

EXECUTIVE SUMMARY:

FINAL ENVIRONMENTAL IMPACT ASSESSMENT REPORT

PROPOSED NEW CBD BYPASS ROAD IN HERMANUS

DEA&DP Reference Number: 16/3/1/2/E2/15/2124/14
Heritage Western Cape Reference Number: 14112403AS1203E

1 INTRODUCTION

The Provincial Government Western Cape: Department of Transport and Public Works (WCDTPW) proposes to construct a bypass road approximately 3 km long, to the north of the Hermanus Central Business District (CBD), abutting Mountain Drive, past the Hermanus Sports Complex and along Fairways Avenue, in Hermanus in the Western Cape (see Figure 1).

SRK Consulting (South Africa) Pty Ltd (SRK) has been appointed to undertake the Scoping and Environmental Impact Reporting (S&EIR, also referred to as EIA) process required in terms of the National Environmental Management Act 107 of 1998, as amended (NEMA).

See page 12 for details on how you can participate in the process.



2 GOVERNANCE FRAMEWORK

Sections 24 and 44 of NEMA make provision for the promulgation of regulations that identify activities which may not commence without an EA issued by the competent authority, in this case the Western Cape Department of Environmental Affairs & Development Planning (DEA&DP). The Environmental Impact Assessment (EIA) Regulations, 2010 (Government Notice (GN) R543, which came into effect on 2 August 2010), promulgated in terms of NEMA, govern the process, methodologies and requirements for the undertaking of EIAs in support of EA applications. The EIA Regulations are accompanied by Listing Notices (LN) 1-3 that list activities that require EA.

The EIA Regulations, 2010 and associated LNs were replaced by the EIA Regulations, 2014 (Government Notice (GN) R982 and associated LNs 1-3, which came into effect on 4 December 2014 and were further amended on 7 April 2017. **The application for EA for the project was submitted prior to the promulgation of the EIA Regulations, 2014. As such, the process is governed by the EIA Regulations, 2010.**

The EIA Regulations, 2010 lays out two alternative authorisation processes. Depending on the type of activity

that is proposed, either a BA process or a Scoping and Environmental Impact Reporting (S&EIR) process is required to obtain EA. LN 1 lists activities that require a BA process, while LN 2 lists activities that require S&EIR. LN 3 lists activities in certain sensitive geographic areas that require a BA.

SRK has determined that the proposed Hermanus CBD Bypass project triggers activities listed in terms of Listing Notices 1 – 3 (GN R544, GN R545 and GN R546) of the EIA Regulations, 2010 (Table 1). *The equivalent activities in terms of the EIA Regulations, 2014 (as amended in 2017) are included in brackets.* No additional listed activities that require EA have been identified in terms of the EIA Regulations, 2014; some activities are no longer listed.

Table 1: Listed activities triggered by the project

Activity	Description
Listing Notice 1 (requiring BA)	
11 (12)	The construction of 50 m ² of infrastructure or structures within a watercourse or within 32 m of a watercourse.
18 (19)	The infilling or depositing of more than 5 m ³ of any material into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock from a watercourse.
22 (24)	The construction of a road, outside urban areas, with a reserve wider than 13.5 m.
40 (-)	The expansion of infrastructure by more than 50 m ² within a watercourse or within 32 m of a watercourse.
Listing Notice 2 (requiring S&EIR)	
18 (-)	The route determination of roads and design of associated physical infrastructure for a road administered by a provincial authority.
Listing Notice 3 (requiring BA in the sensitive areas)	
12 (12)	The clearance of 300 m ² or more of vegetation where 75% or more constitutes indigenous vegetation within a critically endangered ecosystem.
13 (-)	The clearance of 1 ha or more of vegetation where 75% or more constitutes indigenous vegetation outside of urban areas in a protected area and within 10 km from national parks and in urban areas in areas zoned for use as public open space and areas on the watercourse side of the development setback line or within 100 m from the edge of a watercourse, where no such setback line has been determined.
16 (14)	The construction of infrastructure covering 10 m ² or more within a watercourse or within 32 m of a watercourse outside of urban areas in a protected area.
19 (18)	The widening of a road by more than 4 m, or the lengthening of a road by more than 1 km outside of urban areas in or near a protected area.

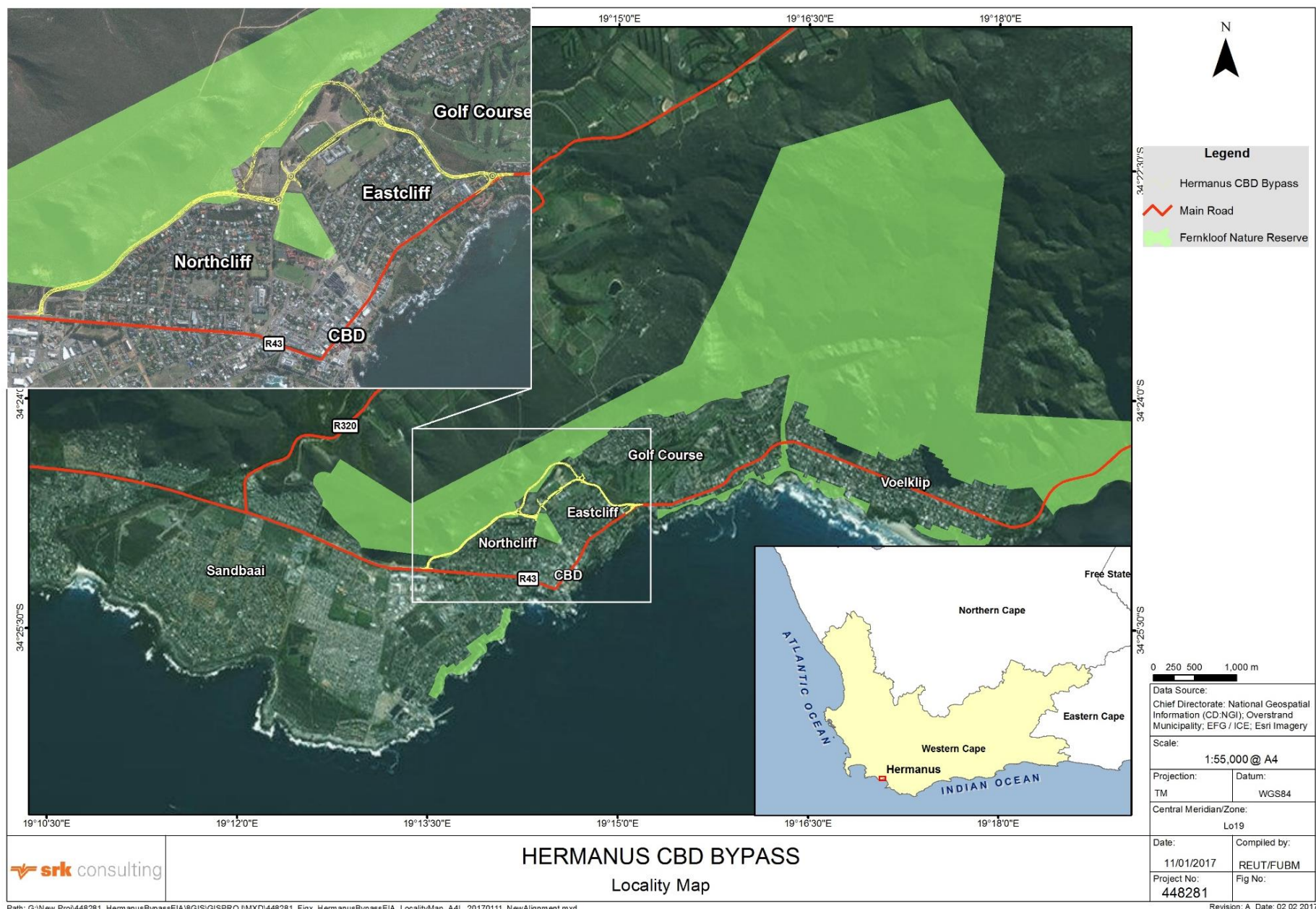


Figure 1: Location of the proposed Hermanus CBD Bypass (northern and southern alternatives)

Consequently, the proponent is obliged to apply for EA for the project. Since activities listed under Regulation GN R545 apply to the project, an S&EIR process is required.

A Water Use Authorisation in terms of Section 21 of the National Water Act 36 of 1998 (NWA) will be required from the Department of Water and Sanitation. Water use activities applicable to the project are listed in Table 2.

Table 2: Activities requiring a Water Use Licence

o	Description
c	Impeding or diverting the flow of water in a watercourse.
i	Altering the bed, banks, course or characteristics of a watercourse.

Where the Hermanus CBD Bypass impacts on areas within the Fernkloof Nature Reserve (FNR), an application to exclude affected areas must be submitted to the Minister for Environmental Affairs of the Western Cape Province.

3 ENVIRONMENTAL PROCESS

The EIA Regulations, 2010 define the detailed approach to the S&EIR process, which consists of two phases: the Scoping Phase (completed in April 2016) and the Impact Assessment Phase (the current phase) (see Figure 3).

The key objectives of the EIA are to:

- Inform Interested and Affected Parties (IAPs) about the proposed Project and the EIA process followed;
- Obtain comments from IAPs (including the relevant authorities and the public) and ensure that all issues, concerns and queries raised are fully documented and addressed in the EIA Report;
- Identify and assess potential significant impacts associated with the proposed development;
- Formulate mitigation measures to avoid and/or minimise impacts and enhance benefits of the Project; and
- Produce a Final EIA Report which will provide all the necessary information for the DEA&DP to decide whether (and under what conditions) to authorise the proposed Project.



Figure 2: Hermanus Country Market

Source: Facebook page

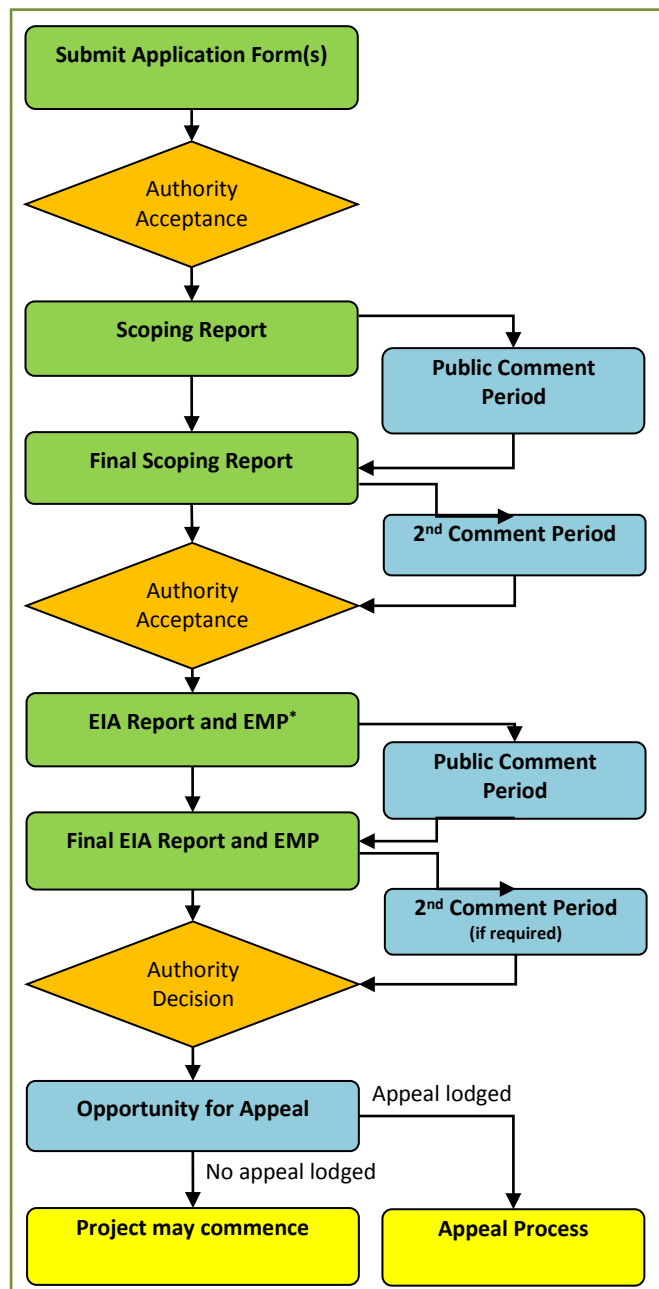


Figure 3: S&EIR Process

*Note: EMP = Environmental Management Programme

4 DESCRIPTION OF THE SITE AND ENVIRONMENT

Hermanus is situated along a narrow stretch of the coast between the Kleinrivier Mountains and the Atlantic Ocean. It is the largest town in the Overstrand Municipal area and the business, cultural and administrative centre of the region.

Due to its reputation as one of the best land-based whale watching destinations in the world and its scenic landscape, Hermanus is a popular holiday and retirement destination for local and international visitors alike, who support a flourishing hospitality industry, specialty shops, shopping centres and restaurants.

The proposed Hermanus CBD bypass is located north of the Hermanus CBD. The western section of the bypass is located north of the existing urban area and Mountain

Drive, which effectively forms the urban edge in this area, and in the southern portion of the FNR. This section is largely located on the southern edge of an area densely vegetated with fynbos (see Figure 4).

The eastern section of the bypass is located within the existing urban area immediately to the west of the Hermanus Golf Course (see Figure 5). The proposed bypass largely follows and/or will be aligned parallel to existing roads.



Figure 4: Western section of Mountain Drive



Figure 5: Fairways Avenue along Hermanus Golf Club



Figure 6: Land uses surrounding the proposed CBD Bypass

The proposed bypass route abuts urban areas and natural areas. The most notable land uses adjacent to the route are shown in Figure 6 and include:

- The Fernkloof Nature Reserve (1);
- Residential areas, including Northcliff suburb (2), Eastcliff suburb (10) and Innesbrook Village (9);
- Institutions and recreational areas, such as the Hermanus High School (5), Hermanus Private School

(8), Sports complex (6), Hermanus Golf Course (11) and Hermanus Country Market (7); and

- Heritage areas such as the Hermanus cemetery (3) and Hoy's Koppie (4).

The mountainous areas, sandstone cliffs and stony scree slopes of the Overstrand municipal area provide habitat for near-pristine remnants of Critically Endangered mountain fynbos vegetation and are considered of high importance for biodiversity conservation. The proposed bypass is located in Overberg Sandstone Fynbos, at the ecotone with Hangklip Sand Fynbos and Agulhas Limestone Fynbos. The FNR also provides pristine and varied habitat for many animal species.

According to the South African National Biodiversity Institute, the area north of Mountain Drive is deemed a Critical Biodiversity Area (CBA), while a wetland adjacent to the Hermanus Golf Course is designated an Ecological Support Area (ESA).

A number of watercourses drain the Kleinrivier Mountains north of Hermanus. A number of dispersed ephemeral drainage lines cross the proposed alignment of the Hermanus CBD Bypass.

The population in the Overstrand Local Municipality, where the site is located, increased by approximately 44% between 2001 and 2011, to 80 432 in 2011. Local economic growth is driven by tertiary services such as wholesale and retail (which also reflects tourism activity), transport, government and business services, as well as property development. The relatively strong growth of Overstrand Municipality may (at least partly) be linked to the vibrant tourism industry that centres predominantly around Hermanus.

5 PROJECT MOTIVATION

An investigation of the need for and possible alignments of a bypass along the Hermanus mountainside indicated that:

- Taking historical traffic growth and future land use planning in the Overstrand Municipality into account, the following minimum future annual traffic growth rates are anticipated:
 - 1.5% for local traffic (internal traffic growth due to development within Greater Hermanus); and
 - 2.5% for external traffic (as a result of visitors to, and traffic through, Hermanus);
- Anticipated traffic growth for the next 20 to 25 years does not warrant the “full” bypass alignment initially considered; and
- Anticipated traffic growth justifies a CBD bypass that supports the Hermanus CBD Regeneration Framework currently investigated by the Overstrand Municipality.

The WCDTPW would proclaim the bypass as the new provincial trunk road (providing mobility) and de-proclaim

Main Road (R43 section through the Hermanus CBD), which would become a municipal road providing local accessibility.

Key aims of Hermanus CBD Bypass implementation are to:

- Support of the implementation of the CBD Renewal Framework;
- Provide a mobility route for traffic between the eastern and western parts of Hermanus;
- Improve accessibility, traffic flow and safety in the CBD;
- Enable business development within the CBD by optimising accessibility, parking and non-motorised access;
- Provide improved access to schools, sports fields, farmers market and other institutions in the area along Jose Burman Avenue; and
- Reduce traffic on the local roads currently serving as a *de facto* CBD bypass.

The purpose of the current exercise is to secure a future road alignment to minimise future impacts on property owners and the environment. In this instance, a bypass alignment could have and should have been proclaimed at least 20 years ago. The failure to do so may contribute to current concerns about the project.

6 PROJECT DESCRIPTION

The proposed bypass is approximately 3 km long and:

- Starts in the vicinity of the intersection of Main Road, Mountain Drive and Mimosa Street in the west;
- Runs in a north-easterly direction along and to the north of Mountain Drive and the existing edge of the built environment;
- Passes either (also see Section 6):
 - To the north of the cemetery and the proposed new Hermanus Sports Complex before turning southwards along the eastern edge of the sports fields (*northern alternative*); or
 - To the south of the cemetery and intersects with Lord Roberts Drive before continuing in a north-easterly direction along Jose Burman Drive between the Hermanus High School and the proposed new Hermanus Sport Complex (*southern alternative*);
- Continues southwards across the eastern portion of the Hermanus High School sports fields and along a section of Fairways Avenue between the residential suburb of Eastcliff and Hermanus Golf Course; and
- Joins Main Road at a new traffic circle approximately 110 m to the north-east of the existing intersection of Fairways Avenue with Main Road (R43).

The road will function as a regional route and consist of a single carriageway, i.e. one lane in each direction. Vehicle lanes will be 3.7 m wide with a 1.8 m wide shoulder in each

direction, within a road reserve of approximately 25 m (also see Figure 9). The proposed speed limit is 60 km/h.

One combined 3 m wide pedestrian walkway and cycle path is proposed alongside the road. It is proposed that all retaining structures are constructed with natural sandstone rock.

7 ALTERNATIVES

The EIA Regulations, 2010, require that all S&EIR processes must identify and describe feasible and reasonable alternatives. Numerous alternatives were identified and considered to date, as described in the Final Scoping Report. Table 3 lists alternatives that were screened out.

Table 3: Alternatives screened out

Alternative	Key reason for screening out
Use alternative regional routes	Does not address Hermanus-internal traffic
Full bypass	Insufficient demand on eastern section
Upgrade CBD Relief Road	Insufficient road reserve / width available Intersection spacing too close Direct accesses in conflict with demand for mobility
Upgrade R43 through the CBD	High expropriation costs Does not sufficiently address predicted future congestion Does not align with Hermanus CBD Regeneration Framework
Upgrade Mountain Drive	Direct access and traffic calming measures are in conflict with demand for mobility
Locate bypass away from Mountain Drive	Requires more land in sensitive FNR
Sink bypass along Jose Burman	High cost associated with excavations and retaining walls, as well as challenges associated with water table and geometric problems with connections to local road network
Alignment along Lord Roberts Drive	Only provides an alternative route for the eastern portion of the CBD and does not alleviate congestion along the route
Alignment along Fernkloof Drive	Limited additional benefit, conflict with the demand for mobility and additional impact on residential units along Fernkloof Drive
Provide public transport	Insufficient demand and budget and inappropriate land use patterns and densities

The following alternatives were investigated in the EIA Report:

- The **northern alignment** runs just north of and adjacent to the existing Mountain Drive, then aligns north of the cemetery and sports complex, then leads south, along the eastern edge of the sports complex between the cricket oval and the Hermanus Private School and then joins Fairways Avenue (see Figure 7);



Figure 7: Proposed Northern Hermanus CBD Bypass alignment

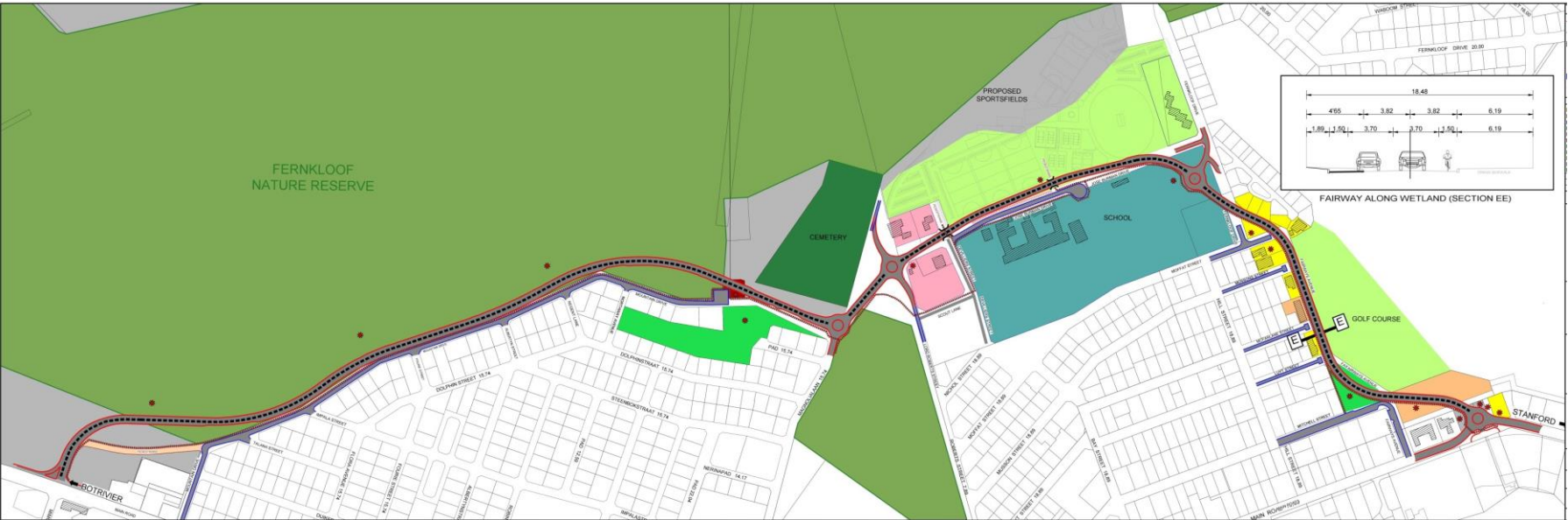


Figure 8: Proposed Southern Hermanus CBD Bypass alignment

LEGEND

- 20m ROAD ALIGNMENT
- CENTER LINE
- BUILDINGS
- EXPROPRIATION OF PORTION OF PROPERTY REQUIRED TO ACCOMMODATE ROAD WIDENING

GENERALISED LANDUSE

- SINGLE RESIDENTIAL
- GENERAL RESIDENTIAL
- BUSINESS
- EDUCATIONAL
- INSTITUTIONAL/COMMUNITY
- GOVERNMENT/MUNICIPAL USE
- OPEN SPACE
- CEMETERY
- RECREATIONAL
- VACANT
- NATURE RESERVE

Amend.	Date	Description

EFG Engineers (Pty) Ltd
PO Box 3850
Durbanville
7551
Tel No: (021) 975 3880
Fax No: (021) 975 3890
e-mail: info@efgeng.co.za

ICE Group (Pty) Ltd
PO Box 131
Stellenbosch
7550
Tel No: +27 (0) 21 880 0443
Fax No: +27 (0) 21 880 0390
e-mail: info@icegroup.co.za

EFG ENGINEERS

ICE GROUP

- The **southern alignment** runs just north of and adjacent to the existing Mountain Drive, then runs south of the cemetery and follows Jose Burman Drive between the high school and the sports complex (see Figure 8). A pedestrian underpass under the bypass is proposed in the eastern portion of this section, while a pedestrian and vehicular underpass is proposed in the western portion of this bypass section. This implies that the road is raised along this section. The road then runs south along the eastern edge of the high school and joins Fairways Avenue; and
- The **No-Go alternative** entails no change to the status quo, i.e. the bypass will not be constructed and traffic will continue to use existing roads. Traffic volumes are expected to increase over time irrespective of whether the Hermanus CBD Bypass is built or not. In line with trends already observed, it is also expected that increasing congestion in the CBD will cause more motorists to use the Mountain Drive – Jose Burman Drive – Fairways Avenue route as a *de facto* bypass.

8 STAKEHOLDER ENGAGEMENT

Stakeholder engagement is a key component of the S&EIR process and is being undertaken in accordance with the requirements of the EIA Regulations, 2010. Stakeholder comments were received during *four* formal comment periods to date:

1. After initial notification and release of the BID;
2. On the Scoping Report;
3. On the Final Scoping Report (FSR); *and*
4. *On the EIA Report.*

Some 294 comments were received on the FSR. Some 235 stakeholders endorsed the comment submitted by the Hermanus Botanical Society (opposing [aspects of] the proposal). Of these, some 60 stakeholders also endorsed the comment submitted by the Hermanus Ratepayers Association and some 60 stakeholders endorsed the comment submitted by Whale Coast Conservation (WCC).

Comments on the EIA Report were received from 201 stakeholders. The main issues raised by stakeholders on the EIA Report largely mirror those previously raised on the Scoping Report. The large majority of comments submitted is critical of the bypass.

Key issues raised by stakeholders *on the EIA Report* are listed in Box 1. Comments *on the EIA Report* are responded to in Appendix 5 of the *Final* EIA Report.

The key stakeholder engagement activities during the Impact Assessment Phase are summarised in Table 4.

Table 4: Stakeholder Engagement during the Impact Assessment Phase

Activity	Date
Release EIA Report to registered stakeholders for comment	26 May 2017
Public comment period	29 May 2017 – 3 July 2017
Focus Group Meetings	To be confirmed
<i>Collate comments and compile Final EIA Report</i>	<i>August 2017 – October 2017</i>
<i>Release Final EIA Report to registered stakeholders for comment</i>	<i>17 November 2017</i>
<i>Public comment period on Final EIA Report</i>	<i>18 November 2017 – 11 December 2017</i>
Collate comments and submit Final EIA Report to DEA&DP	<i>December 2017 or January 2018</i>

Box 1: Key stakeholder comments and concerns

Key comments and concerns raised by stakeholders on the EIA Report predominantly relate to:

- *The **need** for the Hermanus CBD Bypass is **not understood or supported**, as traffic is satisfactory during most of the year;*
- *Traffic on the Hermanus CBD Bypass will increase **noise and air pollution** and affect adjacent residential areas, schools, churches and the sense of place in the area and the FNR;*
- *The northern alignment will force the closure of the **Hermanus Country Market**, which is a regional attraction and provides income to a large number of people;*
- *The Hermanus CBD Bypass will require clearing of important fynbos areas and affect portions of the **FNR**, thereby reducing the proclaimed nature reserve;*
- *The Hermanus CBD Bypass will affect the sensitive **wetland** adjacent to the Hermanus Golf Course;*
- *The bypass will reroute traffic from the **CBD** and lead to a decline in retail activity in the CBD, exacerbated by the development of a new regional mall;*
- *The bypass is too **expensive**, and funds should be used for other national, provincial or municipal project;*
- *There are certain omissions in / concerns with regards to aspects of the **specialist studies** compiled for the EIA; and*
- *Some stakeholders express **support** for the bypass.*

9 ASSESSMENT OF POTENTIAL IMPACTS

Specialist studies were undertaken to investigate key potential direct, indirect and cumulative impacts:

- Air Quality Impact Assessment;
- Noise Impact Assessment (additional input on mitigation was provided by FMAC);
- Freshwater / Wetland Impact Assessment;
- Terrestrial Ecology Impact Assessment;
- Socio-economic Impact Assessment;
- Visual Impact Assessment; and
- Heritage Impact Assessment.

For all potentially significant impacts, the significance of the anticipated impact was rated without and with recommended mitigation measures. These impacts are presented in Table 4.

The significance of potential impacts of the proposed Project was determined in order to assist decision-makers. **Relevant observations with regard to the overall impact ratings**, assuming mitigation measures are effectively implemented, are:

- The predicted *air quality* impacts, mainly associated with the emissions of vehicles on the bypass road, are rated as *low*. The No-Go alternative is also expected to have a *very low* impact as traffic is expected to grow on the existing road network without the bypass.
- The predicted *noise* impacts are rated as *medium* and represent one of the more significant project impacts. The main difference between the northern and southern alternatives is the noise impact at adjacent schools, as noise levels would increase at the Bosko and Private Schools (currently located in comparatively quiet environments) and decrease at the Hermanus High School for the northern alternative, and vice versa for the southern alternative. Mitigation is considered feasible and must be investigated in more detail during detailed design;
- The predicted *freshwater* impacts, specifically the loss of 0.3 ha in the southern portion of the Hermanus Golf Course wetland, are rated as *low to very low*¹. Aligning the bypass to reduce its footprint in the wetland, coupled with the fact that the bypass affects the southern-most (downstream) partly transformed portion of the wetland which reduces the overall impact. The development of golf lodges on this portion of land has reportedly been approved, in which case the No-Go alternative may have a *similar* impact on the wetland, based on the wetland boundaries mapped for the Hermanus CBD Bypass EIA process.
- The predicted *botanical* impacts associated with the bypass, notably the loss of up to 3.7 ha of vegetation located on a portion of the southern boundary of the FNR, and fragmentation of small degraded portions of

terrestrial habitat, are rated as *low to very low*². Habitat fragmentation is *insignificant* for the southern alternative. Aligning the bypass to reduce its footprint in intact vegetation and the size of remnants, coupled with the fact that vegetation in some of the affected area is degraded from previous activities, reduces the overall impact. The functioning of the FNR is not jeopardised.

- The predicted impacts on *fauna* are generally rated as *low* due to the barrier function of the road to faunal migration. However, the bypass is located alongside existing roads / developments and does not fragment new habitats, reducing the overall impact.
- The predicted *socio-economic impacts* are rated as *medium* (relating to nuisance of residents and users of the area), *low* (for expropriation, access to the FNR and reduction in property values along the bypass). The predicted *socio-economic benefits* are rated as *low* (reduction in travel time and increase in CBD visitors) and *very low* (increase in visitors to Hermanus and improvement in road safety). The No-Go alternative is expected to have a *low* (negative) impact on property values and the number of CBD visitors and a *medium* (negative) impact on travel times.
- The predicted *heritage* impact is rated as *very low*.
- The predicted *visual* impacts are rated as *low* for the northern alternative and *high* for the southern alternative, owing to the visibility of the raised road between the high school and sports complex.
- The barrier effect of the southern alternative is not specifically assessed as an impact, as the High School does not currently use the facilities at the Sports Complex; this is expected to change in future when the Sport Complex is intended to become an asset utilised by schools in the area.

Table 5 below summarises the impacts assessed in the EIA, including:

- Their significance before and following the implementation of essential mitigation measures; and
- The key mitigation measures on which the significance rating is based (where applicable).

Impact Significance Ratings Legend:

Rating	+ve	-ve
Insignificant	I	I
Very Low	VL	VL
Low	L	L
Medium	M	M
High	H	H
Very High	VH	VH

¹ The EAP adjusted some freshwater impact ratings as laid out in the EIAR

² The EAP adjusted some botanical impact ratings as laid out in the EIAR

Table 5: Summary of Impacts

Impact	Significance rating		Key mitigation/optimisation measures (repeated measures are only included at the first mention)
	Without	With	
CONSTRUCTION PHASE IMPACTS			
Reduced air quality during construction	VL	VL	<ul style="list-style-type: none">Implement good housekeeping and dust suppression practices.
Nuisance to surrounding receptors caused by noise during construction	L	VL	<ul style="list-style-type: none">Implement good housekeeping and noise suppression practices.Implement a grievance mechanism and respond to any complaints about noise.
Loss or disturbance of freshwater habitat and ecol. structure	Project and No-Go ³ M	L	<ul style="list-style-type: none">Realign the eastern section of the bypass to minimise loss and fragmentation of wetland.Where appropriate and applicable, design the road with a permeable pioneer layer that allows lateral water movement and with drainage structures large enough to support the base flow and surface runoff.Where appropriate and applicable, maintain faunal migratory connectivity.Limit the footprint area of the construction activity to what is absolutely essential.Appoint an ECO to inspect freshwater features in close proximity to construction activities.Remove any alien and weed species in areas disturbed as a result of construction activities.Rehabilitate freshwater areas disturbed as a result of road construction.
Changes to ecological and socio-cultural service provision	Project and No-Go L	VL	
Loss or alteration of hydrological connectivity	Project and No-Go M	VL	
Loss of terrestrial habitat	M	L	
Fragmentation of terrestrial habitat	Northern alt. M Southern alt. L	L I	<ul style="list-style-type: none">Realign bypass sections as per above.
Loss of Red List plant species or endemics	L	VL	<ul style="list-style-type: none">Realign bypass sections as per above.Implement detailed search and rescue prior to construction, during the spring season, and collect key species for growing in a nursey and reintroduction to the area / use during rehabilitation.
Loss of fauna	L	VL	<ul style="list-style-type: none">Design fauna-friendly road edge structures (no steep or vertical structures or holes).
Reduction in property sizes due to expropriation	L	L	<ul style="list-style-type: none">Keep the width of the road reserve to a safe minimum.During detailed design, attempt to align the road so as to minimise expropriation.Inform affected landowners about final expropriation areas as early as possible.Compensate affected landowners for expropriated land and impacted structures.Provide compensation as early as possible.
Altered sense of place and visual intrusion from construction activities	L	VL	<ul style="list-style-type: none">Limit vegetation clearance and the footprint of construction activities to the essential.Screen the construction camp / yard with materials that blend into the surrounding area.Implement good housekeeping practices.Rehabilitate disturbed areas incrementally and as soon as possible.
Loss or disturbance of archaeological resources	L	VL	<ul style="list-style-type: none">Report any finds such as human bone or shell middens (unusually dense patches of marine shell) to Heritage Western Cape.
OPERATIONS PHASE IMPACTS			
Reduced air quality along the bypass route	Both alternatives L No-Go alternative VL	L VL	<ul style="list-style-type: none">None.
Increased noise during operations	M	M	<ul style="list-style-type: none">None.
Loss or disturbance of freshwater habitat and ecol. structure	Project and No-Go L	VL	<ul style="list-style-type: none">Limit mowing in the road reserve.Avoid disturbance of freshwater features within the road reserve during maintenance activities as far as possible.
Changes to ecological and socio-cultural service provision	Project and No-Go L	VL	<ul style="list-style-type: none">Keep culverts free from blockages.
Loss or alteration of hydrological connectivity	Project and No-Go L	I	
Increase in nuisance to residents / users	M	M	<ul style="list-style-type: none">None.

³ Note for all freshwater impacts: The significance ratings for the No-Go alternative are based on the assumption that the proposed golf lodges have a similar impact on the erf / wetland as the Hermanus CBD bypass. The post-mitigation rating does not necessarily apply to the No-Go alternative as mitigation measures cannot be stipulated for the No-Go alternative through this process.

Impact	Significance rating		Key mitigation/optimisation measures (repeated measures are only included at the first mention)
	Without	With	
of adjacent areas			
Reduction in access to the FNR	M	L	<ul style="list-style-type: none"> Retain access to formal walking paths on the road boundary.
Reduction in livelihoods from the Hermanus Market	Northern alt. H	I	<ul style="list-style-type: none"> Encourage market organiser and municipality to secure a suitable alternative site for the Hermanus Country Market.
Reduction in property values	Project and No-Go L	L	<ul style="list-style-type: none"> None.
Reduction in travel time and congestion	Both alternatives L	L	<ul style="list-style-type: none"> None.
	No-Go alternative M	M	
Change in visitor numbers to the Hermanus CBD	Both alternatives L	L	<ul style="list-style-type: none"> None.
	No-Go alternative L	L	
Change in tourism to Hermanus	VL	VL	<ul style="list-style-type: none"> None.
Improvement in road safety	VL	VL	<ul style="list-style-type: none"> None.
Altered sense of place and visual intrusion from the proposed road infrastructure during operation	Northern alt. M	L	<ul style="list-style-type: none"> Slope the road towards the mountain, where possible, to reduce visibility of the road. Use a combination of low stone walls, natural planting and vegetated berms to screen the road and associated infrastructure. Avoid grassed areas and uninterrupted horizontal lines. Appoint a landscape architect to assist in the road design. Where possible, situate utilities underground to minimize visual clutter.
	Southern alt. H	H	
Altered sense of place from increased traffic	M	M	<ul style="list-style-type: none"> None.
Altered sense of place and visual quality from light pollution at night	M	L	<ul style="list-style-type: none"> Reduce the height of lighting masts to a workable minimum. Direct lighting inwards and downwards to avoid light spillage and trespass. External lights should be fitted with reflectors ("full cut-off" luminaires) to direct illumination downward and inward to the specific illuminated areas.
Alteration of the cultural landscape	L	L	<ul style="list-style-type: none"> Maintain, as far as possible, a vegetated road edge and use natural stone for culverts and boundary walls. Avoid encroaching on the eastern base of Hoy's Koppie.

The northern and southern alternatives both have clear **advantages and disadvantages**.

The main advantage of the *northern alternative* is that it avoids the visual impact and physical barrier effect of an elevated roadway between the Hermanus High School and the Sports Complex and retains the connectivity between these two facilities. It also results in a possible decrease in noise level at Hermanus High School – at the cost of elevating noise levels at the currently relatively isolated Bosko School to noise levels similar to those currently experienced at the High School. Another disadvantage of the northern alternative is that it requires expropriation of land at Hermanus Private School and identification of a new site for the market; the latter can be effectively mitigated if a new location is provided. This alternative will result in somewhat greater travel time savings.

Conversely, the main advantage of the *southern alternative* is that it has a smaller footprint within the FNR (which reduces biophysical impacts relative to the northern alternative); however, due to the degraded status of the vegetation and relatively small additional footprint (1.3 ha), this aspect is not considered critical to

the selection of a preferred alternative. The main disadvantage of the southern alternative is the high visual impact and loss of urban connectivity at the elevated road.

On social grounds, there is therefore a **preference for the northern alternative** (see Table 6).

WCDTPW, with the support of the Overstrand Municipality, also prefers the northern alternative as:

- The southern alignment will make it near impossible to achieve the Municipality's goal of effectively integrating the Hermanus High School and sports complex, cause separation in the urban fabric in this precinct and a high visual impact;
- The southern route will result in poorly integrated traffic flow in the Jose Burman Drive area and the potential loss of parking at the school and sports complex; and
- Additional noise impact on the large Hermanus High School, with some 900 learners, should be avoided.

Table 6: Comparison of alternatives

Impact category	Northern	Southern
Air Quality	-	-
Noise	-	-
Freshwater ecology		Marginally pref.
Terrestrial ecology		Marginally pref.
SE: exprop. & FNR access		Marginally pref.
SE: reduced travel time	Marginally pref.	
Visual	Preferred	
Heritage	-	-
Barrier effect	Preferred	

The **No-Go alternative** also has expected negative impacts in terms of air quality, noise, property values, travel time and revitalisation of the CBD (and associated attraction of visitors) due to expected natural traffic growth on Mountain Drive as a *de facto* bypass. Wetland impacts are possibly equal or higher for the No-Go alternative if proposed Golf Lodges are developed on Erf 10558.

In terms of **need and desirability**:

- The proposed Hermanus CBD Bypass adds to previous impacts relating to loss of natural habitat and wetland area. However, as the bypass runs along an existing urban edge with few other planned developments, no significant direct cumulative impacts were identified. The project complies with and responds directly to a considerable number of social and economic principles and policies laid out in the planning framework by facilitating a more efficient transport network and enabling the further development and transformation of the Hermanus CBD, in line with the CBD Regeneration Framework and Overstrand IDF. The project is explicitly mentioned in a number of policy documents.
- The project does not fully comply with ecological planning objectives and policies contained in policy documents, as it infringes on a ~1 – 2 km section of the southern boundary of the western portion of the FNR. Impacts are minimised through alignment of the bypass in degraded vegetation and along / on existing roads; nevertheless, the project will result in a loss of some 2.5 – 3.8 ha (0.14 – 0.22%) of the FNR.
- Social, economic and ecological factors are considered and assessed during the EIA process, to ensure that the development is sustainable. Mitigation measures are recommended in the EIA Report to prevent, minimise (and optimise) impacts and to secure stakeholders' environmental rights. An EMPr has been drafted and will be implemented to ensure that potential environmental pollution and degradation can be minimised, if not prevented.
- The Project will generate impacts, both negative and positive and these should be considered in evaluating the desirability of the Project. The impact assessment demonstrates that most impacts can be managed,

though noise may present a challenge to residents adjacent to the (eastern section of) the bypass. (However, residents along existing roads will be affected by elevated noise levels if the bypass is not constructed.)

DEA&DP has also noted in a comment on the EIA Report that the proposed routing of the Hermanus CBD Bypass through a portion of the Hermanus Golf Course wetland is in conflict with an environmental authorisation issued by DEA&DP for the golf course, and principles of sustainable development.

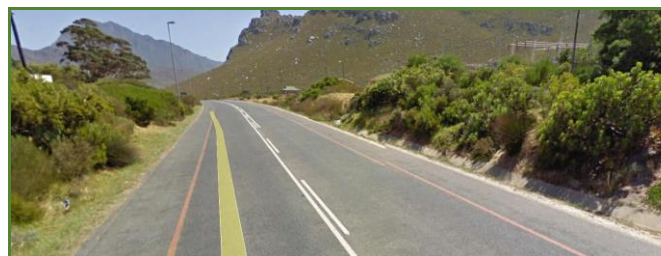


Figure 9: Road layouts generally comparable to the proposed Hermanus CBD bypass

10 CONCLUSIONS AND WAY FORWARD

This EIA Report has identified and assessed the potential biophysical and socio-economic impacts associated with the proposed Hermanus CBD Bypass project in the Western Cape. SRK believes that sufficient information is available for DEA&DP to take a decision regarding authorisation of the development.

The Hermanus CBD Bypass will result in unavoidable adverse environmental impacts. Biophysical impacts are of relatively limited extent, given the limited footprint of the project that largely follows the alignment of existing roads and the less sensitive nature of much of the affected natural habitat. The most significant adverse impacts are associated with anticipated noise increases along the bypass route as well as the visual impact of the southern

alignment along Jose Burman Drive. None of the adverse impacts of the northern alternative are considered unacceptably significant, and it is expected that all can be managed to tolerable levels through the effective implementation of the recommended mitigation measures and possible implementation of additional noise mitigation measures that could be considered in response to any valid complaints, and which were not included in the post-mitigation rating. The visual impact of the southern alternative cannot be effectively and practically mitigated, and thus remains high. The project is expected to benefit the local and regional economy by facilitating traffic to and (re)development of the Hermanus CBD.

Working on the assumption that the WCDTPW is committed to designing, constructing and maintaining the bypass to high standards, achieved through implementation of recommended mitigation measures, SRK believes and the EIA Report demonstrates that the adverse impacts can be reduced to generally acceptable levels for the northern alternative, though it is acknowledged that the impacts on individual residents and owners adjacent to the bypass will be (perceived to be) higher.

The fundamental decision is whether to allow the development, which is supported by the WCDTPW and the Overstrand Municipality, brings some economic benefits and is consistent with many (though not all) development policies for the area, but which may have limited biophysical and socio-economic impacts (as does the No-Go alternative) and has met with considerable stakeholder opposition.

SRK is of the opinion that on purely 'environmental' grounds (i.e. the project's potential socio-economic and biophysical implications) the northern alternative as it is currently articulated could be approved, provided the essential mitigation measures are implemented and the proponent engages with affected parties during detailed design to agree plans to relocate the Hermanus Country Market, retain connectivity in the schools and sports complex precinct and agree precise methods to mitigate noise. WCDTPW seeks authorisation of the northern alternative to avoid the barrier effect of the bypass if it is located between the Hermanus High School and Sports Complex.

The WCDTPW has carefully considered a biodiversity offset and advised that it considers itself not authorised to implement an offset due to stipulations in the Public Finance Management Act 1 of 1999. The following points are also relevant in the consideration of whether offsets are applicable for this project:

- WCDTPW has attempted to avoid and minimise impacts on terrestrial and wetland resources by amending alignments in the FNR and wetland on Erf 10558;

- Residual impacts on terrestrial vegetation and the FNR are assessed to be of low to very low significance;
- The project is a public-sector infrastructure project; and
- The Overstrand Local Municipality is in the process of incorporating additional areas into the FNR.

The Overstrand Municipality has advised that it is not aware of any land in the surrounding area that could be integrated into the FNR as part of an offset, and prefers rehabilitation of other ecosystems in the area in lieu.

HOW YOU CAN YOU PARTICIPATE IN THE EIA PROCESS

The Final EIA Report is now available for public comment prior to submission of the report to DEA&DP, and SRK invites stakeholders to review changes to the report.

Stakeholders' comments on the Final EIA Report will be submitted to DEA&DP with the final report (and all other comments already received). Once a decision is taken by DEA&DP, it will be communicated to all registered IAPs.

REVIEW THE REPORT

Copies of the complete report are available for public review at the following:

- Hermanus Library;
- Mount Pleasant Library;
- SRK's Cape Town office; and
- SRK's website: www.srk.co.za – click on the 'Library' and 'Public Documents' links.

SEND WRITTEN COMMENTS

or requests for (new) registrations to:

Jessica du Toit at SRK Consulting

Email: jedutoit@srk.co.za

Tel: + 27 21 659 3060, Fax: +27 21 685 7105

Postnet Suite #206, Private Bag X18,
Rondebosch, 7701, South Africa

For comments to be included in the submission to DEA&DP, they must reach the above contact person **no later than 11 December 2017**.

