

BASIC ASSESSMENT REPORT

PRE-APPLICATION BASIC ASSESSMENT REPORT IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) AND ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014 (AS AMENDED)

October 2017

PROJECT TITLE

PROPOSED UPGRADE AND EXPANSION OF THE COASTAL ACCESS ROAD FROM L'AGULHAS TO
SUIDERSTRAND

REPORT TYPE CATEGORY	REPORT REFERENCE NUMBER	DATE OF REPORT
Pre-Application Basic Assessment Report (if applicable) ¹	Project title to be used during pre-application phase	11 June 2018
Draft Basic Assessment Report ²	-	
Final Basic Assessment Report ³ or, if applicable Revised Basic Assessment Report ⁴ (strikethrough what is not applicable)	-	

Notes:

1. In terms of Regulation 40(3) potential or registered interested and affected parties, including the Competent Authority, may be provided with an opportunity to comment on the Basic Assessment Report prior to submission of the application but must again be provided an opportunity to comment on such reports once an application has been submitted to the Competent Authority. The Basic Assessment Report released for comment prior to submission of the application is referred to as the "Pre-Application Basic Assessment Report". The Basic Assessment Report made available for comment after submission of the application is referred to as the "Draft Basic Assessment Report". The Basic Assessment Report together with all the comments received on the report which is submitted to the Competent Authority for decision-making is referred to as the "Final Basic Assessment Report".
2. In terms of Regulation 19(1)(b) if significant changes have been made or significant new information has been added to the Draft Basic Assessment Report, which changes or information was not contained in the Draft Basic Assessment Report consulted on during the initial public participation process, then a Final Basic Assessment Report will not be submitted, but rather a "Revised Basic Assessment Report", which must be subjected to another public participation process of at least 30 days, must be submitted to the Competent Authority together with all the comments received.

DEPARTMENTAL REFERENCE NUMBER(S)

Pre-application reference number:

None available as yet, project title to be used as reference during pre-application phase.

CONTENT AND GENERAL REQUIREMENTS

Note that:

1. The content of the Department's Circular EADP 0028/2014 (dated 9 December 2014) on the "One Environmental Management System" and the Environmental Impact Assessment ("EIA") Regulations, 2014 (as amended), any subsequent Circulars, and guidelines must be taken into account when completing this Basic Assessment Report Form.
2. The required information must be typed within the spaces provided in the form. The size of the spaces provided is not necessarily indicative of the amount of information to be provided. The tables may be expanded where necessary.
3. The use of "not applicable" in the report must be done with circumspection. All applicable sections of this report form must be completed. Where "not applicable" is used, this may result in the refusal of the application.
4. While the different sections of the report form only provide space for provision of information related to one alternative, if more than one feasible and reasonable alternative is considered, the relevant section must be copied and completed for each alternative.
5. Unless protected by law, all information contained in, and attached to this report, will become public information on receipt by the competent authority. If information is not submitted with this report due to such information being protected by law, the applicant and/or EAP must declare such non-disclosure and provide the reasons for believing that the information is protected.

6. Unless otherwise indicated by the Department, **two coloured copies and one electronic copy of this report** must be submitted to competent authority.
7. Shape files (.shp) for maps must be included in the electronic copy of the report submitted to the competent authority.
8. No faxed or e-mailed reports will be accepted.
9. The signature of the EAP on the report must be an original signature.
10. The report must be compiled by an independent environmental assessment practitioner.
11. A competent authority may require that for specified types of activities in defined situations only parts of this report need to be completed.
12. Should a specialist report or report on a specialised process be submitted at any stage for any part of this application, the terms of reference for such report must also be submitted.

TABLE OF CONTENTS:

Section	Page(s)
Section A: Project Information	8-14
Section B: Description of the Receiving Environment	14-24
Section C: Public Participation	24-26
Section D: Need and Desirability	26-32
Section E: Details of all the Alternatives considered	32-34
Section F: Environmental Aspects Associated with the Alternatives	35--39
Section G: Impact Assessment, Impact Avoidance, Management, Mitigation and Monitoring Measures	40-49
Section H: Recommendations of the EAP	50
Section I: Appendices	51
Section J: Declarations	52

ACRONYMS USED IN THIS BASIC ASSESSMENT REPORT AND APPENDICES:

BAR	Basic Assessment Report
CBA	Critical Biodiversity Area
DEA	National Department of Environmental Affairs
DEA&DP	Western Cape Government: Environmental Affairs and Development Planning
DWS	National Department of Water and Sanitation
EIA	Environmental Impact Assessment
EMPr	Environmental Management Programme
ESA	Ecological Support Area
HWC	Heritage Western Cape
I&APs	Interested and Affected Parties
NEMA	National Environmental Management Act, 1998 (Act No. 107 of 1998)
NEM:AQA	National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004)
NEM:ICMA	National Environmental Management: Integrated Coastal Management Act, 2008 (Act No. 24 of 2008)
NEM:WA	National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008)
NHRA	National Heritage Resources Act, 1999 (Act No. 25 of 1999)
PPP	Public Participation Process

DETAILS OF THE APPLICANT

Applicant / Organisation / Organ of State:	Cape Agulhas Municipality		
Contact person:	John Daniels		
Postal address:	PO Box 51, Bredasdorp		
Telephone:	028 425 5500	Postal Code:	7280
Cellular:	083 245 0003	Fax:	086 658 5622
E-mail:	johnd@capeagulhas.com		

DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER ("EAP")

Name of the EAP organisation:	Eco Impact Legal Consulting (Pty) Ltd		
Person who compiled this Report:	Johmandie Pienaar		
EAP Reg. No.:	-		
Contact Person (if not author):	NA		
Postal address:	PO Box 45070		
Telephone:	(021) 671 1660	Postal Code:	7735
Cellular:	072 240 3092	Fax:	(021) 671 9967
E-mail:	admin@ecoimpact.co.za		
EAP Qualifications:	<p>EAP for Eco Impact Legal Consulting since March 2009</p> <p>Johmandie Pienaar (Giliomee) holds a Baccalaureus Technologiae Degree (Cum Laude) in Nature Conservation from the Cape Peninsula University of Technology and has also completed the following short courses at the Centre for Environmental Management:</p> <ul style="list-style-type: none"> • Implementing Environmental Management Systems (ISO 14001) (2009); • Occupational Health and Safety Law for Managers (2010); • Implementing an OHS Management System based on OHSAS 18001 (2010) and; • Occupational Health and Safety Management System OHSAS 18001 Audit: A Lead Auditor Course Based on ISO 19011 and ISO 17021 (2011). Short course presented by Executive Coaching & Facilitation: • Conduct Outcome Based Assessments (May 2015). 		

Please provide details of the lead EAP, including details on the expertise of the lead EAP responsible for the Basic Assessment process. Also attach his/her Curriculum Vitae to this BAR.

Refer to Appendix K1: EAP CV

EXECUTIVE SUMMARY OF THE PRE-APPLICATION BASIC ASSESSMENT REPORT:

Proposed Project and Basic Site Description:

Project - The Cape Agulhas Municipality proposes to pave the current ± 5 km long and ± 8 m wide gravel coastal access road from L'Agulhas to Suiderstrand. The road width will be expanded by 2.5m (2.5m paved sidewalk on the coastal side) to a total width of 10.5m.

Along the 5km route there are three sections which fall within 100m from the high-water mark area for which environmental authorisation is required before the development can continue:

- Section 1: ± 820 m (± 710 m of this section has already been paved but is proposed to be expanded by 2.5m in width [paved sidewalk on coastal side]) Expected construction footprint = 4905m^2 ; final development footprint = 2945m^2 and total infill material = 1031m^3
- Section 2: ± 612 m Expected construction footprint = 8874m^2 ; final development footprint = 6426m^2 and total infill material = 2249m^3

- Section 3: $\pm 400\text{m}$ Expected construction footprint = 5800m^2 ; final development footprint = 4200m^2 and total infill material = 1470m^3

The total expected development within these three sections is $\pm 2\text{ha}$ (of which 1.6ha has already been completely cleared due to previous and existing road infrastructure).

The infill material to be used will be G4 gravel material obtained from the commercial borrow pit of Afrimat, Bredasdorp to be constructed by machines and paving material which will be 80mm thick interlocked concrete paving blocks for the road and 60mm thick concrete paving blocks for the sidewalk, which is placed by hand. The expected construction timeline for the completion of the proposed upgrades along the entire 5km route is $\pm 18\text{months}$.

Site – The 5km L'Agulhas to Suiderstrand gravel access road is located along the coast line surrounded by mostly undeveloped natural areas also part of the Agulhas National Park and provides access to a very popular tourist destination as part of the "Southernmost Tip of Africa". During the ecological baseline assessment conducted it was determined that the overall areas to be impacted upon have a low botanical sensitivity/conservation value due to the areas being already impacted upon and previously cleared/disturbed by existing road infrastructure. A maximum of 0.4ha of indigenous vegetation is expected to be cleared for the proposed development within the relevant three sections which falls within the 100m from high water mark area.

Summary of Specialist/s Conclusions and Recommendations:

Ecological Baseline Assessment, June 2018, Eco Impact:

Concluding Remarks and Summary of Impact Mitigation and Rehabilitation Measures Proposed before, during and after the Proposed Activities

It was determined that the overall areas to be impacted upon have a low botanical sensitivity/conservation value. The proposed development areas along the road verges was disturbed and altered during the previous road and infrastructure development and the types of returning plant species (mostly pioneer) recorded on site is evidence of that.

According to the 2017 Western Cape Biodiversity Spatial Plan the road and its edges (proposed development area) outside the Agulhas National Park area is not mapped as a CBAs. The 1st section closest to Agulhas falls within the Agulhas National Park and is mapped as a Protected Area. The area surrounding the proposed development area of section 2 and most of section 3 is mapped as Ecological Support Area (ESA 1), and a small surrounding area along section 3 as Terrestrial Critical Biodiversity Area (CBA 1). These areas were identified as such to protect coastal process. The paving and widening of the road will however not have a significant negative impact on these coastal processes as road paving and widening will occur mostly on already existing cleared gravel road area and only have a limited impact on surrounding indigenous vegetation areas, and even these areas are disturbed road verges with mainly returning pioneer species.

The National Vegetation Map of South Africa (2012) identifies the remnants of natural vegetation occurring within the area as Overberg Dune Strandveld (LT). The indigenous vegetation species populations recorded on site in the areas that will be impacted by the proposed development is mostly pioneer species not of conservation concern other than to stabilize the previously disturbed road edges. However, mitigation measures must be put in place to minimise the edge effects during construction and operation/maintenance to prevent wider areas of disturbance. Due to most of the proposed development areas already being cleared/developed upon for the current road infrastructure it is expected that a maximum of 0.4ha of indigenous vegetation will further be cleared for the proposed development within the relevant three sections.

No species of conservation concern were recorded nor are expected to occur on the impacted sites. This study also investigated any presence of any significant wetland/freshwater resources on or within close proximity to the development sites, however no such features were found during the survey.

It was concluded that, from an ecological impact point of view, the proposed development should

not have an unacceptably significant negative impact on environmental features of the site and surrounds if specialist recommendations are taken into consideration and effectively implemented.

Summary of recommendations as listed in the report and additional recommendations to be implemented are listed below:

Construction, Operational/Maintenance and Rehabilitation phases -

- The project implementation process should be subject to standard Environmental Management Programme (EMP) prescripts and conditions and only proceed under supervision of a competent and diligent Environmental Control Officer, both during the construction, operational/maintenance and decommission/rehabilitation phases.
- Clearly demarcate the proposed development footprint area before any construction commences and undertake construction (including construction camp and associated stockpiling) only in demarcated development footprint area to minimise edge effects. Demarcations must occur under the supervision of and approved by ECO. Demarcation must be clearly visible and effective and no-go area must remain demarcated throughout construction phase.
- Undertake all construction and operational/maintenance development activities only in identified and specifically demarcated areas as proposed.
- Personnel should be restricted to the construction camp site and immediate construction areas only.
- Remove and conserve topsoil layer and overburden material for rehabilitation after construction activities have ceased within proposed development areas, where possible and required.
- Implement site specific erosion and storm water runoff management measures to prevent (or if prevention is not possible limit) any erosion from occurring on the development footprint area and surrounds.
- Proper waste bins to be provided during construction and operation and all waste to be regularly (at least once a week) removed to municipal landfill site.
- If any fuel or hazardous materials is spilled on site it must be treated as according to EMP requirements.
- The cement mixing area must be within a demarcated area and no cement mix runoff water escapes from cement mixing area.
- The landowner/s must adhere to his/her legal obligations to actively eradicate and manage alien tree infestations present on the applicable and surrounding properties.
- Conduct tortoise search and rescue operations daily while site clearance is underway (before clearance commences on a day to day basis) and move all tortoises to surrounding impacted areas.
- Rehabilitate all areas that were disturbed outside of the proposed development areas immediately and implement mitigation measures to prevent associated impacts from re-occurring.
- During operation/maintenance no areas outside of the proposed development footprint areas may be disturbed and only existing access routes etc. may be used.
- Construction and operational phase storm water management measures must be implemented to prevent any erosion or significant increase in storm water runoff from occurring.
- All infrastructures must remain clear of build-up, debris as waste so as to prevent any damming of stormwater which may lead to additional impacts such as erosion etc. The municipality will be responsible for the maintenance and upkeep of all infrastructure proposed throughout the construction, operational/maintenance and decommissioning/rehabilitation phases of the proposed development.
- Should any signs of erosion or artificial recharge be observed the municipality must implemented rectification and preventions measures immediately and consult with the appointed ECO before implementing these measures.
- Only use vegetation indigenous to the area to rehabilitate impacted/decommissioned areas and implement ongoing monitoring of the rehabilitated areas until successful rehabilitation has taken place.
- After topsoil has been replaced ongoing monitoring and removal of alien vegetation regrowth must be conducted to ensure effective rehabilitation of indigenous vegetation.
- Decommissioned areas must be rehabilitated and planted with indigenous vegetation immediately

after built structures have been removed.

- Monitor rehabilitation of areas impacted outside of the proposed development areas or decommissioned areas on a 6 monthly basis until effective/successful rehabilitation has been obtained.
- If erosion is detected during or after rehabilitation implement erosion rectification and preventions measures must be implemented as guided by an ECO
- Even though this study only focussed on the three sections as located within the 100m high water mark areas, as according to the scope of the survey conducted, it is recommended that the mitigation measures as proposed within this report also be implemented along the entire proposed 5km route to be paved and expanded and that this be included as part of the Environmental Authorisation requirements.

Eco Impact is of the opinion, and based on the survey and desk study done, that the proposed development activities; if designed and implemented according to the recommendations as provided in this report, will not have an unacceptable significantly negative impact on the environmental aspects of the site and surrounds as assessed in this report.

Summary of Need and Desirability

The proposed activity has been included in the Cape Agulhas Municipality - Service Delivery Implementation Plan as manifested by the Integrated Development Plan. The proposed activity has been planned to upgrade and provide for a formalised road surface along the current Suiderstrand gravel access road and also improve the aesthetic value of the popular tourist route by adding the formal sidewalk. This is in line with the strategic objectives of the Municipality.

Summary of Alternatives Assessed during Pre-Application Basic Assessment Phase:

Location alternatives – The location of the proposed activity is site specific as it along an existing road which is the only official access road in-between L'Agulhas and Suiderstrand, therefore no reasonable or feasible locality alternatives exist.

Activity alternatives- The proposed upgrade and expansion of the L'Agulhas is the only reasonable and feasible activity alternative assessed as it is development proposed along existing infrastructure which needs to be upgraded as it is currently a gravel road.

Layout alternatives - The layout of the proposed activity is site specific as it along an existing road which is the only official access road in-between L'Agulhas and Suiderstrand, therefore no reasonable or feasible layout alternatives exist.

Technology alternatives – No other reasonable or feasible technology/materials alternatives are to be assessed at this stage as the proposed paving of the road and sidewalk is to tie in with existing paving already done along a section of the road.

Operational alternatives – No operational alternatives were considered as the proposed activity is for the paving and expansion of an existing road to be maintained by the municipality after construction completion.

The No-development Option- The No-development option will result in the three relevant sections of the road which falls within the 100m from high water mark areas not to be paved and expanded. This will also be aesthetically undesirable as the relevant sections are located along a very popular tourist route/destination. The Municipality is mandated in terms of the PSDF to provide and maintain road infrastructure and networks. The activity is therefore in line with the objectives manifested in the PSDF and local Service Delivery Implementation Plan.

Summary of Impact Assessment during Pre-Application Basic Assessment Phase:

ALTERNATIVE 1

CONSTRUCTION PHASE- ALTERNATIVE 1

- Disturbance to subsurface geological layers (high negative impact before mitigation and low negative impact with mitigation measures);
- Soil erosion (medium negative impact before mitigation and low negative impact with

mitigation measures);

- Impacts of construction activities on the water quality of surface and underground water resources (high negative impact before mitigation and low negative impact with mitigation measures);
- Increase in and accumulation of storm water runoff (high negative impact before mitigation and low negative impact with mitigation measures);
- Impact of proposed activities on coastal indigenous vegetation and associated fauna and avifauna habitat as part of mapped protected areas, CBAs and ESA's (high negative impact before mitigation and low negative impact with mitigation measures);
- Introduction of alien and weed plant species (medium negative impact before mitigation and low negative impact with mitigation measures);
- Increased temporary construction job opportunities (medium positive impact)
- Traffic impacts due to construction on and along existing roads (medium negative impact before mitigation and low negative impact with mitigation measures)
- Impact of litter or waste from the construction site on the surrounding communities and tourism activities (medium negative impact before mitigation and low negative impact with mitigation measures)
- The potential impact of the proposed development on archaeological, palaeontological and heritage remains (low negative impact before mitigation and low negative impact with mitigation measures)
- Noise due to construction machinery (low negative impact before mitigation and low negative impact with mitigation measures)
- Impact of construction activities on the surrounding land users/owners and tourist's visual landscape of the area (medium negative impact before mitigation and low negative impact with mitigation measures)

OPERATIONAL PHASE- ALTERNATIVE 1

- Soil erosion due to increase in hardened surfaces (medium negative impact before mitigation and low negative impact with mitigation measures);
- Impact of proposed activities on coastal indigenous vegetation and associated fauna and avifauna habitat as part of mapped protected areas, CBAs and ESA's (high negative impact before mitigation and low negative impact with mitigation measures);
- Expansion and upgrade of existing road infrastructure from L'Agulhas to Suiderstrand – (high positive impact on socio-economic, cultural-historical aspects and visual sense of place)

DECOMMISSIONING AND CLOSURE PHASE- LAYOUT ALTERNATIVE 1

- The decommissioning of the infrastructure developments are not anticipated in the near future. Impacts during this phase will however be similar to that of the construction phase. Mitigation and management measures will be related to the technology of the day and needs to be discussed at such time as decommissioning will occur. All structures must be removed and the area rehabilitated to the state as before construction had commenced (dependent upon the end land use agreement). Waste, where possible must be recycled. All concrete introduced must be removed off site to a licensed waste facility.

NO-DEVELOPMENT ALTERNATIVE

CONSTRUCTION PHASE- NO-DEVELOPMENT ALTERNATIVE

- No increase in temporary construction job opportunities (medium negative impact as no temporary construction jobs will be created)

OPERATIONAL PHASE- NO-DEVELOPMENT ALTERNATIVE

- No expansion and upgrade of existing road infrastructure (high negative significance - ongoing successful services provision and promoting of tourism within the area cannot be ensured/promoted)

SECTION A: PROJECT INFORMATION

1. ACTIVITY LOCATION

Location of all proposed sites:	The three sections which falls within the 100m from high water mark area is located along the 5km access road from L'Agulhas to Suiderstrand
Farm / Erf name(s) and number(s) (including Portions thereof) for each proposed site:	Section 1 – Farm 20/281; Farm 4/281 Section 2 – Farm 21/281 Section 3 – Farm 21/281; Farm 58/281
Property size(s) in m ² for each proposed site:	20/281 – 25.78ha 4/281 – 18.25ha 21/281 -42.67ha 58/281 – 1045.66ha
Development footprint size(s) in m ² :	Section 1 - Expected construction footprint = 4905m ² ; final development footprint = 2945m ² and total infill material = 1031m ³ Section 2 - Expected construction footprint = 8874m ² ; final development footprint = 6426m ² and total infill material = 2249m ³ Section 3 - Expected construction footprint = 5800m ² ; final development footprint = 4200m ² and total infill material = 1470m ³
Surveyor General (SG) 21-digit code for each proposed site:	20/281 – C0110000000028100020 4/281 – C0110000000028100004 21/281 – C0110000000028100021 58/281 – C0110000000028100058

2. PROJECT DESCRIPTION

(a) Is the project a new development? If "NO", explain:

YES

NO

NA

(b) Provide a detailed description of the scope of the proposed development (project).

Project - The Cape Agulhas Municipality proposes to pave the current ±5km long and ±8m wide gravel coastal access road from L'Agulhas to Suiderstrand. The road width will be expanded by 2.5m (2.5m paved sidewalk on the coastal side) to a total width of 10.5m.

Along the 5km route there are three sections which fall within 100m from the high-water mark area for which environmental authorisation is required before the development can continue:

- Section 1: ±820m (±710m of this section has already been paved but is proposed to be expanded by 2.5m in width [paved sidewalk on coastal side]) Expected construction footprint = 4905m²; final development footprint = 2945m² and total infill material = 1031m³
- Section 2: ±612m Expected construction footprint = 8874m²; final development footprint = 6426m² and total infill material = 2249m³
- Section 3: ±400m Expected construction footprint = 5800m²; final development footprint = 4200m² and total infill material = 1470m³

The total expected development within these three sections is ± 2ha (of which 1.6ha has already been completely cleared due to previous and existing road infrastructure).

The infill material to be used will be G4 gravel material obtained from the commercial borrow pit of Afrimat, Bredasdorp to be constructed by machines and paving material which will be 80mm thick interlocked concrete paving blocks for the road and 60mm thick concrete paving blocks for the sidewalk, which is placed by hand. The expected construction timeline for the completion of the proposed upgrades along the entire 5km route is ±18months.

Site – The 5km L'Agulhas to Suiderstrand gravel access road is located along the coast line surrounded by mostly undeveloped natural areas also part of the Agulhas National Park and provides access to a very popular tourist destination as part of the "Southernmost Tip of Africa". During the ecological baseline assessment conducted it was determined that the overall areas to be impacted upon have a low botanical sensitivity/conservation value due to the areas being

already impacted upon and previously cleared/disturbed by existing road infrastructure. A maximum of 0.4ha of indigenous vegetation is expected to be cleared for the proposed development within the relevant three sections which falls within the 100m from high water mark area.

Please note: This description must relate to the listed and specified activities in paragraph (d) below.

(c) Please indicate the following periods that are recommended for inclusion in the environmental authorisation:

(i)	the period within which commencement must occur,	Within 5 years of obtaining Environmental Authorisation
(ii)	the period for which the environmental authorisation should be granted and the date by which the activity must have been concluded, where the environmental authorisation does not include operational aspects;	Within 10 years of obtaining Environmental Authorisation
(iii)	the period that should be granted for the non-operational aspects of the environmental authorisation; and	Within 10 years of obtaining Environmental Authorisation
(iv)	the period that should be granted for the operational aspects of the environmental authorisation.	Ongoing maintenance of infrastructure and implementation of EMP until decommissioning.

Please note: The Department must specify the abovementioned periods, where applicable, in an environmental authorisation. In terms of the period within which commencement must occur, the period must not exceed 10 years and must not be extended beyond such 10 year period, unless the process to amend the environmental authorisation contemplated in regulation 32 is followed.

(d) List all the listed activities triggered and being applied for.

Please note: The onus is on the applicant to ensure that all the applicable listed activities are applied for and assessed as part of the EIA process. Please refer to paragraph (b) above.

EIA Regulations Listing Notices 1 and 3 of 2014 (as amended):

Listed Activity No(s):	Describe the relevant Basic Assessment Activity(ies) in writing as per Listing Notice 1 (GN No. R. 983)	Describe the portion of the development that relates to the applicable listed activity as per the project description.	Identify if the activity is development / development and operational / decommissioning / expansion / expansion and operational.
17	Development— (v) if no development setback exists, within a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever is the greater; in respect of— (f) infrastructure or structures with a development footprint of 50 square metres or more	Proposed road widening and paving within 100m inland of the high-water mark of the sea.	Development and expansion
19	The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from (iii) a distance of 100 metres inland of the high-water	Proposed road and pavement infilling within 100m inland of the high-water mark of the sea.	Development and expansion

	mark of the sea		
19A	The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from— (ii) a distance of 100 metres inland of the highwater mark of the sea	Proposed road and pavement infilling within 100m inland of the high-water mark of the sea.	Development and expansion
54	The expansion of facilities— (v) within a distance of 100 metres inland of the high-water mark of the sea; in respect of— (f) infrastructure or structures where the development footprint is expanded by 50 square metres or more,	Proposed road widening within 100m inland of the high-water mark of the sea.	Development and expansion
Listed Activity No(s):	Describe the relevant Basic Assessment Activity(ies) in writing as per Listing Notice 3 (GN No. R. 985)	Describe the portion of the development that relates to the applicable listed activity as per the project description.	Identify if the activity is development / development and operational / decommissioning / expansion / expansion and operational.
12	The clearance of an area of 300 square metres or more of indigenous vegetation i. Western Cape iii. Within 100 metres inland from high water mark of the sea	Clearance of ± 0.4ha of indigenous vegetation within 100m inland from high water mark of the sea, as associated with proposed road widening and paving.	Development and expansion

Waste management activities in terms of the NEM: WA (GN No. 921):

Category A Listed Activity No(s):	Describe the relevant <u>Category A</u> waste management activity in writing as per GN No. 921	Describe the portion of the development that relates to the applicable listed activity as per the project description
NA		

Note: If any waste management activities are applicable, the **Listed Waste Management Activities Additional Information Annexure** must be completed and attached to this Basic Assessment Report as **Appendix I**.

Atmospheric emission activities in terms of the NEM: AQA (GN No. 893):

Listed Activity No(s):	Describe the relevant atmospheric emission activity in writing as per GN No. 893	Describe the portion of the development that relates to the applicable listed activity as per the project description.
NA		

(e) Provide details of all components (including associated structures and infrastructure) of the proposed development and attach diagrams (e.g., architectural drawings or perspectives, engineering drawings, process flowcharts, etc.).

Buildings Provide brief description below:	YES	NO
NA		
Infrastructure (e.g., roads, power and water supply/ storage) Provide brief description below:	YES	NO
The Cape Agulhas Municipality proposes to pave the current ±5km long and ±8m wide gravel coastal access road from L'Agulhas to Suiderstrand. The road width will be expanded by 2.5m (2.5m paved sidewalk on the coastal side) to a total width of 10.5m.		
Along the 5km route there are three sections which fall within 100m from the high-water mark area for which environmental authorisation is required before the development can continue:		

- Section 1: ±820m (±710m of this section has already been paved but is proposed to be expanded by 2.5m in width [paved sidewalk on coastal side]) Expected construction footprint = 4905m²; final development footprint = 2945m² and total infill material = 1031m³
- Section 2: ±612m Expected construction footprint = 8874m²; final development footprint = 6426m² and total infill material = 2249m³
- Section 3: ±400m Expected construction footprint = 5800m²; final development footprint = 4200m² and total infill material = 1470m³

The total expected development within these three sections is ± 2ha (of which 1.6ha has already been completely cleared due to previous and existing road infrastructure).

The infill material to be used will be G4 gravel material obtained from the commercial borrow pit of Afrimat, Bredasdorp to be constructed by machines and paving material which will be 80mm thick interlocked concrete paving blocks for the road and 60mm thick concrete paving blocks for the sidewalk, which is placed by hand. The expected construction timeline for the completion of the proposed upgrades along the entire 5km route is ±18months.

Processing activities (e.g., manufacturing, storage, distribution) Provide brief description below:	YES	NO
NA		
Storage facilities for raw materials and products (e.g., volume and substances to be stored) Provide brief description below:	YES	NO
NA		
Storage and treatment facilities for effluent, wastewater or sewage: Provide brief description below:	YES	NO
NA		
Storage and treatment of solid waste Provide brief description below:	YES	NO
NA		
Facilities associated with the release of emissions or pollution. Provide brief description below:	YES	NO
NA		
Other activities (e.g., water abstraction activities, crop planting activities) – Provide brief description below:	YES	NO
NA		

3. PHYSICAL SIZE OF THE PROPOSED DEVELOPMENT

(a) Property size(s): Indicate the size of all the properties (cadastral units) on which the development proposal is to be undertaken	20/281 – 25.78ha 4/281 – 18.25ha 21/281 – 42.67ha 58/281 – 1045.66ha	
(b) Size of the facility: Indicate the size of the facility where the development proposal is to be undertaken	NA	m ²
(c) Development footprint: Indicate the area that will be physically altered as a result of undertaking any development proposal (i.e., the physical size of the development together with all its associated structures and infrastructure)	<p>Section 1 - Expected construction footprint = 4905m²; final development footprint = 2945m² and total infill material = 1031m³</p> <p>Section 2 - Expected construction footprint = 8874m²; final development footprint = 6426m² and total infill material = 2249m³</p>	m ²

	Section 3 - Expected construction footprint = 5800m ² ; final development footprint = 4200m ² and total infill material = 1470m ³	
(d) Size of the activity: Indicate the physical size (footprint) of the development proposal	±2ha (for the relevant three sections in total, of which 1.6ha has already been cleared as part of existing road infrastructure)	
(e) For linear development proposals: Indicate the length (L) and width (W) of the development proposal	<p>Section 1 – 820m L; 10.5m W (Final Footprint) and 14.5m W (Construction Footprint) of which 710m has already been paved.</p> <p>Section 2 – 612m L; 10.5m W (Final Footprint) and 14.5m W (Construction Footprint)</p> <p>Section 3 - 400m L; 10.5m W (Final Footprint) and 14.5m W (Construction Footprint)</p> <p>Total road and sidewalk length for entire route = 5km L; 10.5m W (Final Footprint) and 14.5m W (Construction Footprint)</p>	
(f) For storage facilities: Indicate the volume of the storage facility	NA	m ³
(g) For sewage/effluent treatment facilities: Indicate the volume of the facility (Note: the maximum design capacity must be indicated)	NA	m ³

4. SITE ACCESS

(a) Is there an existing access road?	YES	NO
(b) If no, what is the distance in (m) over which a new access road will be built?	m	
(c) Describe the type of access road planned:		
NA		

Please note: The position of the proposed access road must be indicated on the site plan.

5. DESCRIPTION OF THE PROPERTY(IES) ON WHICH THE LISTED ACTIVITY(IES) ARE TO BE UNDERTAKEN AND THE LOCATION OF THE LISTED ACTIVITY(IES) ON THE PROPERTY

- 5.1 Provide a description of the property on which the listed activity(ies) is/are to be undertaken and the location of the listed activity(ies) on the property, as well as of all alternative properties and locations (duplicate section below as required).

The three sections of the proposed road paving and expansion which falls within the 100m from high water mark area of the sea is located along the 5km access road from L'Agulhas to Suiderstrand, and is surrounded by mainly undeveloped vegetation areas in a moderate to good condition also partly located within the Agulhas National Park.

Coordinates of all the proposed activities on the property or properties (sites):	Section 1	Latitude (S): (deg.; min.; sec)			Longitude (E): (deg.; min.; sec.)			
		Start	34°	49'	47.05"	20°	00'	36.88"
	End	34°	49'	53.75"	20°	00'	08.50"	
	Section 2	Start	34°	49'	53.72"	19°	59'	50.77"
		End	34°	49'	50.23"	19°	59'	27.42"
	Section 3	Start	34°	49'	47.53"	19°	59'	14.11"
End		34°	49'	39.97"	19°	59'	02.52"	

Note: For land where the property has not been defined, the coordinates of the area within which the development is proposed must be provided in an addendum to this report.

- 5.2 Provide a description of the area where the aquatic or ocean-based activity(ies) is/are to be undertaken and the location of the activity(ies) and alternative sites (if applicable).

NA

Coordinates of the boundary /perimeter of all proposed aquatic or ocean-based activities (sites) (if applicable):	Latitude (S): (deg.; min.; sec)			Longitude (E): (deg.; min.; sec)		
	°	'	"	°	'	"
	°	'	"	°	'	"
	°	'	"	°	'	"
Refer to the proposed activity layout GPS Co-ordinates in the table under 5.1 above.	°	'	"	°	'	"

- 5.3 For a linear development proposal, please provide a description and coordinates of the corridor in which the proposed development will be undertaken (if applicable).

Refer to 5.1 above.

For linear activities:	Latitude (S): (deg.; min.; sec)			Longitude (E): (deg.; min.; sec)		
• Starting point of the activity	°	'	"	°	'	"
• Middle point of the activity	°	'	"	°	'	"
• End point of the activity	°	'	"	°	'	"

Note: For linear development proposals longer than 1000m, please provide an addendum with co-ordinates taken every 250m along the route. All important waypoints must be indicated and the GIS shape file provided digitally.

- 5.4 Provide a location map (see below) as **Appendix A** to this report that shows the location of the proposed development and associated structures and infrastructure on the property; as well as a detailed site development plan / site map (see below) as **Appendix B** to this report; and if applicable, all alternative properties and locations. The GIS shape files (.shp) for maps / site development plans must be included in the electronic copy of the report submitted to the competent authority.

6. SITE PHOTOGRAPHS

Colour photographs of the site and its surroundings (taken on the site and taken from outside the site) with a description of each photograph. The vantage points from which the photographs were taken must be indicated on the site plan, or locality plan as applicable. If available, please also provide a recent aerial photograph. Photographs must be attached as

Appendix C to this report. The aerial photograph(s) should be supplemented with additional photographs of relevant features on the site. Date of photographs must be included. Please note that the above requirements must be duplicated for all alternative sites.

SECTION B: DESCRIPTION OF THE RECEIVING ENVIRONMENT

Site/Area Description

For linear development proposals (pipelines, etc.) as well as development proposals that cover very large sites, it may be necessary to complete copies of this section for each part of the site that has a significantly different environment. In such cases please complete copies of Section B and indicate the area that is covered by each copy on the Site Plan.

1. GRADIENT OF THE SITE

Indicate the general gradient of the sites (highlight the appropriate box).

Flat	Flatter than 1:10	1:10—1:4	Steeper than 1:4
------	-------------------	----------	------------------

2. LOCATION IN LANDSCAPE

(a) Indicate the landform(s) that best describes the site (highlight the appropriate box(es)).

Ridgeline	Plateau	Side-slope-of hill-/mountain	Closed valley	Open valley	Coastal Plain	Undulating plain/low hills/inland dunes	Dune	Sea-front
-----------	---------	---------------------------------	------------------	----------------	------------------	--	------	-----------

(b) Provide a description of the location in the landscape.

The proposed development areas is located inland along the Atlantic Ocean coastline on a relatively flat lying gravel road which stretches from L'Agulhas to Suiderstrand through mainly undeveloped natural areas.

3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

(a) Is the site(s) located on or near any of the following (highlight the appropriate boxes)?

Shallow water table (less than 1.5m deep)	YES	NO	UNSURE
Seasonally wet soils (often close to water bodies)	YES	NO	UNSURE
Unstable rocky slopes or steep slopes with loose soil	YES	NO	UNSURE
Dispersive soils (soils that dissolve in water)	YES	NO	UNSURE
Soils with high clay content	YES	NO	UNSURE
Any other unstable soil or geological feature	YES	NO	UNSURE
An area sensitive to erosion	YES	NO	UNSURE
An area adjacent to or above an aquifer.	YES	NO	UNSURE
An area within 100m of a source of surface water	YES	NO	UNSURE
An area within 500m of a wetland	YES	NO	UNSURE
An area within the 1:50 year flood zone	YES	NO	UNSURE
A water source subject to tidal influence	YES	NO	UNSURE

(b) If any of the answers to the above is "YES" or "UNSURE", specialist input may be requested by the Department. (Information in respect of the above will often be available at the planning sections of local authorities. The 1:50 000 scale Regional Geotechnical Maps prepared by Geological Survey may also be used).

(c) Indicate the type of geological formation underlying the site.

Granite	Shale	Sandstone	Quartzite	Dolomite	Dolerite	Other (describe)
Provide a description.						

Geology & Soils Deep, Recent marine-derived calcareous sands forming dunes that line the coast (Quaternary Strandveld Formation of the Bredasdorp Group), to shelly, shallow-marine sandstones and limestones of the Bredasdorp Group deposited on underlying Table Mountain Group sandstone. The most important land types include Hb (37%), Ha (31%) and Fc (18%).

4. SURFACE WATER

(a) Indicate the surface water present on and or adjacent to the site and alternative sites (highlight the appropriate boxes)?

Perennial River	YES	NO	UNSURE
Non-Perennial River	YES	NO	UNSURE
Permanent Wetland	YES	NO	UNSURE
Seasonal Wetland	YES	NO	UNSURE
Artificial Wetland	YES	NO	UNSURE
Estuarine / Lagoon	YES	NO	UNSURE

(b) Provide a description.

NA

5. THE SEAFRONT / SEA

(a) Is the site(s) located within any of the following areas? (highlight the appropriate boxes).

If the site or alternative site is closer than 100m to such an area, please provide the approximate distance in (m).

AREA	YES	NO	UNSURE	If "YES": Distance to nearest area (m)
An area within 100m of the high water mark of the sea	YES	NO	UNSURE	Located within the 100m of the high water mark of the sea
An area within 100m of the high water mark of an estuary/lagoon	YES	NO	UNSURE	
An area within the littoral active zone	YES	NO	UNSURE	
An area in the coastal public property	YES	NO	UNSURE	
Major anthropogenic structures	YES	NO	UNSURE	
An area within a Coastal Protection Zone	YES	NO	UNSURE	
An area seaward of the coastal management line	YES	NO	UNSURE	
An area within the high risk zone (20 years)	YES	NO	UNSURE	
An area within the medium risk zone (50 years)	YES	NO	UNSURE	
An area within the low risk zone (100 years)	YES	NO	UNSURE	
An area below the 5m contour	YES	NO	UNSURE	
An area within 1km from the high water mark of the sea	YES	NO	UNSURE	
A rocky beach	YES	NO	UNSURE	
A sandy beach	YES	NO	UNSURE	

(b) If any of the answers to the above is "YES" or "UNSURE", specialist input may be requested by the Department. (The 1:50 000 scale Regional Geotechnical Maps prepared by Geological Survey may also be used).

6. BIODIVERSITY

Note: The Department may request specialist input/studies depending on the nature of the biodiversity occurring on the site and potential impact(s) of the proposed development. To assist with the identification of the biodiversity occurring on site and the ecosystem status, consult <http://bgis.sanbi.org> or BGIShelp@sanbi.org. Information is also available on compact disc ("cd") from the Biodiversity-GIS Unit, Tel.: (021) 799 8698. This information may be updated from time to time and it is the applicant/ EAP's responsibility to ensure that the latest version is used. A map of the relevant biodiversity information (including an indication of the habitat conditions as per (b) below) must be provided as an overlay map on the property/site plan as **Appendix D** to this report.

(a) Highlight the applicable biodiversity planning categories of all areas on preferred and alternative sites and indicate the reason(s) provided in the biodiversity plan for the selection of the specific area as part of the specific category. Also

describe the prevailing level of protection of the Critical Biodiversity Area ("CBA") and Ecological Support Area ("ESA") (how many hectares / what percentages are formally protected).

Systematic Biodiversity Planning Category	CBA	ESA	Other Natural Area ("ONA")	No Natural Area Remaining ("NNR")
If CBA or ESA, indicate the reason(s) for its selection in biodiversity plan and the conservation management objectives	According to the 2017 Western Cape Biodiversity Spatial Plan the road and its edges (proposed development area) outside the Agulhas National Park area is not mapped as a CBA or ESA. The 1st section closest to Agulhas falls within the Agulhas National Park and is mapped as a Protected Area. The area surrounding the proposed development area of section 2 and most of section 3 is mapped as Ecological Support Area (ESA 1), and a small surrounding area along section 3 as Terrestrial Critical Biodiversity Area (CBA 1). These areas were identified as such to protect coastal processes. The paving and widening of the road will however not have a significant negative impact on these coastal processes as road paving and widening will occur mostly on already existing cleared gravel road area and only have a limited impact on surrounding indigenous vegetation areas, and even these areas are disturbed road verges with mainly returning pioneer species.			
Describe the site's CBA/ESA quantitative values (hectares/percentage) in relation to the prevailing level of protection of CBA and ESA (how many hectares / what percentages are formally protected locally and in the province)	NA			

(b) Highlight and describe the habitat condition on site.

Habitat Condition	Percentage of habitat condition class (adding up to 100%) and area of each in square metre (m ²)		Description and additional comments and observations (including additional insight into condition, e.g. poor land management practises, presence of quarries, grazing/harvesting regimes, etc.)
Natural	0%	m ²	
Near Natural (includes areas with low to moderate level of alien invasive plants)	0%	m ²	
Degraded (includes areas heavily invaded by alien plants)	20%	0.4	The total expected development within the relevant three sections is ± 2ha (of which 1.6ha has already been completely cleared due to previous and existing road infrastructure, and the remaining 0.4ha road verges are also degraded and mainly consists of pioneer plant species typical of disturbed areas associated with Overberg Dune Strandveld).
Transformed (includes cultivation, dams, urban, plantation, roads, etc.)	80%	1.6ha	

(c) Complete the table to indicate:

- (i) the type of vegetation present on the site, including its ecosystem status; and
- (ii) whether an aquatic ecosystem is present on/or adjacent to the site.

Terrestrial Ecosystems	Description of Ecosystem, Vegetation Type, Original Extent, Threshold (ha, %), Ecosystem Status	
Ecosystem threat status as per the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)	Critically	NA
	Endangered	
	Vulnerable	NA
	Least Threatened	The National Vegetation Map of South Africa (2012)

		identifies the remnants of natural vegetation occurring within the area as Overberg Dune Strandveld (LT). The indigenous vegetation species populations recorded on site in the areas that will be impacted by the proposed development is mostly pioneer species not of conservation concern other than to stabilize the previously disturbed road edges. Due to most of the proposed development areas already being cleared/developed upon for the current road infrastructure it is expected that a maximum of 0.4ha of indigenous vegetation will further be cleared for the proposed development within the relevant three sections.
--	--	--

Aquatic Ecosystems						
Wetland (including rivers, depressions, channelled and unchannelled wetlands, flats, seeps pans, and artificial wetlands)			Estuary		Coastline	
YES	NO	UNSURE	YES	NO	YES	NO

(d) Provide a description of the vegetation type and/or aquatic ecosystem present on the site, including any important biodiversity features/information identified on the site (e.g. threatened species and special habitats). Clearly describe the biodiversity targets and management objectives in this regard.

It was determined that the overall areas to be impacted upon have a low botanical sensitivity/conservation value. The proposed development areas along the road verges was disturbed and altered during the previous road and infrastructure development and the types of returning plant species (mostly pioneer) recorded on site is evidence of that.

According to the 2017 Western Cape Biodiversity Spatial Plan the road and its edges (proposed development area) outside the Agulhas National Park area is not mapped as a CBA or ESA. The 1st section closest to Agulhas falls within the Agulhas National Park and is mapped as a Protected Area. The area surrounding the proposed development area of section 2 and most of section 3 is mapped as Ecological Support Area (ESA 1), and a small surrounding area along section 3 as Terrestrial Critical Biodiversity Area (CBA 1). These areas were identified as such to protect coastal process. The paving and widening of the road will however not have a significant negative impact on these coastal processes as road paving and widening will occur mostly on already existing cleared gravel road area and only have a limited impact on surrounding indigenous vegetation areas, and even these areas are disturbed road verges with mainly returning pioneer species.

The National Vegetation Map of South Africa (2012) identifies the remnants of natural vegetation occurring within the area as Overberg Dune Strandveld (LT). The indigenous vegetation species populations recorded on site in the areas that will be impacted by the proposed development is mostly pioneer species not of conservation concern other than to stabilize the previously disturbed road edges. However, mitigation measures must be put in place to minimise the edge effects during construction and operation/maintenance to prevent wider areas of disturbance. Due to most of the proposed development areas already being cleared/developed upon for the current road infrastructure it is expected that a maximum of 0.4ha of indigenous vegetation will further be cleared for the proposed development within the relevant three sections.

No species of conservation concern were recorded nor are expected to occur on the impacted sites. This study also investigated any presence of any significant wetland/freshwater resources on or within close proximity to the development sites, however no such features were found during the survey.

It was concluded that, from an ecological impact point of view, the proposed development should not have an unacceptably significant negative impact on environmental features of the site and surrounds if specialist recommendations are taken into consideration and effectively implemented.

Refer to Appendix G: Ecological Baseline Assessment (Eco Impact, June 2018) for further details on current state of the site.

7. LAND USE OF THE SITE

Note: The Department may request specialist input/studies depending on the nature of the land use character of the area and potential impact(s) of the proposed development.

Untransformed area	Low density residential	Medium density residential	High density residential	Informal residential
Retail	Commercial & warehousing	Light industrial	Medium industrial	Heavy industrial
Power station	Office/consulting room	Military or police base/station/compound	Casino/entertainment complex	Tourism and Hospitality facility
Open cast mine	Underground mine	Spoil heap or slimes dam	Quarry, sand or borrow pit	Dam or reservoir
Hospital/medical centre	School	Tertiary education facility	Church	Old age home
Sewage treatment plant	Train station or shunting yard	Railway line	Major road (4 lanes and more)	Airport
Harbour	Sport facilities	Golf course	Polo fields	Filling station
Landfill or waste treatment site	Plantation	Agriculture	River, stream or wetland	Nature conservation area
Mountain, koppie or ridge	Museum	Historical building	Graveyard	Archaeological site
Other land uses (describe):	Existing gravel road.			

(a) Provide a description.

The proposed development areas falls within an existing mainly gravel access road from L'Agulhas to Suiderstrand along the Atlantic coastline, which also partially falls within the Agulhas National Park.

8. LAND USE CHARACTER OF THE SURROUNDING AREA

(a) Highlight the current land uses and/or prominent features that occur within +/- 500m radius of the site and neighbouring properties if these are located beyond 500m of the site.

Note: The Department may request specialist input/studies depending on the nature of the land use character of the area and potential impact(s) of the proposed development.

Untransformed area	Low density residential	Medium density residential	High density residential	Informal residential
Retail	Commercial & warehousing	Light industrial	Medium industrial	Heavy industrial
Power station	Office/consulting room	Military or police base/station/compound	Casino/entertainment complex	Tourism and Hospitality facility
Open cast mine	Underground mine	Spoil heap or slimes dam	Quarry, sand or borrow pit	Dam or reservoir
Hospital/medical centre	School	Tertiary education facility	Church	Old age home
Sewage treatment plant	Train station or shunting yard	Railway line	Major road (4 lanes and more)	Airport
Harbour	Sport facilities	Golf course	Polo fields	Filling station
Landfill or waste treatment site	Plantation	Agriculture	River, stream or wetland	Nature conservation area
Mountain, koppie or ridge	Museum	Historical building	Graveyard	Archaeological site
Other land uses (describe):	Atlantic coastline			

(b) Provide a description, including the distance and direction to the nearest residential area, industrial area, agri-industrial area.

The following land uses/characteristics surrounds the proposed development areas along the road:

- North – Untransformed indigenous vegetation areas, Agulhas National Park, Agulhas Lighthouse and Museum
- East – L'Agulhas Residential Areas
- South – Atlantic coastline, Southernmost Tip of Africa monument and tourist destination
- West - Untransformed indigenous vegetation areas, Agulhas National Park, Suiderstrand Residential Areas

9. SOCIO-ECONOMIC ASPECTS

- a) Describe the existing social and economic characteristics of the community in the vicinity of the proposed site, in order to provide baseline information (for example, population characteristics/demographics, level of education, the level of employment and unemployment in the area, available work force, seasonal migration patterns, major economic activities in the local municipality, gender aspects that might be of relevance to this project, etc.).

Cape Agulhas Municipality is one of four Category B Local Municipalities that form part of the broader Overberg District as per the Municipal Demarcation Act. A distinct geographical feature of the Municipality is that it is located at the southernmost tip of the Western Cape Province, South Africa and the African continent. It is also located at the point where the Indian and Atlantic oceans meet.

Bredasdorp is the main economic centre and is also the town where the main office of the Cape Agulhas Municipality is situated. Cape Agulhas Municipality had a total population of 33 038 in 2011 which constitutes 12, 8% of the total population of the Overberg district. This actually confirms that Cape Agulhas is the smallest municipality in the district in terms of population size. Similar to other rural municipalities, Cape Agulhas also experiences common challenges such as skew patterns of wealth distribution, relatively high levels of unemployment and crime. The economy of Cape Agulhas Municipality grew at an average growth rate of 2.1% between 2007 and 2010 but despite this relatively positive economic growth it is quite evident that not all sectors of society share in the benefit resulting from this. In fact it seems that the gap between rich and poor is actually widening. One of the objectives of this strategy is particularly aimed at increasing the participation of emerging entrepreneurs in the mainstream economy and to bring the first and second economy closer together.

Struisbaai:

Struisbaai, only a few kilometres from L'Agulhas, is renowned for its pristine 14 km beach, which is presumably one of the longest uninterrupted stretches of white sandy beach in the southern hemisphere. Struisbaai is very popular for aquatic sports and its small convenient harbour facility offers boat owners the lure of deep-sea fishing. The harbour was recently deepened and a new jetty constructed, replacing the original, which was built in 1859. Major attractions include fishermen's cottages at Hotagterklip and the Limestone Church, which are all National Monuments. The route to Struisbaai skirts around the Karsrivierlei and Soetendalsvlei, which is the largest natural body of fresh water in South Africa. Struisbaai is the other town in Cape Agulhas which comprise of some kind of economic hub and is renowned as a sought after tourist destination.

L'Agulhas:

L'Agulhas is the southernmost town on the African continent. A cairn marks the official position of the southernmost tip of Africa and it is at this longitudinal point that the Atlantic and Indian Oceans officially meet. The town of L'Agulhas developed around the famous lighthouse at Cape Agulhas, which is the country's second oldest lighthouse - dating back to 1848.

There are not many permanent residents in the towns of Struisbaai and Agulhas (especially Agulhas) and the erven are mainly used due peak holiday seasons. During 2008 the population survey conducted indicated 2 252 permanent residents for Struisbaai and 794 for Agulhas.

Suiderstrand

Suiderstrand is widely regarded as an extension of the town of L'Agulhas and is situated approximately 10km west of this panoramic coastal town. Suiderstrand mostly consist of a number

of holiday homes along the beach and makes use of all public facilities and services of L'Agulhas. The town has developed fairly recently when mostly high income earners settled in this tranquil seaside village to either retire or use it as a second home during leisure time. It consists of 324 erven of which 77% has been occupied yet (Cape Agulhas Municipality 3rd Generation IDP 2012 – 2016)

Suiderstrand is currently to a large extent a retirement and holiday destination. This forms the economic base of this area according to the 'Growth Potential of Town in the Western Cape (2004). The number of permanent residents is low but however slowly growing.

General socio economic characteristic of the Cape Agulhas Municipality:

The population is fairly equally distributed in terms of gender with 51,9% females and 48,1% males, which is in line with South African, Western Cape and ODM percentages.

The majority of the population have some form of education. Only 16.8% of the population have matric or higher education while only 22.5% of those aged 20 years or older have matric or higher education. This means that the majority of the population have a low skill level and would either occupy job employment in low skill sectors, or they must be provided with better education opportunities in order to improve their skills level and simultaneously that of the area and their income level.

66.1% of the total population of CAM falls in the economically active population (EAP) which is classified as individuals aged 15-65.

A large percentage of the population are unemployed. The main reasons for people not working are students and scholars (50,1%) and pensioners (20,1%). The working population are mainly employed in the formal sector.

The relevant road is part of a very popular tourist attraction within the area namely the Southernmost Tip of Africa monument which was also recently upgraded with associated wooden boardwalks and art.

References – Cape Agulhas Municipality 3rd Generation IDP 2012 – 2016 and Revised IDP 2013-2014

10. HISTORICAL AND CULTURAL ASPECTS

- (a) Please be advised that if section 38 of the NHRA is applicable to your proposed development, you are requested to furnish this Department with written comment from Heritage Western Cape as part of your public participation process. Heritage Western Cape must be given an opportunity, together with the rest of the I&APs, to comment on any Pre-application BAR, a Draft BAR, and Revised BAR.

Section 38 of the NHRA states the following:

"38. (1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorised as-

- (a) the construction of a road, wall, power line, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;*
- (b) the construction of a bridge or similar structure exceeding 50m in length;*
- (c) any development or other activity which will change the character of a site-*
 - (i) exceeding 5 000m² in extent; or*
 - (ii) involving three or more existing erven or subdivisions thereof; or*
 - (iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or*
 - (iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;*
- (d) the re-zoning of a site exceeding 10 000m² in extent; or*
- (e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority,*

must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development".

- (b) The impact on any national estate referred to in section 3(2), excluding the national estate contemplated in section 3(2)(i)(vi) and (vii), of the NHRA, must also be investigated, assessed and evaluated. Section 3(2) states the following:
- "3(2) Without limiting the generality of subsection (1), the national estate may include—*
- (a) places, buildings, structures and equipment of cultural significance;*
 - (b) places to which oral traditions are attached or which are associated with living heritage;*
 - (c) historical settlements and townscapes;*
 - (d) landscapes and natural features of cultural significance;*
 - (e) geological sites of scientific or cultural importance;*

- (f) archaeological and palaeontological sites;
- (g) graves and burial grounds, including—
- (i) ancestral graves;
 - (ii) royal graves and graves of traditional leaders;
 - (iii) graves of victims of conflict;
 - (iv) graves of individuals designated by the Minister by notice in the Gazette;
 - (v) historical graves and cemeteries; and
 - (vi) other human remains which are not covered in terms of the Human Tissue Act, 1983 (Act No. 65 of 1983);
- (h) sites of significance relating to the history of slavery in South Africa;
- (i) movable objects, including—
- (i) objects recovered from the soil or waters of South Africa, including archaeological and paleontological objects and material, meteorites and rare geological specimens;
 - (ii) objects to which oral traditions are attached or which are associated with living heritage;
 - (iii) ethnographic art and objects;
 - (iv) military objects;
 - (v) objects of decorative or fine art;
 - (vi) objects of scientific or technological interest; and
 - (vii) books, records, documents, photographic positives and negatives, graphic, film or video material or sound recordings, excluding those that are public records as defined in section 1(xiv) of the National Archives of South Africa Act, 1996 (Act No. 43 of 1996)".

Is Section 38 of the NHRA applicable to the proposed development?		YES	NO	UNCERTAIN
If YES or UNCERTAIN, explain:	A Notice of Intent to Develop was submitted to the HWC. Record of Decision is awaited.			
Will the development impact on any national estate referred to in Section 3(2) of the NHRA?		YES	NO	UNCERTAIN
If YES or UNCERTAIN, explain:	NA			
Will any building or structure older than 60 years be affected in any way?		YES	NO	UNCERTAIN
If YES or UNCERTAIN, explain:	NA			
Are there any signs of culturally or historically significant elements, as defined in section 2 of the NHRA, including Archaeological or paleontological sites, on or close (within 20m) to the site?		YES	NO	UNCERTAIN
If YES or UNCERTAIN, explain:	NA			

Note: If uncertain, the Department may request that specialist input be provided **and** Heritage Western Cape must provide comment on this aspect of the proposal. (Please note that a copy of the comments obtained from the Heritage Resources Authority must be appended to this report as Appendix E1).

11. APPLICABLE LEGISLATION, POLICIES, CIRCULARS AND/OR GUIDELINES

- (a) Identify all legislation, policies, plans, guidelines, spatial tools, municipal development planning frameworks, and instruments that are applicable to the development proposal and associated listed activity(ies) being applied for and that have been considered in the preparation of the BAR.

LEGISLATION, POLICIES, PLANS, GUIDELINES, SPATIAL TOOLS, MUNICIPAL DEVELOPMENT PLANNING FRAMEWORKS, AND INSTRUMENTS	ADMINISTERING AUTHORITY and how it is relevant to this application	TYPE Permit/license/authorisation/comment / relevant consideration (e.g. rezoning or consent use, building plan approval, Water Use License and/or General Authorisation, License in terms of the SAHRA and CARA, coastal discharge permit, etc.)	DATE (if already obtained):
Western Cape Land Use Planning Act, 2014	Cape Agulhas Municipality	Consent use	CAM to rezone

("LUPA")			applicable areas as/if required.
National Water Act, 1998 (Act No. 36 of 1998) [NWA] and relevant regulations	Breede-Gouritz Catchment Management Agency	Water Use Licence	NA
National Environmental Management Act, 1998 (Act No. 107 of 1998) [NEMA] and relevant regulations	Department of Environmental Affairs	Environmental Authorisation Application	Application to be submitted
National Heritage Resources Act 25 of 1999 [NHRA]	Heritage Western Cape South African Heritage Resource Agency	NID Submission of a Heritage Impact Assessment	Application submitted
National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) [NEMWA] and relevant regulations	Western Cape Department of Environmental Affairs and Development Planning	NA	NA
National Environmental Management: Biodiversity Act 10 of 2004 [NEMBA]	Western Cape Department of Environmental Affairs and Development Planning Cape Nature South African National Parks	Comments to be obtained concerning expected biodiversity impacts	Comments still to be obtained
National Environmental Management: Air Quality Act, 39 Of 2004 [NEMAQA] and Relevant Regulations	Western Cape Department of Environmental Affairs and Development Planning	NA	NA
Conservation of Agricultural Resources Act, 43 Of 1983 [CARA]	National Department of Agriculture, forestry and Fisheries Western Cape Department of Agriculture	Comments to be obtained	Comments still to be obtained
National Health Act, 61 of 2003 [NHA]	Department of Health	NA	NA
Constitution of the Republic of South Africa, 1996		General application to individual rights of all on and adjacent to the sites.	Public Participation Process to be conducted
Fencing Act, 31 of 1963		NA	NA
National Building Regulations and Building Standards Act 103 of 1977 [NBRBSA] and relevant regulations		NA	NA
National Veld and Forest Fire Act 101 of 1998 [NVFFA]		NA	NA
Fertilizers, Farm Feeds, Agricultural Remedies And Stock Remedies Act, 36 Of 1947 [FFFARSRA] and Relevant Regulations	National Department of Agriculture, forestry and Fisheries Western Cape Department of Agriculture	NA	NA
Cape Agulhas Municipality Spatial Development Framework	City of Cape Town	Proposed road developments already included in planned infrastructure in local SDF	NA

Cape Agulhas Municipality 2017-2018 Service Delivery Implementation Plan	City of Cape Town	Proposed road developments already included in planned infrastructure in service delivery plan	NA
Cape Agulhas Municipality Integrated Development Plan 2017-2022	City of Cape Town	Proposed road developments already included in planned infrastructure in local IDP	NA

POLICY/ GUIDELINES/BY-LAWS	ADMINISTERING AUTHORITY
Guideline on Public Participation	Western Cape Department of Environmental Affairs and Development Planning
Guidelines on Alternatives	Western Cape Department of Environmental Affairs and Development Planning
Guideline on Need and desirability	Western Cape Department of Environmental Affairs and Development Planning
Guideline for Environmental Management Plans (EMP's)	Western Cape Department of Environmental Affairs and Development Planning
Guideline of Specialist Reports	Western Cape Department of Environmental Affairs and Development Planning

(b) Describe how the proposed development **complies with and responds** to the legislation and policy context, plans, guidelines, spatial tools, municipal development planning frameworks and instruments.

LEGISLATION, POLICIES, PLANS, GUIDELINES, SPATIAL TOOLS, MUNICIPAL DEVELOPMENT PLANNING FRAMEWORKS, AND INSTRUMENTS	Describe how the proposed development complies with and responds to:
NEMA	Basic Assessment Process conducted to assess potential environmental impacts and apply for Environmental Authorisation
NEMWA	If applicable all waste management activities to be conducted during the proposed development to adhere to the NEMWA requirements
NEMBA	If applicable potential impacts on biodiversity features of the site and surrounds to be assessed and mitigation measures proposed during the basic assessment process.
NEMAQA	If applicable potential impacts on air quality on site and surrounds to be assessed and mitigation measures proposed during the basic assessment process.
NWA	If applicable potential impacts on ground- and surface water resources assessed during basic assessment process and if required a water use authorisation under section 21 will be applied for.
CARA	If applicable the landowner/applicant is reminded of his/her responsibility to manage and eradicate certain weed and alien plant vegetation on his/her property and requirements are incorporated into the EMP.
National Health Act	If applicable potential impacts on the health and wellbeing of human population on the site and surrounds are assessed and mitigation measure are proposed during the basic assessment process.
Constitution of the RSA	General application to individual rights of all on and adjacent to the sites.
Fencing Act	If applicable potential impacts and requirements concerning fencing of the site and surrounds to be assessed and mitigation measures proposed during the basic assessment process.
National Building Regulations and Building Standards Act	If applicable potential impacts and requirements concerning erection of building on the site and surrounds to be assessed and mitigation measures proposed during the basic assessment process.
NHRA	If applicable potential impacts on graves and burial sites and any structures older than 60 years are assessed and mitigation measures proposed during the basic assessment process.
NVFFA	If applicable any activities that could result in the start of veld fires are assessed and mitigated during the basic assessment process.

LEGISLATION, POLICIES, PLANS, GUIDELINES, SPATIAL TOOLS, MUNICIPAL DEVELOPMENT PLANNING FRAMEWORKS, AND INSTRUMENTS	Describe how the proposed development complies with and responds to:
FFFARSRA	If applicable any potential impacts of activities associated with pest control, the use of agricultural remedies and with providing / manufacturing fertiliser are assessed and mitigated during the basic assessment process.
Guideline on Public Participation	The public participation guideline is used to determine the requirements in terms of implementing the public participation process during the basic assessment process to be conducted. The guideline was also used to determine the most effective communication strategies for public participation.
Guidelines on Alternatives	The guidelines for alternatives assessment was used to develop a methodology for alternatives assessment. This methodology was applied to determine and assess the most viable alternatives to the project. The assessment was undertaken against the baseline environment (i.e. the no-go option).
Guideline on Need and desirability	The guideline was taken into account to determine whether the project complied according to the concept of Best Practicable Environmental Option as well as environmental and social sustainability.
Guideline for EMP's	The guideline for EMP's was taken into account to determine the most effective minimize, mitigation and management measures to minimise or prevent the potential environmental impacts identified during the basic assessment process

Note: Copies of any comments, permit(s) or licences received from any other Organ of State must be attached to this report as **Appendix E**.

Section C: PUBLIC PARTICIPATION

The PPP must fulfil the requirements outlined in the NEMA, the EIA Regulations, 2014 (as amended) and if applicable, the NEM: WA and/or the NEM: AQA. This Department's Circular EADP 0028/2014 (dated 9 December 2014) on the "One Environmental Management System" and the EIA Regulations, any subsequent Circulars, and guidelines must also be taken into account.

- Please highlight the appropriate box to indicate whether the specific requirement was undertaken or whether there was an exemption applied for.

In terms of Regulation 41 of the EIA Regulations, 2014 (as amended) -			
(a) fixing a notice board at a place conspicuous to and accessible by the public at the boundary, on the fence or along the corridor of -			
(i) the site where the activity to which the application relates, is or is to be undertaken; and	YES	EXEMPTION	
(ii) any alternative site	YES	EXEMPTION	N/A
(b) giving written notice, in any manner provided for in Section 47D of the NEMA, to –			
(i) the occupiers of the site and, if the applicant is not the owner or person in control of the site on which the activity is to be undertaken, the owner or person in control of the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;	YES	EXEMPTION	N/A
(ii) owners, persons in control of, and occupiers of land adjacent to the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;	YES	EXEMPTION	
(iii) the municipal councillor of the ward in which the site or alternative site is situated and any organisation of ratepayers that represent the community in the area;	YES	EXEMPTION	
(iv) the municipality (Local and District Municipality) which has jurisdiction in the area;	YES	EXEMPTION	
(v) any organ of state having jurisdiction in respect of any aspect of the activity; and	YES	EXEMPTION	
(vi) any other party as required by the Department;	YES	EXEMPTION	N/A
(c) placing an advertisement in -			
(i) one local newspaper; or	YES	EXEMPTION	
(ii) any official Gazette that is published specifically for the purpose of providing public notice of applications or other submissions made in terms of these Regulations;	YES	EXEMPTION	N/A
(d) placing an advertisement in at least one provincial newspaper or national newspaper, if the activity has or may have an impact that extends beyond the boundaries of the metropolitan or district municipality in which it is or will be undertaken	YES	EXEMPTION	N/A

(e) using reasonable alternative methods, as agreed to by the Department, in those instances where a person is desirous of but unable to participate in the process due to— (i) illiteracy; (ii) disability; or (iii) any other disadvantage.	YES	EXEMPTION	N/A
If you have indicated that "EXEMPTION" is applicable to any of the above, proof of the exemption decision must be appended to this report.			
Please note that for the NEM: WA and NEM: AQA, a notice must be placed in at least two newspapers circulating in the area where the activity applied for is proposed.			
If applicable, has/will an advertisement be placed in at least two newspapers?	YES	NO	
If "NO", then proof of the exemption decision must be appended to this report.			

2. Provide a list of all the State Departments and Organs of State that were consulted:

State Department / Organ of State	Date request was sent:	Date comment received:	Support / not in support
Cape Nature	Still to be sent	-	-
South African National Parks	Still to be sent	-	-
National - Department of Environmental Affairs	Still to be sent	-	-
National – Department of Environmental Affairs Oceans and Coasts	Still to be sent	-	-
DEA&DP: Development Facilitation	Still to be sent	-	-
DEA&DP: Biodiversity and Coastal Management	Still to be sent	-	-
DEA&DP: Development Management	Still to be sent	-	-
DEA&DP: Waste Management	Still to be sent	-	-
DEA&DP: Pollution and Chemicals Management	Still to be sent	-	-
Breede-Gouritz Catchment Management Agency	Still to be sent	-	-
National Department of Agriculture, forestry and Fisheries	Still to be sent	-	-
Western Cape Department of Agriculture	Still to be sent	-	-
Heritage Western Cape	Notice of Intent to Develop to be submitted	-	-
Overberg District Municipality	Still to be sent	-	-

3. Provide a summary of the issues raised by I&APs and an indication of the manner in which the issues were incorporated, or the reasons for not including them.
(The detailed outcomes of this process, including copies of the supporting documents and inputs must be included in a Comments and Response Report to be attached to the BAR (see note below) as **Appendix F**.)

None as of yet. A copy of this report is still to be circulated.

4. Provide a summary of any conditional aspects identified / highlighted by any Organs of State, which have jurisdiction in respect of any aspect of the relevant activity.

None as of yet. A copy of this report is still to be circulated.

Note:

Even if pre-application public participation is undertaken as allowed for by Regulation 40(3), it must be undertaken in accordance with the requirements set out in Regulations 3(3), 3(4), 3(8), 7(2), 7(5), 19, 40, 41, 42, 43 and 44.

If the "exemption" option is selected above and no proof of the exemption decision is attached to this BAR, the application will be refused.

A list of all the potential I&APs, including the Organs of State, notified and a list of all the registered I&APs must be submitted with the BAR. The list of registered I&APs must be opened, maintained and made available to any person requesting access to the register in writing.

The BAR must be submitted to the Department when being made available to I&APs, including the relevant Organs of State and State Departments which have jurisdiction with regard to any aspect of the activity, for a commenting period of at least 30 days. Unless agreement to the contrary has been reached between the Competent Authority and the EAP, the EAP will be responsible for the consultation with the relevant State Departments in terms of Section 24O and Regulation 7(2) – which consultation must happen simultaneously with the consultation with the I&APs and other Organs of State.

All the comments received from I&APs on the BAR must be recorded, responded to and included in the Comments and Responses Report included as **Appendix F** of the BAR. If necessary, any amendments made in response to comments received must be effected in the BAR itself. The Comments and Responses Report must also include a description of the PPP followed.

The minutes of any meetings held by the EAP with I&APs and other role players wherein the views of the participants are recorded, must also be submitted as part of the public participation information to be attached to the final BAR as **Appendix F**.

Proof of all the notices given as indicated, as well as notice to I&APs of the availability of the Pre-Application BAR (if applicable), Draft BAR, and Revised BAR (if applicable) must be submitted as part of the public participation information to be attached to the BAR as **Appendix F**. In terms of the required "proof" the following must be submitted to the Department:

- a site map showing where the site notice was displayed, a dated photographs showing the notice displayed on site and a copy of the text displayed on the notice;
- in terms of the written notices given, a copy of the written notice sent, as well as:
 - if registered mail was sent, a list of the registered mail sent (showing the registered mail number, the name of the person the mail was sent to, the address of the person and the date the registered mail was sent);
 - if normal mail was sent, a list of the mail sent (showing the name of the person the mail was sent to, the address of the person, the date the mail was sent, and the signature of the post office worker or the post office stamp indicating that the letter was sent);
 - if a facsimile was sent, a copy of the facsimile report;
 - if an electronic mail was sent, a copy of the electronic mail sent; and
 - if a "mail drop" was done, a signed register of "mail drops" received (showing the name of the person the notice was handed to, the address of the person, the date, and the signature of the person); and
- a copy of the newspaper advertisement ("newspaper clipping") that was placed, indicating the name of the newspaper and date of publication (of such quality that the wording in the advertisement is legible).

SECTION D: NEED AND DESIRABILITY

Note: Before completing this section, first consult this Department's Circular EADP 0028/2014 (dated 9 December 2014) on the "One Environmental Management System" and the EIA Regulations, 2014 (as amended), any subsequent Circulars, and guidelines available on the Department's website: <http://www.westerncape.gov.za/eadp>. In this regard, it must be noted that the *Guideline on Need and Desirability in terms of the Environmental Impact Assessment (EIA) Regulations, 2010* published by the national Department of Environmental Affairs on 20 October 2014 (GN No. 891 on Government Gazette No. 38108 refers) (available at: http://www.gov.za/sites/www.gov.za/files/38108_891.pdf) also applied to EIAs in terms of the EIA Regulations, 2014 (as amended).

1. Is the development permitted in terms of the property's existing land use rights?	NO	-	Please explain
To be located on existing road reserve.			
2. Will the development be in line with the following?			
(a) Provincial Spatial Development Framework ("PSDF").	YES	NO	Please explain
The proposed activity will result in the expansion and upgrade of existing road network. The Municipality is mandated in terms of the PSDF to provide and maintain road infrastructure and networks. The activity is therefore in line with the objectives manifested in the PSDF.			
(b) Urban edge / edge of built environment for the area.	YES	NO	Please explain
Although the development is not located within existing built environment it is located on existing road infrastructure.			
(c) Integrated Development Plan and Spatial Development Framework of the Local Municipality (e.g., would the approval of this application compromise the integrity of the existing approved and credible municipal IDP and SDF ?).	YES	NO	Please explain
The proposed activity has been included in the Cape Agulhas Municipality Service Delivery Implementation Plan as manifested by the Integrated Development Plan and SDF.			
(d) An Environmental Management Framework (" EMF ") adopted by this Department. (e.g., Would the approval of this application compromise the integrity of the existing environmental management priorities for the area and if so, can it be justified in terms of sustainability considerations?)	YES	NO	Please explain
No EMF adopted by the Department for the applicable area.			
(e) Any other Plans (e.g., Integrated Waste Management Plan (for waste management activities), etc.)).	YES	NO	Please explain

NA			
3. Is the land use (associated with the project being applied for) considered within the timeframe intended by the existing approved SDF agreed to by the relevant environmental authority (in other words, is the proposed development in line with the projects and programmes identified as priorities within the credible IDP)?	YES	NO	Please explain
The proposed activity has been included in the Cape Agulhas Municipality Service Delivery Implementation Plan as manifested by the Integrated Development Plan and SDF.			
4. Should development, or if applicable, expansion of the town/area concerned in terms of this land use (associated with the activity being applied for) occur on the proposed site at this point in time?	YES	NO	Please explain
The proposed activity has been included in the Cape Agulhas Municipality Service Delivery Implementation Plan as manifested by the Integrated Development Plan and SDF.			
5. Does the community/area need the project and the associated land use concerned (is it a societal priority)? (This refers to the strategic as well as local level (e.g., development is a National Priority, but within a specific local context it could be inappropriate.)	YES	NO	Please explain
Upgrade of the current gravel road from L'Agulhas to Suiderstrand has been requested by the local community for a number of years now and is supported by the local community.			
6. Are the necessary services available together with adequate unallocated municipal capacity (at the time of application), or must additional capacity be created to cater for the project? (Confirmation by the relevant municipality in this regard must be attached to the BAR as Appendix E .)	YES	NO	Please explain
The proposed development will only make use of municipal services temporarily during the construction phase. i.e. water will be required for cement mixing and waste handling facilities for the disposal of construction waste.			
7. Is this project provided for in the infrastructure planning of the municipality and if not, what will the implication be on the infrastructure planning of the municipality (priority and placement of services and opportunity costs)? (Comment by the relevant municipality in this regard must be attached to the BAR as Appendix E .)	YES	NO	Please explain
The proposed activity has been included in the Cape Agulhas Municipality Service Delivery Implementation Plan as manifested by the Integrated Development Plan and SDF.			
8. Is this project part of a national programme to address an issue of national concern or importance?	YES	NO	Please explain
-			
9. Do location factors favour this land use (associated with the development proposal and associated listed activity(ies) applied for) at this place? (This relates to the contextualisation of the proposed land use on the proposed site within its broader context.)	YES	NO	Please explain
The proposed activities are site specific.			
10. Will the development proposal or the land use associated with the development proposal applied for, impact on sensitive natural and cultural areas (built and rural/natural environment)?	YES	NO	Please explain
Refer to detailed impact assessment attached as Appendix J .			
11. Will the development impact on people's health and well-being (e.g., in terms of noise, odours, visual character and 'sense of place', etc.)?	YES	NO	Please explain
Construction of the proposed infrastructure will lead to temporary construction noise impacts and permanent visual impacts. Refer to detailed impact assessment attached as Appendix J .			
12. Will the proposed development or the land use associated with the proposed development applied for, result in unacceptable opportunity costs?	YES	NO	Please explain
-			
13. What will the cumulative impacts (positive and negative) of the proposed land use associated with the development proposal and associated listed activity(ies) applied for, be?			
<p>Definite Positive Cumulative Impacts:</p> <ul style="list-style-type: none"> • Temporary employment opportunities (construction) • Road infrastructure upgrade. <p>Potential Negative Cumulative Impacts mainly associated with the Construction Phase:</p> <ul style="list-style-type: none"> • Disturbance to subsurface geological layers • Soil erosion • Hardening of surfaces leading to storm water accumulation and increase in amount and runoff speed • Dust • Surface and ground water resources pollution • Emissions and air quality • Impact on sensitive environments (i.e. protected areas) 			

<ul style="list-style-type: none"> • Increase in traffic • Noise • Impact of the proposed development on archaeological, paleontological and heritage remains • Visual/sense of place 			
14. Is the development the best practicable environmental option for this land/site?	YES	NO	Please explain
As per the findings of the ecological baseline assessment the sensitive natural features remaining on the site have been transformed and degraded to such an extent that the proposed development will have overall low negative impact significance if mitigated. The location factors of the site in terms of connectivity value to existing road infrastructure also favours the proposed development.			
15. What will the benefits be to society in general and to the local communities?			Please explain
Definite Positive Cumulative Impacts:			
<ul style="list-style-type: none"> • Temporary employment opportunities (construction) • Road infrastructure upgrade. 			
16. Any other need and desirability considerations related to the proposed development?			Please explain
NA			
17. Describe how the general objectives of Integrated Environmental Management as set out in Section 23 of the NEMA have been taken into account:			
<ul style="list-style-type: none"> • All involved in the planning and design identify, predict and evaluate the actual and potential impact on the environment, socio-economic conditions and cultural heritage. The risks and consequences and alternatives and options for mitigation of activities, with a view to minimising negative impacts, maximising benefits, and promoting compliance with the principles of environmental management set out in Section 23 were taken in consideration and used in the assessments, mitigations and recommendations throughout this report. 			
INTEGRATED ENVIRONMENTAL MANAGEMENT			
23. General objectives			
(1) The purpose of this Chapter is to promote the application of appropriate environmental management tools in order to ensure the integrated environmental management of activities.			
(2) The general objective of integrated environmental management is to			
(a) promote the integration of the principles of environmental management set out in section 2 into the making of all decisions which may have a significant effect on the environment; <i>Refer to point 18 below.</i>			
(b) identify, predict and evaluate the actual and potential impact on the environment, socioeconomic conditions and cultural heritage, the risks and consequences and alternatives and options for mitigation of activities, with a view to minimising negative impacts, maximising benefits, and promoting compliance with the principles of environmental management set out in section 2; <i>The potential impacts for both the construction and the operational phase have been identified and assessed in this report – this allows for the appropriate management and mitigation measures to be identified and implemented where and when necessary to prevent (and if prevention is not possible to mitigate) environmental degradation and promote sustainability.</i>			
(c) ensure that the effects of activities on the environment receive adequate consideration before actions are taken in connection with them; <i>All decisions during the planning and assessment by all involved for the activity promote the integration of the principles of environmental management set out in Section 2 to minimize and mitigate any significant effect on the environment. All these mitigations and management measures are proposed to be included as EA conditions and included in the EMP requirements.</i>			
(d) ensure adequate and appropriate opportunity for public participation in decisions that may affect the environment; <i>Adequate and appropriate opportunity for public participation was provided and proof thereof included in Appendix F as per the guidelines and regulations in decisions that may affect the environment.</i>			

(e) ensure the consideration of environmental attributes in management and decision-making which may have a significant effect on the environment; and
All involved in the planning and design identify, predict and evaluate the actual and potential impact on the environment, socio-economic conditions and cultural heritage. The risks and consequences and alternatives and options for mitigation of activities, with a view to minimising negative impacts, maximising benefits, and promoting compliance with the principles of environmental management set out in Section 2 were taken in consideration and used in the assessments, mitigations and recommendations throughout this report

(f) identify and employ the modes of environmental management best suited to ensuring that a particular activity is pursued in accordance with the principles of environmental management set out in section 2.

Refer to point 18 below.

(3) The Director-General must coordinate the activities of organs of state referred to in section 24(1) and assist them in giving effect to the objectives of this section and such assistance may include training, the publication of manuals and guidelines and the co-ordination of procedures.

18 Describe how the **principles of environmental management** as set out in Section 2 of the NEMA have been taken into account:

NATIONAL ENVIRONMENTAL MANAGEMENT PRINCIPLES

2. Principles

(1) The principles set out in this section apply throughout the Republic to the actions of all organs of state that may significantly affect the environment and

(a) shall apply alongside all other appropriate and relevant considerations, including the State's responsibility to respect, protect, promote and fulfil the social and economic rights in Chapter 2 of the Constitution and in particular the basic needs of categories of persons disadvantaged by unfair discrimination;

(b) serve as the general framework within which environmental management and implementation plans must be formulated;

(c) serve as guidelines by reference to which any organ of state must exercise any function when taking any decision in terms of this Act or any statutory provision concerning the protection of the environment;

(d) serve as principles by reference to which a conciliator appointed under this Act must make recommendations; and

(e) guide the interpretation, administration and implementation of this Act, and any other law concerned with the protection or management of the environment.

(2) Environmental management must place people and their needs at the forefront of its concern, and serve their physical, psychological, developmental, cultural and social interests equitably.
The proposed environmental management requirements have been determined by assessing all potential impacts that the development may have on people and their needs and aims to prevent or if prevention is not possible to mitigate any potential negative impacts on the environment and people.

(3) Development must be socially, environmentally and economically sustainable.
The proposed development has been planned, designed and assessed in such a manner as to ensure that it is socially, environmentally and economically sustainable.

(4)

(a) Sustainable development requires the consideration of all relevant factors including the following:

(i) That the disturbance of ecosystems and loss of biological diversity are avoided, or, where

they cannot be altogether avoided, are minimised and remedied;

(ii) that pollution and degradation of the environment are avoided, or, where they cannot be altogether avoided, are minimised and remedied;

(iii) that the disturbance of landscapes and sites that constitute the nation's cultural heritage is avoided, or where it cannot be altogether avoided, is minimised and remedied;

(iv) that waste is avoided, or where it cannot be altogether avoided, minimised and re-used or recycled where possible and otherwise disposed of in a responsible manner;

(v) that the use and exploitation of non-renewable natural resources is responsible and equitable, and takes into account the consequences of the depletion of the resource;

(vi) that the development, use and exploitation of renewable resources and the ecosystems of which they are part do not exceed the level beyond which their integrity is jeopardised;

(vii) that a risk-averse and cautious approach is applied, which takes into account the limits of current knowledge about the consequences of decisions and actions; and

(viii) that negative impacts on the environment and on people's environmental rights be anticipated and prevented, and where they cannot be altogether prevented, are minimised and remedied.

The assessment conducted aimed to identify all potential negative impacts on the environment and on people's environmental rights (as listed above and more), and where such potential negative impacts as identified and assessed could not be altogether prevented/avoided mitigation measures were recommended and incorporated into the Environmental Management Programme to minimise the significance of the potential negative impacts as far as possible. The assessment also aimed to determine whether or not the proposed development will lead to the unacceptable exploitation of renewable and non-renewable resources and associated ecosystems.

(b) Environmental management must be integrated, acknowledging that all elements of the environment are linked and interrelated, and it must take into account the effects of decisions on all aspects of the environment and all people in the environment by pursuing the selection of the best practicable environmental option.

An integrated environmental assessment approach was followed acknowledging that all elements of the environment are linked and interrelated and realising that effects of decisions may have cumulative impacts on the environment and people and that the best practicable environmental option must therefore be selected.

(c) Environmental justice must be pursued so that adverse environmental impacts shall not be distributed in such a manner as to unfairly discriminate against any person, particularly vulnerable and disadvantaged persons.

Environmental justice was pursued to prevent discrimination against any person, particularly vulnerable and disadvantage persons.

(d) Equitable access to environmental resources, benefits and services to meet basic human needs and ensure human well-being must be pursued and special measures may be taken to ensure access thereto by categories of persons disadvantaged by unfair discrimination.

Equitable access to environmental resources, benefits and services to meet basic human needs and ensure human well-being was pursued and special measures implemented if required ensure access.

(e) Responsibility for the environmental health and safety consequences of a policy, programme, project, product, process, service or activity exists throughout its life cycle.

As per the recommended EMP requirements the Applicant (as per the EA stipulations) remains responsible for the environmental health and safety consequences of the proposed activity/ies

throughout its life cycle.

(f) The participation of all interested and affected parties in environmental governance must be promoted, and all people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equitable and effective participation, and participation by vulnerable and disadvantaged persons must be ensured.

Adequate and appropriate opportunity for public participation was provided and proof thereof included in Appendix F as per the guidelines and regulations in decisions that may affect the environment.

(g) Decisions must take into account the interests, needs and values of all interested and affected parties, and this includes recognising all forms of knowledge, including traditional and ordinary knowledge.

All decision regarding the proposed activity/ies took into account the interests, needs and values of all potential interested and affected parties.

(h) Community wellbeing and empowerment must be promoted through environmental education, the raising of environmental awareness, the sharing of knowledge and experience and other appropriate means.

Depending on the scope of the proposed activity community awareness campaigns will be conducted as and if required.

(i) The social, economic and environmental impacts of activities, including disadvantages and benefits, must be considered, assessed and evaluated, and decisions must be appropriate in the light of such consideration and assessment.

All potential negative and positive impacts associated with the proposed development are assessed and mitigated during the assessment process.

(j) The right of workers to refuse work that is harmful to human health or the environment and to be informed of dangers must be respected and protected.

As per standard EMP requirements all relevant health and safety legislation must be adhered to during the implementation of the proposed activities.

(k) Decisions must be taken in an open and transparent manner, and access to information must be provided in accordance with the law.

As per public participation process regulations all information relating to the proposed activities are public knowledge and available to the public for perusal and comments during the assessment process.

(l) There must be intergovernmental co-ordination and harmonisation of policies, legislation and actions relating to the environment.

(m) Actual or potential conflicts of interest between organs of state should be resolved through conflict resolution procedures.

Comments from all relevant organs of state are requested, recorded and addressed during assessment process.

(n) Global and international responsibilities relating to the environment must be discharged in the national interest.

Applied as and when relevant to the proposed activities.

(o) The environment is held in public trust for the people, the beneficial use of environmental resources must serve the public interest and the environment must be protected as the people's common heritage.

All potential impacts on environmental resources are assessed and mitigated to prevent unacceptable exploitation of renewable and non-renewable resources and associated ecosystems.

(p) The costs of remedying pollution, environmental degradation and consequent adverse health

effects and of preventing, controlling or minimising further pollution, environmental damage or adverse health effects must be paid for by those responsible for harming the environment. As per standard EMP requirements the applicant, as per the EA issued, will remain financially responsible for remedying any negative environmental and health effects cause by or due to the proposed activities.

(q) The vital role of women and youth in environmental management and development must be recognised and their full participation therein must be promoted.

If applicable the role of women and youth in environmental management and development related to the proposed activities will be assessed and incorporated into EMP requirements during the assessment process.

(r) Sensitive, vulnerable, highly dynamic or stressed ecosystems, such as coastal shores, estuaries, wetlands, and similar systems require specific attention in management and planning procedures, especially where they are subject to significant human resource usage and development pressure. *All sensitive, vulnerable, highly dynamic or stressed ecosystems must be identified during the assessment process and the significance of any potential impacts on these systems must be determined and appropriate prevention, or if prevention is not possible mitigation measures must be incorporated into the EMP requirements.*

SECTION E: DETAILS OF ALL THE ALTERNATIVES CONSIDERED

Note: Before completing this section, first consult this Department's Circular EADP 0028/2014 (dated 9 December 2014) on the "One Environmental Management System" and the EIA Regulations, 2014 (as amended), any subsequent Circulars, and guidelines available on the Department's website <http://www.westerncape.gov.za/eadp>.

The EIA Regulations, 2014 (as amended) defines "alternatives" as "*in relation to a proposed activity, means different means of fulfilling the general purpose and requirements of the activity, which may include alternatives to the—*

- (a) property on which or location where the activity is proposed to be undertaken;*
- (b) type of activity to be undertaken;*
- (c) design or layout of the activity;*
- (d) technology to be used in the activity; or*
- (e) operational aspects of the activity;*
- (f) and includes the option of not implementing the activity;"*

The NEMA (section 24(4)(a) and (b) of the NEMA, refers) prescribes that the procedures for the investigation, assessment and communication of the potential consequences or impacts of activities on the environment must, *inter alia*, with respect to every application for environmental authorisation –

- ensure that the general objectives of integrated environmental management laid down in the NEMA and the National Environmental Management Principles set out in the NEMA are taken into account; and
- include an investigation of the potential consequences or impacts of the alternatives to the activity on the environment and assessment of the significance of those potential consequences or impacts, including the option of not implementing the activity.

The general objective of integrated environmental management (section 23 of NEMA, refers) is, *inter alia*, to "*identify, predict and evaluate the actual and potential impact on the environment, socio-economic conditions and cultural heritage, the risks and consequences and alternatives and options for mitigation of activities, with a view to minimising negative impacts, maximising benefits, and promoting compliance with the principles of environmental management*" set out in the NEMA.

The identification, evaluation, consideration and comparative assessment of alternatives directly relate to the management of impacts. Related to every identified impact, alternatives, modifications or changes to the activity must be identified, evaluated, considered and comparatively considered to:

- in terms of negative impacts, firstly avoid a negative impact altogether, or if avoidance is not possible alternatives to better mitigate, manage and remediate a negative impact and to compensate for/offset any impacts that remain after mitigation and remediation; and
- in terms of positive impacts, maximise impacts.

1. DETAILS OF THE IDENTIFIED AND CONSIDERED ALTERNATIVES AND INDICATE THOSE ALTERNATIVES THAT WERE FOUND TO BE FEASIBLE AND REASONABLE

Note: A full description of the investigation of alternatives must be provided and motivation if no reasonable or feasible alternatives exists.

- (a) Property and **location/site** alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist:

Location alternatives – The location of the proposed activity is site specific as it along an existing road which is the only official access road in-between L'Agulhas and Suiderstrand, therefore no reasonable or feasible locality alternatives exist.

- (b) **Activity** alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist:

Activity alternatives- The proposed upgrade and expansion of the L'Agulhas is the only reasonable and feasible activity alternative assessed as it is development proposed along existing infrastructure which needs to be upgraded as it is currently a gravel road.

- (c) **Design or layout** alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist:

Layout alternatives - The layout of the proposed activity is site specific as it along an existing road which is the only official access road in-between L'Agulhas and Suiderstrand, therefore no reasonable or feasible layout alternatives exist.

- (d) **Technology** alternatives (e.g., to reduce resource demand and increase resource use efficiency) to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist:

Technology alternatives – No other reasonable or feasible technology/materials alternatives are to be assessed at this stage as the proposed paving of the road and sidewalk is to tie in with existing paving already done along a section of the road.

- (e) **Operational** alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist:

Operational alternatives – No operational alternatives were considered as the proposed activity is for the paving and expansion of an existing road to be maintained by the municipality after construction completion.

- (f) The option of **not implementing** the activity (the 'No-Go' Option):

The No-development Option- The No-development option will result in the three relevant sections of the road which falls within the 100m from high water mark areas not to be paved and expanded. This will also be aesthetically undesirable as the relevant sections are located along a very popular tourist route/destination. The Municipality is mandated in terms of the PSDF to provide and maintain road infrastructure and networks. The activity is therefore in line with the objectives manifested in the PSDF and local Service Delivery Implementation Plan.

- (g) **Other** alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist:

NA

- (h) Provide a **summary** of all alternatives investigated and the outcome of each investigation:

Location alternatives – The location of the proposed activity is site specific as it along an existing road which is the only official access road in-between L'Agulhas and Suiderstrand, therefore no reasonable or feasible locality alternatives exist.

Activity alternatives- The proposed upgrade and expansion of the L'Agulhas is the only reasonable and feasible activity alternative assessed as it is development proposed along existing infrastructure which needs to be upgraded as it is currently a gravel road.

Layout alternatives - The layout of the proposed activity is site specific as it along an existing road which is the only official access road in-between L'Agulhas and Suiderstrand, therefore no reasonable or feasible layout alternatives exist.

Technology alternatives – No other reasonable or feasible technology/materials alternatives are to be assessed at this stage as the proposed paving of the road and sidewalk is to tie in with existing

paving already done along a section of the road.

Operational alternatives – No operational alternatives were considered as the proposed activity is for the paving and expansion of an existing road to be maintained by the municipality after construction completion.

The No-development Option- The No-development option will result in the three relevant sections of the road which falls within the 100m from high water mark areas not to be paved and expanded. This will also be aesthetically undesirable as the relevant sections are located along a very popular tourist route/destination. The Municipality is mandated in terms of the PSDF to provide and maintain road infrastructure and networks. The activity is therefore in line with the objectives manifested in the PSDF and local Service Delivery Implementation Plan.

- (i) Provide a detailed **motivation for not further considering** the alternatives that were found not feasible and reasonable, including a description and proof of the investigation of those alternatives:

Refer to points (a) – (f) above.

2. PREFERRED ALTERNATIVE

- (a) Provide a **concluding statement** indicating the preferred alternative(s), including preferred location, site, activity and technology for the development.

Only one activity alternative has been assessed thus far. Due to the proposed location being site specific; related to where it can and must be located on existing road infrastructure; the proposed alternative is the only reasonable and feasible alternative available to assess.

SECTION F: ENVIRONMENTAL ASPECTS ASSOCIATED WITH THE ALTERNATIVES

Note: The information in this section must be DUPLICATED for all the feasible and reasonable ALTERNATIVES.

1. DESCRIBE THE ENVIRONMENTAL ASPECTS ASSOCIATED WITH THE PROPOSED DEVELOPMENT AND ITS ALTERNATIVES, FOCUSING ON THE FOLLOWING:

(a) Geographical, geological and physical aspects:

The proposed development will lead to the hardening of existing gravel road surface and road verges.

(b) Ecological aspects:

Will the proposed development and its alternatives have an impact on CBAs or ESAs? If yes, please explain: Also include a description of how the proposed development will influence the quantitative values (hectares/percentage) of the categories on the CBA/ESA map.	YES	NO
According to the 2017 Western Cape Biodiversity Spatial Plan the road and its edges (proposed development area) outside the Agulhas National Park area is not mapped as a CBA or ESA. The 1 st section closest to Agulhas falls within the Agulhas National Park and is mapped as a Protected Area. The area surrounding the proposed development area of section 2 and most of section 3 is mapped as Ecological Support Area (ESA 1), and a small surrounding area along section 3 as Terrestrial Critical Biodiversity Area (CBA 1). These areas were identified as such to protect coastal processes. The paving and widening of the road will however not have a significant negative impact on these coastal processes as road paving and widening will occur mostly on already existing cleared gravel road area and only have a limited impact on surrounding indigenous vegetation areas, and even these areas are disturbed road verges with mainly returning pioneer species.		
Will the proposed development and its alternatives have an impact on terrestrial vegetation, or aquatic ecosystems (wetlands, estuaries or the coastline)? If yes, please explain:	YES	NO
The proposed development areas are located along existing road infrastructure along the coastal access road from L'Agulhas to Suiderstrand. It was determined that the overall areas to be impacted upon have a low botanical sensitivity/conservation value. The proposed development areas along the road verges was disturbed and altered during the previous road and infrastructure development and the types of returning plant species (mostly pioneer) recorded on site is evidence of that. According to the 2017 Western Cape Biodiversity Spatial Plan the road and its edges (proposed development area) outside the Agulhas National Park area is not mapped as a CBA or ESA. The 1 st section closest to Agulhas falls within the Agulhas National Park and is mapped as a Protected Area. The area surrounding the proposed development area of section 2 and most of section 3 is mapped as Ecological Support Area (ESA 1), and a small surrounding area along section 3 as Terrestrial Critical Biodiversity Area (CBA 1). These areas were identified as such to protect coastal process. The paving and widening of the road will however not have a significant negative impact on these coastal processes as road paving and widening will occur mostly on already existing cleared gravel road area and only have a limited impact on surrounding indigenous vegetation areas, and even these areas are disturbed road verges with mainly returning pioneer species. The National Vegetation Map of South Africa (2012) identifies the remnants of natural vegetation occurring within the area as Overberg Dune Strandveld (LT). The indigenous vegetation species populations recorded on site in the areas that will be impacted by the proposed development is mostly pioneer species not of conservation concern other than to stabilize the previously disturbed road edges. However, mitigation measures must be put in place to minimise the edge effects during construction and operation/maintenance to prevent wider areas of disturbance. Due to most of the proposed development areas already being cleared/developed upon for the current road infrastructure it is expected that a maximum of 0.4ha of indigenous vegetation will further be cleared for the proposed development within the relevant three sections. No species of conservation concern were recorded nor are expected to occur on the impacted sites. This study also investigated any presence of any significant wetland/freshwater resources on		

or within close proximity to the development sites, however no such features were found during the survey.

It was concluded that, from an ecological impact point of view, the proposed development should not have an unacceptably significant negative impact on environmental features of the site and surrounds if specialist recommendations are taken into consideration and effectively implemented.

Will the proposed development and its alternatives have an impact on any populations of threatened plant or animal species, and/or on any habitat that may contain a unique signature of plant or animal species? If yes, please explain:	YES	NO
--	-----	----

As the proposed development is located along an existing road it is not expected that the activities will have a significant negative impact on any populations of threatened plant, animal or bird species or their habitat.

Describe the manner in which any other biological aspects will be impacted:

Refer to Ecological Baseline Assessment as available under Appendix G.

Will the proposed development also trigger section 63 of the NEM: ICMA?	YES	NO
---	-----	----

If yes, describe the following:

- (i) the extent to which the applicant has in the past complied with similar authorisations;
- (ii) whether coastal public property, the coastal protection zone or coastal access land will be affected, and if so, the extent to which the proposed development proposal or listed activity is consistent with the purpose for establishing and protecting those areas;
- (iii) the estuarine management plans, coastal management programmes, coastal management lines and coastal management objectives applicable in the area;
- (iv) the likely socio-economic impact if the listed activity is authorised or is not authorised;
- (v) the likely impact of coastal environmental processes on the proposed development;
- (vi) whether the development proposal or listed activity—
 - (a) is situated within coastal public property and is inconsistent with the objective of conserving and enhancing coastal public property for the benefit of current and future generations;
 - (b) is situated within the coastal protection zone and is inconsistent with the purpose for which a coastal protection zone is established as set out in section 17 of NEM: ICMA;
 - (c) is situated within coastal access land and is inconsistent with the purpose for which coastal access land is designated as set out in section 18 of NEM: ICMA;
 - (d) is likely to cause irreversible or long-lasting adverse effects to any aspect of the coastal environment that cannot satisfactorily be mitigated;
 - (e) is likely to be significantly damaged or prejudiced by dynamic coastal processes;
 - (f) would substantially prejudice the achievement of any coastal management objective; or
 - (g) would be contrary to the interests of the whole community;
- (vii) whether the very nature of the proposed activity or development requires it to be located within coastal public property, the coastal protection zone or coastal access land;
- (viii) whether the proposed development will provide important services to the public when using coastal public property, the coastal protection zone, coastal access land or a coastal protected area; and
- (ix) the objects of NEM: ICMA, where applicable.

The proposed activity will have an impact on the coastal protection zone in terms of the relevant three sections being within the 100m from high-water mark areas of the sea and partially within protected areas as part of the Agulhas National Park, but the proposed developments will be along an existing gravel road to be paved and sidewalk to be added therefore having a positive impact in terms of socio-economic aspects such as upgrade on an gravel road and the addition of a formal sidewalk along a popular tourist route.

(c) Social and Economic aspects:

What is the expected capital value of the project on completion?	Unknown
What is the expected yearly income or contribution to the economy that will be generated by or as a result of the project?	R0
Will the project contribute to service infrastructure?	YES NO
Is the project a public amenity?	YES NO
How many new employment opportunities will be created during the development phase?	Unknown
What is the expected value of the employment opportunities during the development phase?	Unknown
What percentage of this will accrue to previously disadvantaged individuals?	As much as possible
How will this be ensured and monitored (please explain):	
Employment opportunities to be allocated as according to municipal policy/guidelines which promote the employment and appointment of previously disadvantaged individuals.	
How many permanent new employment opportunities will be created during the operational phase of the project?	0

What is the expected current value of the employment opportunities during the first 10 years?	Unknown
What percentage of this will accrue to previously disadvantaged individuals?	Unknown
How will this be ensured and monitored (please explain):	
Employment opportunities to be allocated as according to municipal policy/guidelines which promote the employment and appointment of previously disadvantaged individuals.	
Any other information related to the manner in which the socio-economic aspects will be impacted:	
-	

(d) Heritage and Cultural aspects:

A Notice of Intent to Develop to be submitted to the HWC. Proposed road upgrades expected to have a positive impact on heritage and cultural aspects of the site in terms of infrastructure upgrades as proposed along the popular tourist destination Southernmost Tip of Africa monument.

2. WASTE AND EMISSIONS

(a) Waste (including effluent) management

Will the development proposal produce waste (including rubble) during the development phase?	YES	NO
If yes, indicate the types of waste (actual type of waste, e.g. oil, and whether hazardous or not) and estimated quantity per type?	Unknown	
Waste is mainly expected to be produced during the construction phase. Types of "construction phase waste" may include: <ul style="list-style-type: none"> Overburden material from land clearing including plant materials and sand. Waste oils i.e. from construction machinery and vehicles. Sewage from portable toilets. General domestic waste i.e. food waste and packaging from construction workers. Construction packing materials i.e. empty cement bags, plastic ties and wrapping etc. Illegally dumped domestic waste as already present on proposed development site which will have to be removed before construction can commence. Runoff waste water i.e. from cement mixing areas. <p>There is no reasonable or feasible method to calculate the estimated quantities that will be produced for each of these waste types due to the amount of potential variables which exists i.e. amount of total staff to be employed, amount and type of construction materials to be used etc.</p>		

Will the development proposal produce waste during its operational phase?	YES	NO
If yes, indicate the types of waste (actual type of waste, e.g. oil, and whether hazardous or not) and estimated quantity per type?	NA m ³	
NA		

Will the development proposal require waste to be treated / disposed of on site?	YES	NO
If yes, indicate the types of waste (actual type of waste, e.g. oil, and whether hazardous or not) and estimated quantity per type per phase of the proposed development to be treated/disposed of?	NA m ³	
NA		
If no, where and how will the waste be treated / disposed of? Please explain. Indicate the types of waste (actual type of waste, e.g. oil, and whether hazardous or not) and estimated quantity per type per phase of the proposed development to be treated/disposed of?	Unknown	
All non-hazardous and hazardous waste to be suitably and temporarily stored at the construction camp and disposed of at a licensed landfill and/or hazardous waste handling facility at least once a week.		
Has the municipality or relevant authority confirmed that sufficient capacity exists for treating / disposing of the waste to be generated by the development proposal? If yes, provide written confirmation from the municipality or relevant authority.	YES	NO
Will the development proposal produce waste that will be treated and/or disposed of at another facility other than into a municipal waste stream?	Potentially – Yes (it is the applicant's prerogative to decide whether or not he/she wants to appoint a private	

		waste handling company who might dispose of/treat the collected waste elsewhere outside of the municipal waste stream)	
If yes, has this facility confirmed that sufficient capacity exists for treating / disposing of the waste to be generated by the development proposal? Provide written confirmation from the facility.		YES	NO
Does the facility have an operating license? (If yes, please attach a copy of the licence.)		YES	NO
Facility name:			
Contact person:			
Cell:	Postal address:		
Telephone:	Postal code:		
Fax:	E-mail:		

Describe the measures that will be taken to reduce, reuse or recycle waste:
As per standard EMP waste management requirements to reduce, reuse or recycle waste must be promoted and implemented as far as feasibly and reasonable practical and financially possible.

(b) Emissions into the atmosphere

Will the development proposal produce emissions that will be released into the atmosphere?	YES	NO
If yes, does this require approval in terms of relevant legislation?	YES	NO
If yes, what is the approximate volume(s) of emissions released into the atmosphere?	Unknown	
Describe the emissions in terms of type and concentration and how these will be avoided/managed/treated/mitigated:		
Potential construction vehicle emission to be produced during the construction phase. Amounts to be produced unknown – will depend on type, amount and condition of construction vehicles used.		

3. WATER USE

(a) Indicate the source(s) of water for the development proposal by highlighting the appropriate box(es).

Municipal	Water board	Groundwater	River, Stream, Dam or Lake	Other	The project will only use water during its construction phase during which municipal water will be used for i.e. cement mixing
-----------	-------------	-------------	----------------------------	-------	--

Note: Provide proof of assurance of water supply (e.g. Letter of confirmation from the municipality / water user associations, yield of borehole)

(b) If water is to be extracted from a groundwater source, river, stream, dam, lake or any other natural feature, please indicate the volume that will be extracted per month:	NA	m ³
--	----	----------------

(c) Does the development proposal require a water use permit / license from DWS?	YES	NO
If yes, please submit the necessary application to the DWS and attach proof thereof to this application as an Appendix.		

(d) Describe the measures that will be taken to reduce water demand, and measures to reuse or recycle water:
Water to be used during the construction phase i.e. for cement mixing to be sourced from non-potable water resources as far as possible.

4. POWER SUPPLY

(a) Describe the source of power e.g. municipality / Eskom / renewable energy source.

NA

(b) If power supply is not available, where will power be sourced?

NA

5. ENERGY EFFICIENCY

- (a) Describe the design measures, if any, that have been taken to ensure that the development proposal will be energy efficient:

NA

- (b) Describe how alternative energy sources have been taken into account or been built into the design of the project, if any:

NA

6. TRANSPORT, TRAFFIC AND ACCESS

Describe the impacts in terms of transport, traffic and access.

The objective of the proposed development is to upgrade an existing gravel road by paving it and adding a sidewalk therefore the proposed activity will have a positive impact on transport, traffic and access infrastructure.

During the construction phase the proposed activities will have temporary negative impacts on the traffic flow within the relevant area, however traffic volumes are generally low along the remaining route to be paved and therefore manageable. The necessary traffic management/mitigation measures must be incorporated into the EMP to minimise the significance of these impacts as far as possible.

7. NUISANCE FACTOR (NOISE, ODOUR, etc.)

Describe the potential nuisance factor or impacts in terms of noise and odours.

Noise

It is not anticipated that the construction noise will be significant and will only be temporary.

Odour

No odours are expected to be produced during the proposed construction and/or operational phases.

Dust

It is not anticipated that significant additional dust levels will be experienced during construction as the current road is already a gravel road and dust levels will in fact decrease as the development is completed.

Note: Include impacts that the surrounding environment will have on the proposed development.

8. OTHER

Refer to Section G below for summary of potential positive and negative impacts as assessed.

SECTION G: IMPACT ASSESSMENT, IMPACT AVOIDANCE, MANAGEMENT, MITIGATION AND MONITORING MEASURES

1. METHODOLOGY USED IN DETERMINING AND RANKING ENVIRONMENTAL IMPACTS AND RISKS ASSOCIATED WITH THE ALTERNATIVES

- (a) Describe the **methodology** used in determining and ranking the nature, significance consequences, extent, duration and probability of potential environmental impacts and risks associated with the proposed development and alternatives.

The assessment criteria were developed based on the Department of Environmental Affairs' Integrated Environmental Management Series guideline documents.			
Criteria	Description		
Nature	a description of what causes the effect, what will be affected, and how it will be affected.		
	Type	Score	Description
Extent (E)	None (No)	1	Footprint
	Site (S)	2	On site or within 100 m of the site
	Local (L)	3	Within a 20 km radius of the centre of the site
	Regional (R)	4	Beyond a 20 km radius of the site
	National (Na)	5	Crossing provincial boundaries or on a national / land wide scale
Duration (D)	Short term (S)	1	0 – 1 years
	Short to medium (S-M)	2	2 – 5 years
	Medium term (M)	3	5 – 15 years
	Long term (L)	4	> 15 years
	Permanent(P)	5	Will not cease
Magnitude (M)	Small (S)	0	will have no effect on the environment
	Minor (Mi)	2	will not result in an impact on processes
	Low (L)	4	will cause a slight impact on processes
	Moderate (Mo)	6	processes continuing but in a modified way
	High (H)	8	processes are altered to the extent that they temporarily cease
	Very high (VH)	10	results in complete destruction of patterns and permanent cessation of processes.
Probability (P) the likelihood of the impact actually occurring. Probability is estimated on a scale, and a score assigned	Very improbable (VP)	1	probably will not happen
	Improbable (I)	2	some possibility, but low likelihood
	Probable (P)	3	distinct possibility
	Highly probable (HP)	4	most likely
	Definite (D)	5	impact will occur regardless of any prevention measures
Significance (S)	Determined through a synthesis of the characteristics described above: S = (E+D+M) x P Significance can be assessed as low, medium or high		
Low: < 30 points:	The impact would not have a direct influence on the decision to develop in the area		
Medium: 30 – 60 points:	The impact could influence the decision to develop in the area unless it is effectively mitigated		
High: > 60 points:	The impact must have an influence on the decision process to develop in the area		
No significance	When no impact will occur or the impact will not affect the environment		
Status	Positive (+)		Negative (-)
The degree to which the impact can be reversed	Completely reversible (R)	90-100%	The impact can be mostly to completely reversed with the implementation of the correct mitigation and rehabilitation measures.
	Partly reversible (PR)	6-89%	The impact can be partly reversed providing that mitigation measures as stipulated in the EMP are implemented and rehabilitation measures are undertaken
	Irreversible (IR)	0-5%	The impact cannot be reversed, regardless of the mitigation or rehabilitation measures taking place
The degree to which the impact may cause irreplaceable loss of resources	Resource will not be lost (R)	1	The resource will not be lost or destroyed provided that mitigation and rehabilitation measures as stipulated in the EMP are implemented
	Resource may be partly destroyed (PR)	2	Partial loss or destruction of the resources will occur even though all management and mitigation measures as stipulated in the EMP are implemented
	Resource cannot be replaced (IR)	3	The resource cannot be replaced no matter which management or mitigation measures are implemented.
The degree to which the impact can be mitigated	Completely mitigatable (CM)	1	The impact can be completely mitigated providing that all management and mitigation measures as stipulated in the EMP are implemented
	Partly mitigatable (PM)	2	The impact cannot be completely mitigated even though all management and mitigation measures as stipulated in the EMP are implemented. Implementation of these measures will provide

			a measure of mitigatibility
	Un-mitigatable (UM)	3	The impact cannot be mitigated no matter which management or mitigation measures are implemented.

(b) Please describe any gaps in knowledge.

EAP is only knowledgeable with regards to the potential environmental and ecosystems aspects.

(c) Please describe the underlying assumptions.

In undertaking the investigation and compiling this report, the following has been assumed:

- The information provided by the client, specialists and engineers is accurate and unbiased;
- The scope of this investigation is to assess the direct and cumulative environmental impacts associated with the development; and
- Should the proposed project be authorised, the applicant will incorporate the recommendations and mitigation measures outlined in this BAR, the EMP and the EA into the detailed design and construction contract specifications and operational management system for the proposed project.

(d) Please describe the uncertainties.

None at this stage.

(e) Describe adequacy of the assessment methods used.

Based on the EAP's assessment information was provided to address the concerns and assess the impacts of the proposed development on the environment. Information as provided by the applicant, specialist, engineers and as collected by the EAP during site surveys etc. has been used to inform the current development proposal and impact assessment.

2. IDENTIFICATION, ASSESSMENT AND RANKING OF IMPACTS TO REACH THE PROPOSED ALTERNATIVES INCLUDING THE PREFERRED ALTERNATIVE WITHIN THE SITE

Note: In this section the focus is on the identified issues, impacts and risks that influenced the identification of the alternatives. This includes how aspects of the receiving environment have influenced the selection.

(a) List the identified impacts and risks for each alternative.

Alternative 1:	<p><u>ALTERNATIVE 1</u></p> <p><u>CONSTRUCTION PHASE</u></p> <ul style="list-style-type: none"> • Disturbance to subsurface geological layers (high negative impact before mitigation and low negative impact with mitigation measures); • Soil erosion (medium negative impact before mitigation and low negative impact with mitigation measures); • Impacts of construction activities on the water quality of surface and underground water resources (high negative impact before mitigation and low negative impact with mitigation measures); • Increase in and accumulation of storm water runoff (high negative impact before mitigation and low negative impact with mitigation measures); • Impact of proposed activities on coastal indigenous vegetation and associated fauna and avifauna habitat as part of mapped protected areas, CBAs and ESA's (high negative impact before mitigation and low negative impact with mitigation measures); • Introduction of alien and weed plant species (medium negative impact before mitigation and low negative impact with mitigation measures); • Increased temporary construction job opportunities (medium positive impact) • Traffic impacts due to construction on and along existing roads (medium negative impact before mitigation and low negative impact with mitigation measures)
----------------	--

	<ul style="list-style-type: none"> • Impact of litter or waste from the construction site on the surrounding communities and tourism activities (medium negative impact before mitigation and low negative impact with mitigation measures) • The potential impact of the proposed development on archaeological, palaeontological and heritage remains (low negative impact before mitigation and low negative impact with mitigation measures) • Noise due to construction machinery (low negative impact before mitigation and low negative impact with mitigation measures) • Impact of construction activities on the surrounding land users/owners and tourist's visual landscape of the area (medium negative impact before mitigation and low negative impact with mitigation measures) <p><u>OPERATIONAL PHASE</u></p> <ul style="list-style-type: none"> • Soil erosion due to increase in hardened surfaces (medium negative impact before mitigation and low negative impact with mitigation measures); • Impact of proposed activities on coastal indigenous vegetation and associated fauna and avifauna habitat as part of mapped protected areas, CBAs and ESA's (high negative impact before mitigation and low negative impact with mitigation measures); • Expansion and upgrade of existing road infrastructure from L'Agulhas to Suiderstrand – (high positive impact on socio-economic, cultural-historical aspects and visual sense of place) <p><u>DECOMMISSIONING AND CLOSURE PHASE</u></p> <ul style="list-style-type: none"> • The decommissioning of the infrastructure developments are not anticipated in the near future. Impacts during this phase will however be similar to that of the construction phase. Mitigation and management measures will be related to the technology of the day and needs to be discussed at such time as decommissioning will occur. All structures must be removed and the area rehabilitated to the state as before construction had commenced (dependent upon the end land use agreement). Waste, where possible must be recycled. All concrete introduced must be removed off site to a licensed waste facility.
No-Development Alternative:	<p><u>CONSTRUCTION PHASE- NO-DEVELOPMENT ALTERNATIVE</u></p> <ul style="list-style-type: none"> • No increase in temporary construction job opportunities (medium negative impact as no temporary construction jobs will be created) <p><u>OPERATIONAL PHASE- NO-DEVELOPMENT ALTERNATIVE</u></p> <ul style="list-style-type: none"> • No expansion and upgrade of existing road infrastructure (high negative significance - ongoing successful services provision and promoting of tourism within the area cannot be ensured/promoted)

(b) Describe the impacts and risks identified for each alternative, including the nature, significance, consequence, extent, duration and probability of the impacts, including the degree to which these impacts can be reversed; may cause irreplaceable loss of resources; and can be avoided, managed or mitigated.

The following table serves as a guide for summarising each alternative. The table should be repeated for each alternative to ensure a comparative assessment. (The EAP has to select the relevant impacts identified in blue in the table below for each alternative and repeat the table for each impact and risk).

Note: The EAP may decide to include this section as Appendix J to the BAR.

Refer to Appendix J for Impact Assessment Tables.

(c) Provide a summary of the site selection matrix.

Only one project alternative has been assessed thus far. Due to the proposed location being site

specific; related to where it can and must connect to existing road infrastructure; the limited availability of road development areas within the coastal area and location of existing road the proposed layout alternative is the only reasonable and feasible alternative available to assess.

(d) Outcome of the site selection matrix.

Refer to (c) above.

3. SPECIALIST INPUTS/STUDIES, FINDINGS AND RECOMMENDATIONS

Note: Specialist inputs/studies must be attached to this report as **Appendix G** and must comply with the content requirements set out in Appendix 6 of the EIA Regulations, 2014 (as amended). Also take into account the Department's Circular EADP 0028/2014 (dated 9 December 2014) on the "One Environmental Management System" and the EIA Regulations, 2014, any subsequent Circulars, and guidelines available on the Department's website (<http://www.westerncape.gov.za/eadp>).

Provide a summary of the findings and impact management measures identified in any specialist report and an indication of how these findings and recommendations have been included in the BAR.

Ecological Baseline Assessment, June 2018, Eco Impact:

Ecological Impact Assessment with Associated Mitigation and Rehabilitation Measures to be implemented

Construction and Operational/Maintenance Phases:

Nature of potential impact:

Impact of proposed activities on indigenous vegetation and associated fauna and avifauna habitat as part of mapped protected areas, CBAs and ESA's

Discussion:

On the proposed development area the indigenous vegetation is of low conservation value with no plant species of conservation concern, and the site is not expected to be an important breeding site or habitat for any fauna or avifauna species of conservation concern.

Cumulative impacts:

Loss of indigenous vegetation and associated fauna and avifauna habitat.

Mitigation:

- Clearly demarcate the proposed development footprint area before any construction commences and undertake construction (including construction camp and associated stockpiling) only in demarcated development footprint area to minimise edge effects. Demarcation method to be approved by an Environmental Control Officer (ECO).
- No construction related disturbance should be allowed outside the demarcated areas.
- Implement site specific erosion and storm water runoff management measures to prevent (or if prevention is not possible limit) any erosion from occurring on the development footprint area and surrounds.
- The landowner/s must adhere to his/her legal obligations to actively eradicate and manage alien vegetation infestations present on the applicable and surrounding properties.
- Conduct tortoise search and rescue operations daily while site clearance is underway (before clearance commences on a day to day basis) and move all tortoises to surrounding impacted areas.
- Rehabilitate all areas that were disturbed outside of the proposed development areas immediately and implement mitigation measures to prevent associated impacts from re-occurring.
- During operation/maintenance no areas outside of the proposed development footprint areas may be disturbed and only existing access routes etc. may be used.

Criteria		
	Without Mitigation	With Mitigation
Extent	2	1
Duration	5	5
Magnitude	10	2
Probability	5	2
Significance	85 - High	16 - Low

Status	High Negative Significance without Mitigation	Low Negative Significance with Mitigation
Reversibility	100% Reversible	100% Reversible
Irreplaceable loss of resources	2-Partial loss of resources but can be rehabilitated	2 – Partial loss of resources
Degree to which impact can be mitigated	2 – Partly, some loss of indigenous vegetation will occur	

Nature of potential impact:

Impact of proposed development activities on surface- and groundwater resources

Discussion:

Construction activities can impact negatively upon the surface and groundwater resources on and adjacent to the site.

Possible chemicals found on site during construction as well as any hydrocarbon spillages will negatively affect the soil and surface or ground water interacting with it. Should the spills not be cleaned up and surface water infiltrate the ground, pollutants may even affect the groundwater resource.

Cumulative impacts:

Loss of fresh water habitat and pollution of surface water resources.

Mitigation:

- All construction activities and personnel on site to stay within demarcated construction areas.
- Proper waste bins to be provided to construction staff and all waste to be regularly removed to municipal landfill site.
- If any fuel or hazardous materials is spilled on site it must be treated as according to EMP hazardous spill management requirements.
- The cement mixing area must be within the demarcated area and no seepage of site into the surrounding vegetation may occur.

Criteria	Without Mitigation	With Mitigation
Extent	2	1
Duration	5	1
Magnitude	10	2
Probability	5	2
Significance	85 - High	8 - Low
Status	High Negative Significance without Mitigation	Low Negative Significance with Mitigation
Reversibility	100%	100%
Irreplaceable loss of resources	2-Partial loss of resources but can be rehabilitated	1 – Resource will not be lost
Degree to which impact can be mitigated	1- Completely	

Nature of potential impact:

Potential erosion of the site and surrounds

Discussion:

Vegetation clearance and hardening of surfaces could lead to an increase in storm water runoff and eventually lead to soil erosion which can occur due to wind (wind erosion cause dust pollution); and due to overland storm water flow should heavy rains fall.

Cumulative impacts:

Exposing soil may lead to erosion of site and surrounds if not mitigated.

Mitigation:

- Construction and operational phase storm water management measures must be implemented to prevent any erosion or significant increase in storm water runoff from occurring.
- Should any signs of erosion or artificial recharge be observed the municipality must implement rectification and preventions measures immediately and consult with the appointed ECO before implementing these measures.

Criteria	Without Mitigation	With Mitigation
Extent	3	1
Duration	5	1
Magnitude	6	2
Probability	4	2
Significance	56 - Medium	8 - Low
Status	Medium Negative Significance without Mitigation	Low Negative Significance with Mitigation
Reversibility	100%	100%
Irreplaceable loss of resources	2-Partial loss of resources but can be rehabilitated	1 – Resource will not be lost
Degree to which impact can be mitigated	1 – Can be completely mitigated	

Decommissioning/Rehabilitation Phase:**Nature of potential impact:**

Potential erosion of the site and surrounds during rehabilitation phase

Discussion:

Rehabilitation (i.e. demolishing developed structures) could lead to soil erosion which can occur due to wind (wind erosion cause dust pollution); and due to overland storm water flow should heavy rains fall.

Cumulative impacts:

Exposing soil may lead to erosion of site and surrounds if not mitigated.

Mitigation:

- Decommissioned areas must be rehabilitated and planted with indigenous vegetation immediately after built structures have been removed.
- Engineered contour structures reinstated and maintained.
- Monitor rehabilitation of area on a 6 monthly basis until effective/successful rehabilitation has been obtained.
- If erosion is detected implement erosion rectification and preventions measures as guided by an ECO

Criteria	Without Mitigation	With Mitigation
Extent	3	1
Duration	5	1
Magnitude	6	2
Probability	4	2
Significance	56 - Medium	8 - Low
Status	Medium Negative	Low Negative (Acceptable)
Reversibility	100%	100%
Irreplaceable loss of resources	2-Partial loss of resources but can be rehabilitated	1 – Resource will not be lost
Degree to which impact can be mitigated	1 – Can be completely mitigated	

Concluding Remarks and Summary of Impact Mitigation and Rehabilitation Measures Proposed before, during and after the Proposed Activities

It was determined that the overall areas to be impacted upon have a low botanical sensitivity/conservation value. The proposed development areas along the road verges was disturbed and altered during the previous road and infrastructure development and the types of returning plant species (mostly pioneer) recorded on site is evidence of that.

According to the 2017 Western Cape Biodiversity Spatial Plan the road and its edges (proposed development area) outside the Agulhas National Park area is not mapped as a CBAs. The 1st section closest to Agulhas falls within the Agulhas National Park and is mapped as a Protected Area. The area surrounding the proposed development area of section 2 and most of section 3 is mapped as Ecological Support Area (ESA 1), and a small surrounding area along section 3 as Terrestrial Critical Biodiversity Area (CBA 1). These areas were identified as such to protect coastal process. The paving and widening of the road will however not have a significant negative impact on these coastal processes as road paving and widening will occur mostly on already existing cleared gravel road area and only have a limited impact on surrounding indigenous vegetation areas, and even these areas are disturbed road verges with mainly returning pioneer species.

The National Vegetation Map of South Africa (2012) identifies the remnants of natural vegetation occurring within the area as Overberg Dune Strandveld (LT). The indigenous vegetation species populations recorded on site in the areas that will be impacted by the proposed development is mostly pioneer species not of conservation concern other than to stabilize the previously disturbed road edges. However, mitigation measures must be put in place to minimise the edge effects during construction and operation/maintenance to prevent wider areas of disturbance. Due to most of the proposed development areas already being cleared/developed upon for the current road infrastructure it is expected that a maximum of 0.4ha of indigenous vegetation will further be cleared for the proposed development within the relevant three sections.

No species of conservation concern were recorded nor are expected to occur on the impacted sites. This study also investigated any presence of any significant wetland/freshwater resources on or within close proximity to the development sites, however no such features were found during the survey.

It was concluded that, from an ecological impact point of view, the proposed development should not have an unacceptably significant negative impact on environmental features of the site and surrounds if specialist recommendations are taken into consideration and effectively implemented.

Summary of recommendations as listed in the report and additional recommendations to be implemented are listed below:

Construction, Operational/Maintenance and Rehabilitation phases -

- The project implementation process should be subject to standard Environmental Management Programme (EMP) prescripts and conditions and only proceed under supervision of a competent and diligent Environmental Control Officer, both during the construction, operational/maintenance and decommission/rehabilitation phases.
- Clearly demarcate the proposed development footprint area before any construction commences and undertake construction (including construction camp and associated stockpiling) only in demarcated development footprint area to minimise edge effects. Demarcations must occur under the supervision of and approved by ECO. Demarcation must be clearly visible and effective and no-go area must remain demarcated throughout construction phase.
- Undertake all construction and operational/maintenance development activities only in identified and specifically demarcated areas as proposed.
- Personnel should be restricted to the construction camp site and immediate construction areas only.
- Remove and conserve topsoil layer and overburden material for rehabilitation after construction activities have ceased within proposed development areas, where possible and required.
- Implement site specific erosion and storm water runoff management measures to prevent (or if prevention is not possible limit) any erosion from occurring on the development footprint area

and surrounds.

- Proper waste bins to be provided during construction and operation and all waste to be regularly (at least once a week) removed to municipal landfill site.
- If any fuel or hazardous materials is spilled on site it must be treated as according to EMP requirements.
- The cement mixing area must be within a demarcated area and no cement mix runoff water escapes from cement mixing area.
- The landowner/s must adhere to his/her legal obligations to actively eradicate and manage alien tree infestations present on the applicable and surrounding properties.
- Conduct tortoise search and rescue operations daily while site clearance is underway (before clearance commences on a day to day basis) and move all tortoises to surrounding impacted areas.
- Rehabilitate all areas that were disturbed outside of the proposed development areas immediately and implement mitigation measures to prevent associated impacts from re-occurring.
- During operation/maintenance no areas outside of the proposed development footprint areas may be disturbed and only existing access routes etc. may be used.
- Construction and operational phase storm water management measures must be implemented to prevent any erosion or significant increase in storm water runoff from occurring.
- All infrastructures must remain clear of build-up, debris as waste so as to prevent any damming of stormwater which may lead to additional impacts such as erosion etc. The municipality will be responsible for the maintenance and upkeep of all infrastructure proposed throughout the construction, operational/maintenance and decommissioning/rehabilitation phases of the proposed development.
- Should any signs of erosion or artificial recharge be observed the municipality must implemented rectification and preventions measures immediately and consult with the appointed ECO before implementing these measures.
- Only use vegetation indigenous to the area to rehabilitate impacted/decommissioned areas and implement ongoing monitoring of the rehabilitated areas until successful rehabilitation has taken place.
- After topsoil has been replaced ongoing monitoring and removal of alien vegetation regrowth must be conducted to ensure effective rehabilitation of indigenous vegetation.
- Decommissioned areas must be rehabilitated and planted with indigenous vegetation immediately after built structures have been removed.
- Monitor rehabilitation of areas impacted outside of the proposed development areas or decommissioned areas on a 6 monthly basis until effective/successful rehabilitation has been obtained.
- If erosion is detected during or after rehabilitation implement erosion rectification and preventions measures must be implemented as guided by an ECO
- Even though this study only focussed on the three sections as located within the 100m high water mark areas, as according to the scope of the survey conducted, it is recommended that the mitigation measures as proposed within this report also be implemented along the entire proposed 5km route to be paved and expanded and that this be included as part of the Environmental Authorisation requirements.

Eco Impact is of the opinion, and based on the survey and desk study done, that the proposed development activities; if designed and implemented according to the recommendations as provided in this report, will not have an unacceptable significantly negative impact on the environmental aspects of the site and surrounds as assessed in this report.

4. ENVIRONMENTAL IMPACT STATEMENT

Provide an environmental impact statement of the following:

(i) A summary of the key findings of the EIA.

ALTERNATIVE 1

CONSTRUCTION PHASE- ALTERNATIVE 1

- Disturbance to subsurface geological layers (high negative impact before mitigation and low negative impact with mitigation measures);
- Soil erosion (medium negative impact before mitigation and low negative impact with mitigation measures);
- Impacts of construction activities on the water quality of surface and underground water resources (high negative impact before mitigation and low negative impact with mitigation measures);
- Increase in and accumulation of storm water runoff (high negative impact before mitigation and low negative impact with mitigation measures);
- Impact of proposed activities on coastal indigenous vegetation and associated fauna and avifauna habitat as part of mapped protected areas, CBAs and ESA's (high negative impact before mitigation and low negative impact with mitigation measures);
- Introduction of alien and weed plant species (medium negative impact before mitigation and low negative impact with mitigation measures);
- Increased temporary construction job opportunities (medium positive impact)
- Traffic impacts due to construction on and along existing roads (medium negative impact before mitigation and low negative impact with mitigation measures)
- Impact of litter or waste from the construction site on the surrounding communities and tourism activities (medium negative impact before mitigation and low negative impact with mitigation measures)
- The potential impact of the proposed development on archaeological, palaeontological and heritage remains (low negative impact before mitigation and low negative impact with mitigation measures)
- Noise due to construction machinery (low negative impact before mitigation and low negative impact with mitigation measures)
- Impact of construction activities on the surrounding land users/owners and tourist's visual landscape of the area (medium negative impact before mitigation and low negative impact with mitigation measures)

OPERATIONAL PHASE- ALTERNATIVE 1

- Soil erosion due to increase in hardened surfaces (medium negative impact before mitigation and low negative impact with mitigation measures);
- Impact of proposed activities on coastal indigenous vegetation and associated fauna and avifauna habitat as part of mapped protected areas, CBAs and ESA's (high negative impact before mitigation and low negative impact with mitigation measures);
- Expansion and upgrade of existing road infrastructure from L'Agulhas to Suiderstrand – (high positive impact on socio-economic, cultural-historical aspects and visual sense of place)

DECOMMISSIONING AND CLOSURE PHASE- ALTERNATIVE 1

- The decommissioning of the infrastructure developments are not anticipated in the near future. Impacts during this phase will however be similar to that of the construction phase. Mitigation and management measures will be related to the technology of the day and needs to be discussed at such time as decommissioning will occur. All structures must be removed and the area rehabilitated to the state as before construction had commenced (dependent upon the end land use agreement). Waste, where possible must be recycled. All concrete introduced must be removed off site to a licensed waste facility.

NO-DEVELOPMENT ALTERNATIVE

CONSTRUCTION PHASE- NO-DEVELOPMENT ALTERNATIVE

- No increase in temporary construction job opportunities (medium negative impact as no temporary construction jobs will be created)

OPERATIONAL PHASE- NO-DEVELOPMENT ALTERNATIVE

No expansion and upgrade of existing road infrastructure (high negative significance - ongoing successful services provision and promoting of tourism within the area cannot be ensured/promoted)

(ii) Has a map of appropriate scale been provided, which superimposes the proposed development and its associated structures and infrastructure on the environmental sensitivities of the preferred site, indicating any areas that should be avoided, including buffers?	YES	NO
---	-----	----

(iii) A summary of the positive and negative impacts that the proposed development and alternatives will cause in the environment and community.

Refer to Section G: 2(a) above.

5. IMPACT MANAGEMENT, MITIGATION AND MONITORING MEASURES

- (a) Based on the assessment, describe the impact management, mitigation and monitoring measures as well as the impact management objectives and impact management outcomes included in the EMP. The EMP must be attached to this report as Appendix H.

The key mitigation measures recommended should be impact avoidance. Where adverse impacts cannot reasonably be avoided, the activities should be managed through the effective implementation of the EMP with a strong emphasis on post-construction rehabilitation where required.

Refer to the Impact Assessment tables under Appendix J for list of mitigation measures as proposed for each potential impact assessed as well as the EMP under Appendix H in which all of the proposed mitigation measures have been incorporated.

- (b) Describe any provisions for the adherence to requirements that are prescribed in a Specific Environmental Management Act relevant to the listed activity or specified activity in question.

NA

- (c) Describe the ability of the applicant to implement the management, mitigation and monitoring measures.

The applicant is ultimately responsible for the implementation of the EA and EMP and the financial cost related thereto. In accordance with the requirements of the EA and EMP, the applicant must ensure that any person acting on their behalf complies with the conditions / specifications contained in this EA, EMP and any other relevant permits/licences/legislation etc. related to the activities. In addition, an Environmental Control Officer must be appointed to review, monitor and report on compliance with the relevant requirements. Thus, if the applicant intends to commence with the proposed and authorised activities he/she must ensure that he/she is able to implement the required management, mitigation and monitoring measures throughout the lifespan of the project.

- (d) Provide the details of any financial provisions for the management of negative environmental impacts, rehabilitation and closure of the proposed development.

Unknown at this stage.

- (e) Describe any assumptions, uncertainties, and gaps in knowledge which relate to the impact management, mitigation and monitoring measures proposed.

EAP is only knowledgeable with regards to the potential environmental and ecosystems aspects.

In undertaking the investigation and compiling this report, the following has been assumed:

- The information provided by the client, specialists and engineers is accurate and unbiased;
- The scope of this investigation is to assess the direct and cumulative environmental impacts associated with the development; and
- Should the proposed project be authorised, the applicant will incorporate the recommendations and mitigation measures outlined in this BAR, the EMP and the EA into the detailed design and construction contract specifications and operational management system for the proposed project.

SECTION H: RECOMMENDATIONS OF THE EAP AND SPECIALISTS

(a) In my view as the appointed EAP, the information contained in this BAR and the documentation attached hereto is sufficient to make a decision in respect of the listed activity(ies) applied for.	YES	NO
(b) If the documentation attached hereto is sufficient to make a decision, please indicate below whether, in your opinion, the listed activity(ies) should or should not be authorised:		
Listed activity(ies) should be authorised:	YES	NO
Provide reasons for your opinion		
This report is only a pre-application basic assessment report - comments must also still be obtained and addressed from key departments and registered I&APs during the public participation process still to be conducted.		
Therefore the pre-application basic assessment report documentation is not sufficient to make a decision at this stage.		
(c) Provide a description of any aspects that were conditional to the findings of the assessment by the EAP and Specialists which are to be included as conditions of authorisation.		
Project specific aspects and recommendations to be included as conditions of the authorisation will be included here during the final basic assessment report phase.		
(d) If you are of the opinion that the activity should be authorised, please provide any conditions, including mitigation measures that should in your view be considered for inclusion in an environmental authorisation.		
Will be addressed and included within the final basic assessment report		
(e) Please indicate the recommended periods in terms of the following periods that should be specified in the environmental authorisation:		
i.	the period within which commencement must occur;	Within 5 years of obtaining Environmental Authorisation
ii.	the period for which the environmental authorisation is granted and the date on which the development proposal will have been concluded, where the environmental authorisation does not include operational aspects;	Within 10 years of obtaining Environmental Authorisation
iii.	the period for which the portion of the environmental authorisation that deals with non-operational aspects is granted; and	Within 10 years of obtaining Environmental Authorisation
iv.	the period for which the portion of the environmental authorisation that deals with operational aspects is granted.	Ongoing maintenance of infrastructure and implementation of EMP until decommissioning.

SECTION I: APPENDICES

The following appendices must be attached to this report:

APPENDIX		Confirm that Appendix is attached
Appendix A:	Locality map	Y
Appendix B:	Site development plan(s)	Y
	A map of appropriate scale, which superimposes the proposed development and its associated structures and infrastructure on the environmental sensitivities of the preferred site, indicating any areas that should be avoided, including buffer areas;	Y
Appendix C:	Photographs	Y
Appendix D:	Biodiversity overlay map	Y
Appendix E:	Permit(s) / license(s) from any other Organ of State, including service letters from the municipality.	
	Appendix E1: Copy of comment from HWC.	N – Still to be obtained
Appendix F:	Public participation information: including a copy of the register of I&APs, the comments and responses report, proof of notices, advertisements and any other public participation information as is required in Section C above.	Y
Appendix G:	Specialist Report(s)	Y
Appendix H :	EMPr	Y
Appendix I:	Additional information related to listed waste management activities (if applicable)	NA
Appendix J:	If applicable, description of the impact assessment process followed to reach the proposed preferred alternative within the site.	Y
Appendix K:	Any Other (if applicable). AppendixK1: EAP CV	Y

SECTION J: DECLARATIONS

Original signed copies of the declarations to be provided with the Final Basic Assessment Report to be submitted to the Department of Environmental Affairs for a final decision.