug and other substance abuse, making them festering spots for crime.

The Zeekoevlei, Rondevlei and Zandvlei nature reserves along sector 1 are an important social resource to the surrounding communities. Apart from being important recreational centres and giving residents access to a natural environment, these nature reserves are also the home of significant environmental education programmes. Plans are underway to develop these nature reserve into the False Bay Ecology Park, which would include a craft centre, restaurant, eco-village with accommodation, donkey rides and various training activities and educational experiences.

The Rondevlei environmental education programmes receive 8000 schoolchildren a year. This is the largest and most accessible environmental education programme in Cape Town and has been running for 25 years. The vast majority of the visitors are school children from underprivileged communities in the area. A significant feature of this environmental programme is that it is holistic, in that it exposes visitors to the interaction between natural and manmade habitats. Visits to the sewerage and waste sites form a significant part of the programme. The reserve illustrates sandy and estuary ecology as well as wetland and dune ecology.

About 2000 children stay overnight during a year in a bush camp with a tree house, from where they can see various natural phenomena including hippos. The managers of the environmental education centre says that many of the children who visit live in environments which do not fulfil basic livelihood needs such as food and proper sanitation, and many children are subject to abuse and neglect. For these children, the environmental education programme offers an opportunity to experience a different quality of life, and gives them access to the natural environment with all its healing benefits. The rangers receive countless letters of appreciation from disadvantaged children. Some comments from children: "My experience at Zeep camp was the most wonderful thing. I became more aware of nature and most important of all I left all the worries and stress behind." "My experience was the best experience of my life". "Thank you for helping us to understand nature. Now we don't do what we used to do. When we were needing help, you came to us".

The Junior Honorary Rangers are a local friends group that provides environmental education to local school children during school holidays. This programme not only provides environmental education, but importantly keeps children occupied and off the streets.

The reserve has started a programme to train tour guides from the local environment. Eight tour guides have been trained thus far, and are taking groups out

to the natural and manmade sites. Visits to the sewerage works with its rich bird life forms an important aspect of this experience. All secondary employment opportunities, such as catering for groups, are also given to local residents.

The Zeekoevlei Environmental Education Programme is a private trust that conducts three-day overnight education camps. These programmes use the area proposed for the road development extensively, both in accessing the beach for marine ecology lessons, as well as during visits to the wastewater treatment works and landfill site. The latter two sites are vital, as they provide children with an understanding and education related to sustainable living in the city. This education programme is the only one of its kind in the City, and sees on average 2000 children a year.

The Zeekoevlei and Rondevlei Nature Reserves provide the bulk of environmental education in the City of Cape Town. They are also irreplaceable assets to the local surrounding communities that make use of them. Due to economic constraints, these communities are generally not able to access environmental facilities further afield.

The Zandvlei Environmental Education Centre is a new resource, which has already received 703 learners from four surrounding schools since January 2002.

### 5.3. Sector 2: Existing R300

This section starts with Vanguard Drive and finishes at the intersection with the N1. The main localities along this proposed route are:

Bongweni  
Iwezi Park  
Tembani  
Mandalay  
Lentegeur  
Philippi Non Urban (NU)  
Browns Farm  
Belhar  
Delft  
Bellville Industria  
Glen Haven  
Labiance  
Bentwood Park  
Diepwater  
Driftsands  
Hagley  
Kuilsrivier  
Mfuleni  
Sarepta

This area has the highest population density along the entire road (249 878 residents in 1996). The social profile of the area is similar to that of sector 1. Unemployment levels are high, with 34% of the 'other', 40% of the coloured and 71% of the African population being unemployed. Dependency ratios are high (2.3 for 'other', 2.9 for coloured and 3.5 for African residents). The vast majority of residents, 52% of 'other', 71% of coloured and 84% of African residents earn an income below R1000 a month. Employment mobility is limited by lack of education, with 52% of the other,

and 70% of African and coloured residents having qualifications below matric level. This is the area along the road with the highest percentage of informal houses, with 6% of the coloured and 76% of the African residents residing in shacks. Since the 1996 census, informal settlements have sprung up in Belhar, Delft and the N2/R300 crossing.

Conditions related to crime and social disintegration are similar to those in sector 5, which impacts significantly on the social vulnerability of residents. Apart from the factors mentioned under sector 1, the following crime factors are significant: There are incidences of the stoning of cars on the R300/N2 intersection. Territorial taxi wars have occurred in Delft, Belhar and Khayelitsha.

Traffic accidents take place due to drunken driving, the lack of lights on the road and the lack of pedestrian corridors and road crossings.

The R300 provides vital access to work, social networks and amenities to the communities of Mitchells Plain. The communities of Delft, Khayelitsha, Belhar and Blue Downs make extensive use of the R300 to get to work, family, shops, etc. Many residents of the Cape Flats area were relocated to their current area during the time of the Group Areas Act, and still rely heavily on public transport for access to family, places of worship and other areas of cultural or religious significance.

The existing R300 is used by a large number of taxis, which serve as the main form of transport for lower income groups from the surrounding communities.

#### 5.4. Section 6 (sector 3) and 4

Since no significant differences could be found between the social environments of section 6 (sector 3) and sector 4, these two sectors are discussed under one heading. Section 6 and sector 4 fall mainly within the Tygerberg municipal area. The main suburbs along these sections of the proposed road are:

*Belhar*  
*Durbanville*  
*Eversdal*  
*La Rochelle*  
*Morning Star*  
*Oak Glen*  
*Stellenberg*  
*Vredeklouf*

The communities affected by Section 6 and Sector 4 are situated in suburbs on the urban fringe, some of which have a semi-rural character. The vast majority (90%) of the inhabitants is classified as "other" (white, Asian or Indian) in the census data, most (71%) of which are employed. All residents in this category have formal housing. These factors indicate relatively high levels of livelihood security. However, levels of income are low amongst residents in this category, with 47% earning a monthly income of less than R1000. For class "other" residents in the lower income levels, who are mainly situated in the suburbs of Durbanville and Eversdal, access to formal housing and the value of their properties are likely to be an important source of livelihood security.

On the other end of the scale, a relatively large percentage of residents in the category "other" have high levels of livelihood security, with 27% earning an income above R6000. Education levels are high, with 34% having matric and 30% a tertiary education. Matriculation and tertiary qualifications significantly improve the employment mobility of residents.

Of the remaining 10% of the population in the sectors 3 and 4 area, 8% are defined as coloured and 2% as African. A large percentage of the overall population in sectors 3 and 4 (62%) is female. This may be because the majority of African and coloured residents are women employed in domestic service. Levels of employment are high (81% of the coloured population, 87% of the African population), but the majority (71% of the coloured population, 69% of the African population) earn a monthly income of less than R1000. Education levels are relatively low, with 69% of the coloured and 60% of the African population being without matric. The livelihood security of African and coloured women who are employed in domestic service would depend on their continued employment and the provision of accommodation by their employers. Few coloured (6%) and African (3%) residents live in informal dwellings, which are mostly situated in the suburb of Morningstar.

The census data indicates low dependency ratios for African (1,6) and coloured (1,7) residents. This information could be interpreted as indicating that the livelihood security of residents in these categories would not affect those of many others. However, this definition is based solely on the amount of employed and unemployed residents in the specific enumerator area. Most domestic servants are likely to have children and other dependents (up to ten people) in other suburbs.

#### 5.5. Sector 3 (section 7 and 8)

The main localities along this section of the proposed road are *farmlands*, which are identified as 27 Enumerator Areas, for which the census data does not give place names in order to preserve confidentiality. Other places included are:

*Melkbosstrand*

*Philadelphia*

*Atlantis Industrial*

*Malmesbury NU (7 Enumerator Areas)*

A distinction can be made between the social environment surrounding highway sections 7 and 8 in this sector. Section 7 is defined as the farmlands between the R302 and the N7, and section 7 is located between the N7 and Melkbosstrand.

#### Section 7

This area consists mostly of private land, owned by six farmers and three development companies. The population density is relatively low (total population 8108). The population consists mainly of farmers (34% in the category 'other') and farm workers (49% coloured and 17% African residents).

The farms in this area are mostly long standing family farms. The farm Welgegund, for instance, has been in the Loubser family for 130 years, and the current farmer is the fifth generation Loubser on the farm. These old family farms have

established homesteads for farmers and farm workers, as well as significant other infrastructure, such as dairies and factories.

Census data indicates that the level of income amongst the 'other' population group is low, with 50% earning an income of less than R1000 a month. The livelihood security of farm residents in all three categories is likely to depend on that of their access to farm infrastructure and accommodation rather than on cash income.

These are high intensity farming areas. The productive value of vineyards in this area has been estimated at R50 000 per hectare, and that of wheat and cattle farming slightly less. Every hectare of arable land contributes to the feasibility of these farming enterprises.

Because of the focus on farming activity, levels of employment are relatively high in this area (73% of 'other', 75% of coloured and 70% of African residents are employed). The low levels of schooling amongst coloured and African residents (96% of whom do not have matric) indicates that their work and livelihood security depends on their continued employment by farmers in the area. Levels of income are low (88% of coloured and 78% of African residents earn less than R1000 per month), but the majority have formal accommodation on farms (92% of coloured and 73% of African residents).

The high percentage of men (63%) amongst the African population indicates that male African workers are living without their families, whereas coloured workers are living with their families (as indicated by the even gender distribution in this category). The farms also provide employment for seasonal workers, some of who travel to the farms from Bellville South and Kraaifontein, and some of who are subcontracted by companies in the area that provide seasonal work force.

## Section 8

The population of sector 3B is relatively small (total 9179). The majority of residents are in the category 'other' (67%) and residing in Melkbosstrand, a holiday resort town on the coast.

The most vulnerable communities in this phase are those residing in Malmesbury non-urban enumerator area. In this area, 45% of people in the category 'other' are unemployed, and 37% of the coloured population. The level of income is low, with 87% of the coloured population and 75% of the African population earning an income below R1000. The majority of informal dwellings in sector 3B are located in this area (7% of the coloured and 3% of the African population live in shacks).

Melkbosstrand residents also have low-income levels, with 47% of the 'other' population (which comprises the majority of people in Melkbosstrand) earning an income below R1000 per month. Amongst the African community, 22% of people are unemployed. There are a small number of informal dwellings (2% of the coloured population live in shacks).

### 5.6. Sector 5 (Philippi Link)

A separate EIA has been conducted to evaluate the feasibility of the Philippi Link road. This assessment has been completed and approved. The Philippi Link road

forms part of the proposed toll road system. It is consequently included in this EIA. However, since this section has already been described and evaluated in the Philippi Link EIA, this report provides only a brief synopsis of the social environment and the potential impacts of the development on this area.

The Philippi Horticultural Area is the main environment through which the Philippi Link Road will run. This area consists of 14000 hectares of horticultural land. The planning consensus is that the Philippi Horticultural Area should be preserved as it represents a strategic asset providing affordable fresh vegetables for the Cape Metropolitan Area (CMA). The road also runs through the residential areas of Grassy Park and Parkwood.

## 6. Anticipated impacts and mitigation measures

### 6.1. Sector 1

#### 6.1.1. Impact on conservation area in urban township

It is a recognized planning principle that nature conservation areas closest to working class urban townships must not be further truncated or dismembered. Zeekoevlei, Zandvlei and Rondevlei are significant nature conservation areas, which serve the major working class township areas of Cape Town. The current road alignment runs through these reserves, as well as the sewerage works, which form an important part of the environmental resource, and thus violates this principle. The road will create a barrier between the reserve and the communities living to the north. High levels of noise and pollution and the lighting of the road will detract from the experience of the natural environment. The reserve along the waterway is also used for recreational purposes. The presence of natural areas creates a healthy living environment.

#### Mitigation

Mitigation measures have been determined to address some of the factors inherent in this impact. These are listed below. These measures do not address the fact that the construction of this road would constitute a major urban development through a nature conservation area. The impact therefore remains high.

- A double dune system would protect the park from the noise, light, visual and pollution impacts of the road.
- A retaining wall on the side of the dunes will further mitigate against noise, light and pollution impacts.
- Overhead footbridges or underpasses can be constructed to allow access to the parks. Footbridges are the safer, and therefore the preferred option.

Impact assessment: division of conservation areas in urban township

#### ASSESSMENT

	Extent	Duration	Intensity	Status	Significance	Confidence	Probability
<b>Without Mitigation</b>	M	H	M-	Negative	M	H	H
<b>With Mitigation</b>	M	H	M-	Negative	M	H	H

#### 6.1.2 Impact: Environmental education programmes

The Sector 1 development will significantly alter the nature of the Rondevlei and Zandvlei reserves and have serious impacts on the environmental education programmes. The road alignment runs 100m from the Zandvlei environmental education programme, which will cut off access to the centre and change the environment so significantly that the centre will have to close. The road alignment cuts the Rondevlei environmental education area in two, and separates the natural and man made environment (sewerage works). Groups will no longer be able to walk to the various ecological sites without crossing a road.

## Mitigation

- The developer could sponsor the environmental education trust at a cost of R2.7 million. This would be considered 'in kind' mitigation.
- See also mitigation measures proposed under Impact: division of conservation areas in urban township

Impact assessment: environmental education programmes

	Extent	Duration	Intensity	Status	Significance	Confidence	Probability
<b>Without Mitigation</b>	M	H	H-	Negative	H	H	H
<b>With Mitigation</b>	M	H	M-	Negative	M	H	H

### 6.1.3 Viability of False Bay Ecology Park and job creation through tourism

The road will not enhance accessibility to the False Bay Ecology Park due to the positioning of the gates. The road will split the park in two sections, which would require tourists to cross the road, a factor which detracts from the eco-tourism experience. The impact of sector 1 development could have a negative impact on tourism to and resultant job creation in Rondevlei and Zandvlei. If the development of the road leads to a decrease in the number of tourists visiting Rondevlei nature reserve, this would undermine the feasibility of the training and employment of local tour guides on the reserve.

## Mitigation

- A possible mitigating factor is the creation of employment opportunities for local residents due to a significant increase in tourism to the coast once the road is built. Confidence in the effectiveness of this mitigation measure is not high.
- Although in a different employment sector, the creation of employment through the construction, maintenance and operation of the road can be seen as in-kind mitigation for the loss of tourism employment opportunities.

Impact assessment: impact on viability of False Bay Ecology Park and job creation through tourism

	Extent	Duration	Intensity	Status	Significance	Confidence	Probability
<b>Without Mitigation</b>	M	M	M-	Negative	M	M	M
<b>With Mitigation</b>	M	L	L-	Negative	L	M	M

### 6.1.4 Impact: Crime and safety concerns.

- a) The sector 1 development will provide access to suburbs, which have previously been protected from crime by lack of access (e.g. Lakeside). According to the Michells Plain Police Office, lack of alternative flight routes currently makes it possible for police to catch criminals at Sunrise Circle. On the other hand, new access routes allow police to move more freely in pursuit of criminals.

- b) The building of the road could aggravate divisions between communities and lead to an increase in volatility if the current constitution of the social fabric is not considered.
- c) Criminal activity on the toll roads is a possibility, especially at tollgates and traffic circles. The current alignment of Sector 1 of the proposed road will require of taxis to drive through gangster-ridden areas. Where taxi operators are vulnerable to attack by gangs, they are forced to pay “protection money” to gangs to ensure their safety, which further supports criminal undercurrents in the area.
- d) A temporary workforce (during the construction of the road) could reactivate drug and other gang related crime.

Mitigation

- The Mitchell's Plain police station should be consulted during the development phase in order to advise the developers and plan for the effective management of crime.
- The tender document should provide clear guidelines regarding minimum safety requirements on the toll road.
- Information sharing and consultation with affected communities could prevent volatility.
- Developers, in consultation with the Mitchell's Plain police office, should determine measures to ensure that the presence of construction workers does not aggravate negative social patterns in the area.

Impact assessment: impact on crime

	Extent	Duration	Intensity	Status	Significance	Confidence	Probability
<b>Without Mitigation</b>	M	M	M-	Negative	M	M	M
<b>With Mitigation</b>	M	M	L	Positive	L	M	M

6.1.5 Impact: Cost of travel for vulnerable communities.

The tolling of sector 1 will increase the cost of private travel in these areas. The Economic Specialist study compares the environment to be tolled to the tolling of the N1/N2 (at the R44 on the N2), where figures indicate that 6.2% of users who travel on the road to be tolled, earn a monthly income of below R5000. The Economic Specialist Study projects increase in travel costs for private road users with incomes below R5 000 a month who do 60 trips a month to be 7.2% of their income. Furthermore, lower income private road users spend less on car maintenance and therefore benefit less financially from the increase in road quality, which reduces the cost of car maintenance for higher income road users.

Tolling will also have a significant effect on the cost of public transport in these areas. It is estimated that an average of 300 taxis uses the existing R300 per day. If taxis get awarded an R300 licence, they will only be allowed to travel on this route, and will therefore have to pay toll fees. The increased expense in public transport is most likely to be carried over to passengers. The Economic Specialist Report indicates that price increases of up to 44c per trip can be expected by residents from these areas. This amounts to up to 1.3% of monthly income for daily commuters. This could have a significant impact on people's access to work, amenities (such as

the hospital in Retreat) and social networks by people of the very lowest income brackets, and particularly for the unemployed. In addition, the current alignment of the proposed R300 extension will require taxis to drive through gangster-ridden areas, which will create safety hazards and contribute to an increase in taxi fares due to the cost of protection.

The baseline description indicates that the majority of the communities in sector 1 have vulnerable livelihood conditions and very limited access to cash resources. A change in their economic environment such as an increase in taxi fares could significantly increase livelihood risk.

#### Mitigation

- Consultation with taxi associations should be held to ensure that the cost of public (taxi) transport is not affected adversely by the tolling of the road.
- It is proposed that the tolling of taxis on the road be fully or partially subsidised by the fiscus. The recommendation is discussed in more detail in the Economic Specialist report.
- Tariff concessions for regular users could limit the increase in costs for taxis.

Impact assessment: cost of travel for vulnerable communities

	Extent	Duration	Intensity	Status	Significance	Confidence	Probability
<b>Without Mitigation</b>	M	M	M-	Negative	M	H	M
<b>With Mitigation</b>	M	M	L-	Negative	L	H	M

#### 6.1.6 Impact: Inequality.

The positive benefits of the development are not likely to be felt by the surrounding communities, but rather by more affluent communities who can afford to pay for tolling. The fact that this development is likely to happen at cost of disadvantaged communities contravenes the equity requirements of the National Environmental Management Act (see 9. Legal requirements).

#### Mitigation 1

This impact can be partly mitigated by measures suggested to ensure that the tolling of the road does not lead to increased travel costs for local communities.

#### Mitigation 2

Tender documents should stipulate a local labour preference policy and give a minimum quota for local labour to be employed.

#### Mitigation 3

Since the project is likely to be at cost rather than to the benefit of surrounding communities, the developers should consider ways of investing in these communities if the development were to go ahead. It is recommended that the developers strategize for community upliftment programmes and encourage integrated

community development initiatives during the planning phase of the project. This will be done most effectively in consultation with local community organisations and local authorities.

#### Mitigation 4

Measures should be taken to ensure that the use of current transport avenues could continue without interruption.

Impact assessment: inequality

	Extent	Duration	Intensity	Status	Significance	Confidence	Probability
<b>Without Mitigation</b>	M	M	M-	Negative	M	H	M
<b>With Mitigation</b>	M	M	L-	Negative	L	H	M

#### 6.1.7. Impact: Division of communities and separation from amenities

The building of the road could lead to the division of communities and the creation of barriers between residents and amenities. The current alignment would separate users from schools, mosques and churches, particularly in Pelican Park, as well as in Grassy Park (sector 5). Capricorn Park, on the northern side of the proposed road, is the shopping centre for some of the communities on the southern side of the road. The road would form a barrier for these poorer communities who do not have access to cars.

#### Mitigation

- ◆ The division of communities by the current road alignment cannot be adequately mitigated. The separation of communities from amenities can be partly mitigated through the construction of pedestrian bridges and pedestrian walkways.
- ◆ Detailed information and consultation sessions should be held with affected communities to ensure that communities are informed of changes and have an opportunity to make suggestions to minimise the impact of divisions. Requirements for consultation with this aim should be written into the tender document.

Impact assessment: Division of communities and separation from amenities

	Extent	Duration	Intensity	Status	Significance	Confidence	Probability
<b>Without Mitigation</b>	L	H	M-	Negative	M	H	H
<b>With Mitigation</b>	L	H	L-	Negative	M	H	H

#### 6.1.8. Impact: Road crossings

The building of the road through the densely populated suburbs along the route could increase road crossings, which provides a safety risk, particularly for school children.

## Mitigation

Pedestrian bridges should be constructed to ensure the safe crossing of the road. This is essential in densely populated areas. The tender document should stipulate that the sites for pedestrian bridges should be identified in consultation with affected communities. This will ensure that bridges are placed most effectively and are least likely to become sites for criminal activity. Refer to Appendix X for a summary of the investigation into pedestrian desire lines. This summary, a supplementary study to the SIA, identifies the potential necessary locations of pedestrian bridges and/or crossings along the proposed route

### Impact assessment: Road crossings

	Extent	Duration	Intensity	Status	Significance	Confidence	Probability
<b>Without Mitigation</b>	L	H	H-	Negative	H	H	H
<b>With Mitigation</b>	L	M	M-	Negative	M	H	H

### 6.1.9. Impact: Living conditions

The building of the road could lead to an increase in the number of beach visitors, which will increase noise levels and be unpleasant for local residents (e.g. Lakeside). The use of alternative routes to avoid paying toll could lead to an increase in traffic congestion along these routes.

#### Mitigation:

- ◆ Noise levels could be kept down through the planting of tall trees or the creation of similar sound obstructions between beaches and immediately affected residential areas.
- ◆ Traffic and road engineers should plan the new development so as to minimise traffic congestion on alternative routes.

### Impact assessment: Living conditions

	Extent	Duration	Intensity	Status	Significance	Confidence	Probability
<b>Without Mitigation</b>	L	M	M-	Negative	M	H	M
<b>With Mitigation</b>	L	M	L-	Negative	L	M	M

### 6.1.10. Impact: Increased safety and access

A positive impact of the development could be that land which is now vacant (as part of the road reserve) and will be developed for the road, will no longer be available as criminal hideouts. Increased light will also discourage criminal activity. The road could also create an alternative access road to shops for African residents in Vrygrond who suffer racial abuse when walking through surrounding coloured areas to access shops. Areas with currently insufficient access roads, notably Marina da Gama, will benefit from a lowering in traffic congestion.

## Mitigation

Provide a safe footpath for pedestrians from Vrygrond to shops.

Impact assessment: Increased safety and access

	Extent	Duration	Intensity	Status	Significance	Confidence	Probability
<b>Without Mitigation</b>	L	M	M+	Positive	M	H	M
<b>With Mitigation</b>	L	M	M+	Positive	M	H	M

#### 6.1.11. Impact: Recreational activities.

The development of the road will impact on open areas, some of which are currently used for recreational activities (e.g. Soccer fields in the road reserve, Montagu's Gift).

#### Mitigation

Tender documents should stipulate that alternative sites for recreational activities should be found and communities assisted with the relocation of any infrastructure. The effectiveness of this mitigation measure is limited by the availability of open land in densely populated areas such as Montague's Gift.

Impact assessment: Recreational activities.

	Extent	Duration	Intensity	Status	Significance	Confidence	Probability
<b>Without Mitigation</b>	L	M	M-	Negative	L	M	M
<b>With Mitigation</b>	L	L	L-	Negative	L	M	M

#### 6.1.12. Impact: Employment creation

The project has the potential to generate 2 100 jobs during the construction phase. Further 600 to 900 sustainable jobs will be created during the maintenance and operational phases. The Economic Specialist Report estimates that between 2000 and 5000 direct and indirect jobs can be created during the 30 years session period. This level of employment creation has the potential to contribute significantly to the well being of local vulnerable communities, provided that a local employment preference policy is written into tender documents. Employment opportunities created for local residents contribute to the support of wider dependent social networks.

#### Mitigation

To maximise the potential positive impact of job creation on local vulnerable communities, a local employment preference policy (preferably with a minimum quota figure) should be written into tender documents. Stipulations in SANRAL tender documents in support of Affirmable Business Enterprises, Previously Disadvantaged Individuals, and Small, Medium and Micro Enterprises, should be applied, as well as requirements for training and capacity building.

	Extent	Duration	Intensity	Status	Significance	Confidence	Probability
<b>Without Mitigation</b>	M	M	M+	Positive	M	H	M

### 6.1.13. Potential impact: Resettlement

Any resettlement of residents, especially from the more vulnerable communities, will be problematic as it will have significant impacts on the livelihood security and support systems of those to be resettled, as well as on territorial interests in volatile communities. It should also be considered that the construction of the highway could result in secondary development, which could lead to resettlement. The current definition of sector 1 by the developers rules out the possibility of resettlement. This possible impact is therefore mentioned but not evaluated.

## 6.2 Sector 2

### 6.2.1. Impact: Cost of public transport and road use.

The tolling of the existing R300 would necessitate an increase in taxi fares and the cost of private road use. A description of estimated financial impacts is give under 6.1.5. The economic sensitivity of this area could lead to taxis becoming unaffordable to local users, the majority of whose livelihood security is unstable. This would significantly impact on their access to places of work, social networks (family, friends, institutions of support), cultural and religious facilities and basic amenities and services, such as hospitals, clinics, shops and schools. It should be considered that many of those who use the road for work purposes earn a menial income, which may not be able to support the impact of increased taxi fares. The significance of this impact is aggravated by the political sensitivity of this area, considering that many Cape Flats residents were relocated to their current living area and are travelling long distances due to the lingering impact of apartheid.

Observation of traffic on the existing R300 indicates that many motor vehicle users on this road are also from lower income groups. Similar to taxi users, lower income group vehicle users may not be able to afford the tolling of this road. The impact on their livelihoods would be the same as on that of the taxi users.

### Mitigation

- ◆ It is recommended that this section of the road be exempted from tolling, and that fees be gathered through other tolling gates.
- ◆ Special tariffs for frequent road users could lessen the impact of tolling on low income road users.
- ◆ It is recommended that the tolling of taxis on the proposed road be subsidised by the fiscus. See the Economic Specialist report for a description of this measure.

Impact assessment: Cost of public transport and road use

	Extent	Duration	Intensity	Status	Significance	Confidence	Probability
<b>Without Mitigation</b>	M	H	H-	Negative	H	H	H
<b>With Mitigation</b>	M	M	M-	Negative	M	H	H

6.2.2. Impact: Road crossings.

Road crossings by school children and pedestrians could result in death. The communities in this area have to walk long distances and cross the R300 to access public transport. Current pedestrian access and security is far from adequate.

Mitigation

Pedestrian bridges and walkways should be constructed to ensure the safe crossing of the road. This is essential in densely populated areas. See 6.1.8 for further definition of mitigation.

Impact assessment: Road crossings

	Extent	Duration	Intensity	Status	Significance	Confidence	Probability
<b>Without Mitigation</b>	L	H	H-	Negative	H	H	H
<b>With Mitigation</b>	L	m	M-	Negative	M	H	H

6.2.3. Impact: Crime on roads.

The stoning of cars is a hazard to motorists. The high levels of crime and gangsters in the area could lead to theft and hijackings on the road. This could be aggravated by the availability of cash at tollgates.

Mitigation

The installation of proper lighting on the R300 could decrease traffic accidents and crime levels along the road. The Mitchell's Plain police station should be consulted during the development phase in order to advise the developers and plan for the effective management of crime. Measures such as proper lighting, emergency telephones and automatic billing at tollgates should be considered. Extra police staffing will be needed to effectively monitor crime.

## Impact assessment: crime on roads

	Extent	Duration	Intensity	Status	Significance	Confidence	Probability
<b>Without Mitigation</b>	M	M	M-	Negative	M	H	M
<b>With Mitigation</b>	M	M	L-	Negative	L	H	M

### 6.3. Section 6 (Sector 3) and sector 4

#### 6.3.1 Impact: Sense of place<sup>3</sup>

The main social concerns about the development result from an impact on people's sense of well being, rather than their livelihood security. The suburbs affected by the development of section 6 and sector 4 are situated on the urban fringe, and have a rural character, which is much valued by residents. The concern is that the development of a major road through this area would detract from the semi-rural character of the area due to increased traffic noise and pollution. The road reserve, which would be used for this development, also currently serves as a greenbelt, which adds to the semi-rural character. The Brackenfell Golf Academy is partly situated in the road reserve, the nature of which would alter significantly if the road were to be built.

#### Mitigation

Visual impact can be minimised by planting and landscaping to screen the road, and to provide, noise and visual absorption capacity to try and maintain the semi-rural character to a degree.

	Extent	Duration	Intensity	Status	Significance	Confidence	Probability
<b>Without Mitigation</b>	L	H	M-	Negative	H	H	M
<b>With Mitigation</b>	L	M	L-	Negative	M	H	M

#### 6.3.2 Impact of property values on livelihood security

Formal housing provides an important source of security for homeowners and indirectly for african and coloured residents employed by them as gardeners and domestic workers. The development of the road would negatively affect the property prices in these areas, and thus lessen the value of this source of security. This is a concern particularly for lower income earners in Durbanville and Eversdal.

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<sup>3</sup> *Sense of place* refers to the phenomenon that people's sense of well being (which could include health, stress levels, creativity, sharing), and often their cultural and social identities, are influenced and impacted on by their environment. When significant changes are made to the environment, these impact on people's sense of well being and identity.

## Mitigation

There is not adequate mitigation for this impact, since it would not be feasible for developers to buy out affected property owners at current property values.

Impact assessment: Property values – livelihood security

	Extent	Duration	Intensity	Status	Significance	Confidence	Probability
<b>Without Mitigation</b>	L	M	M-	Negative	M	H	H
<b>With Mitigation</b>	Not relevant						

### 6.3.3. Impact: Travel costs for vulnerable groupings

The tolling of the road may increase travel costs for coloured and African residents, who are the most vulnerable sections of this area, and whose families and social networks reside elsewhere in Cape Town.

## Mitigation

Negotiations could be held with taxi associations to ensure that the building of the road will not lead to significant increases in taxi fares. Concessions for frequent users could lessen the impact of tolling on taxi costs.

Impact assessment: travel costs for vulnerable groupings

	Extent	Duration	Intensity	Status	Significance	Confidence	Probability
<b>Without Mitigation</b>	M	H	H-	Negative	H	H	H
<b>With Mitigation</b>	M	M	M-	Negative	M	H	H

## 6.4. Sector 3 section 7 and 8

### Section 7

#### 6.4.1. Impact: Livelihood risk.

The division of the farms in this area by the construction of the road would impact on the viability of the farm Vrymansfontein and therefore increase livelihood risk for those whose livelihood is dependent on the continued operations of the farms. The development could result in the loss of 32 jobs, of which 30 are on the farm Vrymansfontein. Vrymansfontein is a dairy farm, and the proposed road runs through the existing dairy farming infrastructure. Vrymansfontein is the sole supplier of milk to the dairy factory on Bon Mella farm, the viability of which would therefore also be affected.

The following factors could impact on the feasibility of affected farms and the continued employment of farm workers. The current road alignment would

necessitate the relocation of costly infrastructure, which, in the case of the farm Vrymansfontein, will not be financially viable. The road will take significant amounts of productive land on these farms. The access road to the farm Loch Lynne will be taken away.

#### Mitigation 1

Change in road alignment. The negative impacts of the road development on the farms would be significantly altered if the road alignment were to be shifted to the border of the farm Vrymansfontein.

#### Mitigation 2

Financial compensation will be suitable social mitigation only if this leads to the full rehabilitation of farming industries, and prevents the loss of jobs and income, especially by farm workers. Once-off financial compensation for job losses is not a suitable measure to ensure livelihood security for these vulnerable residents.

Impact assessment: livelihood risk

	Extent	Duration	Intensity	Status	Significance	Confidence	Probability
<b>Without Mitigation</b>	L	M	H-	Negative	M	H	H
<b>With Mitigation</b>	L	L	L-	Negative	L	H	H

#### 6.4.2. Impact: Relocation and devaluation of dwellings

The current road alignment goes through a farm worker home on the farm Vrymansfontein. The road alignment significantly reduces the property value of dwellings on a number of farms, due to the increase in noise pollution.

##### Mitigation measure 1

Change in road alignment. The negative impacts of the road development on the farms would be significantly altered if the road alignment were to be shifted to the borders of the farm.

##### Mitigation measure 2

Adequate compensation should be given to farmers to ensure that housing and infrastructure can be recreated elsewhere on the farm. This should be done in consultation with farmers (see requirements of National Heritage Resources Act under 9. "Legal Requirements" in this report). Compensation should be given for the devaluation of housing. The following factors limit the value of this mitigation measure: The farmer homesteads have historic value, cultural and family heritage significance, which cannot be replaced. Farm worker communities are vulnerable ecosystems that cannot easily be relocated without negative consequences.

##### Mitigation measure 3

Landscaping and road engineering measures can be applied to limit noise and light pollution on farms.

Impact assessment: relocation and devaluation of dwellings

	Extent	Duration	Intensity	Status	Significance	Confidence	Probability
<b>Without Mitigation</b>	L	H	M-	Negative	H	M	M
<b>With Mitigation</b>	L	M	L-	Negative	L	M	M

6.4.3 Impact on rural lifestyle and sense of place

The rural character of this area will be significantly affected by the building of a major road through the farmlands. The building of this road will alter the character of the area for generations to come.

Mitigation

Road engineering and landscaping measures can be applied to limit noise and light pollution on farms. Trees can be planted to limit visual impact.

Impact assessment: rural lifestyle and sense of place

	Extent	Duration	Intensity	Status	Significance	Confidence	Probability
<b>Without Mitigation</b>	M	H	M-	Negative	M	H	H
<b>With Mitigation</b>	L	H	M-	Negative	M	H	H

6.4.4 Impact: Influence of construction workers.

The presence of construction workers involved in the building of the road may have a negative social impact on farm workers and other residents in the area. In the area closest to the N7, shebeens erected by patrons from Atlantis have lead to violent confrontations. Prostitution activity is also evident in this area. The presence of construction workers with cash income may further these social activities.

Mitigation

It is recommended that construction workers do not live on site. Measures need to be taken by the developers to ensure that construction workers do not support negative social activities in the area.

	Extent	Duration	Intensity	Status	Significance	Confidence	Probability
<b>Without Mitigation</b>	L	M	L-	Negative	L	M	M
<b>With Mitigation</b>	L	L	L-	Negative	L	M	M

#### 6.4.5 Impact on safety.

Farmers are concerned about the safety of their lives and property, which may be affected by the access that the road will provide to their farms, by the tendency for informal settlements to get established along roads, and by the increased danger of fire.

#### Mitigation

- ◆ The maintenance of high security levels on the toll road is important. Safety patrols in this section of the development would mitigate against criminal invasion on the farms, and could also be used to prevent the erection of informal settlements.
- ◆ The risk of fire could be limited by ensuring that road reserve areas remain clean and that grass remains short.

#### Impact assessment: safety

	Extent	Duration	Intensity	Status	Significance	Confidence	Probability
<b>Without Mitigation</b>	L	H	L-	Negative	M	M	M
<b>With Mitigation</b>	L	M	L-	Negative	L	M	M

#### 6.4.6 Impact: Lack of access.

The fact that there is no provision for access to the road by the farms through which it will be built, results in the road being of no positive value to the farmers.

#### Mitigation measure

Access to the proposed road would increase the viability of the affected farms. Alternatively, a consideration is to upgrade existing access roads such as Vissershok Road.

#### Impact assessment: lack of access

	Extent	Duration	Intensity	Status	Significance	Confidence	Probability
<b>Without Mitigation</b>	L	M	L-	Negative	M	M	M
<b>With Mitigation</b>	L	M	L+	Positive	M	M	M

## Section 8

The development of section 8 of the project is not likely to have significant impacts on the population in this area. However, the following possible impacts are noted:

### 6.4.7. Impact: Sense of place.

The building of the road could lead to the loss of a sense of place and the rural atmosphere of the rural and semi-rural areas along this road.

#### Mitigation

Measures suggested in the Visual Impact Assessment report, such as the planting of clumps of trees, and the landscaping and revegetation of dunes, will decrease the impact of the road on the sense of place in this environment.

Impact assessment: sense of place

	Extent	Duration	Intensity	Status	Significance	Confidence	Probability
<b>Without Mitigation</b>	M	M	L-	Negative	L	H	M
<b>With Mitigation</b>	L	M	L-	Negative	L	H	M

### 6.4.8. Impact: Livelihood security.

There is a possibility that the building of the road could lead to increased economic activity in this area, which would contribute positively to the livelihood security of residents. The tourism impact assessment indicates this area as a popular tourism destination. The construction of the road would increase access to the area.

Impact assessment: lack of livelihood security

	Extent	Duration	Intensity	Status	Significance	Confidence	Probability
<b>Without Mitigation</b>	L	M	M	Positive	M	M	M
<b>With Mitigation</b>	Not relevant						

### 6.4.9. Impact: Access.

The road could provide access to workplaces and social networks elsewhere the greater Cape Town for unemployed residents in this area, and thereby increase livelihood security.

Impact assessment: access

	Extent	Duration	Intensity	Status	Significance	Confidence	Probability
<b>Without Mitigation</b>	L	H	M	Positive	M	M	M
<b>With Mitigation</b>	Not relevant						

6.4.10. Impact on housing and job security

As far as could be determined, the development of the road would not lead to any job losses or require the relocation of formal or informal dwellings. This potential impact is therefore not assessed. However, it is important to mention that, if this were to happen in Malmesbury non-urban area, or in the vulnerable pockets of the Melkbosstrand community, it would significantly increase their levels of vulnerability.

6.5. Sector 5

The inclusion of the Philippi Link in the proposal due to the possible tolling of this road necessitates consideration of the results of the Philippi Link EIA. These are summarised here, and mitigation measures are listed where given. Full evaluations of the anticipated impacts are contained in the Philippi Link EIA. The results of this EIA for the Cape Flats Freeway Extension between Vanguard Drive and Prince George Drive indicate the following potential social impacts:

6.5.1. Impact: possible land invasion

The building of the road could contribute to the invasion of open land by locals. In Grassy Park, the 'Burning Spears movement' has erected an informal settlement, which is located in the road corridor.

6.5.2. Impact: expropriation of land

The road will require the expropriation of some community facilities and public open space land from Montagu's Gift Primary School. The construction of the road will lead to the loss of 12 hectare of horticultural land (from the total of 14000 hectare under horticultural cultivation).

Mitigation

- Compensation of land swap for farm expropriation
- Measures should be taken to minimise loss of horticultural land.
- Roads should be designed as to minimise shadow cast onto horticultural land
- The integrity of larger farms should be preserved.
- Maintaining the continuity of the existing road system including public gravel roads will be required to ensure the continued horticultural cultivation of residual fragments of the affected farms.

- Redundant fragments of properties bisected by the road into adjacent horticultural farms should be consolidated and the continuation of horticultural cultivation on these fragments should be ensured.

#### 6.5.3. Impact: security

Farmers are concerned that the building of the road would increase access to their farms and result in crop theft.

#### Mitigation

Security fencing between highway and farmland is recommended. The developer should undertake the maintenance of the fencing.

#### 6.5.4. Impact: Disruption of business

Disruptions of short and medium term business operations and planning is expected during this project.

#### 6.5.5. Impact: separation of communities

Residents in the Grassy Park/Parkwood area would be affected by the construction of the Philippi Link road in that it would separate communities north and south of the road.

#### Mitigation

The maintenance of existing road connections and, where warranted, pedestrian and cyclist facilities are required.

#### 6.5.6. Impact: Pedestrian safety

Ensuring pedestrian safety of children in the area will be a priority. There are a large number of school children crossing the road corridor to go to school.

#### Mitigation

- The provision of pedestrian bridges is suggested and the raising of the freeway as well as appropriate fencing is needed to discourage attempts to cross it.
- The road should serve public transport needs.

## 7. Assessment of the no-go option

Since public finances are not available to ensure the maintenance of current road standards on the existing R300, it is likely that the quality of this road will gradually deteriorate if the toll road project were not to go ahead. Decreased quality of the road will lead to an increase in hidden travel costs for road users, such as the cost of vehicle maintenance, and the travel time involved in journeys.

If the project were not to go ahead, the integrity of the Zandvlei and Rondevlei nature conservation areas would not be compromised. These areas serve as significant open space and natural resources for the surrounding urban townships.

The no-go option would not lead to additional security measures in sections 1 and 2, where crime levels are high.

## **8. Legal requirements**

The following legal requirements as outlined in the National Environmental Management Act are applicable:

- Development must be socially, environmentally and economically sustainable.
- Equitable access to environmental resources, benefits and services to meet basic human needs and ensure human well-being must be pursued and special measures must be taken to ensure access thereto by categories of persons disadvantaged by unfair discrimination.
- These requirements are applicable to all impacts associated with vulnerable communities, but particularly those indicated for sector 1 and 2 communities.

The National Heritage Resources Act (No 25 of 1999) states that heritage resources form an important part of the history and beliefs of communities and must be managed in a way that acknowledges the right of affected communities to be consulted and to participate in their management. This Act applies to the impacts described for Sector 3.

## **10. Conclusion**

This assessment of the social impacts of the N21 (R300) Cape Town Ring Road Toll Project indicates that the development of sectors 3 to 5 could proceed without severe social impact. However, the social impact on sectors 1 and 2 is significant enough to bring the acceptability of the development as currently defined, into question. Main concerns are the impacts of the tolling of the road on the livelihood security of vulnerable communities, the impact of road crossings, the impact of the development of the road on access to a use of environmental resources, the impact of the development on access to amenities and on the division of communities, and the impact on sense of place. Furthermore, the development compromises the integrity of a number of nature reserves which are significant environmental resources for local vulnerable communities. Mitigation measures lessen the significance of most of these impacts, and should therefore be stipulated in the EIR and where relevant in tender documents, and their application should be monitored.