

**AGENDA of the
Portfolio Committee : Infrastructure and Planning
22 March 2017
(Also the agenda for the Mayoral Committee Meeting : 29 March 2017)**

4.

ERF 280, 10 JIMMY SMITH STREET, SANDBAAI, OVERSTRAND MUNICIPAL AREA : PROPOSED CONSENT USE AND DEPARTURE : MESSRS HIGHWAVE CONSULTANTS (PTY) LTD ON BEHALF OF JA SWANEPOEL

280 HSB (3075)

H Olivier

(028) 313 8900

Hermanus Administration

30 December 2016

1. Executive Summary

An application has been received on 6 October 2015 from Messrs Highwave Consultants (Pty) Ltd on behalf of the property owner, JA Swanepoel, on Erf 280, Sandbaai for a consent use in order to erect a 15m high camouflaged transmission tower on the property concerned.

Application is also made for a departure to relax the 8,5m height restriction to 15m to accommodate the transmission tower.

A Locality Plan of the property concerned is attached as Annexure A. The proposed Site Plan is attached as Annexure B, and the Motivation Report from the applicant in support of the proposal is attached as Annexure C.

2. Service Delivery and Budget Implementation Plan - IGNITE

Infrastructure and Planning
Town- and Spatial Planning

3. Compliance with Strategic Priority

Provision of democratic and accountable governance

4. Delegated Authority

Executive Mayor

5. Legal Requirements

- Section 2.2 of the Overstrand Zoning Scheme
- Section 15 of the Land Use Planning Ordinance, 1985 (Ordinance 15 of 1985)

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6. Background/Discussion/Motivation/Evaluation

Background

The property is situated in Jimmy Smith street, south of the Sandbaai Hall, and to the east of Sandbaai Main Road. The property is developed with commercial and retail concerns.

The applicant proposes to erect a 15m high transmission tower camouflaged as a tree. There will also be an area of 10m x 8m that would be fenced off with palisade fencing, and the mast and equipment containers will be placed inside the fenced area.

The application was advertised in the local press, Government Gazette and registered notices were sent to surrounding potentially affected property owners, and three (3) letters of objection were received.

The objections can be summarized as follows:

1. Visual Impact

- The tower will be double the allowable height restriction, which is not acceptable.
- Previous application to relax the height restriction on Erf 283 was not allowed due to objections received.

2. Health Concerns

- There are children and old people in the immediate area, and in terms of information on the internet radio waves have a negative impact on people's health.
- No information is provided regarding the long term impact on health.
- How will it be monitored that the signal will be limited 800mHz and how trust worthy are these people.

3. Property Devaluation

- The tower will create a visual eyesore in this residential area and this will lead to a drop in property values.

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4. Support from Community

- Only four (4) to five (5) surrounding neighbours were informed about the application.
- Why was the proposal not shown to the Sandbaai Community Forum or discussed with the community.

The objections are attached as Annexure D.

The applicant's response to the objections can be summarized as follows:

1. Visual Impact

The original application would have been for a 25m high tower, but due to the possible visual impact, it was lowered to 15m.

Application was made to relax the height restriction, but the tower will be placed as such to reduce visual impact.

In the Visual Impact Assessment (VIA) it is indicated that a 15m slim line monopole design would have the least impact, and could be considered by the Municipality.

2. Health Concerns

There is no evidence that telecommunication base stations affect health, and this viewpoint is supported by the South African Department of Health.

The exposure level of cellular operator antennae is 1/1000th of the exposure levels as prescribed by the International Commission on Non-Ionizing Radiation Protection (ICNIRP).

Environmental Management Framework (EMF) levels are monitored by operators themselves, Independent Communications Authority of South Africa (ICASA) in collaboration with the South African Department of Health, ICNIRP and World Health Organization (WHO).

3. Property Devaluation

There is no proof proximity to base stations impact on property values, and there is infrastructure in affluent neighbourhoods where no clear drop in property values has been identified.

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Good internet services in areas have actually lead to increases in property values.

4. Support from Surrounding Community

An increase in infrastructure is required to cater for new technology and provide optimal coverage, coming at a very high financial cost, and will ultimately benefit the community and economy.

Existing telecommunication infrastructure in this area is serving over 2 000 businesses, institutions and residential erven, showing why this additional infrastructure is required to alleviate congestion.

The applicant's response on the objections is attached as Annexure E.

Town Planner's response on the objections and applicant's response thereon:

1. Visual Impact

The comments of the objections and applicant are noted.

The application on Erf 283, Sandbaai was to construct a 3rd storey on a building, which was of a much bigger magnitude than a transmission tower. It is therefore not reasonable to compare the two applications.

A VIA was prepared by the applicant, and the findings in the VIA and comments of the Building Control Department, Environmental Services and Local Heritage will also be considered to evaluate the visual impact of the application.

2. Health concerns

In most applications for transmission towers the public raise health concerns. At this stage there is no real proof to such effect, as was also clearly addressed in the comments by the applicant on the objections.

3. Property devaluation

The concern regarding property devaluation is mostly raised from the perceived health impact and visual impact of the transmission tower. This is however speculative and difficult to proof.

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4. Support from surrounding community

A public participation process was followed in terms of the legislative requirements. The application was advertised in the local press and government Gazette, and notices were also sent to thirty nine (39) surrounding property owners and the Sandbaai Ratepayers Association.

It is to be noted that objections were also received from the Sandbaai Ward Committee via the circulation process. This was not submitted as a formal objection in terms of the legislative requirements, but will be considered as comments.

Most of the concerns are directed as the visual impact and impact on scenic views, health concerns and impact on the residential area. These points are the same as the other objections received. The additional point that such mast should be located more along the mountain is duly noted.

The Ward Committee's comments as submitted by the Senior Manager : Hermanus Administration is attached as Annexure F.

Location and Accessibility

Erf 280 is situated in Jimmy Smith Street, almost in the centre of Sandbaai. Access can be obtained from the R43 District Road via Sandbaai Main Road into Jimmy Smith Street and the site.

The type of activity however does not generate traffic volumes and should have no traffic impact.

Existing Planning in the area

Erf 280 is situated on the eastern edge of a small commercial node. It is bordered by residential erven to its east and south, business zoned erven to its west and community zoned erven including sport facilities, community halls, etc. to its north.

Existing development on site

The site is developed with commercial buildings on the western portion of the site. The eastern portion of the site next to a residential erf is vacant at this stage. The proposal is to construct a 15m high transmission tower on the north eastern portion of Erf 280, next to the existing commercial building and Jimmy Smith Street.

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Character of the area

Erf 280 is situated in one of the four (4) small commercial nodes situated around the centralized area utilized for community purposes (sport, community hall, church, etc.) and an old age home. The business nodes serve the surrounding community of Sandbaai with shops, offices and also some higher density residential development.

Erf 280 is situated on the eastern edge of the node in Jimmy Smith Street. As previously indicated, it is bordered by residential erven to its south and east, business sites to its west and community zoned erven to its north.

Most of the concerns have been direct at the visual impact and possible scenic impact the tower will have.

It is also the objectors' opinions that the visual impact with health concerns could have a negative impact on property values on the residential area.

As previously indicated, the health impact of transmission towers have been debated in various platforms. The fact is that the Department of Health is in support of the erection of such towers and therefore health concerns are not considered valid objections.

The concern with regard with to the visual impact of a 15m high transmission tower in an area where only double and single buildings are allowed is a valid concern.

It is a fact that due to the increase in use of the internet and cellphones more infrastructure is required. It is however required that the placement of these towers should not create major visual impact within such areas.

In considering the visual impact of the proposed transmission tower, the Municipal Environmental Department required that a VIA must be prepared.

The findings of the VIA are that a three-type mast should not be supported, but rather a monopole flagpole type mast with clustered antenna on top. The impact of such structure is rated as low negative significance. The impact on scenic value from surrounding roads was also considered. It was found that the sites to position a fair way from scenic routes.

Considering the above and the proposed mitigating measures proposed by the VIA, the visual impact would be of a low negative impact.

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The application is then also supported by the Municipal Environmental Department, the Local Heritage Committee and the Building Control Department, who also consider aesthetical impact of structures/buildings.

It is therefore the opinion that considering the fact that this area already has a mixed use character the construction of a transmission tower is not out of line with the character of this area, and with the recommended mitigation measures a mono-pole transmission tower would have a low impact on the character of the surrounding area.

Property rights of surrounding property owners

One (1) concern was that a transmission tower on Erf 280 could impact on property values.

It is to be noted that owners of surrounding residential erven are aware of the fact that they bought properties next to or close to business sites, and activities on such sites could impact on them. The only valid concern is the visual impact, and it is clear that a specialist with regard to visual impact consider the impact to be low negative impact. The concerns with regard to property values are therefore speculative.

It is the opinion that this application will not negatively affect property rights of surrounding property owners.

Discussion/Evaluation

The application can only be considered in terms of the criteria to determine desirability in terms of Section 36 of the Land Use Planning Ordinance 1985, (Ordinance 15 of 1985).

The matters of health concerns and the public participation process has already been dealt with and not be addressed further in this Evaluation.

Conclusion

Three (3) letters of objection were received. The objections were sufficiency addressed by the applicant.

The Sandbaai Ward Committee does not support the application.

All municipal departments support the application.

The location of the site and the scale of the application are such that it would not negatively affect scenic routes as identified in the Overstrand Municipality Spatial Development Framework, 2006.

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The application for consent use to construct a mono-pole transmission tower and infrastructure and also a departure to allow the relaxation of the 8,5m height restriction to 15m to accommodate the transmission tower, is supported.

7. Financial Implications

None

8. Staff Implications

None

9. Comments from other Departments, Divisions and Administrations

Engineering Services Department

See Annexure H.

Fire Department

No objection provided that the structure is in compliance with National Fire Protection Regulations SANS 10400 T : 2011.

Manager: Building Department

Supported to comply with SANS 10400.

Local Heritage

Supported.

Environmental Department

The proposal in the VIA that a flagpole type mast be erected, is supported.

District Health

See Annexure G.

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10. Annexures

- Annexure A: Locality Plan
- Annexure B: Proposed Site Development Plan
- Annexure C: Motivation Report
- Annexure D: Objections received
- Annexure E: Applicant's response to objections including VIA
- Annexure F: Ward Committee comments via Area Manager
- Annexure G: Comments : District Health
- Annexure H: Services Report

RECOMMENDATION:

1. that, in terms of Section 2.2 of the Section 9 Zoning Scheme Regulations of the Land Use Planning Ordinance, 1985 (Ordinance 15 of 1985), the application for a consent use on Erf 280, Sandbaai to erect a transmission tower on the property, **be approved**;
2. that, in terms of Section 15 of the Land Use Planning Ordinance, 1985 (Ordinance 15 of 1985), the application for a departure on Erf 280, Sandbaai to relax the 8,5m height restriction to 15m to accommodate a transmission tower, **be approved**;
3. that the approvals in Points 1. and 2. be subject to the following conditions:
 - (a) that a mono-pole flagpole-type transmission tower be constructed in line with the mitigating measures in the Visual Impact Assessment dated 23 June 2016 prepared by Enviroworks Environmental Consulting, and that the Environmental Management Program in the assessment be complied with;
 - (b) that the placement of the transmission tower and infrastructure be in line with Site Development Plan 1928-0-004 submitted with the application;
 - (c) that commercial rates and service tariffs, as determined by the annual budget, be made applicable, which tariffs are automatically adjusted in terms of the annual budget;
 - (d) that Council reserves the right to rescind this approval without payment of compensation should any justified objection be received to the manner in which the transmission tower is operated or should the operation be found to be detrimental to the peacefulness and amenity of the surrounding area;
 - (e) that this approval does not absolve the owner/applicant from compliance with any other relevant legislation;

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- (f) that building plans should be submitted to the Building Control Department for approval;
 - (g) that all the conditions in the Services Report (attached as Annexure H), be complied with; and
 - (h) that all the conditions of the Fire Department and District Health be complied with at building plan approval phase and the operational phase.
4. that the applicant be notified of his/her right of appeal in terms of Section 62 of the Local Government : Municipal Systems Act No 32 of 2000 with regard to the above conditions of approval.

RESPONSIBLE OFFICIAL :	H OLIVIER
TARGET DATE FOR IMPLEMENTATION :	12 APRIL 2017
TARGET DATE TO INFORM APPLICANT :	12 APRIL 2017
TARGET DATE TO INFORM OBJECTORS :	12 APRIL 2017

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ERF 280, 10 JIMMY SMITH STREET, SANDBAAI, OVERSTRAND MUNICIPAL
AREA : PROPOSED CONSENT USE AND DEPARTURE : MESSRS HIGHWAVE
CONSULTANTS (PTY) LTD ON BEHALF OF JA SWANEPOEL**

280 HSB (3075)

H Olivier

(028) 313 8900

Hermanus Administration

30 December 2016

**THIS MATTER SERVED BEFORE THE JOINT PORTFOLIO COMMITTEE ON
22 MARCH 2017, WHICH COMMITTEE RECOMMENDED AS FOLLOWS:**

RECOMMENDATION:

1. that the application for Consent Use **not be approved**; and
2. that a policy to guide applications for mobile phone facilities be developed for consideration by Council.

RESPONSIBLE OFFICIAL :

H OLIVIER

TARGET DATE FOR IMPLEMENTATION :

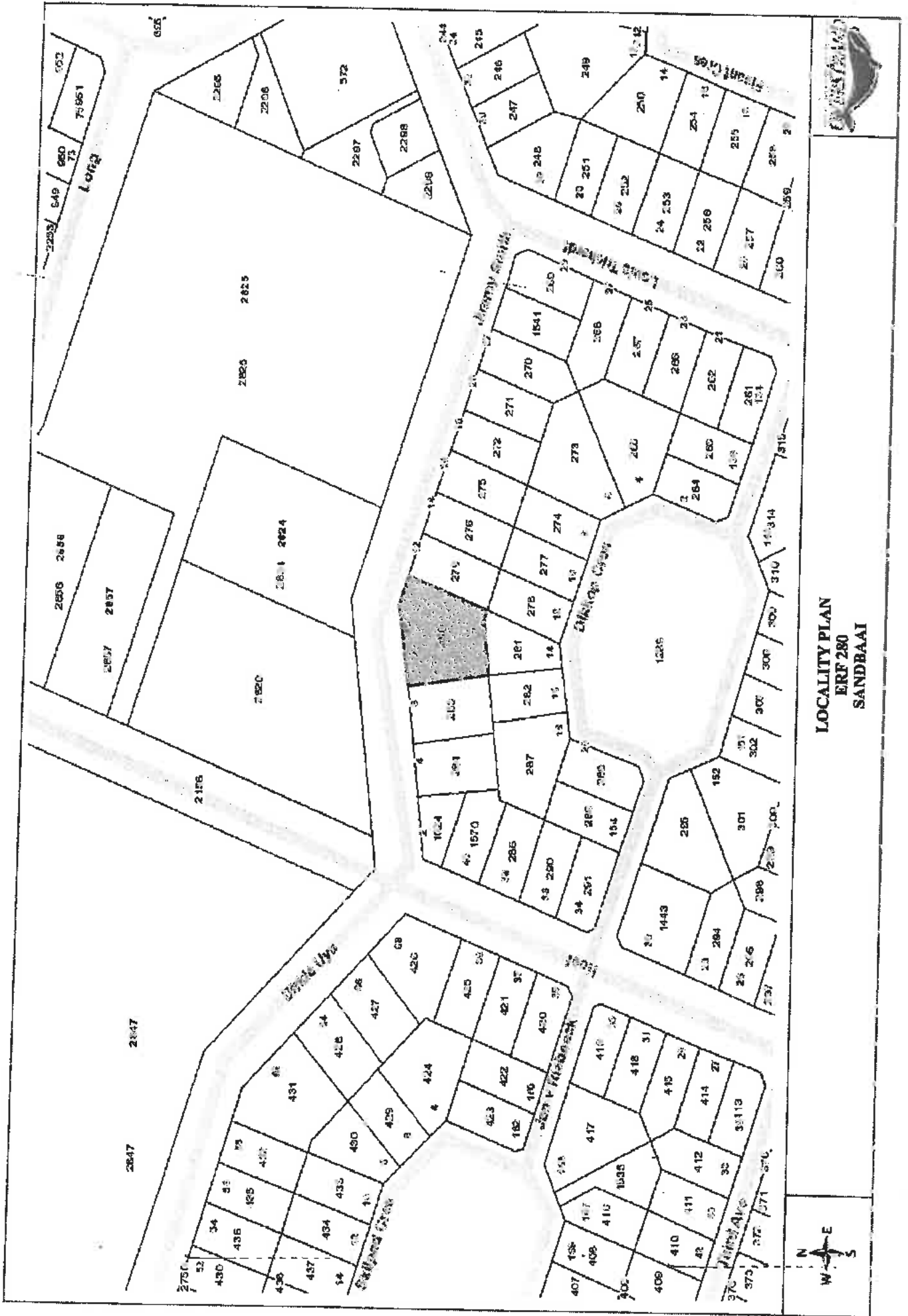
12 APRIL 2017

TARGET DATE TO INFORM APPLICANT :

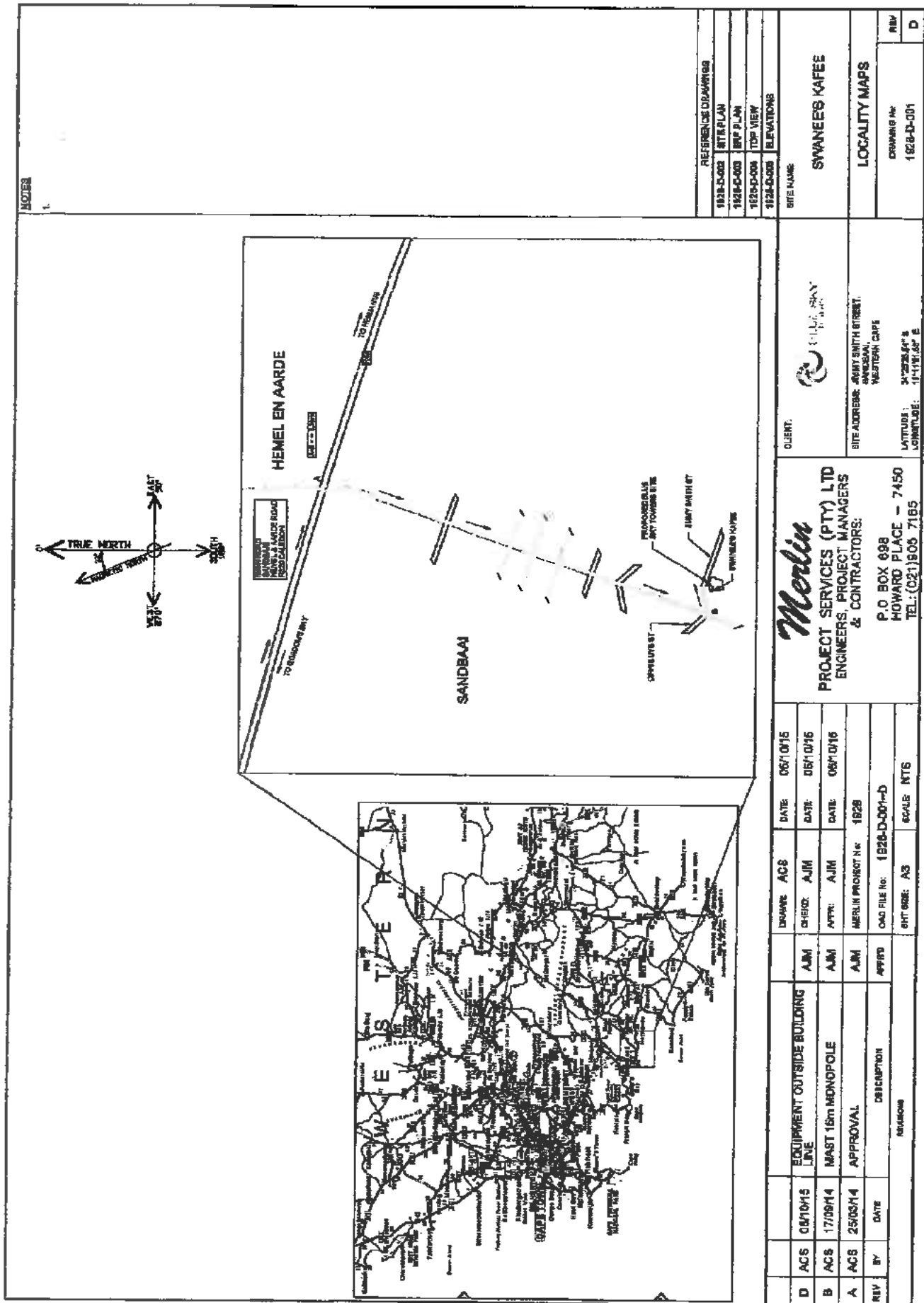
12 APRIL 2017

TARGET DATE TO INFORM OBJECTORS :

12 APRIL 2017



LOCALITY PLAN
 ERF 280
 SANDBANI



REFERENCE DRAWINGS	
1928-D-000	SITE PLAN
1928-D-000	RFI PLAN
1928-D-000	TOP VIEW
1928-D-000	ELEVATIONS
SITE NAME	
SWANEES KAFEE	
LOCALITY MAPS	
DRAWING No.	1928-D-001
REV	D

CLIENT: MERLIN PROJECTS

PROJECT SERVICES (PTY) LTD
ENGINEERS, PROJECT MANAGERS
& CONTRACTORS.

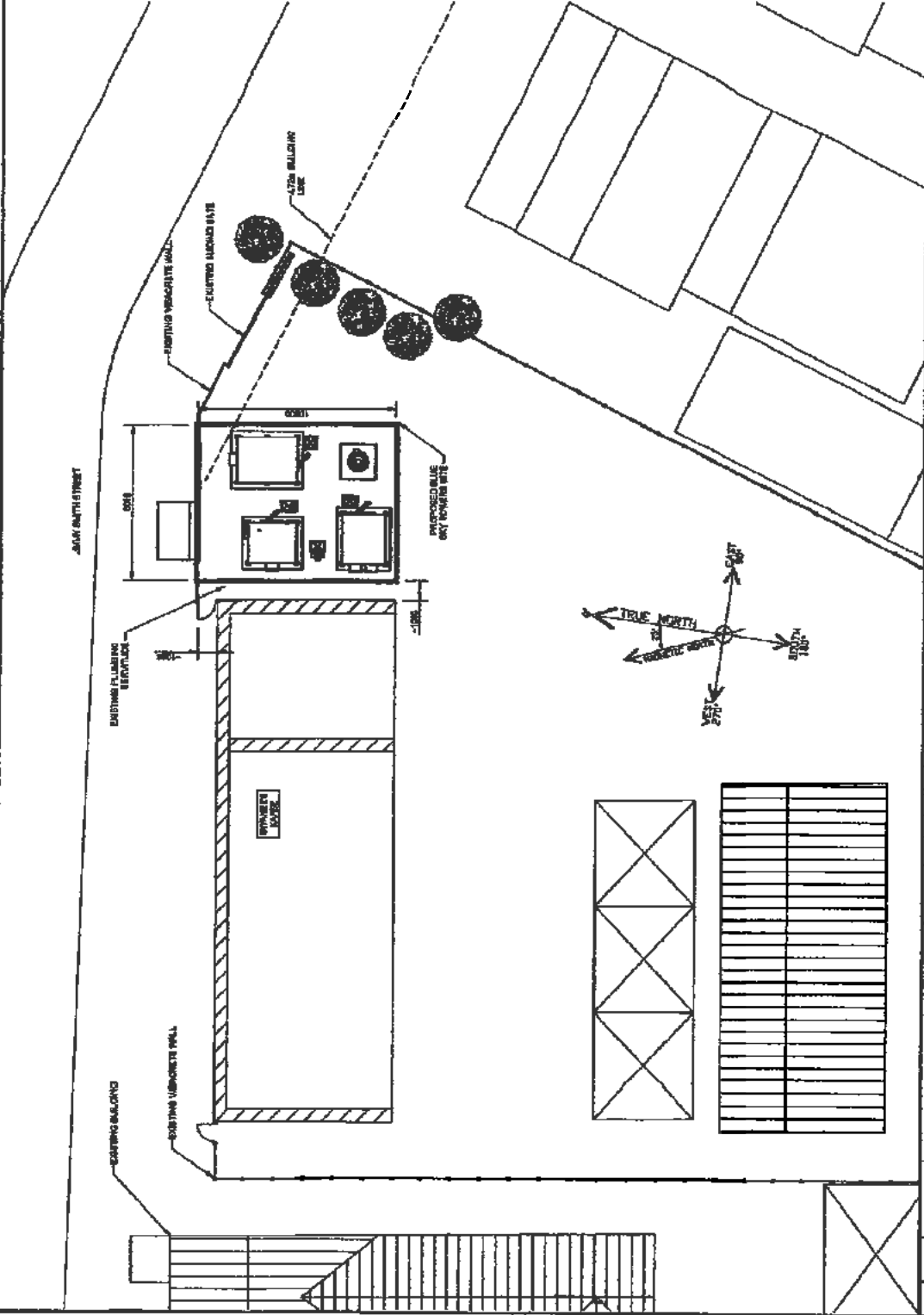
P.O BOX 688
HOWARD PLACE - 7450
TEL: (021) 905 7165

SITE ADDRESS: ARMY SMITH STREET,
SANDBAAI,
WESTERN CAPE

LATITUDE: 34°25'24.4" S
LONGITUDE: 18°11'18.6" E

DRAWN	ACS	DATE	06/10/15
CHECKED	AJM	DATE	05/10/16
APPROVED	AJM	DATE	08/10/16
MERLIN PROJECT No.	1928		
CDG FILE No.	1928-D-001-D		
SHR CODE:	AS	SCALE:	NTS
DESCRIPTION	EQUIPMENT OUTSIDE BUILDING LINE		
REVISIONS	MAST 15m MONOPOLE		
REVISIONS	APPROVAL		
REV BY	DATE	DESCRIPTION	
A	ACS	25/03/14	APPROVAL
B	ACS	17/09/14	MAST 15m MONOPOLE
D	ACS	08/10/15	EQUIPMENT OUTSIDE BUILDING LINE

NOTES:
 1. Site engineer to check on site, if a separate plan is needed for the site not approved. Site Sky Plans will be used for the existing project to this property. The final plan will then be checked for requirements to property owner.



APPROVED/REPROBATED	DATE
SPECIALTY ENGINEER SIGNATURE	
REFERENCE DRAWING NO.	
1828-D-001 LOCALITY MAPS	
1828-D-002 ERF PLAN	
1828-D-003 TOP VIEW	
1828-D-005 ELEVATIONS	
SITE NAME	SWANEE'S KAFEE
SITE PLAN	
DRAWING NO.	1828-D-002
REV	D

CLIENT: **TRUL SKY**
 SITE ADDRESS: JIMMY SMITH STREET, SANDHILL WESTERN CAPE
 LATITUDE: 34°28'26.84" S
 LONGITUDE: 18°11'51.87" E

Merlin
PROJECT SERVICES (PTY) LTD
 ENGINEERS, PROJECT MANAGERS & CONTRACTORS
 P.O. BOX 698
 HOWARD PLACE - 7450
 TEL: (021) 905 7165

REV	BY	DATE	DESCRIPTION	APPROV	CAD FILE NO.	SCALE
D	ACS	06/10/15	EQUIPMENT OUTSIDE BUILDING LINE	AMM	1828-D-002-D	1:200
B	ACS	17/08/14	MABT 15th MONPOLE	AJM		
A	ACS	25/03/14	APPROVAL	AJM		

Consent Use: Erf 280 Sandbaai

1. APPLICATION

Application is hereby made on behalf of our client Blue Sky Towers to allow the following on Remainder of Erf 280 Sandbaai:

- **Consent Use application** in terms of PN400/2013 of the Overstrand Zoning Scheme Regulations for the purpose of erecting a 15m Camouflaged Transmission Tower.

2. PROPERTY SIZE, DESCRIPTION AND OWNERSHIP

The concerned property is identified as the Remainder of Erf 280 Sandbaai with an extent of 1655 (One Thousand Six Hundred and Fifty) square meters. The property is situated in the Sandbaai sub-divisional area and forms part of the greater Overstrand municipal area. The property is located in Jimmy Smith street, Sandbaai and is currently owned by Jan Andries Swanepoel.

There are no restrictive conditions contained in title deed no. T3732/2001 prohibiting the installation of transmission tower on this property. *(Please refer to Annexure A: Title Deed)*

Below please find details pertaining to the property:

ERF NO	ERF 280 SANDBAAI	
OWNERSHIP DETAILS	JAN ANDRIES SWANEPOEL	
APPLICANT	HIGHWAVE Consultants	
TITLE DEED RESTRICTIONS	NONE	
TITLE DEED NO.	T3732/2001	
ZONING	Business 3 (Local Business)	
BUILDING LINES	COMMON	STREET
	4,72 m	4,72 m
SERVITUDES	No servitude are registered in the concerned property	

3. SURROUNDING AREA

The proposal entails the erection of a camouflaged transmission tower on Erf 280 Sandbaai. The property is currently zoned Business Zone 3 (Local Business) and is utilized for retail purposes. The surrounding land uses in the area are predominantly utilized for commercial, community and residential purposes with the site situated along a designated activity corridor. The land use bordering the property directly north is utilized for community/church purposes, whereas the land use bordering directly west is utilized for business purposes, the remaining land uses to the east and south is utilized for residential purposes.



Fig.1 – ~~Church building~~ situated north of Erf 280 Sandbaai

Sandbaai Hall

4. DEVELOPMENT PROPOSAL

a. Development

It is the intention of our client to apply for a consent use for the purpose of erecting a camouflage transmission tower. The application entails the following proposed development parameters:

- Erection of a 15 m camouflaged yellow tree mast situated in the north-eastern portion of the property.

- Installation of 9 triband antennae on the proposed 15m mast.
- Installation of 3 transmission dishes on the proposed 15m mast.
- Construction of 3 x 2.4m (L) x 3.0m (W) concrete plinths and installation of 3 x telecommunications equipment containers measuring 2.4m (L) x 3.0m (W) at ground level.
- The mast & equipment containers will be placed inside a 10m (L) x 8m (W) compound enclosed off by a 2.4m palisade fence.

The proposal will not encroach onto any building lines and all additional equipment will be painted green in order to match the proposed camouflaged tree mast.



Fig.2 – Proposed Development (Camouflaged Tree Mast)

b. Land Use

The property is currently zoned as Business 3 (Local Business) and the current land use is for commercial and retail purposes. *Business zonings are designed to promote economic development in business districts and development corridors, and include a wide range of land uses such as business, residential and community uses, although industrial development is restricted. By contrast, the mixed use zonings are suitable for completely mixed areas in terms of land use, including industrial, business and residential development.*

c. Access

Access to the proposed freestanding base station will be obtained from the entrance to the property located on the northern side of the property, situated on Jimmy Smith street, Sandbaai.

d. Security

The proposed freestanding base telecommunications station will be constructed at the Remainder of Erf 280, Sandbaai, partially surrounded by vibracrete walls. Extra security to the actual telecommunications base station will be added by a 2,4m high palisade fence. The telecommunications radio and transmission equipment will be installed inside alarm monitored containers, these containers are secure as they are locked at all times. The antennae will be located 15m above ground level and are inaccessible to the public. A mast door with a high security lock will be installed ensuring increased security to mast. Access to the equipment and antennae will be limited to registered and qualified personnel only. Health and safety legislation also require restrictive security signage (0,4 x 0,5m) to be attached to access gate, containers and mast door.

The above safety and security measures have been put in place by telecommunication operators and legal entities to prevent access to the public and greatly reduce vandalism of the equipment.

e. Electricity Requirements

Electricity supply will be obtained from the available on-site supply, technological advances have also seen current telecommunications equipment reduce their electricity usage.

f. Environmental

The National Environmental Management Act (Act 107 of 1998) regulates environmental and social sustainability. According to the National Environmental Management Act Regulations Listing Notice 3 of 2014, which came into effect on 08 December 2014, an Environmental Impact Assessment (EIA) or Record of Decision (ROD) is a ONLY an requirement for:

"The development of masts or towers of any material or type used for telecommunication broadcasting or radio transmission purposes where the mast or tower-

- a) is to be placed on a site not previously used for this purpose; and
- b) will exceed 15 metres in height

But excluding attachments to existing buildings and masts on rooftops".

Listing Notice 3 of 2014 clearly defines the requirements in the **Western Cape**:

"(f) In Western Cape:

- I. All areas outside urban areas; or
- II. Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority, or zoned for a conservation purpose, within urban areas.

As this site falls within an urban area inside the Overstrand municipality and not in an area designated for conservation use as prescribed in the Spatial Development Framework adopted by the competent authority, or zoned for conservation purposes, it does not trigger a listed activity in terms of the 2014 NEMA regulations and therefore no environmental impact assessment or ROD (Record of Decision) is required. **(Please refer to Annexure Annexure F: A Copy of the Listing Notice 3 of 2014)**

5. MOTIVATION

a. Background

Recent research conducted has indicated that there is a current lack of cellular infrastructure to provide optimal and efficient data/ voice coverage to the surrounding community situated in the Sandbaai area.

The need for optimal coverage was mainly caused by the rapid urbanization & commercial development in the surrounding area over the past few years as well as the introduction of

Consent Use: Erf 280 Sandbaai

LTE (*latest cellular technology*). In addition to the research there has been a clear increase in customer complaints in the Sandbaai area regarding poor or no voice & data coverage, especially during the holiday season.

Although not applicable in the Overstrand municipal area, in order to provide clarity and for ease of reference, below please find an extract from the Cape Town Development Management Scheme as approved by the Western Cape Government defining a Freestanding Telecommunications base station or Transmission Tower in the context of telecommunications infrastructure and the National Communications Act.

“Freestanding Base telecommunication station (FSBTS) means a freestanding support structure on land or anchored to land and used to accommodate telecommunication infrastructure for the transmitting or receiving of electronic communication signals, and may include an access road to such facility;”

“Telecommunication Infrastructure (TI) means any part of the infrastructure of a telecommunication network for radio / wireless communication [in the 0 to 300 GHz range], including voice, data and video telecommunications that is used in the transmission or reception of electromagnetic waves. This includes the following: Freestanding base telecommunication station (FBTS); Rooftop base telecommunication station (RBST); antennae; any support structure; equipment room (defined); radio equipment (irrespective of spectrum used); and optical communications equipment (laser and infra-red) provided by cellular network operators and any other telecommunication provider as well as all ancillary structures and the associated feeder cables between the communication equipment and the antennae, needed for the operation of TI.”

b. Proposed Development Parameters

The current and proposed allowable development parameters as per the OZSR are indicated in the table on the following page:

Development Parameters	Overstrand Zoning Scheme Regulations (Business 3 – Local Business)	Proposed Development on Remainder of Erf 280 Sandbaai
Floor Factor	At most 1,5	COMPLY: 0,37
Coverage (As per Title Deed)	At most 50%	COMPLY: 37%
Building Lines (As per Title Deed)	Street Building Lines: 4,72m	COMPLY: 4,72 m
Street Setback	Street Setback Line: 6,5m	COMPLY: 9,75 m
Height	<i>"means any support structure and associated infrastructure more than 3 m in height, that is used for the transmission and/or reception of electromagnetic waves; and includes telecommunication, cellular telecommunication, radio, television and satellite transmission."</i>	COMPLY: 15,0m Above N.G.L

The proposed erection of a freestanding base telecommunication station will **NOT** have an impact on building lines, parking, coverage or floor factor as described in the OZSR.

c. Physical Characteristics

RF Engineers identify sites by utilizing a specific set of engineering rules and principles, Erf 280 Sandbaai was identified as an optimal position on the following premise:

- Property offers the optimal position situated between existing and planned base stations to provide efficient data and voice coverage.
- Surrounding geographical aspects are in line with the requirements.

Consent Use: Erf 280 Sandbaai

- Minimized physical, natural and visual impact.
- Ability to reduce the number of base stations in the surrounding areas.
- Ability to provide sufficient security to the equipment.
- Capacity to share infrastructure with majority of the operators.
- Property position will address the complaints received in the area.
- Sufficient space to erect a freestanding base telecommunications station.

The possibility of installing a rooftop base telecommunication station was also investigated, but unfortunately due to the average height of buildings in the area being less than the optimal height of 25,0m (T.O.A) this option was unachievable. In order to achieve the optimal data and voice coverage objectives base stations needs to be approximately 750m-1000m apart on average, this depends on the density of the surrounding areas as well as geographical and physical features. Due to the high density in the area an additional base station is a requirement.

Below please find a list of base telecommunications stations able to accommodate 3 major operators situated in close proximity of the proposed property:

BASE STATION TYPE	ADDRESS	DISTANCE	INSUFFICIENCY OF CURRENT TOWER
25m – Lattice Mast	Hermanus Noord Sentech	2500 m	<ul style="list-style-type: none"> • Cannot provide sufficient coverage due to a lack of infrastructure. • Tower is currently overloaded and cannot provide space for additional users • Cannot provide sufficient coverage due to a lack of infrastructure. • Cannot provide sufficient coverage due to distance and density factor. •
10m - Rooftop	Hermanus Private Hospital	3000 m	<ul style="list-style-type: none"> • Cannot provide sufficient coverage due to a lack of infrastructure. • Cannot provide sufficient coverage due to distance and density factor.

Consent Use: Erf 280 Sandbaal

In light of the above it is abundantly clear that the existing infrastructure cannot optimally serve the community of Sandbaal, Hermanus.

Below please find an extract of the current zoning and current zoning requirements and specifications:



Fig. 3 – Business 3 Zoning – LOCAL BUSINESS CONFIRMATION

BUSINESS ZONES BUSINESS ZONE 3: LOCAL BUSINESS (B3)	FLOOR FACTOR	COVERAGE	MAXIMUM HEIGHT MEASURED FROM THE BASE LEVEL	BUILDING LINES			STREET CENTRE LINE SETBACK
				To Top of Roof	Street building line	Side building line	
PRIMARY USES shops, flats (above ground floor), offices CONSENT USE Bottle store, business premises, clinic, conference facility, flats (on ground floor), town housing, guest house, hotel, informal trading, institution, place of assembly, place of entertainment, place of instruction, place of worship, recreational facilities, residential building, restaurant, rooftop base station, sale of alcoholic beverages, service station, service trade, transmission tower	1.5	75%	8,5m (2 stories)	0,0m 3,5m for fuel pumps	0,0m or 3,0m Refer to 7.2.2(e)	3,0m or 4,5m Refer to 7.2.2(e)	6,5m Refer to 16.2
			Earth banks and retaining structures shall comply with 16.6				

Fig. 4 – BZ3 – LOCAL ZONING CONFIRMATION

Consent Use: Erf 280 Sandbaai

d. Title Deed Restrictions

In respect of Erf 280 Sandbaai it was found that there are no restrictive conditions contained in title deed no.3732/2001 that prohibits the installation of telecommunication infrastructure. ***(Please refer to the attached Annexure A: Title Deed)***

e. Health

The Directorate: Radio Control, within the South African Department of Health is the responsible authority regulating cellular base-station effects on health. The department of health regulates non-ionizing radiation, and this includes electromagnetic fields (EMF) at frequencies less than 300 GHz.

The Directorate makes use of the World Health Organization's (WHO) International EMF Project (www.who.int/emf) as its primary source of information and guidance with respect to the health effects of EMF and cellular infrastructure.

With reference to EMF there are two recent publications by the World Health Organization that are of direct relevance.

- (i) International EMF Project Fact Sheet ***"Electromagnetic fields and public health: mobile phones"*** <http://www.who.int/mediacentre/factsheets/fs193/en/index.html> and;
- (ii) the results of the multi-national 10-year long INTERPHONE study on mobile phone use and brain cancer risk (press release – www.iarc.fr/en/mediacentre/pr/pdfs/pr200_E.pdf). The Directorate endorses the exposure guidelines published in 1998 by the International Commission on Non-Ionizing Radiation Protection (ICNIRP).

The World Health Organization has officially endorsed these studies with regards to EMF exposure. ICNIRP states categorically that exposure to EMF at any level below that of the ICNIRP exposure guidelines will protect people against the known adverse health effects of EMF.

In addition measurement assessments conducted in South Africa and around the world have indicated that the actual levels of public exposure of base station emissions are only a

Consent Use: Erf 280 Sandbaai

fraction of the percentage as regulated by the ICNIRP guidelines, even in cases where the public have been concerned regarding their exposure to emissions from base stations.

Department of Health is therefore satisfied that the health of the general public is not being compromised by their exposure to the emissions of cellular base stations, at present no confirmed scientific evidence exists that would indicate any hazard to human health in situations that members of the public would typically find themselves in.

f. Need & Desirability

In modern times it is become a rear instance where a member of the public only utilizes one cellular phone, majority utilize a cellular phone for personal and an additional phone, Ipad or dongle for business purposes, it's on this premise that we believe it to be in both the Overstrand municipality & the operators interests to address the problem of weak voice and data coverage and to provide the surrounding residential & business community with the basic need of effective voice and data coverage, as it has become an integral part of our daily lives.

When selecting a site, special consideration is given to the geographical aspects so that the cellular infrastructure is positioned to ensure optimal functionality and availability to the customer. This reduces the number of base telecommunication stations necessary to provide the best possible experience for the end user.

Our client Blue Sky Towers (Pty) Ltd pride themselves in ensuring that a positive impact is created in terms of the social and economic wellbeing of the area. Since the introduction of LTE in South Africa in 2012 there has been greater need for access to faster data, due to the higher penetration of LTE data in commercial and business areas, this has led to lower subscription fees which in itself provide economic sustainability and development. LTE will ultimately address high data traffic requirements and the surrounding community will be the main beneficiary.

The erection of a telecommunication base station does not impact on the current or surrounding land uses of the property nor does it encroach onto any building lines or increase the need for parking or bulk of the said property. The construction and maintenance phase of the proposal will provide a positive economic & social impact by ensuring job creation.

g. Existing Policy Frameworks**Western Cape Integrated Development Plan**

As depicted in the Western Cape IDP, a change in intensified land use and form is anticipated. Hermanus has been identified as an easily accessible activity corridor where increased public movement and transportation is both being expected and supported by the district municipality. The positioning of the base station will be in close proximity of the district restructuring routes. This will lead to an increase in tourism, commercial and business activities and would require the need to erect a base station which in turn will address the increased communication needs of the surrounding community.

Western Cape Economic Development Strategy (2009)

The Directorate for Economic and Human Development published a draft Economic Development Strategy in 2009 which supports the need to provide fundamental telecommunications infrastructure and to provide the best possible available coverage. This will lead to the attraction and growth of the commercial sector and at the same time retain and advance skilled persons.

Please find below an extract from the above mentioned policy supporting telecommunications infrastructure:

"High data access and low telecommunications costs are a key input factor for local community, business and industry to achieve sustainable growth" &

"Taking into account the high accessibility of mobile telephones and the growth in the mobile telecommunications market, the provincial government will actively seek to create technology parks in nodal areas in order to increase the digital literacy of citizens".

As confirmed by the policy, basic access to voice and data coverage is defined as a basic need for the public and falls under the umbrella of electricity, water, sanitation and access.

h. Electricity

As per the telecommunications policy the electricity supply to TI (Telecommunications Infrastructure) must, where practically possible, make use of underground cables. All

Consent Use: Erf 280 Sandbaai

electrical installations must be as per ESKOM or Overstrand Municipal Electrical Department requirements and standards. Our client will ensure that the proposal will be in line with the above mentioned electrical supply requirements.

i. Visual Impact

Special consideration has been given to the placement of the proposed freestanding base station in order to minimize the visual impact. After intensive investigation it was concluded that the typical monopole or lattice mast be redesigned from a 25m tower to a 15m camouflaged tree mast in order to reduce the impact on the surrounding built environment. Various Telecommunications Policies encourages the collocation or sharing of telecommunications infrastructure in order to minimize the visual impact and amount of masts in the area. The proposed erection of a 15m freestanding base station will offer the opportunity for operators to collocate.

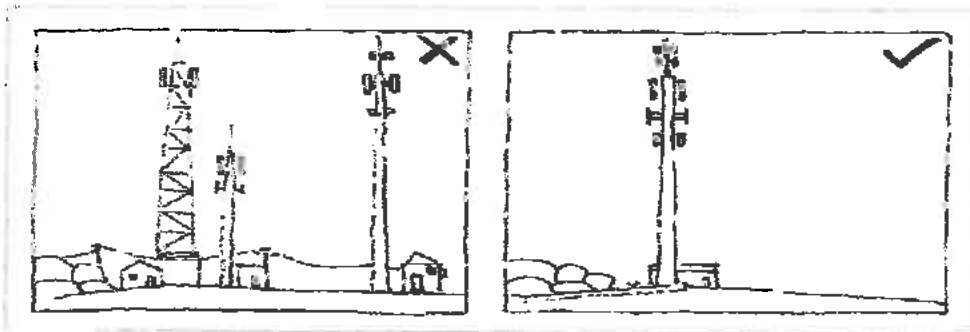


Fig.5 - Sharing of Infrastructure

The visual impact of the freestanding base telecommunications station will be reduced by the hardened urban landscape and building visible on the property from the western elevation as well as the existing tree line situated to the east. Due to the available open space and potential for increased urban densification and growth in the area, the visual impact of the mast is will be increasingly reduced by the desensitization created by the future surrounding urban landscape.

j. Access & Traffic considerations

Erf 280 Sandbaai is easily accessible and access will be obtained from Jimmy Smith Street. This road has low to medium traffic volume thus this development will not affect traffic negatively and will not cause any additional traffic volume to the area.

Consent Use: Erf 280 Sandbaai**i. Alternative Candidates**

Various alternative candidates was evaluated and approached for this proposal as detailed below:

- **Erf 283 Sandbaai** was also identified but consent could not be obtained.
- **Erf 2820 Sandbaai** was also identified as an alternative candidate but due to difficult lease process and the fact that this site is not situated at an optimal position it would be impractical.

6. CONCLUSION

The application for the consent use to allow the transmission tower on Erf 280 Sandbaai will not have a negative impact on the surrounding area. As supported by various policies and legislation it is clear that the proposal will have a positive economic and social impact ensuring that the surrounding business & residential community benefits from optimal and effective voice and data coverage. The development will not have an impact on parking, coverage or the floor factor.

Notwithstanding the above, the erection of a freestanding base telecommunication station will provide an additional passive income to the landowner which can in turn utilize the additional income to uplift the surrounding area. The application has been proven to be desirable and it is hereby kindly requested that the Overstrand municipality provide their full support with regards to this application.

TP A Theart
C Holivier

Postlink Hermanus

From: Stella Geldenhuys <stelcor2014@gmail.com>
Sent: 15 April 2016 11:41 AM
To: hermanus@postlink.co.za
Subject: Erf 280 Jimmy Smithstraat 10



Wie dit mag aangaan

Ek wil hiermee my algehele teenkanting teen die oprigting van die voorgestelde vergunningsgebruik en afwyking van die oprigting van die beplande toring op erf 280 deurgee.

Eerstens is die boubeperkings hoogte in Sandbaai 8.5 meter. Die beplande toring sal bykans dubbeld die hoogte wees en dit is absoluut onaanvaarbaar.

Vantevore was daar teenkanting teen die woonstel blok op erf 283, ook in Jimmy Smithstr se aanvraag op oorskryding van die bou beperkings hoogte. Die hoogte beperkingis na die teenkanting gehandhaaf.

Die toring gaan heeltemal onooglik en onvanpas in 'n residensiele gebied wees. Indien die toring wel opgerig word sal die eiendoms waarde in die onmiddelijke omgewing daal.

In die onmiddelijke omgewing is daar heelwat ouers met klein kindertjies. Verder is daar baie ouer mense. Volgens soeke op internet is gevind dat die uitstraling van die radio aktiewe golwe uiters nadelig vir menslike gesondheid is.

Die uwe

JC Geldenhuys

FILE NO:	EL 280-SB
SCAN NO:	29
COLLABORATOR NO:	894461

TP A Theant
CH Olivier)

ANNEXURE D 2/4

Loretta Gillion - Nuwe selfoon toring te Sandbaai



From: Elna Marais <elna.property@gmail.com>

To: <loretta@overstrand.gov.za>

Date: 11/04/2016 04:22 PM

Subject: Nuwe selfoon toring te Sandbaai - Erf 280, Sandbaai

Beste mnr Olivier,

Die ontugtering was baie groot nadat ek verneem het van die selfoon toring wat beplan word om opgerig te word in Sandbaai.

Ek is ook erg ontsteld dat hierdie oprigting so stil-stil gedoen word met net vier of vyf aangrensende eiendomme wat ingelig word. Die res word blatant geignoreer, tog sal ons dieselfde hoeveelheid bestraling ervaar, met 'n enkele individu wat finansiële voordeel trek.

Nog iets wat baie kwel, is die feit dat die maatskappy wat verantwoordelik is vir hierdie toring, van mening is dat slegs 800MHz bestraling uitgestraal sal word. Ek wil weet, wie gaan dit monitor? Hoe betroubaar is hierdie mense? Ek glo natuurlik gladnie in hul betroubaarheid nie, aangesien hierdie toring so stil-stil opgerig moet word.

Is u bewus van die Sandbaai Gemeenskapsforum wat besluit het dat sulke torings nie in Sandbaai opgerig moet word nie, maar eerder op die berg? Waarom is dit nie met die gemeenskap van Sandbaai bespreek nie?

Ek glo u sal Sandbaaiers beter inlig voordat julle voortgaan met so 'n oprigting.

Baie dankie

Elna Marais
Hoofweg 31, Sandbaai
060 622 0607

FILE NO:	EL 280-58
SCAN NO:	16
COLLABORATOR NO:	893322

TP
12 APR 2016

TP

11 APR 2016

TR A Theart

(Holmies)

Rob R.



FILE NO:

EL 280-SB

SCAN NO:

COLLABORATOR NO: 893080

7200

6/4/2016

Attention Mr. S Müller.

Dear Sir,

I am in receipt of your letter, dated 10/3/2016.

File reference 280.HSB (3075)

I, the undersigned, hereby object to the proposed building of a 15m. transmission tower on erf 280 on the following grounds:

- (1) The structure exceeds the height restriction of this area.
- (2) Record exists of successful objections to a previous application to exceed the height restriction on neighbouring Erf 283.

Q:

neighbouring ref: 283.

(3) Re: Health

Paragraph 8 =

Present research only
is mentioned. No long-
term study is given.

Yours faithfully,
Mrs. A. E. Bathroyd.

HIGH WAVE

CONSULTANTS

25 Huguenot Street
Oakwood
Durbanville
7550

21 July 2016

Attention: H Olivier

CASE ID: EL 280-SB

OVERSTRAND MUNICIPALITY

PO BOX 20

HERMANUS

7200

Dear Sir/ Madam

**PROPOSED APPLICATION: RESPONSES ON COMMENTS AND OBJECTIONS, ERF 280,
SANDBAAL.**

This letter serves as a response to letter dated 21 April 2016. We apologize for the delay unfortunately the requested VIA has taken longer than initially anticipated.

We thank you for your prompt response regarding the application, below please find responses on comments and objections received.

1) **HEALTH CONCERNS:**

- a) Currently no evidence exist that telecommunication base stations has adverse effect on public health. South African Department of Health fully supports the erection of telecommunication base stations in accordance with ICNIRP (International Commission on Non-Ionizing Radiation Protection), the WHO (World Health Organization) and ICASA (Independent Communications Authority of South Africa).
(Please refer to the attached memorandum from the South African Department of Health.)
- b) ICNIRP (International Commission on Non-Ionizing Radiation Protection) allows for an exposure measurement level of 41.000 (v/m) within a distance of 15m from the

HIGH WAVE

CONSULTANTS

antennae. Cellular operator antennae operates at a level of not more than 0.04 (v/m) within a distance of 15m, in laymen's terms the levels are approximately 1/1000th of the prescribed exposure levels. It is therefore clear that the installation of these antennae does not pose a health risk.

- c) The monitoring of EMF levels are monitored by the operators themselves, ICASA in collaboration with the SA Department of Health, ICNIRP and the WHO requires quarterly report form the major operators relating to the exposure levels.
- d) This section is addressed in detail in our motivation report.

2) VISUAL IMPACT:

With reference to the comment received regarding the visual impact attached please find a visual impact assessment, we have proposed to alter the design as follow in order to ensure that the design is in fitting with the amenities of the surrounding area:

- a) One of the most important aspect of building a sustainable telecommunications network is in ensuring that the base stations are situated at an optimal height. The initial preferable height would have been 25m but due to various anticipated impact on the surrounding area the height and design has been altered to a 15m tree mast.
- b) We have applied for a height departure in order to allow for a height of 15m.
- c) With reference to the anticipated visual impact created by the erection of the proposed freestanding base telecommunication station, the optimal position was chosen base on effective coverage provisioning and reduced visual and build environment impact.
- d) The independent VIA practitioner has confirmed that a 15m slimline monopole design would be the best design, it would be appreciated if the Overberg Municipality could confirm if this is satisfactory in order to alter the design according to the VIA practitioner's recommendations.



3. PROPERTY DEVALUATION:

- a) This subject has been debated for years and at present no confirmed evidence exists that properties situated in close proximity of a base station would result in the decrease of property value. There are various residential properties situated in close proximity of affluent areas such as Durbanville, Constantia and Camps Bay where property value have not decreased as stated by the objectors.
- b) Due to the increased need for voice and internet services certain property values have actually increased due to optimal data and voice coverage.

4. SUPPORT FROM SURROUNDING COMMUNITY:

- a) The National Communications Act identifies the need for telecommunication support structures to be situated closer to one another due to the increased need for smart devices. There is an increased need to provide optimal coverage in certain areas due to the increase developments created over the past decade resulting in increased signal congestion, the coverage area is thereby reduced. The area has been identified as a high congestion area in terms of coverage provisioning and the lack of existing coverage. The costs relating to the construction and maintenance of these structures are enormous and it should be made clear that telecommunications operators will not invest in these structures just for the sake of it. These structures are planned by subject matter experts and implemented for the benefit of both the community and economy.
- b) The existing telecommunications infrastructure situated in the area are currently serving approximately 2000 business, Institutional and residential erven in the area which is a clear indication that additional telecommunication infrastructure is required in the area in order to alleviate congestion. *(Please refer to the attached Radio Frequency Plots)*

HIGH WAVE

CONSULTANTS

It is clear that the proposed application meets the applicable desirability criteria and precedents set and it is therefore recommended that the application be supported by the relevant authorities. We trust the above response addresses your concerns. Please do not hesitate to contact me should you have any additional queries.

Regards



Pieter Pretorius

B/8277/2015, SAPI

1st Consultative Draft

**SWANNEE'S KAFEE
PROPOSED MONOPOLE ANTENNA MAST**
Erf 280, Sandbaai

VISUAL IMPACT ASSESSMENT

23 June 2016

PROJECT NO: VIA_240515.EW

Produced for:

Blue Sky Towers (Pty) Ltd.



On behalf of:

Enviroworks Environmental Consulting



Today's Impact | Tomorrow's Legacy



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PROPOSED MONOPOLE ANTENNA MAST

Erf 280, Sandbaai

ANNEXURE 1

DECLARATION OF INDEPENDENCE



Declaration of Independence

I, Jacques Louis Volschenk, representing Zone Land Solutions (Pty) Ltd., hereby declares that I am an independent consultant appointed to provide specialist input for a VIA assessment. I confirm that I have no personal financial interest in the project other than remuneration for the VIA study itself, and neither I nor Zone Land Solutions (Pty) Ltd. will benefit in any other way from the outcomes of this VIA study. I further declare that opinions expressed in this report have been formulated in an objective manner without interference from any third party.

Jacques Volschenk

Print Name

Signature

14 June 2016

Date

PROPOSED MONOPOLE ANTENNA MAST

Erf 280, Sandbaai

ANNEXURE 2
SELECTED OBSERVATION POINT VIEWSHED AND
ASSESSMENTS



1 SELECTED OBSERVATION POINT ASSESSMENTS

The selected *observation points* were categorized and assessed in terms of the following assessment criteria.

KEY	DESCRIPTION
NUMBER	Each observation point was allocated a reference number.
CO-ORDINATES	The co-ordinates of each of the observation points are provided.
ALTITUDE	The altitude of the observation point was provided in meters above sea level.
DESCRIPTION	A brief description where the observation point is located is provided.
TYPE	Each observation point is categorized according to its location and significance rating. These criteria include the following: <ul style="list-style-type: none"> a) Tourist-related areas. b) Corridors, including linear geographical areas visible to users of a route or vantage points. c) Residential Areas/Farmstead. d) Areas of cultural significance. e) Recreational areas.
PHOTOGRAPH	A photograph was taken from each observation point in the direction of the project site to verify the digitally generated view-shed.
PROPERTY LOCATION	The location of the property was described as <i>foreground, middle ground or background</i> .
PROXIMITY	The distance between the observation point and the project site was provided in kilometres.
VISUAL SENSITIVITY OF RECEPTORS	The visual impact considered acceptable is dependent on the type of receptors. A high (e.g. residential areas, nature reserves and scenic routes or trails), moderate (e.g. sporting or recreational areas, or places of work), or low sensitivity (e.g. Industrial, mining or degraded areas) was awarded to each observation point.
VISUAL EXPOSURE	Exposure or visual impact tends to diminish exponentially with distance. A high (dominant or clearly visible), moderate (recognizable to the viewer) or low exposure (not particularly visible to the viewer) rating was allocated to each observation point.
VISUAL ABSORPTION CAPACITY (VAC)	The potential of the landscape to conceal the proposed development was assessed. A rating of high (effective screening by topography and vegetation), moderate (partial screening) and low (little screening) was allocated to each observation point.
VISUAL INTRUSION	The potential of the development to fit in with the surrounding environment was determined. The visual intrusion relates to the context of the proposed development while maintaining the integrity of the landscape. A rating of high (noticeable change), moderate (partially fits into the surroundings) or low (blends in well with the surroundings) was allocated.
DURATION	With regard to roads, the distance (in kilometres) and duration (in seconds) for which the property will be visible to the road user, were calculated for each observation point.

2 KEY OBSERVATION POINT 5

KOP5 is situated at the commercial node north of the project site. Due to the topography of the area, the viewshed from this observation point almost coincides with that of the project site. The photograph below verifies that the project site would possible be visible from this point. As a result it is expected that the visual impact from this point would be medium to high.



Figure 1: KOP5 Viewshed. Areas shaded yellow is theoretically visible from KOP5.

NUMBER:	KOP5	CO-ORDINATES:	S	E
ALTITUDE:	18m		34°25'28.80"S	19°12'00.27"E
DESCRIPTION:	KOP5 is situated at the commercial facilities on the corner of Main and Long Streets.			
TYPE:	Commercial	PHOTO:	Photograph 1	
PROP. LOCATION:	Foreground	PROXIMITY:	310m	
VISUAL SENSITIVITY:	Low			
VISUAL EXPOSURE:	High	VAC:	Moderate	
VISUAL INTRUSION:	Moderate - high	DURATION:	N/A	



~~... Photograph 1: Southerly view towards the project site from KOP5.~~

Coastally view

3 KEY OBSERVATION POINT 7

KOP7 is situated at the entrance to Mount Pleasant Primary School, situated some 1.57km north-east of the project site. Despite the relative height advantage of the observation point and the results of the GIS-generated viewshed, the photographic confirms that the project site is not visible from this point. It is therefore expected that the visual impact from this point would be negligible.

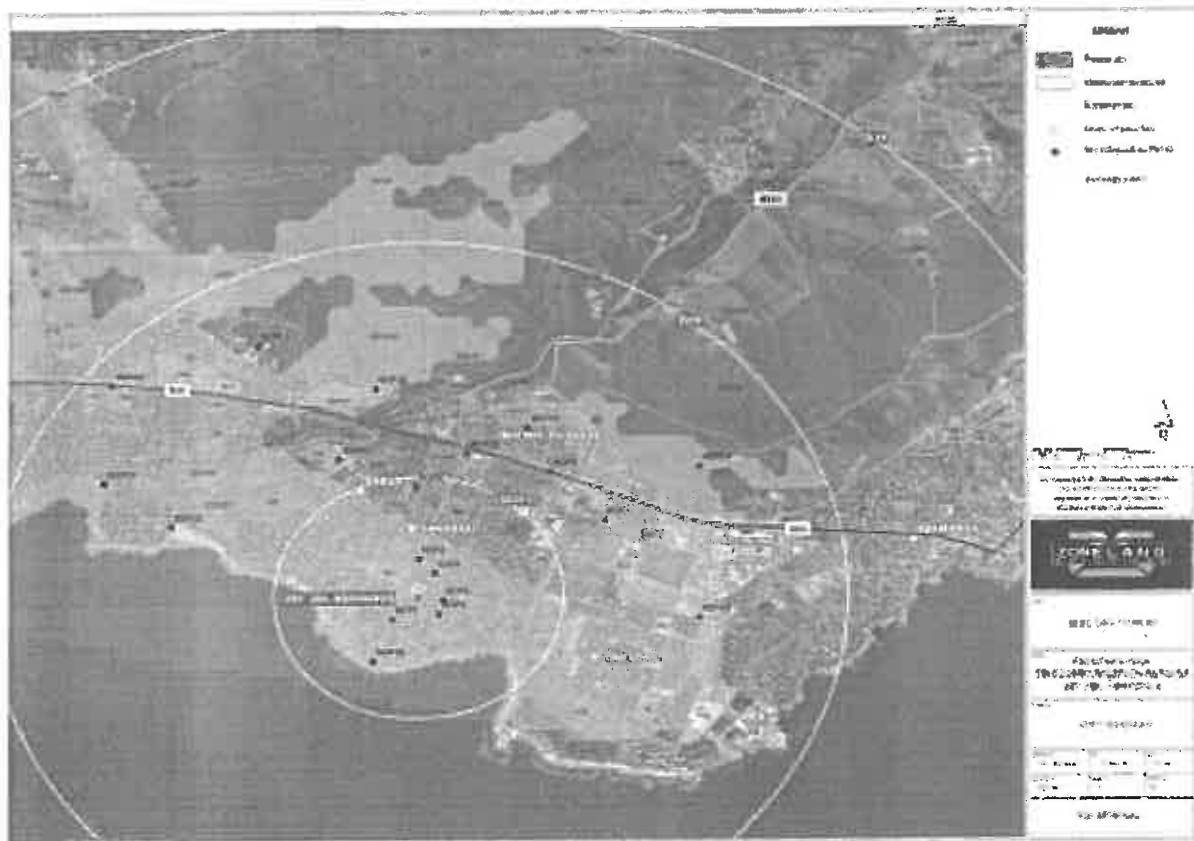


Figure 2: KOP7 Viewshed. Areas shaded yellow is theoretically visible from KOP7.

NUMBER:	KOP7	CO-ORDINATES:	S	E
ALTITUDE:	36m		34°25'11.54"	19°12'50.71"
DESCRIPTION:	KOP7 is situated at the entrance to Mount Pleasant Primary School.			
TYPE:	Institutional	PHOTO:	Photograph 2	
PROP. LOCATION:	Middle ground	PROXIMITY:	1570m	
VISUAL SENSITIVITY:	High			
VISUAL EXPOSURE:	Low	VAC:	High	
VISUAL INTRUSION:	Low	DURATION:	N/A	



Photograph 2: View towards the project site from KOP7.

4 KEY OBSERVATION POINT 8

KOP8 is situated at a new residential development on the corner of Skilpad Road and Aalwyn Street, approximately 1.45km from the project site. Similar to the results from KOP7, the viewshed from this observation point suggests that the project site might be visible from this point. However, due to the distance from the site and the high visual absorption capacity en-route to the site, it is confirmed that proposed installation would have a negligible impact on receptors at this point.

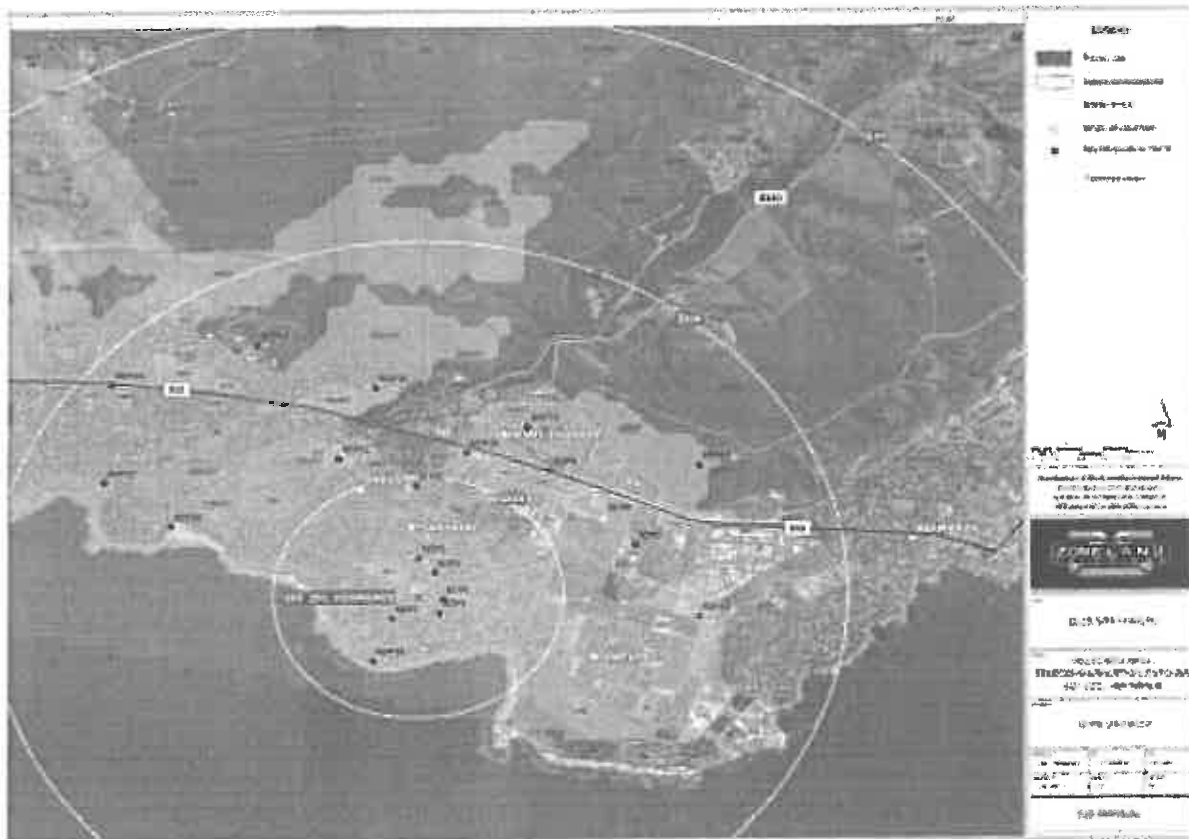


Figure 3: KOP8 Viewshed. Areas shaded yellow is theoretically visible from KOP8.

NUMBER:	KOP8	CO-ORDINATES:	S	E
ALTITUDE:	39m		34°24'04.47"S	19°12'41.74"E
DESCRIPTION:	KOP8 is located at a residential development north-east of the project site.			
TYPE:	Residential	PHOTO:	Photographs 3	
PROP. LOCATION:	Middle ground	PROXIMITY:	1450m	
VISUAL SENSITIVITY:	High			
VISUAL EXPOSURE:	Low	VAC:	High	
VISUAL INTRUSION:	Low	DURATION:	N/A	



Photograph 3: View towards the project site from KOP8.

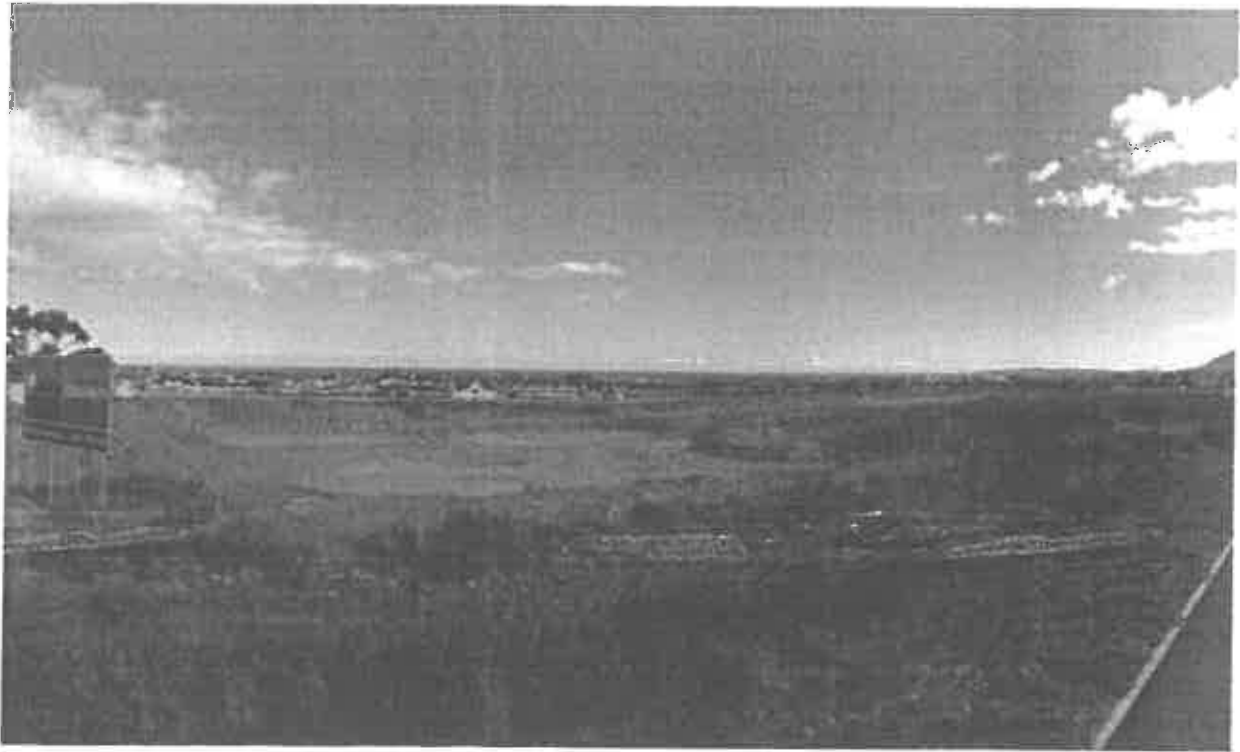
5 KEY OBSERVATION POINT 9

KOP9 is situated north of the project site, along the R43 Scenic Linkage Route. The GIS-generated viewshed, once again, indicates the project site would potentially be visible from this point. The photograph below confirms this but due to the distance between the project site and observation point, objects are not clearly distinguishable in the landscape. It is therefore expected that the visual impact of the proposed infrastructure from this point will be low.



Figure 4: KOP9 Viewshed. Areas shaded yellow is theoretically visible from KOP9.

NUMBER:	KOP9	CO-ORDINATES:	S	E
ALTITUDE:	41m		34°24'51.08"S	19°12'27.33"E
DESCRIPTION:	KOP9 is located along the R43.			
TYPE:	Transportation	PHOTO:	Photograph 4	
PROP. LOCATION:	Middle ground	PROXIMITY:	1400m	
VISUAL SENSITIVITY:	Low			
VISUAL EXPOSURE:	Low	VAC:	High	
VISUAL INTRUSION:	Low	DURATION:	2.3km @ 80km/h 1.725 min southwards	



Photograph 4: View from KOP9 towards the project site.

6 KEY OBSERVATION POINT 11

KOP11 is located at the Curro Private School, situated some 1.27km north-west of the project site. The GIS-generated viewshed indicates that the majority of the landscape en-route to the project site is theoretically visible. This is however refuted by the photograph below which indicates the high visual absorption capacity of the landscape en-route to the site. The visual impact is therefore considered to be negligible from this point.



Figure 5: KOP11 Viewshed. Areas shaded yellow is theoretically visible from KOP11.

NUMBER:	KOP11	CO-ORDINATES:	S	E
ALTITUDE:	23m		34°24'47.96"S	19°11'29.59"E
DESCRIPTION:	KOP11 is located at the Curro Private School to the northwest of the site.			
TYPE:	Institutional	PHOTO:	Photograph 5	
PROP. LOCATION:	Middle ground	PROXIMITY:	1270m	
VISUAL SENSITIVITY:	High			
VISUAL EXPOSURE:	Low	VAC:	High	
VISUAL INTRUSION:	Low	DURATION:	N/A	



Photograph 5: View from KOP11 towards the project site in the south.

6 KEY OBSERVATION POINT 12

KOP12 is located at the popular Onrus lagoon, at the mouth of the Onrus River. The observation point is situated some 1.83km westwards of the project site. Due to the relatively low altitude of the observation point, coupled with the distance to the project site, it is expected that the visual impact from this point would be negligible.



Figure 5: KOP12 Viewshed. Areas shaded yellow is theoretically visible from KOP12.

NUMBER:	KOP12	CO-ORDINATES:	S	E
ALTITUDE:	7m		34°25'06.26''S	19°10'42.76''E
DESCRIPTION:	KOP12 is located at the mouth of the Onrus River.			
TYPE:	Residential	PHOTO:	Photograph 6	
PROP. LOCATION:	Middle ground	PROXIMITY:	1830m	
VISUAL SENSITIVITY:	High			
VISUAL EXPOSURE:	Low	VAC:	High	
VISUAL INTRUSION:	Low	DURATION:	N/A	



Photograph 6: View from KOP12 towards the project site.

6 KEY OBSERVATION POINT 14

KOP14 is located at the lookout point off the Rotary Drive scenic route. Due to the height advantage of the lookout point (180m abmsl), unspoiled views are offered over the coastal plains. As illustrated by Photograph 7 below, the entire Sandbaai area is clearly visible from this area. However, due to the distance from the project site, specific objects in the landscape are not clearly visible or distinguishable. The expected visual impact is therefore expected to be low from this observation point.

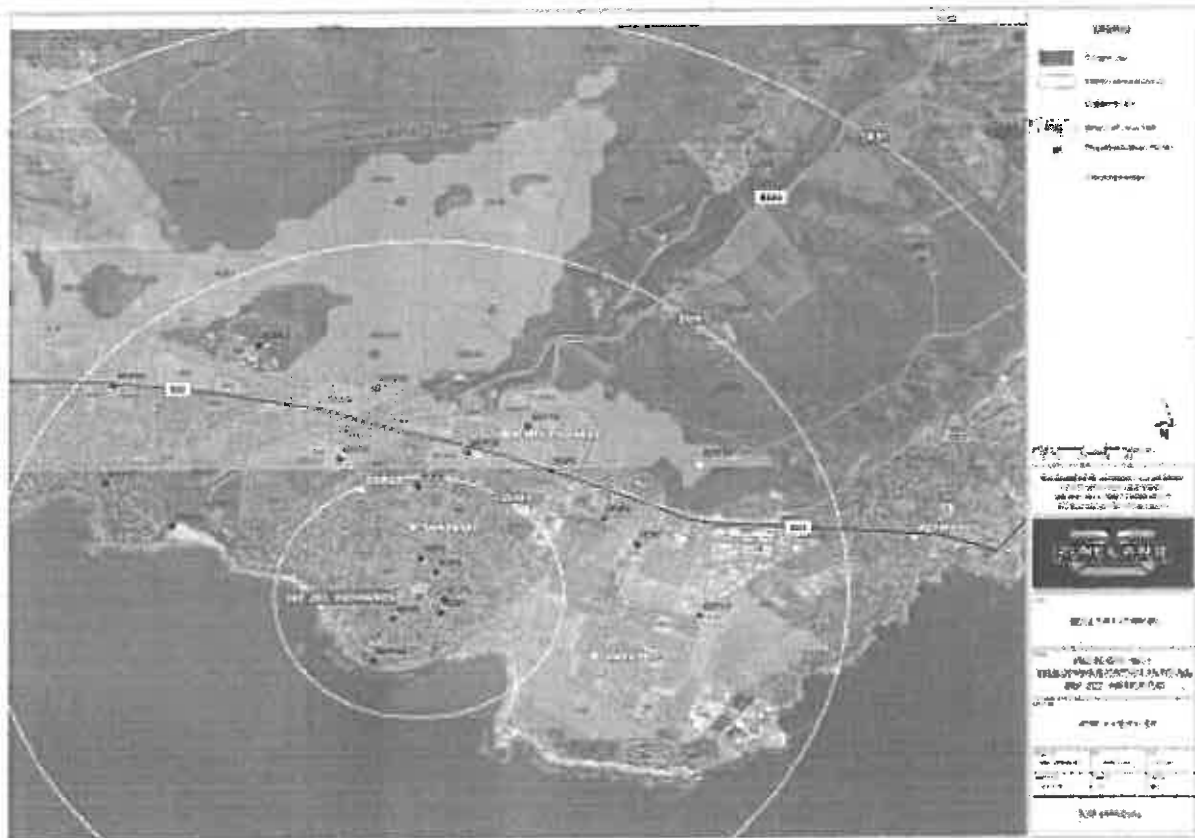


Figure 5: KOP14 Viewshed. Areas shaded yellow is theoretically visible from KOP14.

NUMBER:	KOP19	CO-ORDINATES:	S	E
ALTITUDE:	180m		34°24'49.53"S	19°13'06.42"E
DESCRIPTION:	KOP14 is located at the lookout point off Rotary Drive.			
TYPE:	Recreation	PHOTO:	Photograph 7	
PROP. LOCATION:	Middle ground	PROXIMITY:	2200m	
VISUAL SENSITIVITY:	High			
VISUAL EXPOSURE:	Moderate	VAC:	Low	
VISUAL INTRUSION:	Low	DURATION:	N/A	



Photograph7: View from KOP14 towards the project site.

6 KEY OBSERVATION POINT 16

KOP16 is located along the Vermont, Onrus, Sandbaai Coastal Path, located some 650m south of the project site. As illustrated by Photograph 8 below, only the most prominent landforms, such as the Hemel-en-Aarde Mountains as well as the row of houses directly in its line of sight is visible from this point. The high visual absorption capacity therefore negates any potential visual impact from this point. The expected visual impact is therefore expected to be negligible.

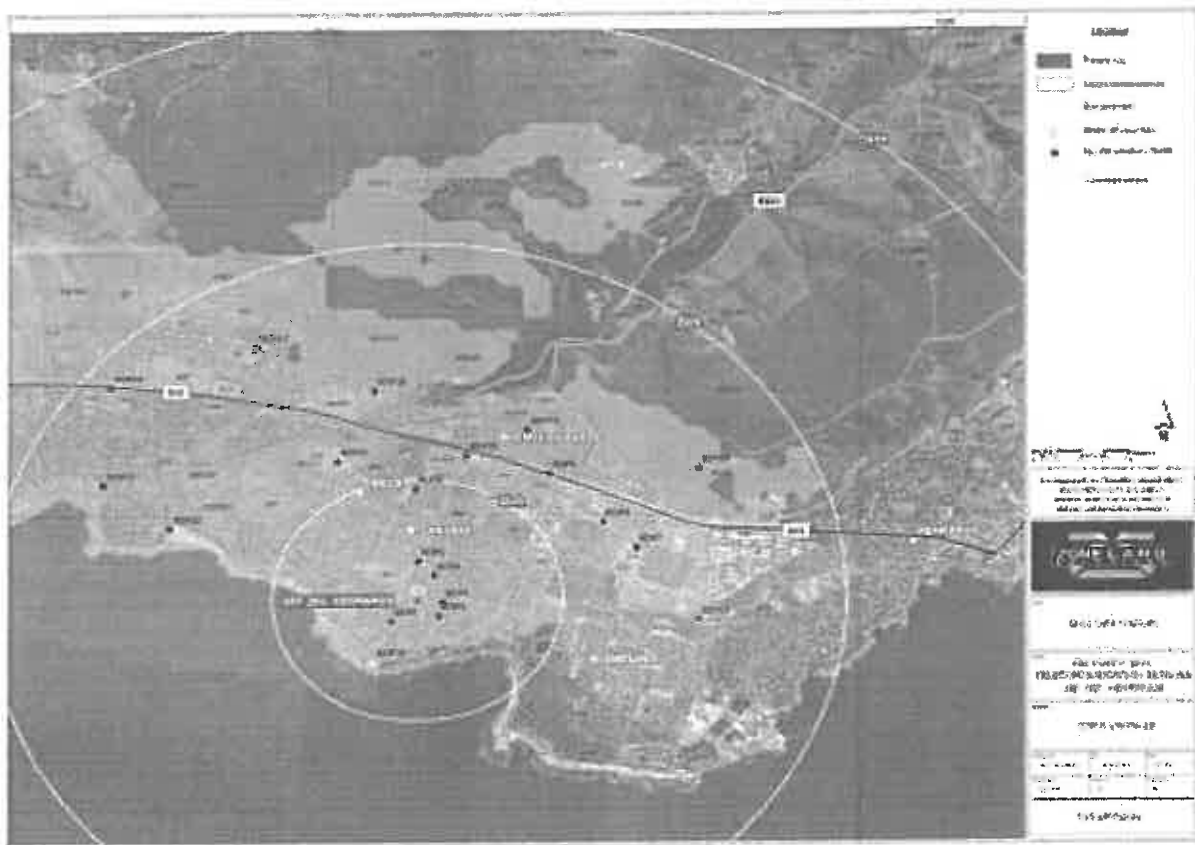


Figure 5: KOP16 Viewshed. Areas shaded yellow is theoretically visible from KOP16.

NUMBER:	KOP19	CO-ORDINATES:	S	E
ALTITUDE:	7m		34°25'43.43"S	19°11'38.79"E
DESCRIPTION:	KOP16 is located along the coastal path, south of the project site.			
TYPE:	Recreational	PHOTO:	Photograph 8	
PROP. LOCATION:	Foreground	PROXIMITY:	643m	
VISUAL SENSITIVITY:	High			
VISUAL EXPOSURE:	Low	VAC:	High	
VISUAL INTRUSION:	Low	DURATION:	N/A	



Photograph 8: View from KOP16 towards the project site.

PROPOSED MONOPOLE ANTENNA MAST

Erf 280, Sandbaai

ANNEXURE 3

LIST OF PLANS



1 INTRODUCTION

1.1 BACKGROUND AND PURPOSE OF REPORT

Since the introduction of LTE In South Africa in 2012 there has been greater need for access to faster data. Higher penetration of LTE data in educational, residential, commercial and business areas has led to lower subscription fees, which in itself provide economic sustainability and development. When selecting a site to erect a communication mast, special consideration is given to the geographical aspects so that the cellular infrastructure is positioned to ensure optimal functionality and availability to the customer.

Blue Sky Towers (Pty) Ltd. pride themselves in ensuring that a positive impact is created in terms of the social and economic well-being in the area and will endeavour to erect a base station in such a manner so that it does not detract from the aesthetics in the surrounding area.

The purpose of this Visual Impact Assessment (VIA) is to assess the proposed activity in terms of the *Guidelines for Involving Visual and Aesthetic Specialists in the EIA Process and the NEMA/EIA Regulations of 2010*.

1.2 COMPONENTS OF THE REPORT

The aspects addressed in this report are as follows:

- a) Description of the methodology adopted in preparing the report.
- b) Description of the receiving environment.
- c) Description of the view catchment area, view corridors, viewpoints and receptors.
- d) Identification and evaluation of potential visual impacts associated with the proposed activity and the alternatives identified, by using the established criteria, including potential lighting impacts at night.
- e) Identification in terms of best practical environmental option in terms of visual impact.
- f) Addressing of additional issues such as:
 - Impact on skyline.
 - Negative visual impact.
 - Impact on aesthetic quality and character of place.
- g) Assumptions made and uncertainties or gaps in knowledge.
- h) Recommendations in respect of mitigation measures that should be considered by the applicant and competent authority.

1.3 STUDY METHODOLOGY

As stated previously, this VIA was undertaken in accordance with the *Guideline for Involving Visual and Aesthetic Specialists in EIA Processes*, as issued by the Western Cape Government's Department of Environmental Affairs and Development Planning during 2005.

The VIA was undertaken in distinct steps, each of which informed the subsequent steps. Figure 1 below summarises the methodology adopted for undertaking the assessment.

1.4 SUPPLEMENTARY DOCUMENTATION

This report is to be read together with Annexure 2 (Selected observation point viewsheds and assessments), which provides an identification of selected observation points and visual assessment of the proposed activity from each of these points.

1.5 GAPS IN KNOWLEDGE, ASSUMPTIONS AND LIMITATIONS

This assessment was undertaken during the compilation phase of the draft BA report and is based on the information provided by Enviroworks Environmental Consulting on 24 April 2016, for the mentioned project. Other than to perform a VIA for the proposed monopole mast, no specific Terms of Reference has been provided.

Assessments of this nature generally suffer from a number of defects that must be acknowledged:

- **Limited time:** A comprehensive assessment requires a systematic assessment of the environment at different times of the day. Such luxury is not always possible and therefore most assessments are based on observations made at a specific time of day. Educated estimates are made, where applicable, based on the knowledge of the area.

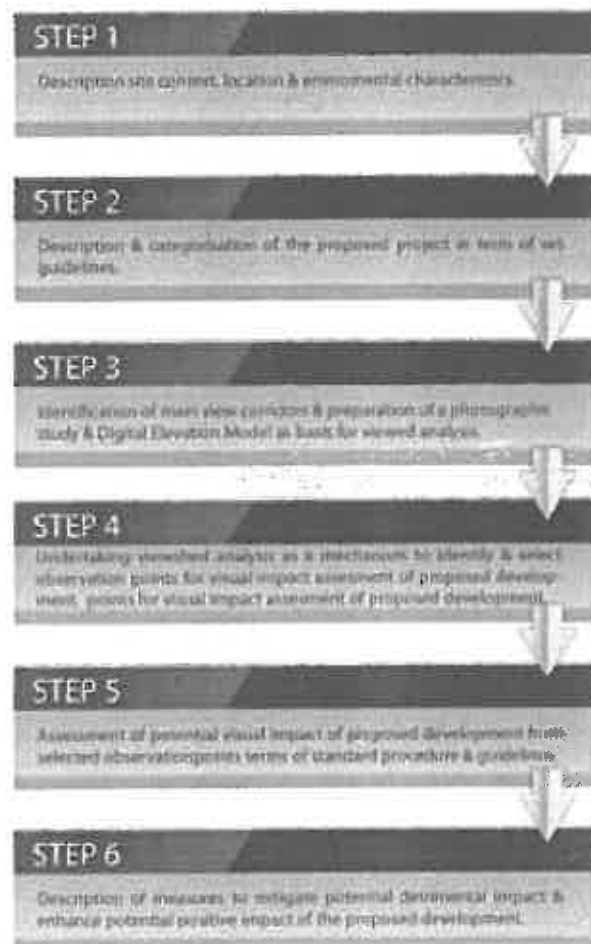


Figure 1: Methodology adopted for the VIA.

- **Availability of literature:** A thorough assessment requires that all relevant literature on the subject matter is studied, acknowledged and incorporated in the report. Due to a range of factors, forward planning documents are not always available for all spheres of government.

2 THE AFFECTED ENVIRONMENT

2.1 LOCALITY

The project site is located in the seaside suburb of Sandbaai, some 2km from the town of Hermanus. Hermanus is the administrative capital of the Overstrand Municipality and is located approximately 1 hour from Cape Town. Given its proximity to the City, Hermanus, and many of the other coastal towns in this region, is considered a major destination for tourists and weekend getaways.

The Greater Hermanus area functions as the primary civic, administrative and tourism centre within its sub-regional and municipal context. Greater Hermanus is renowned for the quality of its natural environment, including sandy beaches, rocky coastline, fynbos and whales. These attribute, as well as the temperate climate, have made Greater Hermanus a popular retirement, holiday and tourism destination (Overstrand SDF, 2010).

Throughout the years, Sandbaai has developed from a sleepy coastal settlement, to a proper suburb of the Greater Hermanus. These days, Sandbaai houses approximately 4000 people and includes all the required ancillary uses of a typical suburban suburb including a large variety of shops, farm stalls, galleries, studios, jewellers and restaurants, as well as the recently-developed Curro Private School.

From a topographical point of view, Sandbaai is located on a narrow coastal plain, wedged in between the Hemel-en-Aarde and Hermanus Mountains to the north and the Atlantic Ocean to the south. With regard to the former, the mountains are frequented by hikers and the general public for recreational uses. The coastal plain is interrupted by the Onrus River that runs down the Hemel-en-Aarde Valley and enters the sea some 2km to the west.



Figure 2: Panoramic view from Hermanus Mountain over Hermanus town.

The R43 is the major trunk road linking Fisherhaven, Hawston, Vermont, Onrus River, Sandbaai, Zwelihie, and Hermanus with Stanford and the other coastal town located in the Overstrand Municipality. The latter road is considered to be a Scenic Linkage Route, while the Hemel-en-Aarde road (R320) is considered a Primary Scenic Route. Rotary Drive, which leads all the way to the top of Hermanus Mountain, is considered to be a Secondary Scenic Route. There are also a number of local and provincial heritage sites in the area, the majority of which is located in Onrus River and the Old Harbour in Hermanus.

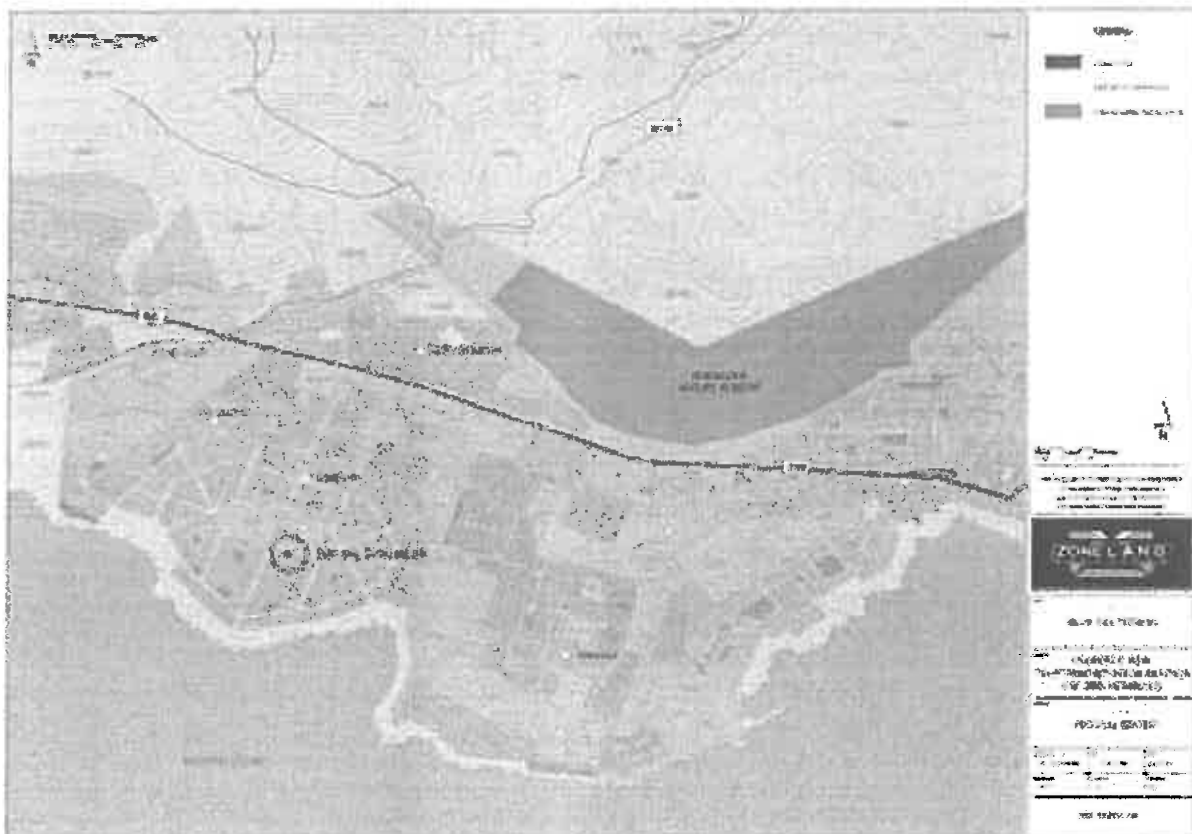


Figure 3: Regional context of the project site.

Due to the narrow width of the coastal plain, most urban uses has developed south of the R43, while a number of primarily residential uses have, in recent times, developed northwards of the R43.

The nearest conservation area to the site is the Fernkloof Nature Reserve which is located along the Hermanus Mountains.

The Overstrand Spatial Development Framework states that the protection and maintenance of the character of the area within Greater Hermanus, as well as the sustainable management of growth in the area, formed the basis of the land use and development proposals of the approved current Greater Hermanus Sub-regional Spatial Development Framework (July 2000). The challenge will be to retain this unique character and its attractiveness by balancing the need for urban growth with the conservation of the area's biophysical and cultural heritage assets.

As described in Chapter 2.2 below, the project site is situated on a portion of erf 280, Sandbaai. The project site, which is primarily retail orientated, is situated amongst a conventional residential neighbourhood of single residential dwellings, as well as retirement units and other ancillary uses such as a community hall, retail shops and offices.



Figure 4: View across ~~Jimmy Smith Street~~ towards the Hermanus Mountains in the distance.

~~Jimmy Smith Street~~
 Main Street?

2.1.1 Intrinsic Values of the Region

It is a common principle of planning that each place has a specific intrinsic, instrumental and systemic value and that such values need to be carefully considered when contemplating the current and future use of any particular place.

Broadly -speaking, two different philosophical perspectives are possible when considering the value of any place or object, namely **what is it good for?** and **what is its own good?** The first question relates to its instrumental value, while the second deals with intrinsic value. Instrumental value uses something as a *'means to an end'* while intrinsic value refers to being *'worthwhile in itself'* (Rolston, 1994).

Systemic value relates to the fact that *'things do not have their separate natures merely in, and for themselves, but they face outward and co-fit into broader natures. Value seeps out into the system and the individual lose its status as sole locus of value'* (Rolston, 1994:174). Systemic value refers to the relations that things have with other things, and to the role they play in larger wholes.

The value system of the Greater Hermanus area was determined in the various collaborative, participative processes undertaken during the drafting of forward planning documentation, policy and guidelines. As such, the intrinsic value of the area is found in the natural characteristics of the area.

2.2 PROJECT SITE DESCRIPTION

The Swanee's Kafee project site is situated on a portion of erf 280, Sandbaai. The project site is located in Jimmy Smith Street across the Sandbaai Community Hall. Also directly opposite the project site, along Jimmy Street, is a large public open space.

The property is currently used for a variety of uses which includes the Overstrand Kafee and Take-aways (formerly Swanee's Kafee), the Wishy Washy Laundromat and PC 4 Ever Computer Workshop and Internet Cafe. In addition to the above uses, a residential dwelling with additional parking is situated to the back of the property.



Figure 5: Panoramic view of the project site. The monopole mast is to be erected to the east of the shop.



Figure 6: Aerial perspective of the project site indicating the existing uses on site and the surrounding properties.

Although the project site is located in a typical suburban environment, the surrounding natural resources makes up a significant and direct contribution to the atmosphere and characteristics of an area. These natural characteristics are predominantly associated with the seashore as well as

the Hemel-en-Aarde Mountains, and Fernkloof Nature Reserve and to a lesser extent, the public open spaces throughout Sandbaai.

2.2.1 Landscape Character

The area has a very gentle southerly slope towards the seashore. The Sandbaai area slopes from approximately 35m amsl at the R43 to approximately 7m amsl at the seashore. In stark contrast to this gentle slope, the Hemel-en-Aarde Mountains and Hermanus Mountain towers over the seaside landscape. It is also along the latter that particular vantage points are created which offers undisrupted views over the landscape. As for the project site, the latter is virtually flat at a mean altitude of 17m above mean sea level.

Hermanus experiences an annual rainfall of approximately 518mm with most rain occurring during winter. The average midday temperatures range from approximately 15.9°C in July to 24.9°C in February. The region is the coldest during July when the mercury drops to 6.8°C on average during the night (www.saexplorer.co.za/south-africa/climate/hermanus_climate.asp).

In terms of the underlying vegetation type, the area is dominated by Overberg Sandstone Fynbos (FFs 12). According to Mucina and Rutherford (2009), this vegetation type is found from Bot River and Hawston in the northwest to the Soetanysberg and Bredasdorp in the southeast, including the Caledon Swartberg, Babilonstoring, Kleinrivier and Bredasdorp Mountains, and Agulhas hills such as Franskraal se Berge and Buffeljagsberg. The vegetation type is generally found at an altitude between 20m –1 167m above sea level.

Vegetation and landscape features are described as low mountains, undulating hills and moderately undulating plains supporting moderately tall, dense restioid, ericoid-leaved and proteoid shrublands. Structurally these are mainly proteoid and ericaceous fynbos, with restioid fynbos also occurring locally.

Overberg Sandstone Fynbos is classified as 'Least threatened' although only 6% is statutorily conserved in the Agulhas National Park, Fernkloof, Babilonstoring, Heuningberg, Maanskynkop, Salmonsdam and Caledon Nature Reserves. Conservation Targets are set at 30%. As only 6% occurs in reserve areas, vegetation type is classified as 'Poorly Protected'. Only 6% additional area is protected in private conservation areas such as Vogelgat, Brandfontein, Jan Malherbe, Groothagelkraal, Fynbosrand, Brandfontein-Rietfontein and Waterfall. Approximately 6% has been transformed, mostly by cultivation.

3 PROJECT DESCRIPTION AND PROPOSED INFRASTRUCTURE

As mentioned above, it is proposed that a communication mast be erected on a portion of erf 280. This mast will be used for the communication of LTE Data and Voice by either of the cell phone companies such as Vodacom or Cell C.

The limited space available for the erection of any communication structure on the property makes the option of the proposed monopole structure ideal.

Monopole structures are generally a tapered, tubular pole structure from steel plate formed into a circular cross section. Monopoles are used where minimal land is available and / or aesthetics are of prime concern (<http://www.sectionalpoles.co.za/index.php/monopole-masts-and-towers>). Various tree camouflage versions are also available, as per the preferred option.

As illustrated by the figures below, the proposed project infrastructure will constitute a 15m high tree type monopole communication mast. The latter will be housed in an enclosed steel palisade structure of 8.0m x 10.0m (80m²). Access to this structure will be via a new ramp and sliding gate. Also to be included in this enclosed area is three proposed telecoms equipment containers and a pole-mounted telecoms DB box with floodlight.

The preferred alternative for the communication infrastructure is a tree type monopole communication mast. This type of communication structures tend to be installed in urban, suburban and commercial areas, which often makes it a preferred solution when local residents or businesses would be less than satisfied with a more complex-looking lattice design.

The aim of the proposed tree monopole is to create a tower that blends into the natural surroundings while meeting performance expectations.

The key features of the tree monopole are as follows:

- A significant height can be achieved on a very small footprint.
- Radio-transparent material shrouds hide hardware and offer aesthetic advantages.
- Adaptable to equipment needs of all segments of the communications industry.
- Able to accommodate antennas, radios, microwave and radar equipment, wind and solar energy units, cameras and monitoring equipment, lights, signage and flags.

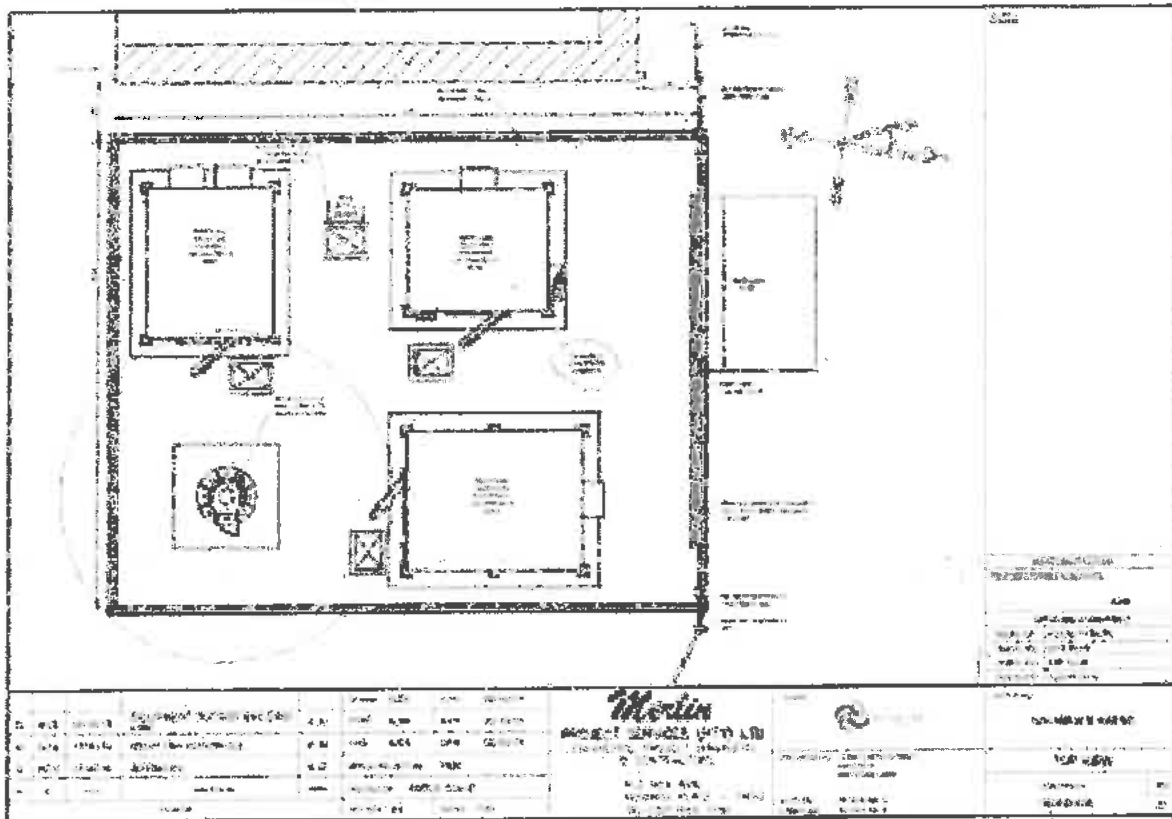


Figure 7: Top view of the proposed monopole structure and ancillary infrastructure (Source: Merlin Engineers, 2016).

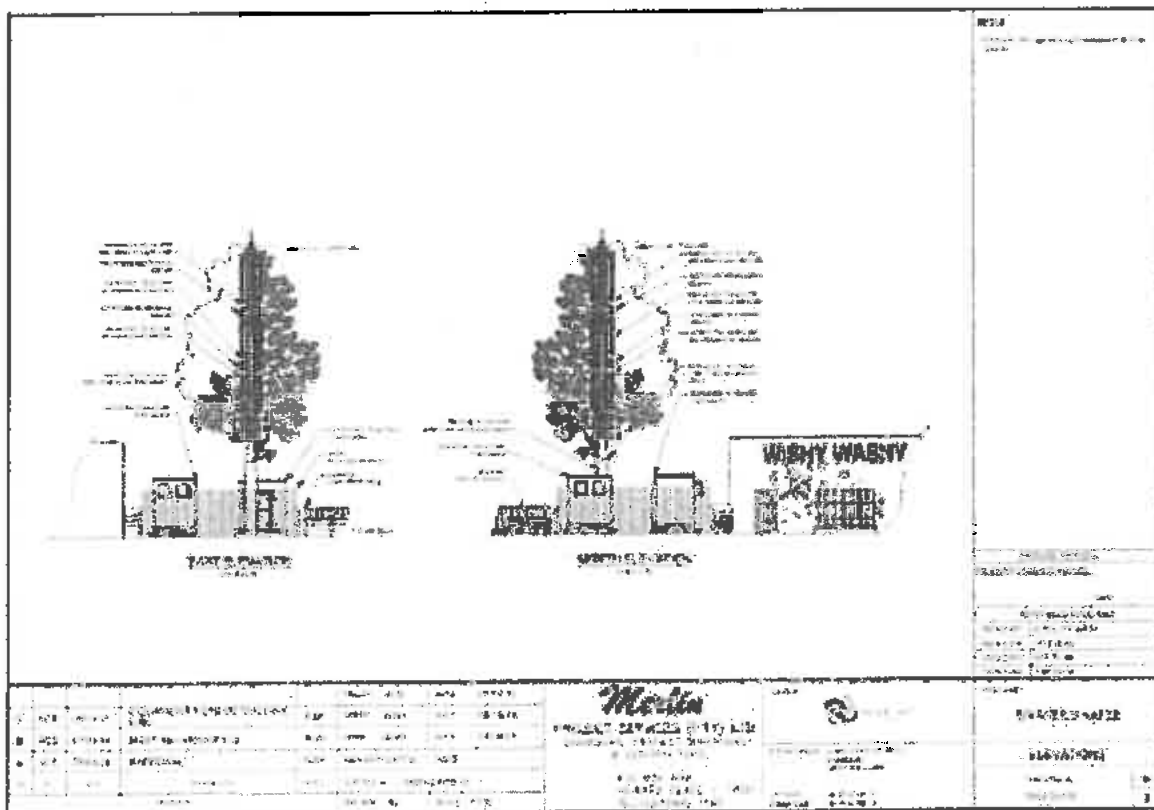


Figure 8: Elevations of the proposed tree monopole (Source: Merlin Engineers, 2016).

4 POTENTIAL 'TRIGGERS' OR KEY ISSUES

A 'trigger' is a characteristic of either the receiving environment or the proposed project which indicates that visibility and aesthetics are likely to be key issues and may require further specialist involvement (DEA&DP, 2005).

The 'triggers', as it relates to the proposed project refer to the following:

Table 1: Potential triggers.

KEY ISSUE	FOCAL POINTS	DESCRIPTION
a) Nature of the receiving environment:	<i>Areas of important tourism or recreational value.</i>	The project site is situated within the Greater Hermanus area which is considered to be a major tourist destination.
	<i>Areas with important vistas or scenic corridors.</i>	The landscape character of the area will be assessed in determining the expected visual impact.
b) Nature of the project:	<i>Possible visual intrusion in the landscape.</i>	The proposed activity is particularly visually prominent from defined observation points, the impact of which will be assessed through this VIA.

4.1 DEVELOPMENT CATEGORY

Based upon the 'triggers' and key issues and the environmental context summarised above, the proposed activity is categorised as a **Category 3 Development**.

This categorisation is based upon the *Guidelines for Involving Visual and Aesthetic Specialists in EIA Processes*, which lists the following categories of development:

Box 3: KEY TO CATEGORIES OF DEVELOPMENT

Category 1 Development: *e.g. nature reserves, nature-related recreation, camping, picnicking, trails and minimal visitor facilities.*

Category 2 Development: e.g. low-key recreation/resort/residential type development, small-scale agriculture/nurseries/narrow roads and small-scale infrastructure.

Category 3 Development: e.g. low density residential/resort type development, golf or polo estates, low to medium-scale infrastructure.

Category 4 Development: e.g. medium density residential development, sport facilities, small-scale commercial facilities/office parks, one-stop petrol stations, light industry, medium-scale infrastructure.

Category 5 Development: e.g. high density township/residential development, retail and office complexes, industrial facilities, refineries, treatment plants, power stations, wind energy farms, power lines, freeways, toll roads, large-scale infrastructure generally. Large-scale development of agriculture land and commercial tree plantations. Quarrying and mining activities with related processing plants.

Based upon the above categorization and the assessment criteria provided in the *Guidelines for Involving Visual and Aesthetic Specialists in EIA Processes* it is expected that a 'moderate visual impact' could be expected as a result of the proposed activity (refer to the table below).

The objectives of the VIA described in this report is to:

- determine whether such broad impact categorisation is appropriate and if not, to determine an appropriate category of impact;
- formulate and implement measures or interventions that would mitigate any detrimental impacts to the extent that the activity will be acceptable.

Table 2: Categorization of expected visual impact (DEA&DP, 2005).

Type of environment	Type of development				
	Category 1	Category 2	Category 3	Category 4	Category 5
Protected/wild areas of international or regional significance	Moderate visual impact expected	High visual impact expected	High visual impact expected	Very high visual impact expected	Very high visual impact expected
Areas or routes of high scenic, cultural, historical significance	Minimal visual impact expected	Moderate visual impact expected	High visual impact expected	High visual impact expected	Very high visual impact expected

Areas or routes of medium scenic, cultural or historical significance	Little or no visual impact expected	Minimal visual impact expected	Moderate visual impact expected	High visual impact expected	High visual impact expected
Areas or routes of low scenic, cultural or historical significance/disturbed	Little or no visual impact expected. Possible benefits	Little or no visual impact expected	Minimal visual impact expected	Moderate visual impact expected	High visual impact expected
Disturbed or degraded sites / run-down urban areas / wasteland	Little or no visual impact expected. Possible benefits	Little or no visual impact expected. Possible benefits	Little or no visual impact expected	Minimal visual impact expected	Moderate visual impact expected

5 VIEWSHED ANALYSIS

5.1 DOMINANT VIEW CORRIDORS

As a first step of this VIA, a survey was undertaken to determine the existence of significant view corridors associated with the project site. A view corridor is defined as 'a linear geographic area, usually along movement routes, that is visible to users of the route' (DEA&DP, 2005).

Having regard for the above, the primary view corridors are the scenic routes that pass through the landscape, namely the R43, the Hemel-en-Aarde Road and the Rotary Drive. However, these roads are relatively far away from the project site and might not relate directly to the proposed activity.

When determining dominant view corridors, one has to take into consideration the class of the road, the dominance and nature of the town/settlement/neighbourhood/district in which direction it travels and the distance from the proposed activity. In this regard, only the surrounding residential streets, namely Jimmy Smith Street, Main Road, Dirkie Uys Street and Long Street can be considered as view corridors that might be affected by the proposed activity.

5.2 RELEVANT TOPOGRAPHIC AND PHYSICAL CHARACTERISTICS

A further key aspect affecting the potential visual impact of any proposed activity is the topography of the project site and the surrounding environment and the existence of prominent biophysical features from where the project site is visible. The topography and the major ridgelines of the area were subsequently determined and mapped by using a *Digital Elevation Model*¹.

As illustrated by the DEM below, the project site is located at a mean elevation of approximately 17m above sea level. The DEM shows that the wider coastal plain slopes gently downwards in a southerly direction from the R43 in the north. The most significant areas on this plain are Zwelihle, Hemel-en-Aarde Estate, Onrus River, Vermont, and Sandbaai itself. The most prominent ridges or topographical manifestations within the immediate vicinity of the project site, from where the project site and the proposed activity could potentially be visible are the Hemel-en-Aarde and Hermanus Mountains.

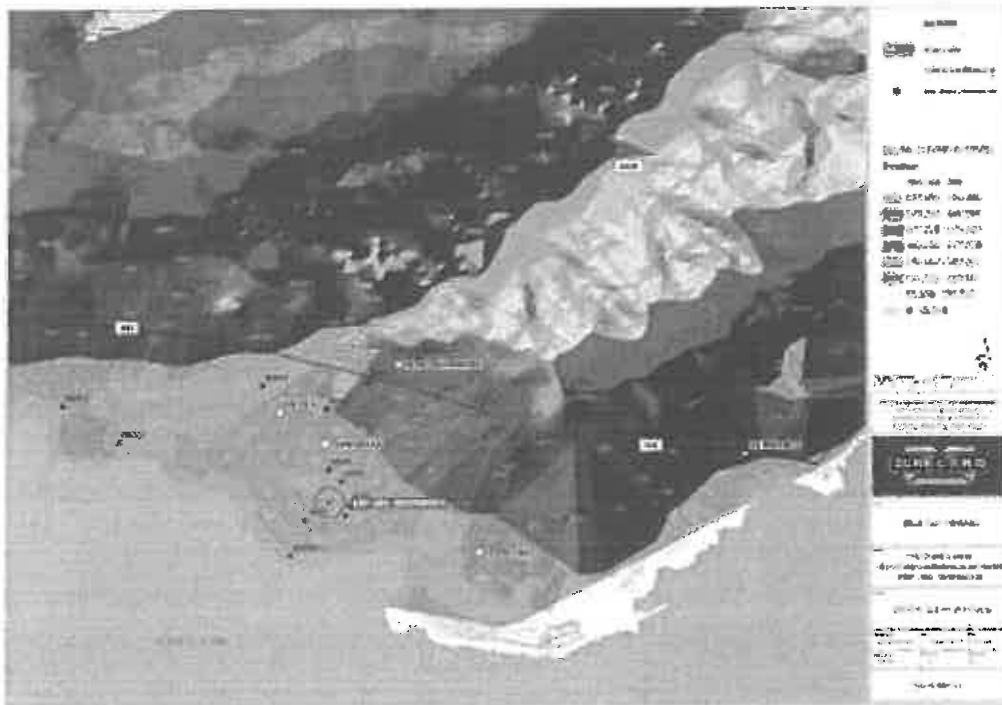


Figure 9: Digital Elevation Model illustrating the undulating nature of the area and the dominant view corridors in the sub-region.

¹ A Digital Elevation Model (DEM) is a geographic information system-based outcome generated from contours for a specific area. In this instance, 20m contour intervals for reference sheet no. 3419ac were used to calculate the DEM for the region.

5.3 PHOTOGRAPHIC STUDY AS SUPPLEMENTARY COMPONENT

In order to quantify and assess the visibility and potential impact of the proposed activity and to provide a basis for selecting appropriate observation points outside of the project site, a photographic study and analysis was undertaken in the vicinity of the project site. The analysis identified several observation points with similar characteristics and assessments outcomes. A selection of Key Observation Points is therefore included under Annexure 2.

6 DIGITAL VIEWSHED ANALYSIS

The photographic study summarised above was supplemented with a digital viewshed analysis based upon the Digital Elevation Model (refer to Figure 9). As stated previously, the purpose of these two steps was to provide a basis for the identification and selection of appropriate observation points outside the project site for the VIA.

The viewshed² analysis was undertaken in accordance with the *Guideline Document for involving Visual Specialists in EIA Processes*. Geographic Information Systems (GIS) technology was used to analyse and map information in order to understand the relationships that exist between the observer and the observed view. Key aspects of the viewshed are as follows:

- It is based on a *single viewpoint* from the highest point of the project site.
- It is calculated at an estimated 4m above the existing natural ground level to reflect the highest point of the proposed activity.
- It represents a '*broad-brush*' designation, which implies that the zone of visual influence may include portions that are located in a view of shadow and it is therefore not visible from the project site and *vice versa*. This may be as a result of landscape features such as vegetation, buildings and infrastructure not taken into consideration by the DEM.
- The viewshed generated from each of the selected observation points referred to in Annexure 2 is calculated at 1.7m above the natural ground level to reflect the average height of person either walking or sitting in a vehicle.

² A viewshed is defined as '*the outer boundary defining a view catchment area, usually along crests and ridgelines. Similar to a watershed*'. A Viewshed Analysis is therefore the study into the extent to which a defined area is visible to its surroundings.

As illustrated by the generated viewsheds (refer to Figure 10 below), the *zone of visual influence*³ is defined to the coastal plain and only stretches as far as the mountains in the north. The viewshed is relatively uniform across the landscape as no prominent features are present in this area. As illustrated by the figure below, the viewshed stretches up to 5km from the project site in a predominantly western direction, all the way to the residential neighbourhood of Vermont.

The GIS-generated viewshed illustrates a theoretical *zone of visual influence*. This does not mean that the proposed activity would be visible from all observation points in this area. The distance radii indicating the various viewing distances from the project site are also illustrated by Figure 10.



Figure 10: Viewshed generated from the centre of the project site.

6.1 KEY ASPECTS OF THE VIEWSHED

The distance between the observer and the observed activity is an important determinant of the magnitude of the visual impact. This is due to the visual impact of an activity diminishing as the

³ Zone of visual influence is defined as 'An area subject to the direct visual influence of a particular project'.

distance between the viewer and the activity increases. Viewsheds are categorised into three broad categories of significance, namely:

- a) **Foreground:** The foreground is defined as the area within 1km from the observer within which details such as colour, texture, styles, forms and structure can be recognised. Objects in this zone are highly visible unless obscured by other landscape features, existing structures or vegetation.
- b) **Middle ground:** The middle ground is the area between 1km and 3km from the observer where the type of detail which is clearly visible in the foreground becomes indistinguishable. Objects in the middle ground can be classified as visible to moderately visible, unless obscured by other elements within the landscape.
- c) **Background:** the background stretches from approximately 3km onwards. Background views are only distinguishable by colour and lines, while structures, textures, styles and forms are often not visible (SRK Consulting, 2007).

7 VISUAL IMPACT ASSESSMENT

7.1 SELECTION OF OBSERVATION POINTS

A total of 20 Key Observation Points (KOPs) were provisionally identified and selected within the defined viewshed for the visual assessment in accordance with the selection criteria stipulated in the Visual Guidelines. These KOPs correspond with movement routes, residential areas and general populated areas, commercial and institutional areas in the region. As a result of the similarity in the assessment results of the KOPs, the description and assessment of only a selected few KOPs are included in Annexure 2.

KOPs selected for the assessment are generally located at the intersection between the zone of visual influence and the defined view corridors (refer to Section 5.1 above). The view corridors are those areas that are accessible to the general observer.

7.2 ASSESSMENT PROCESS

The identified *observation points* were categorised and assessed as summarised in the table below.

Table 3: VIA methodology and process.

KEY	DESCRIPTION
NUMBER	Each observation point was allocated a reference number.
CO-ORDINATES	The co-ordinates of each of the observation points are provided.
ALTITUDE	The altitude of the observation point was provided in meters above sea level.
DESCRIPTION	A brief description where the observation point is located is provided.
TYPE	Each observation point is categorised according to its location and significance rating. These criteria include the following: <ul style="list-style-type: none"> • Tourist-related corridors, including linear geographical areas visible to users of a route or vantage points. • Residential areas. • Institutional areas. • Commercial areas. • Recreational area.
PHOTOGRAPH	A photograph was taken from each observation point in the direction of the project site to verify the digitally-generated viewshed.
PROPERTY LOCATION	The location of the property was described a <i>foreground, middle ground or background</i> .
PROXIMITY	The distance between the observation point and the project site was provided in kilometres.
VISUAL SENSITIVITY OF RECEPTORS	The visual impact considered acceptable is dependent on the type of receptors. A <i>high</i> (i.e. residential areas, nature reserves and scenic routes or trails), <i>moderate</i> (e.g. sporting or recreational areas, or places or work), or <i>low</i> sensitivity (e.g. industrial, mining or degraded areas) was awarded to each observation point.
VISUAL EXPOSURE	Exposure or visual impact tends to diminish exponentially with distance. A <i>high</i> (dominant or clearly visible), <i>moderate</i> (recognisable to the viewer) or <i>low</i> exposure (not particularly visible to the viewer) rating was allocated to each observation point.
VISUAL ABSORPTION CAPACITY (VAC)	The potential of the landscape to conceal the proposed activity was assessed. A rating of <i>high</i> (effective screening by topography and vegetation), <i>moderate</i> (partial screening) and <i>low</i> (little screening) was allocated to each observation point.
VISUAL INTRUSION	The potential of the activity to fit into the surrounding environment was determined. The visual intrusion relates to the context of the proposed activity while maintaining the integrity of the landscape. A rating of <i>high</i> (noticeable change), <i>moderate</i> (partially fits into the surroundings) or <i>low</i> (blends in well with the surroundings) was allocated.

DURATION	With regard to roads, the distance (in kilometres) and duration (in seconds) for which the property will be visible to the road user, were calculated for each observation point.
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7.3 SUMMARY OF ASSESSMENT

Based on the viewshed analysis and the preceding sections, the envisaged visual impact of the proposed activity was assessed in accordance with the criteria for visual impact assessments (DEA&DP, 2005). The findings of the assessment from selected observation points are included under Annexure 2.

7.3.1 Assessment Criteria

It is stated in the DEA&DP's Visual Guidelines that to aid decision-making, the assessment and reporting of possible impacts requires consistency in the interpretation of impact assessment criteria. The criteria that specifically relate to VIAs were therefore described in Table 3 and Annexure 2.

The potential visual impact of the proposed activity was assessed against these criteria, with reference to the summary of criteria in Box 12 of the Visual Guidelines. Table 4 provides a description of the summary criteria used to determine the impact significance.

Table 4: Summary of criteria used to assess the potential impacts of the proposed activity.

CRITERIA	DESCRIPTION
NATURE OF THE IMPACT	The nature of the impact refers to the visual effect the proposed activity would have on the receiving environment. The nature of the development proposals are described in the preceding sections.
EXTENT (Scale)	<p>This category deals with the spatial or geographic area of influence and refers to the following levels:</p> <ul style="list-style-type: none"> • <i>Site-related</i> (extending only as far as the activity), • <i>Local</i> (limited to the immediate surroundings), • <i>Regional</i> (affecting a larger metropolitan or regional area), • <i>National</i> (affecting large parts of the country), • <i>International</i> (affecting areas across international boundaries). <p>A value between 1 and 5 is assigned as appropriate (with 1 being low and 5 being high).</p>

DURATION	Duration refers to the expected life-span of the visual impact. A rating of <i>immediate</i> (assigned score of 1), <i>short term</i> (0-5 years) (assigned score of 2), <i>medium term</i> (5-15 years) (assigned score of 3), <i>long term</i> (ceases at the end of operation) (assigned score of 4), or <i>permanent</i> (where time will not mitigate the visual impact) (assigned score of 5) were applied.
MAGNITUDE	Magnitude refers to the magnitude of the impact on views, scenic or cultural resources. The following ratings were allocated to determine the intensity of the impact: <ul style="list-style-type: none"> • <i>No effect</i> (assigned score of 0), • <i>Low</i> (visual and scenic resources not affected) (score of 2), • <i>Minor</i> (will not result in impact on processes) (score of 4), • <i>Medium</i> (affected to a limited scale) (assigned score of 6), • <i>High</i> (scenic and cultural resources are significantly affected) (assigned score of 8), • <i>Very high</i> (result in complete destruction of patterns) (score of 10).
PROBABILITY	This category refers to the degree of possibility of the visual impact occurring. A rating of <i>none</i> (probably will not happen) (assigned score of 0), <i>improbable</i> (very low possibility of the impact occurring) (assigned score of 1), <i>low probability</i> (assigned score of 2), <i>medium probability</i> (distinct possibility that the impact will occur) (assigned score of 3), <i>highly probability</i> (most likely) (assigned score of 4), or <i>definite</i> (impact will occur regardless of any preventative measures) (assigned score of 5) were applied.
STATUS	Status will be described as <i>positive</i> , <i>negative</i> or <i>neutral</i> .
REVERSIBILITY	Degree to which the activity can be reversed. The following rating were allocated: <ul style="list-style-type: none"> • <i>Reversible</i> (assigned score of 1), • <i>Recoverable</i> (assigned score of 3), or • <i>Irreversible</i> (assigned score of 5).
SIGNIFICANCE	The significance is calculated by combining the criteria in the following formula: $S = (E+D+M)P$ <p>S = Significance E = Extent D = Duration M = Magnitude P = Probability</p>

	<p>The significance ratings for each potential impact are as follows:</p> <ul style="list-style-type: none"> • <i>Low</i> (where it will not have an influence on the decision) (<30 points), • <i>Medium</i> (where it should have an influence on the decision unless it is mitigated) (30-60 points), or • <i>High</i> (where it would influence the decision regardless of any possible mitigation) (>60 points).
--	--

7.4 ASSESSMENT OF IMPACTS

7.4.1 Assessment of Impact on the Landscape Character

Sense of place and landscape character is closely related to one another. Sense of place refers to a unique experience of an environment by a user, based on his or her cognitive experience of the place. Visual criteria and specifically the landscape character of an area (informed by a combination of aspects, such as topography, level of development, vegetation, noteworthy features, cultural/historical features, etc.) play a significant role (MetroGIS, 2012).

A visual impact on the sense of place is one that alters the visual landscape to such an extent that the user experiences the environment differently, and more specifically, in a less appealing or less positive light (MetroGIS, 2012).

The sensitivity of the landscape character is an indication of *'the degree to which a particular landscape can accommodate change from a particular development, without detrimental effects on its character'* (GLVIA, 2002). A landscape with a high sensitivity would be one that is greatly valued for its aesthetic attractiveness and/or have ecological, cultural or social importance through which it contributes to the inherent character of the visual resource (Axis Landscape Architect, 2014).

A landscape sensitivity rating was adapted from GOSW (2006) and applied in the classification of the study area into different sensitivity zones.

Table 5: Landscape character sensitivity rating (adapted from GOSW, 2006).

	DESCRIPTION
Low Sensitivity	<p>These landscapes are likely to:</p> <ul style="list-style-type: none"> • Have distinct landforms; • Have a strong sense of enclosure that reduces visual sensitivity;

	<ul style="list-style-type: none"> • Have been affected by man-made features; • Have reduced tranquillity; • Have little inter-visibility with adjacent landscapes; and • Exhibit a low density of sensitive landscape features.
Moderate sensitivity	<p>These landscapes are likely to:</p> <ul style="list-style-type: none"> • Have moderately prominent landforms that provide some form of enclosure; • Have been affected by some man-made features; • Have little inter-visibility with adjacent landscapes; and • Exhibit a moderate density of sensitive landscape features.
High sensitivity	<p>These landscapes are likely to:</p> <ul style="list-style-type: none"> • Have poorly defined landforms; • Be open or exposed with a remote character and an absence of man-made features; • Be highly visible from adjacent landscapes; and • Exhibit a high density of sensitive landscape features.

Having regard for the existing urban nature of the Sandbaai area and the variety of land uses on and surrounding the project site, it is argued that the sense of place of the area has, to a large degree, been lost in the neighbourhood itself. As a result, the sense of place of the area is commonly associated with urban uses (mainly residential) while the majority of tourist offerings are found in Hermanus itself. The Sandbaai area does represent a slightly quieter lifestyle than areas such as the Cape Metropolitan area, and given the proximity of the natural features and landscapes, the landscape character of the area is considered to be of **moderate sensitivity**.

The table below attempts to summarise the significance of the activities in relation to the landscape character.

Table 6: Impact table summarising the significance of visual impact on the landscape character.

NATURE:	Potential visual impact on the landscape character and sense of place.			
	Without Mitigation	Score	With Mitigation	Score
EXTENT	Regional	3	Local	2
DURATION	Long term	4	Long term	4
MAGNITUDE	Medium	6	Minor	4
PROBABILITY	Medium	3	Low	2
SIGNIFICANCE	Medium	39	Low	20
IRREPLACEABLE LOSS OF RESOURCE?	No		No	

CAN IMPACTS BE MITIGATED?	Partially
CUMULATIVE IMPACTS:	It is expected that the cumulative effect of the proposed activity would be direct as the impact would be experienced at the same time as the introduction of the infrastructure. The cumulative effect would also be additive (e.g. the sudden introduction of new infrastructure in the landscape).
RESIDUAL IMPACTS:	It is argued that the status quo could be regained if the activity would be removed altogether.

7.4.2 Assessment of Impact on Tourist Value of the Area

Specific viewers (visual receptors) experience different views of the visual resource and value it differently. They will be affected because of alterations to their views due to the proposed activity. The visual receptors are grouped according to their location and significance. Differentiation is made between:

- a) Tourist-related and areas of cultural significance.
- b) Motorists along roads.
- c) Residential Areas and Farmstead.
- d) Recreational areas.

Tourists are regarded as visual receptors of exceptional high sensitivity. Their attention is focused towards the landscape which they essentially utilise for enjoyment purposes and appreciation of the quality of the landscape.

Residents of the affected environment are classified as visual receptors of high sensitivity owing to their sustained visual exposure to the proposed development as well as their attentive interest towards their living environment.

Motorists are generally classified as visual receptors of low sensitivity due to their momentary view and experience of the proposed development. As a motorist's speed increases, the sharpness of lateral vision declines and the motorist tends to focus on the line of travel (USDOT, 1981). This adds weight to the assumption that under normal conditions, motorists will show low levels of sensitivity as their attention is focused on the road and their exposure to roadside objects is brief.

Motorists on scenic routes will present a higher sensitivity. Their reason for being in the landscape is similar to that of the tourists and they will therefore be categorised as part of the tourist viewer

group (Axis Landscape Architects, 2014). In terms of the latter, users of the Hemel-en-Aarde Road, Rotary Drive and the R43, as scenic routes, are therefore regarded as receptors of high sensitivity.

Table 7: Impact table summarising the significance of visual impact on the tourism value of the area.

NATURE:	Potential visual impact on the tourism value of the area.			
	Without Mitigation	Score	With Mitigation	Score
EXTENT	Regional	3	Local	2
DURATION	Long term	4	Long term	4
MAGNITUDE	Minor	4	Low	2
PROBABILITY	Low	2	Low	2
SIGNIFICANCE	Low	22	Low	16
IRREPLACEABLE LOSS OF RESOURCE?	No		No	
CAN IMPACTS BE MITIGATED?	Partially			
CUMULATIVE IMPACTS:	It is expected that the cumulative effect of the proposed activity would be direct as the impact would be experienced at the same time as the introduction of the infrastructure. The cumulative effect would also be additive (e.g. the sudden introduction of new infrastructure in the landscape).			
RESIDUAL IMPACTS:	It is argued that the status quo could be regained if the activity would be removed altogether.			

It is submitted that many other sensitive receptors are located in the immediate vicinity of the project site. In addition to the users of the scenic routes these sensitive receptors represent mostly residential properties and tourist-related areas within Sandbaai itself. As illustrated by the results of the assessment included under Annexure 2, only those receptors immediately adjacent to the project site will be visually impacted upon by the proposed activity. Receptors situated further away tend not to be impacted by the proposed activity due to the visual absorption capacity of the landscape within which the project site is located.

7.4.3 Assessment of Impact of Artificial Lighting

The occurrence of light sources in the vicinity of the project site is predominantly associated with the individual residential dwellings and street lighting. The extent of these light sources is relatively minimal, however, a sky glow⁴ effect created by these installations is visible.

Structures and ground surfaces that are highly illuminated can be clearly visible for long distances, especially on clear nights. A primary cause of light pollution is unshielded outdoor illumination fixtures. These fixtures produce large amounts of upward and horizontal spill. Light that shines upward is a direct waste and is the primary cause of light pollution. Horizontal light produces glare which might cause a degree of annoyance for viewers, especially at close proximity (MetroGIS, 2009).

It is noted from the plans provided that a pole-mounted telecoms DB box with floodlight would be erected as part of the infrastructure. As such, it is expected that such source may present a visual impact.

Table 8: Impact table summarising the visual impact of artificial lighting.

NATURE:	Potential visual impact of artificial lighting as a result of the activity.			
	Without Mitigation	Score	With Mitigation	Score
EXTENT	Regional	3	Local	2
DURATION	Long term	4	Long term	4
MAGNITUDE	Medium	6	Minor	4
PROBABILITY	Low	2	Improbable	1
SIGNIFICANCE	Low	26	Low	10
IRREPLACEABLE LOSS OF RESOURCE?	No		No	
CAN IMPACTS BE MITIGATED?	Yes			
CUMULATIVE IMPACTS:	it is expected that the cumulative effect of the proposed activity would be direct as the impact would be experienced at the same time as the introduction of the infrastructure. The cumulative effect would also be additive (e.g. the sudden introduction of new infrastructure in the			

⁴ Sky glow refers to the illumination of the night sky or parts thereof. The most common cause of sky glow is artificial light that emits light pollution, which accumulates into a fast glow that can be seen from kilometers away.

	landscape).
RESIDUAL IMPACTS:	It is argued that the status quo could be regained if the activity would be removed altogether.

8 POLICY CONTEXT

8.1 STRATEGIC PLANNING DOCUMENTS

The Greater Hermanus area functions as the primary civic, administrative and tourism centre within the region. The Overstrand SDF (2006) notes that the Greater Hermanus is renowned for the quality of its natural environment as well as the temperate climate, which have made the Greater Hermanus a popular retirement, holiday and tourism destination.

The protection and maintenance of the character of the areas with the Greater Hermanus, as well as the sustainable growth in the area, formed the basis of the land use and development proposals of the Greater Hermanus Sub-Regional Spatial Development Framework (July 2000). It is further stated that the challenge will be to retain this unique character and its attractiveness by balancing the need for urban growth with the conservation of the area's biophysical and cultural heritage assets.

In order to achieve the above ideals, the SDF lists the following Local Spatial Development Principles:

Promote:

- conservation of sensitive natural resources, including the mountain backdrop and associated Fynbos reserves, a varied coastal strip and associated marine reserves and a series of river and estuarine systems.
- conservation of heritage resources, including the character of the historical fishing/holiday settlement areas of Hermanus and Onrust, the number of buildings of historical, architectural and social value, as well as the scenic beauty of the rural landscape of Hemel-en-Aarde Valley.
- the equitable distribution of community facilities throughout the Greater Hermanus area.
- Greater Hermanus as a tourism destination.

Restrict:

- industrial development to serve industries and clean light industry.

Maintain:

- the unique village atmosphere of Greater Hermanus.
- the open space corridors created by the Onrus River and other drainage channels.
- the network of primary, secondary and linkage scenic routes, e.g. the coastal footpath along the cliffs, Marine Drive, Rotary Way, the route through the Hemel-en-Aarde Valley and the R43.

Contain:

- the urban footprint of Greater Hermanus within a well-defined urban edge.

The proposed infrastructure will adhere to the above principles. The assessment and summary included under Annexure 2 also confirm that the proposed infrastructure will not negatively impact on the heritage resources as indicated by the figure below.

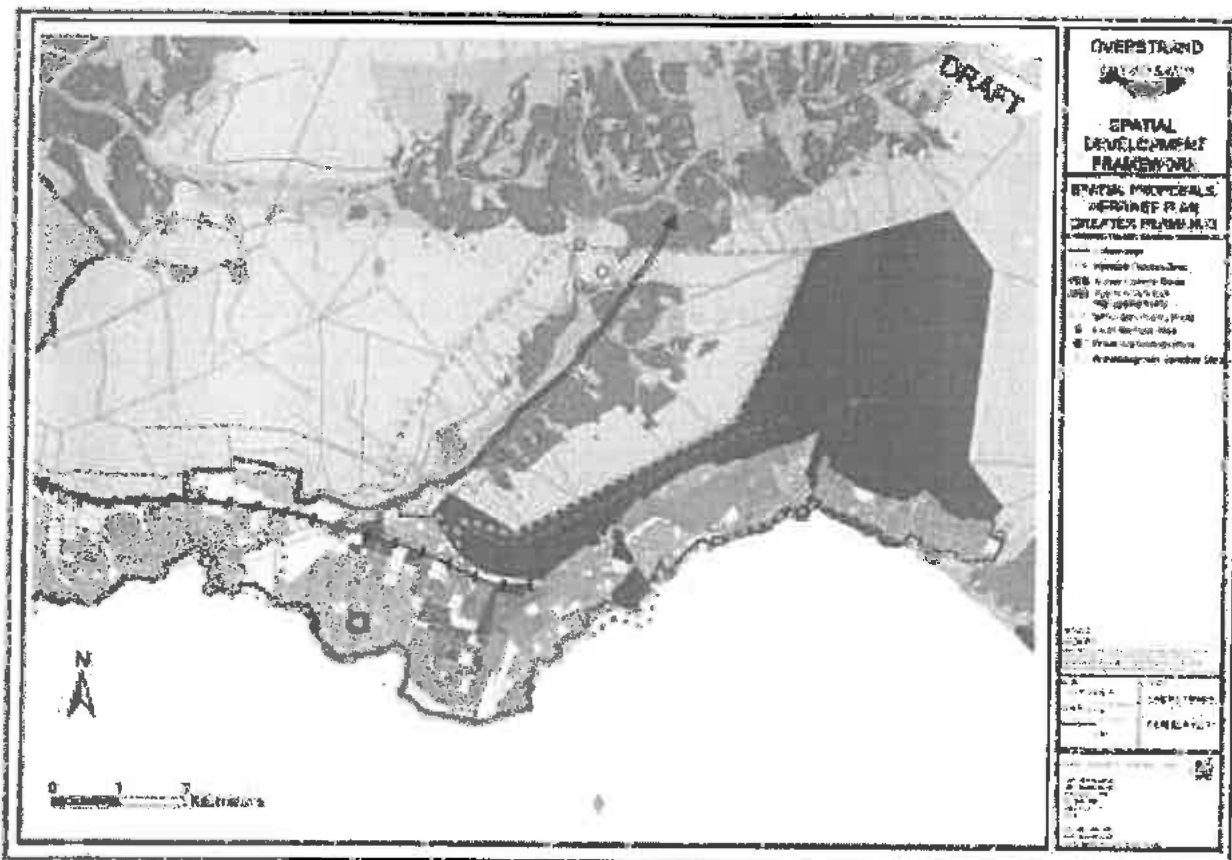


Figure 11: Overstrand Spatial Development Framework Indicating the spatial proposals and heritage resources of the Greater Hermanus area. The project site is indicated by the black circle.

9 IMPACT STATEMENT

The on-site verification from the selected Key Observation Points and the viewsheds generated from the latter points indicated that the proposed activity will only be clearly visible from observation points in the foreground of the project site. To this end, the results of the viewshed analysis from defined Key Observation Points, together with photographs indicating the actual view has been included under Annexure 2.

The results of the Visual Impact Assessment for the proposed monopole mast consequently found that the overall visual impact is summarised as being of a **medium negative significance**. Should the recommendations and mitigation measures be implemented, as proposed below, the expected impact could be reduced to **low negative significance**. The primary informants of this assessment are as follows:

- a) Although the preferred infrastructure will have a relatively small footprint, the proposed mast will be high and top heavy. Thus, a potential impact on the skyline could be expected.
- b) The preferred infrastructure would be developed in an area which is used for a variety of land uses, such as residential, commercial, retail and community uses.
- c) The project site is located relatively far from the scenic routes, i.e. R43, Rorary Drive and Hemel-en-Aarde Road, and the visual absorption capacity en-route to the site is very high.
- d) All forward planning documents reference the importance of services infrastructure to supply in the needs of the greater community. The documents also do not specifically note that such installations could not be considered in the area.

It is therefore concluded that the sense of place, and most other expected impacts of the proposed activity, will not alter to such an extent where users might experience the visual landscape in a less appealing or less positive light.

9.1 RECOMMENDATIONS AND PROPOSED MITIGATION MEASURES

As mentioned above, the current preferred alternative calls for the erected of a tree-type monopole mast up to 15.0m in height. While such installations might strive to be inconspicuous in landscapes, it is mostly in areas where a similar type of vegetation growth occurs, or where large trees are in existence, that the tree-type application should be preferred over other installations for its aesthetic advantages.

Sandbaai is not devoid of large trees but it is also not an area where large trees flourish. To this extent **it is therefore recommended that a less prominent monopole mast such as a flagpole-type mast with a clustered antenna on top be installed in place of the tree-type mast.** In addition, the following mitigation measures should be implemented in order to lessen the potential visual impact of the mast:

- a) Paint all infrastructure in a deep green colour to detract from the purely utilitarian use of the site.
- b) Keep disturbed areas to a minimum.
- c) Outdoor lighting must be strictly controlled so as to prevent light pollution.
- d) All lighting must be installed at downward angles.
- e) Sources of light must as far as possible be shielded by physical barriers such as a planted trees and shrubs or built structures.
- f) Consider the application of motion detectors to allow the application of lighting only where and when it is required.

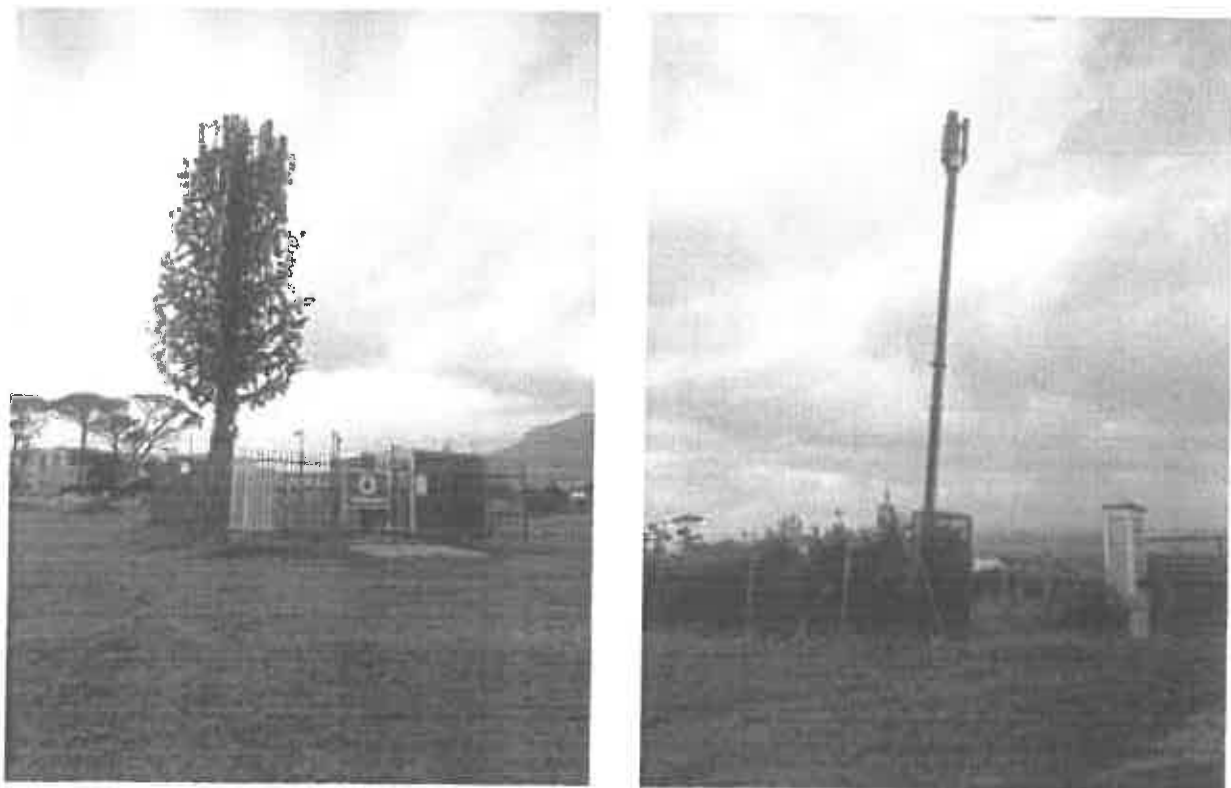


Figure 12: Comparison between the proposed tree-type monopole mast (left) and a flagpole-type mast (right). Note the inconspicuousness of the flagpole-type mast compared to the tree-type mast.

10 ENVIRONMENTAL MANAGEMENT PROGRAMME

The management plan tables aim to summarise the key findings of the visual impact report and to suggest possible management actions in order to mitigate the potential visual impacts.

Table 9: Environmental Management Programme – Planning Phase

OBJECTIVE: To establish a facility that would have the least intrusive impact on the landscape and not create a detrimental visual impact.		
Project component/s	The creation of a low-scale communication mast.	
Potential Impact	Potential visual intrusion and impact on the skyline.	
Activity/risk source	Potential impact on sensitive receptors within the <i>foreground</i> .	
Mitigation: Target/Objective	Diligent planning of the proposed facility to minimise the expected visual impact.	
Mitigation: Action/control	Responsibility	Timeframe
Consider a wide range of communication masts that would comply with the requirements of the developer whilst having the least impact on the community.	Blue Sky Towers/ planners / landscape architect	In the planning phase
Plan vegetated and landscaped areas along adjoining roads to minimise visual impacts onto the site.	Blue Sky Towers / planners / landscape architect	In the planning phase
Performance Indicator	Well maintained activity that has no larger impact than the status quo. All actions to be measured against the Operational Phase Environmental Management Plan.	
Monitoring	N/A	

Table 10: Environmental Management Programme – Construction Phase

OBJECTIVE: Mitigate the potential visual impact associated with the construction phase.		
Project component/s	Construction site	
Potential Impact	Visual impact of general construction activities and associated impacts.	
Activity/risk source	Potential impact on sensitive receptors within the foreground.	
Mitigation: Target/Objective	Minimal visual intrusion by construction activities and general acceptance and compliance with Environmental Specifications.	
Mitigation: Action/control	Responsibility	Timeframe
Plan construction times in such a manner to have the least impact on surrounding properties.	Blue Sky Towers / contractor	Pre-construction
Demarcate sensitive areas and no-go areas with	Blue Sky Towers /	Pre-construction

danger tape to prevent disturbance during construction.	contractor	
Keep disturbed areas to a minimum.	Blue Sky Towers / contractor	Throughout construction
Institute a planting regime in the road reserve to soften the impact of the infrastructure.	Blue Sky Towers / contractor	Construction
Performance Indicator	Construction site is confined to the demarcated areas identified on a Development Plan. No transgression of the Environmental Specifications visible and natural processes occurring freely outside boundaries of the construction site.	
Monitoring	Monitoring to be undertaken by an appointed Site Engineer who will enforce compliance with the Environmental Specifications.	

Table 11: Environmental Management Programme – Operational Phase

OBJECTIVE: Mitigate the possible visual impact associated with the operational phase.		
Project component/s	Low scale communication mast.	
Potential Impact	Potential visual intrusion and impact on the skyline.	
Activity/risk source	Potential impact on sensitive receptors within the <i>foreground</i> .	
Mitigation:	An activity that results in the least visual impact on all receptors.	
Target/Objective		
Mitigation: Action/control	Responsibility	Timeframe
Maintain the general appearance of the facility as a whole.	Blue Sky Towers / contractor	Throughout operational phase
Performance Indicator	Well maintained activity that has little or no impact on the environment. All actions to be measured against the Operational Phase Environmental Management Plan.	
Monitoring	Site Engineer to undertake monitoring functions for 2 months after the project installation to ensure compliance and effectiveness of mitigation measures. Management thereafter to be undertaken by the responsible entity.	

11 REFERENCES

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Sandbaai. 34°25'25.52''S and 19°11'51.07''E. Google Earth. 20 June 2016

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ZONE LAND SOLUTIONS

23 JUNE 2016

ANNEXURE 7: LETTER FROM THE NATIONAL DEPARTMENT OF HEALTH

Department of Health

Directorate: Radiation Control

Private Bag X62

BELLVILLE

7535

Tel: 021 957 7483

Fax: 021 946 1589

E-mail: Dutbil@health.gov.za

Web: <http://www.doh.gov.za/department/radiation/01.html>

Enquiries: LL du Toit

Date: 14 June 2010

To whom it may concern

HEALTH EFFECTS OF CELLULAR BASE STATIONS

Within the national Department of Health, the Directorate: Radiation Control is the section responsible for regulating non-ionizing radiation, and this includes electromagnetic fields (EMF) at frequencies less than 300 GHz. In carrying out this responsibility, the Directorate has been utilising the World Health Organization's (WHO) International EMF Project (www.who.int/emf) as its primary source of information and guidance with respect to the health effects of EMF. In this regard, two recent publications by the WHO are of particular relevance, i.e. (i) International EMF Project Fact Sheet "**Electromagnetic fields and public health: mobile phones**" (www.who.int/mediacentre/factsheets/fs193/en/index.html) and (ii) the results of the multi-national 10-year long INTERPHONE study on mobile phone use and brain cancer risk (press release – www.iarc.fr/en/media-centre/pr/pdfs/pr200_E.pdf). The Directorate endorses the exposure guidelines published in 1998 by the International Commission on Non-Ionizing Radiation Protection (ICNIRP), based on the official endorsement of the WHO in this regard. ICNIRP states categorically that exposure to EMF at any level below that of the ICNIRP exposure guidelines will protect people against the known adverse health effects of EMF. The Department of Health is currently considering new legislation with regard to EMF and compliance with the ICNIRP exposure guidelines would in all probability form the mainstay of any such future EMF regulations. The scope of regulatory control would be another issue to consider, i.e. whether cellular and/or other low power radiofrequency technologies should be included at all, and if so, on what basis and subject to which control measures.

Measurement surveys conducted in South Africa and around the world have shown that the actual levels of public exposure, as a result of base station emissions, are invariably only fractions of a percentage of the ICNIRP guidelines, even in instances where members of the public have been really concerned about their exposure to these emissions. The Department is therefore satisfied that the health of the general public is not being compromised by their exposure to the microwave emissions of cellular base stations, because at present no confirmed scientific evidence exists that would indicate any hazard to human health in situations that members of the public would typically find themselves in.

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RADIO FREQUENCY COVERAGE PLOT:

SANDBAAI, SWANNIES CAFÉ

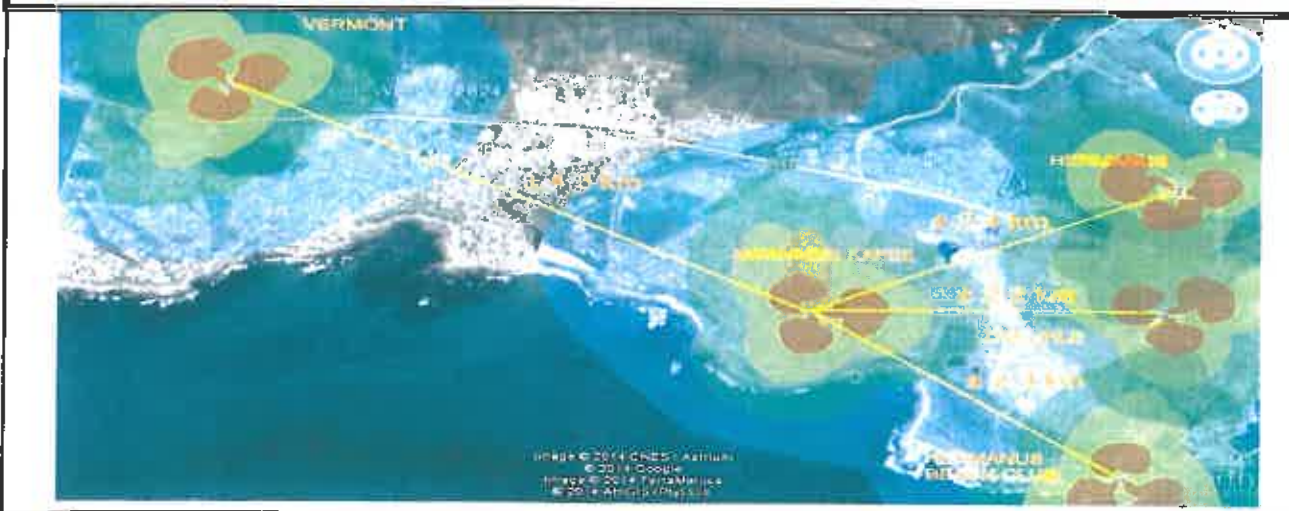
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Howard Place
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Rep. of South Africa

Tel : (021) 905 7185
Fax : (021) 905 6615
simoller@merlins.co.za

FREQUENCY PLOT - Before proposed site construction (October 2014)



FREQUENCY PLOT - After proposed site construction



Legend

- 60 to -70 dBm
- 70 to -80 dBm
- 80 to -90 dBm
- 90 to -100 dBm

The above plots show empirical predictions of the various radio frequencies that are currently experienced in the area given existing infrastructure, versus what the anticipated additional coverage will become with the new site. Top plot shows distances to nearest other existing sites.

Loretta Gillion - Erf 280 Sandbaai - tower

From: Don Kearney
To: Loretta Gillion
Date: 25/04/2016 10:52 AM
Subject: Erf 280 Sandbaai - tower
Cc: Marian moolman; Area Manager Secretary Hermanus; david@route2.co.za

Loretta,

Kindly note that although the closing date for comments was 15 April 2016, the Ward Committee had already submitted their comments to the Administration at their ward committee meeting that was held on 14 April 2016. As the Executive Mayor was also running the IDP Budget Roadshows in all the wards, we were unable to submit the comments earlier.

The Ward Committee of Ward 7 has unanimously objected to the erection of the high mast tower as per the application for the following reasons:

1. The infringement of the scenic views over the area
2. The fact that the height of the tower, no matter how it might be camouflaged, will make the tower aesthetically unpleasing in the residential area
3. The risk of emission of radiation of the air waves, particularly in that area where many people are suffering from carcinoma.
4. That in general, the residents consider it undesirable to have high mast towers in the residential area.

The Ward Committee has recommended that locations along the mountain be identified for this purpose and that a high mast policy be considered.

I trust that you will ensure that these comments are included in the formal comments regarding the said application.

Thanks

Don Kearney
Senior Manager: Hermanus Administration
Overstrand Municipality
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OVERBERG

DISTRIKSMUNISIPALITEIT DISTRICT MUNICIPALITY UMASIPALA WESITHILI



MELD ASB/PLEASE QUOTE

Ons Verw./Our Ref.: 18/3/9/6/2/2

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Hermanus Sub-district Office

15 Flower Street

Tel: 028 313 1243

Fax: 028 313 1263

E-mail: ndreyer@odm.org.za



23 May 2016

The Municipal Manager
Overstrand Municipality
P.O. Box 20
Hermanus
7200

TP-A Theart
C H Olivier


Attention: Town Planning Department

Dear Sir

Proposed Consent Use and Departure Erf 280, 10 Jimmy Smith Street, Sandbaai

This department has no objection to the application for consent use and departure on the abovementioned property subject to compliance with all relevant health requirements and also to prevent any negative influence on the surrounding environment.

Yours truly,


Municipal Manager
Nd/mc

FILE NO:	EL 280-5B
SCAN NO:	36
COLLABORATOR NO:	904223

TP
25 MAY 2016 Alle korrespondensie moet aan die MUNISIPALE BESTUURDER gerig word.
All correspondence must be addressed to the MUNICIPAL MANAGER.

26 May 2016

**COMMENTS FROM THE ENGINEERING SERVICES DEPARTMENT FOR:
APPLICATION FOR CONSENT USE & DEPARTURE: ERF 280, SANDBAAI
(3075)**

Electricity	:	In order
Water	:	In order
Sewer	:	In order
Stormwater	:	In order
Roads and traffic	:	In order

Conditions:

1. that only the existing electricity connection will be available for the development and that, should additional capacity be required, an investigation be conducted, with regard to the capacity required and that available, at the developer's cost;
2. that only the existing water and sewerage connections will be available to the development, should larger capacity in any of these services be required, the upgrading will be at the developer's cost;
3. that no on-street parking be allowed;
4. that stormwater be allowed to discharge through Erf 280, Sandbaai, unobstructed.



**DENNIS HENDRIKS
SENIOR MANAGER:
ENGINEERING SERVICES**



DATE