

## CEN INTEGRATED ENVIRONMENTAL MANAGEMENT UNIT

**Environmental and Rural Development Specialist** 

## **DRAFT BASIC ASSESSMENT REPORT:**

# OCEAN VIEW COLLECTOR SEWER, KOUGA LOCAL MUNICIPALITY, EASTERN CAPE

**DEDEAT Reference Number:** 

EC08/C/LN3/M/14-2025

8 MAY 2025

#### **Project Title:**

DRAFT BASIC ASSESSMENT REPORT:

OCEAN VIEW COLLECTOR SEWER, KOUGA LOCAL MUNICIPALITY,

**EASTERN CAPE** 

#### **Project Applicant:**

Kouga Local Municipality

#### **DEDEAT Reference Number:**

EC08/C/LN3/M/14-2025

#### **Environmental Assessment Practitioner:**

**CEN Integrated Environmental Management Unit** 

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Compiled by: Lucille Behrens

#### **Date of Report:**

8 May 2025

#### **REVISIONS TO THE BASIC ASSESSMENT REPORT**

Version	Date	Comment
0	08-05-2025	Draft Basic Assessment Report for Public Participation

### **Executive Summary**

#### 1.1 Introduction

CEN IEM Unit has been appointed by VST Consulting Engineers (Pty) Ltd on behalf of the Kouga Local Municipality to undertake the Environmental Impact Assessment (EIA) process as the independent Environmental Assessment Practitioner (EAP) for the proposed Ocean View Collector Sewer. The applicant for an Environmental Authorisation is the Kouga Local Municipality (KLM).

The overall proposed Ocean View Collector Sewer project will consist of sewer pipelines ranging from 160mm to 315mm in diameter over a total length of approximately 1500m:

- a) The pipeline along Rolihlanhla Street is a new pipeline within the road verge / reserve, with diameters of 160 200mm and over a length of approximately 650m.
- b) The pipeline then turns and runs along Dolphin Drive for approximately 700m, with diameters ranging from 200 315mm. This section of the pipeline will be located adjacent to the existing sewer pipeline, within the road reserve / verge.
- c) The 315mm diameter pipeline then turns in a north westerly direction from Dolphin Drive and follows an existing gravel road for approximately 150m and then turns and ties into the existing sewer pumpstation.

The portions of the proposed sewer collector pipeline along Rolihlanhla Street and Dolphin Drive do not trigger EIA listed activities for the bulk transportation of sewage as the pipeline diameter is under the threshold of 360mm and exclusions of being located within road reserves and urban areas: and are not located within watercourse areas.

The relevant portion of the collector sewer for the application of an Environmental Authorisation and subject to the EIA is the proposed 315mm diameter sewer collector pipeline, from Dolphin Drive to the Ocean View sewer pumpstation, over a distance of approximately 150m. This portion of the sewer collector pipeline is located within 32m of a watercourse and on public open space, thereby triggering listed activities in terms of the EIA Regulations, 2014 as amended; and as a result an Environmental Authorisation is required.

The existing sewer network blocks frequently and a collector sewer within the road reserve is proposed to reduce the flow in the midblock sewer reticulation area of Ocean View. No capacity increase is proposed for the existing Ocean View Sewer Pumpstation. The sewage will then be pumped via pumpstations to discharge into the Jeffreys Bay Waste Water Treatment Works

The Ocean View Collector Sewer from Dolphin Drive to the Ocean View Sewer Pumpstation is located on Portion 125 of Farm Estate Klein Zeekoe River No. 335 of the Ocean View area of Jeffreys Bay, in Ward 14, in the Kouga Local Municipality, Sarah Baartman District Municipality, Eastern Cape. Refer to **Figure 1 – Locality Map.** 

#### 1.2 Activity Description

The relevant portion of the proposed collector sewer for the application of an Environmental Authorisation and subject to the EIA is the proposed 315mm diameter sewer collector pipeline, from Dolphin Drive to the Ocean View sewer pumpstation, over a distance of approximately 150m. Refer to **Figure 2 – Site Layout.** 

The 315mm diameter pipeline will follow an existing gravel road in a north westerly direction, from Dolphin Drive to the Ocean View Sewer Pumpstation. The proposed collector sewer will then turn in a southerly direction into the existing Ocean View sewer pumpstation, and will tie into the existing sewer infrastructure. The proposed Ocean View Collector Sewer (315mm)

diameter) will cater for velocities between a minimum of 0.667m/s and a maximum of 3.0m/s for the gravity sewer.

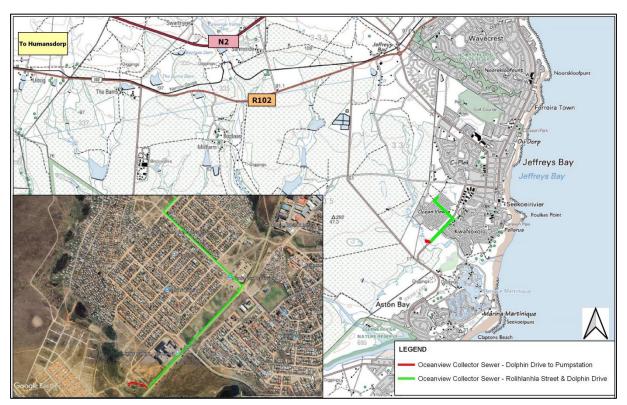


Figure 1: Locality Map

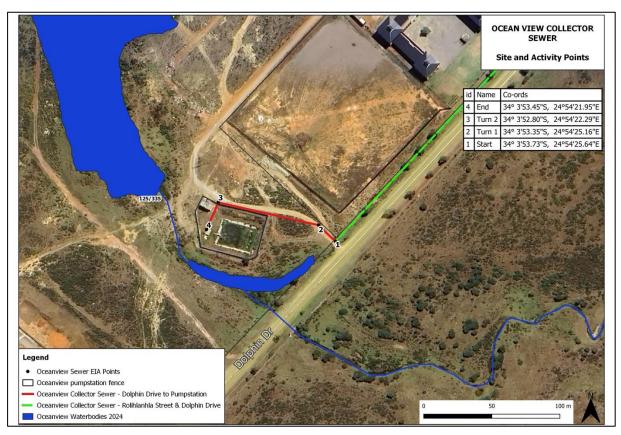


Figure 2: Site Layout and Points

#### 1.3 Legal Framework

#### 1.3.1 EIA Listed Activities

An application for an Environmental Authorisation has been submitted to the Eastern Cape Department of Economic Development, Environmental Affairs and Tourism (DEDEAT). The application reference number is EC08/C/LN3/M/14-2025.

In terms of the EIA Regulations, 2014 (as amended), made under Section 24(5) of NEMA, the following listed activities (Table 1) within Government Notice R. 327 and R.324 (of 7 April 2017) are triggered by the proposed development, thereby requiring environmental authorisation from the DEDEAT.

**Table 1: EIA Listed Activities** 

#### Description **Listed Activity** GNR. 324 Listing Notice 3: Activity 12: The portion of the sewer collector pipeline from Dolphin Drive to the pumpstation would be located The clearance of an area of 300m<sup>2</sup> or more of on land zoned as public open space, and more than indigenous vegetation except where such 300m<sup>2</sup> of vegetation would be cleared. clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan. a. Eastern Cape (v) On land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning. The collector sewer pipeline is located within **GNR. 324 Listing Notice 3: Activity 14:** an aquatic and terrestrial Ecological Support The development of— Area (ESA1), in terms of the Eastern Cape Biodiversity Conservation Plan (ECBCP) (ii) infrastructure or structures with a physical Critical Biodiversity Areas. footprint of 10 square metres or more; The collector sewer pipeline is located within where such development occurs— 5km of the Seekoei River Nature Reserve and (a) within a watercourse; (b) in front of a Noorsekloof Nature Reserve. development setback; or (c) if no development The portion of the sewer collector pipeline from setback has been adopted, within 32 metres of Dolphin Drive to the pumpstation would be a watercourse, measured from the edge of a located on land zoned as public open space. watercourse: It is anticipated that the collector sewer a. Eastern Cape pipeline will exceed 10m<sup>2</sup> footprint where the i. Outside urban areas: pipeline is located within 32m of a watercourse (ff) Critical biodiversity areas or ecosystem (Pietersgat River). service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans. (hh) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a

Listed Activity	Description
biosphere reserve.	
(ii) Inside urban areas:	
(aa) Areas zoned for use as public open space.	

#### 1.3.2 Water Use Authorisation Process

The National Water Act, 1998 (Act No. 36 of 1998) [NWA] aims to regulate the use of water and activities, which may impact on water resources through the categorisation of 'listed water uses'. Such activities require authorisation by the Department of Water and Sanitation (DWS) before such an activity may take place.

Activities for the water uses in terms of Section 21 of the NWA associated with the proposed project are provided in Table 2:

The following has been undertaken as part of the water use authorisation application:

A pre-application enquiry was submitted to the DWS on 4 November 2025, and a pre-application meeting was held on 24 March 2025.

**Table 2: Water Use Listed Activities** 

Listed Activity	Description
Section 21 (c) impeding or diverting the flow of water in a watercourse	The proposed Ocean View Collector Sewer is located within 500m of wetlands.
Section 21 (i) altering the bed, banks, course or characteristics of a watercourse	

#### 1.4 Motivation for Proposed Activity

The existing sewer network blocks frequently and a collector sewer within the road reserve is proposed to reduce the flow in the midblock sewer reticulation area of Ocean View.

The new collector sewer will also make provision for new development in Ocean View and to reduce the flow in the existing sewer reticulation.

The new rising main would reduce any failures on the line, thus reducing sewage spills into the surrounding environment.

The main benefit to society in general is the provision of a sewage system that does not frequently fail and cause sewage spills, and will provide the required municipal services to the community of Ocean View in Jeffreys Bay.

#### 1.5 Alternatives

#### a) Property or Location (Site) Alternatives

The proposed activities are property and location specific with no feasible or reasonable alternatives.

The proposed 315mm diameter sewer collector pipeline, from Dolphin Drive to the Ocean View sewer pumpstation, will be over a distance of approximately 150m. The 315mm diameter pipeline will follow an existing gravel road, from Dolphin Drive, and then turns and ties into the existing Ocean View sewer pumpstation.

The proposed Ocean View Collector Sewer is located in Ward 14 in the Kouga Local Municipality, Sarah Baartman District Municipality, Eastern Cape.

#### b) Activity Alternatives

No feasible or reasonable activity alternatives were identified for consideration.

The proposed activity will not change the existing land use. The activity is proposed to reduce flow in the midblock sewer reticulation area of Ocean View.

#### c) Design or Layout Alternatives

There are no feasible or reasonable alternatives for the design or layout.

The proposed 315mm diameter sewer collector pipeline, from Dolphin Drive to the Ocean View sewer pumpstation, takes into consideration the upstream flow capacities and capacity of the Ocean View Sewer Pumpstation. No capacity increase is proposed for the existing Ocean View Sewer Pumpstation.

The layout of the pipeline follows previously disturbed and/or degraded areas.

#### d) Technology Alternatives

No feasible or reasonable technology alternatives were identified for consideration.

The vegetation will be cleared through a combination of mechanical (i.e. with machinery) means and by-hand. It is not feasible to clear the vegetation entirely by hand and as such this has not been considered as a separate alternative. Construction of the sewer collector will be undertaken by the conventional method of trenching with a TLB (tractor loader backhoe).

#### e) Operational Alternatives

No feasible or reasonable operational alternatives were identified for consideration.

The sewage is fed along the sewer collector and discharges into the Ocean View Sewer Pumpstation. Thereafter the sewage will be pumped via the various pumpstations to the Jeffreys Bay WWTW.

#### f) No-Go Alternative

The No-Go Alternative entails that the proposed Ocean View Collector Sewer is not undertaken and the status quo remains.

The existing sewer network blocks frequently and a collector sewer is proposed to reduce the flow in the midblock sewer reticulation area of Ocean View.

#### **Preferred Alternative**

In terms of the above, the following is presented as the preferred alternative:

 The proposed 315mm diameter sewer collector pipeline, from Dolphin Drive to the Ocean View sewer pumpstation, will be over a distance of approximately 150m. The 315mm diameter pipeline will follow an existing gravel road, from Dolphin Drive, and then turns and ties into the existing Ocean View sewer pumpstation.

- The pipeline diameter is 315mm.
- Construction of the collector sewer will be undertaken by the conventional method of trenching with a TLB (tractor loader backhoe), and clearance of any vegetation mainly by mechanical means.
- The sewage is fed along the sewer collector and discharges into the Ocean View Sewer Pumpstation.

#### 1.6 Public Participation

The Pre-Application Public Participation announced the EIA and WUL application and a 30 day comment and registration period was from 25 October to 25 November 2024.

All registered Interested and Affected Parties (I&APs), relevant authorities and other stakeholders are given a 30 day period to review the Draft Basic Assessment Report and submit comments. Comments received during this period will be incorporated into the Final Basic Assessment Report.

#### **Draft Basic Assessment Report Review Period:**

The Draft Basic Assessment Report is available for a 30 day review period to registered I&APs, relevant authorities and other stakeholders, from **9 May – 9 June 2025** (excluding public holidays).

A copy of the Draft Basic Assessment Report is available on CEN's website: http://www.environmentcen.co.za

#### 1.7 Environmental Impact Statement

#### **Alternative 1 (Preferred Alternative)**

The proposed development footprint of the proposed Ocean View Collector Sewer from Dolphin Drive to the Ocean View Collector Sewer Pumpstation is considered suitable for development.

Terrestrial Biodiversity and Plant Species: The proposed Ocean View Collector Sewer is located within a Terrestrial Critical Biodiversity Area, namely an Ecological Support Area (ESA1), the area is largely transformed. A small section of the proposed Ocean View Collector Sewer, nearby the pump station, will be in proximity to a remnant but degraded pocket of Humansdorp Shale Renosterveld (Endangered Ecosystem), but any loss is likely to be negligible as the route follows a gravel track. No Protected, Endangered or Critically Endangered flora species were confirmed to be present nor are known to be present in the affected area. Eight (8) alien invasive and other weed species were noted within the site and surrounding area. Of these, six (6) species were noted as a listed alien invasive species, either as a Category 1b or Category 2 (Pote, 2024). The following impacts would be of a low negative significance mitigated to a very low negative significance: Loss of natural vegetation, Loss of plant (flora) species of conservation concern, Spread of alien and invasive plant species, Erosion and Disturbance to ecological processes.

**Animal Species:** The site is of low sensitivity due to the low suitability of the project area for animal Species of Conservation Concern (SCC) due to significant anthropogenic threats. Although Lanner falcons (Falco biarmicus) may be present, there are no suitable breeding sites for them within the project area, and their use of the area is likely limited to foraging. Given the small size of the project area and the extent of anthropogenic threats, it is unlikely that the project area holds significant importance for Lanner falcons. No amphibian, reptile, or mammal

SCC is likely to occur in the project area due to unsuitable habitats. No alien invasive animal species listed in terms of the NEMBA are likely to occur in the project area. Potential impacts from the proposed project on animal SCC are considered negligible.

Aquatic Biodiversity: The proposed Ocean View Collector Sewer is located near localised watercourses which have no direct connection to any mainstem systems or estuaries within the K90G Kabeljous quaternary catchment. The wetland areas are fragmented, contain higher levels of solid waste and grazed frequently; resulting in a reduction in wetland species diversity (plants). The Present Ecological Score (PES) is Class D - Largely modified and Ecological Importance and Sensitivity is Low. There are no Strategic Water Source Areas mapped near the site. The southwestern end of the sewer alignment is located within a Wetland Cluster. The Eastern Cape Biodiversity Conservation Plan (ECBCP, 2019) indicates the site is located within an Aquatic Ecological Support Area (ESA 1). No endemic, conservation worthy species or species of special concern (Listed or Protected) were observed or have been recorded within the proposed route areas. The proposed Ocean View Collector Sewer is located outside riverine / wetland areas and are currently within highly transformed areas. Due to the nature of the project and the requirement for gravity fed dependent systems, applying an aquatic buffer zone would not be possible. Further, most of the areas within the buffer portions are already disturbed (Colloty, 2024). The following impacts would be of a medium negative significance mitigated to a low negative significance: Loss of intact wetland or aquatic faunal habitats that could contain various species of special concern, Critical Biodiversity Areas, Disturbance of aquatic features and habitat fragmentation (aquatic), especially areas linked to Ecological Support Areas, Increase in sedimentation and erosion due to improper stormwater management and Risks on the aquatic environment due to water quality.

Archaeological and Heritage: The site is of a low sensitivity in terms of archaeological and heritage aspects as no archaeological sites / materials were observed on site. The majority of the development area does fall within the 5 kilometer radius from the coast that is regarded as an archaeological sensitive zone. Although it is unlikely that archaeological remains will be found in situ, there is always a possibility that human remains and/or other archaeological and historical material may be uncovered during the development. No known graves or buildings / structures older than 60 years were observed along the route. A very low negative / no impact is anticipated for construction phase and no impact during the operational phase.

Palaeontology: In terms of palaeontology the site is of very high sensitivity due to the site underlain by the Ceres Subgroup of the Bokkeveld Group of the Cape Supergroup. The area is completely covered in a red muddy soil layer or vegetation. The area is underlain by an extremely jointed and fractured rock, with rock cleavage cutting through bedding planes. This decreases the chance of any fossil finds. Although possible, it is unlikely that any significant fossils will be found, damaged, or lost, during construction of the proposed Ocean View Collector Sewer (Wilken, 2024). The main impact on possible palaeontological sites will be the physical disturbance or destruction of fossils during site clearance and construction. The palaeontological impact during construction would be of low negative significance mitigated to a very low negative significance. No palaeontology impacts are anticipated during the operational phase.

**Socio-Economic:** The proposed Ocean View Collector Sewer would require a capital amount of approximately R4.4 million. Employment opportunities for skilled workers are approximately 15 positions and 25 positions for un-skilled workers. These employment opportunities would be for a limited duration. The creation of employment opportunities during construction is likely to have a low positive socio-economic impact in the form of increased economic activity, poverty alleviation and favourable socio-economic implications. Limited employment opportunities will be created during the operational phase and these are estimated at 5 positions for skilled and unskilled workers. The socio-economic impact during operations would be of a low positive

significance. Although the actual contribution of the proposed Ocean View Collector Sewer to the local Gross Domestic Product (GDP) may be relatively small in real terms (although positive), it will occur at a time when the local economy is still struggling. The impact to the local economy would be of low positive significance.

**Air quality:** Dust pollution relates to the construction activities on-site for the site preparation, associated earth works and from soil stockpiles or bare ground. This will be of temporary duration, and large volumes of dust are not expected. The impact of dust pollution during construction would be of low negative significance. Dust impacts are anticipated during the operational phase for when maintenance activities are undertaken which require excavations and the movement of soils. The impact of dust pollution during maintenance activities would be of very low negative significance.

**Noise:** Noise pollution impacts relates to noise creation from construction workers and vehicles which may impact on surrounding neighbours. This includes noise emanating from construction machinery, power tools and compressors, construction vehicles and general construction activity. Noise pollution during construction will be temporary, i.e. occurring only during construction and would be of low negative significance. Noise impacts are anticipated during the operational phase for when maintenance activities are undertaken which require construction machinery and vehicles. The impact would be temporary and of very low negative significance.

**Traffic:** During the construction phase a higher number of vehicles are anticipated to use the surrounding road network; however it is not expected that the traffic volumes will significantly increase over this period. Construction trucks and vehicles are not expected to significantly impact the pavement conditions. The related traffic impacts would be temporary, i.e. limited to the construction phase, and of low negative significance. No traffic impacts are anticipated during the operational phase.

**Waste management:** Impacts relating to ineffective waste management procedures may lead to the dumping of building rubble, littering and pollution of the surrounding areas as well as unsanitary (toilet) conditions. Construction waste will increase the amount of waste disposed to landfill. The impact would be of low negative significance mitigated to a very low negative significance. No solid waste is anticipated during the operations.

Health, safety and security: Health related impacts anticipated for the construction phase relates to damage to the existing sewer pipelines and/or working adjacent to areas where failures have occurred on the sewer pipelines resulting in exposure to sewage and contaminated soils. Safety and security impacts refer to the increased risks of veld fires in the open space area due to construction worker practices (e.g. smoking, hot work on high fire danger days and heating with fires), the increased risk of vehicular and pedestrian accidents because of construction vehicle movements, general risks related to construction activities (e.g. excavations) as well as the perceived increase in crime because of outsiders being in the area. The health, safety and security impacts during the construction phase are considered to be of a low negative significance without mitigation and changes to a very low negative significance with mitigation. During the operational phase, health risks from sewage spillages will be reduced with the new Ocean View Collector Sewer and no overflows would be experienced from flow restraints. No impacts on safety and security area are anticipated. The impact related to health during operations would be of medium positive significance.

#### No-Go Alternative:

The possibility of further encroachment by alien and invasive plant species may continue, which may further degrade the terrestrial environment. This impact would be of long term duration and of low negative significance.

It is assumed that the site would continue to degrade due to the poor sanitation services within Oceanview and the impact on water quality from the current sewer network would remain. This would continue into the long-term with a higher intensity that would impact on the regional scale. Little in the way of mitigation could be proposed due to the social needs other than this proposed reticulation upgrade. The aquatic biodiversity impact relating to risks on the aquatic environment due to water quality would be of a high negative significance.

The socio-economic impact of employment opportunities would not occur and would be of a medium negative significance. The contribution to the local economy would not occur and would be of a low negative significance.

The existing sewer main will remain in use and failures on the sewer main will continue. Sewage spillages would continue to impact on the local community. The associated health risks / impact would be of a medium negative significance.

**Table 3** presents a summary of the site sensitivity and potential impacts identified.

**Table 3: Summary of Impacts** 

Impact	Sensitivity	Construction	Operational	No-Go	
	Verification	With M	litigation	Alternative	
Agriculture	Low	No Impact	No Impact	No Impact	
Animal Species	Low	Very Low -	No Impact	No Impact	
Aquatic Biodiversity	Low				
Loss of intact wetland or aquatic faunal habitats		Low -	Low -	No Impact	
Disturbance of aquatic features and habitat fragmentation		Low -	Low -	No Impact	
Increase in sedimentation and erosion		Low -	Low -	No Impact	
Water quality impacts		Low -	Low -	High -	
Archaeological & Cultural Heritage	Low	Very Low -	No Impact	No Impact	
Civil Aviation	Low	No Impact	No Impact	No Impact	
Defence	Low	No Impact	No Impact	No Impact	
Palaeontology	Very High	Very Low -	No Impact	No Impact	
Plant Species - Loss of plant species of conservation concern	Low	Very Low -	Very Low -	No Impact	
Terrestrial Biodiversity	Low				
Loss of vegetation		Very Low -	Very Low -	No Impact	
Spread of alien and invasive plant species		Very Low -	Very Low -	Low -	
Erosion		Very Low -	Very Low -	No Impact	
Disturbance to ecological processes		Very Low -	Very Low -	No Impact	
Socio-Economic: Employment		Low +	Low +	Medium -	

Impact	Sensitivity	Construction	Operational	No-Go Alternative
	Verification	With M	With Mitigation	
opportunities				
Socio-Economic: Contribution to local economy		Low +	No Impact	Low -
Air Quality		Low -	Very Low -	No Impact
Noise			Very Low -	No Impact
Traffic		Low -	No Impact	No Impact
Waste		Very Low -	No Impact	No Impact
Health, Safety & Security		Very Low -	Medium +	Medium -

#### 1.8 Reasoned Opinion and Recommendations

The EAP is of the opinion that the environmental assessment and associated public participation for the proposed Ocean View Collector Sewer fulfils the process requirements of the NEMA, specifically the EIA Regulations of 2014, as amended, and the principles of Section 2 of the NEMA.

The assessment of the issues identified indicated that the significance of potential impacts associated with the proposed Ocean View Collector Sewer are of a medium / low negative significance and can be mitigated to low / very low negative significance. Positive impacts relate to employment opportunities, economic contributions and reduction to health risks from sewage spills.

The EAP is of the opinion that the proposed Ocean View Collector Sewer should be authorized, as per the Preferred Alternative, with following conditions:

- 1) The Environmental Management Programme to be implemented.
- 2) Completion of the construction to be within 5 years.

#### 1.9 Way Forward

The Draft Basic Assessment Report will be updated to the Final Basic Assessment Report, with inclusion of comments received during the review period of the Draft Basic Assessment Report.

The Final Basic Assessment Report will be made available to I&APs, relevant authorities and stakeholders for information purposes only.

The Final Basic Assessment Report will be submitted to the DEDEAT for review for decision-making.

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Appendix C: Facility illustration(s)

#### Appendix D: Specialist reports

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- Appendix D-2: Aquatic Biodiversity Assessment
- Appendix D-3: Animal Species Assessment
- Appendix D-4: Archaeological Letter of Exemption
- Appendix D-5: Palaeontological Assessment

Appendix E: Comments and responses report (Public Participation Process)

Appendix F: Environmental Management Programme (EMPr)

- F-1: Construction EMPr
- F-2: Operational & Maintenance EMPr

#### Appendix G: Other information

- G-1: Screening Tool Report
- G-2: Site Verification Report
- G-3: Impact Assessment Methodology
- G-4: Proof of Water Use Application
- G-5: Affirmation by the EAP, Assumptions, Uncertainties and Gaps in Knowledge
- G-6: Curriculum Vitae of EAP
- G-7: Acknowledgement of Receipts DEDEAT
- G-8: Checklist in terms of Appendix 1 of the EIA Regulations, 2014 as amended



#### **BASIC ASSESSMENT REPORT**

	,	• /	
File Reference Number:			
NEAS Number:			
Date Received:			

(For official use only)

Basic assessment report in terms of the Environmental Impact Assessment Regulations, 2014 as amended, promulgated in terms of the National Environmental Management Act, 1998(Act No. 107 of 1998), as amended.

#### Kindly note that:

- This basic assessment report is a standard report that may be required by a competent authority in terms of the EIA
  Regulations, 2014 as amended and is meant to streamline applications. Please make sure that it is the report used by the
  particular competent authority for the activity that is being applied for. This report is current as of 1 OCTOBER 2022. It is the
  responsibility of the applicant to ascertain whether subsequent versions of the form have been published or produced by the
  competent authority
- 2. The report 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 report is in the form of a table that can extend itself as each space is filled with typing.
- 3. Where applicable tick the boxes that are applicable or black out the boxes that are not applicable in the report.
- 4. An incomplete report may be returned to the applicant for revision.
- 5. The use of "not applicable" in the report must be done with circumspection because if it is used in respect of material information that is required by the competent authority for assessing the application, it may result in the rejection of the application as provided for in the regulations.
- 6. This report must be handed in at offices of the relevant competent authority as determined by each authority unless indicated otherwise by the Department.
- 7. No faxed or e-mailed reports will be accepted unless indicated otherwise by the Department.
- 8. The report must be compiled by an independent environmental assessment practitioner (EAP). The EAP must satisfy conditions 11 below.

- Unless protected by law, all information in the report will become public information on receipt by the competent authority. Any
  interested and affected party should be provided with the information contained in this report on request, during any stage of the
  application process.
- A competent authority may require that for specified types of activities in defined situations only parts of this report need to be completed.
- 11.1 The Environmental Assessment Practitioner (EAP) must be registered in terms of S24H Regulations with the Registration Authority EAPASA as from 8 August 2022.
- 11.2. S24H (14) states that "only a person registered as an Environmental Assessment practitioner may perform tasks in connection with an application for an environmental authorisation contemplated in
- (a) Chapter 5 of the Act read with the Environmental impact Assessment Regulations.
- (b)Section 24G of the Act
- (c) Chapter 5 of the National Environmental Management Waste Act 2008 (Act No 59 of 2008) read with the Environmental Impact Assessment Regulations
- 11.3. Tasks in regulation 14 may only be conducted by an EAP that is registered
- 11.4. Regulations 20 of S24H indicates the offences and penalties as indicated below:
- "20. Offences and penalties
- (1) A person is guilty of an offence if that person-
- (a) contravenes regulation 14 of the Regulations; or
- (b) pretends to be a registered environmental assessment practitioner or registered candidate environmental assessment practitioner.
- (2) A person convicted of an offence in terms of subregulation (1) is liable to the penalties contemplated in section 49B(3) of the Act.". Section 49B(3) of the Act states:
- "A person convicted of an offence in terms of section 49A(1)(h), (l), (m), (n), (o) or (p) is liable to a fine or to imprisonment for a period not exceeding one year, or to both a fine and such imprisonment."

#### **SECTION A: ACTIVITY INFORMATION**

Has a specialist been consulted to assist with the completion of this section?

YES	NO
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If YES, please complete form XX for each specialist thus appointed:

Any specialist reports must be contained in Appendix D.

#### 1. ACTIVITY DESCRIPTION

Describe the activity, which is being applied for, in detail

#### 1.1. Introduction

CEN IEM Unit has been appointed by VST Consulting Engineers (Pty) Ltd on behalf of the Kouga Local Municipality to undertake the Environmental Impact Assessment (EIA) process as the independent Environmental Assessment Practitioner (EAP) for the proposed Ocean View Collector Sewer.

The overall proposed Ocean View Collector Sewer project will consist of sewer pipelines ranging from 160mm to 315mm in diameter over a total length of approximately 1500m:

- a) The pipeline along Rolihlanhla Street is a new pipeline within the road verge / reserve, with diameters of 160 200mm and over a length of approximately 650m.
- b) The pipeline then turns and runs along Dolphin Drive for approximately 700m, with diameters ranging from 200 315mm. This section of the pipeline will be located adjacent to the existing sewer pipeline, within the road reserve / verge.
- c) The 315mm diameter pipeline then turns in a north westerly direction from Dolphin Drive and follows an existing gravel road for approximately 150m and then turns and ties into the existing sewer pumpstation.

The portions of the proposed sewer collector pipeline along Rolihlanhla Street and Dolphin Drive do not trigger EIA listed activities for the bulk transportation of sewage as the pipeline diameter is under the threshold of 360mm and exclusions of being located within road reserves and urban areas; and are not located within watercourse areas.

The relevant portion of the collector sewer for the application of an Environmental Authorisation and subject to the EIA is the proposed 315mm diameter sewer collector pipeline, from Dolphin Drive to the Ocean View sewer pumpstation, over a distance of approximately 150m. This portion of the sewer collector pipeline is located within 32m of a watercourse and on public open space, thereby triggering listed activities in terms of the EIA Regulations, 2014 as amended; and as a result an Environmental Authorisation is required. Refer to **Table 1**.

The existing sewer network blocks frequently and a collector sewer within the road reserve is proposed to reduce the flow in the midblock sewer reticulation area of Ocean View.

No capacity increase is proposed for the existing Ocean View Sewer Pumpstation.

The sewage will then be pumped via pumpstations to discharge into the Jeffreys Bay WWTW.

The applicant for an Environmental Authorisation is the Kouga Local Municipality (KLM).

The collector sewer from Dolphin Drive to the Ocean View Sewer Pumpstation is located on Portion 125 of Farm Estate Klein Zeekoe River No. 335 of the Ocean View area of Jeffreys Bay, in Ward 14, in the Kouga Local Municipality, Sarah Baartman District Municipality, Eastern Cape.

Refer to **Appendix A** for the locality map.

#### 1.2. Description

The relevant portion of the proposed collector sewer for the application of an Environmental Authorisation and subject to the EIA is the proposed 315mm diameter sewer collector pipeline, from Dolphin Drive to the Ocean View sewer pumpstation, over a distance of approximately 150m.

The 315mm diameter pipeline will follow an existing gravel road in a north westerly direction, from Dolphin Drive to the Ocean View Sewer Pumpstation. The proposed collector sewer will then turn in a southerly direction into the existing Ocean View sewer pumpstation, and will tie into the existing sewer infrastructure.

The proposed Ocean View Collector Sewer (315mm diameter) will cater for velocities between a minimum of 0.667m/s and a maximum of 3.0m/s for the gravity sewer.

The proposed 315mm pipeline (collector sewer) will be located on Portion 125 of Farm Estate Klein Zeekoe River No. 335 of the Ocean View area of Jeffreys Bay, in Ward 14, in the Kouga Local Municipality, Sarah Baartman District Municipality, Eastern Cape.

#### 1.3. Construction Phase

The construction of the proposed Ocean View Collector Sewer is anticipated to be approximately 12 months.

No method statements for construction are available at this stage. The following has been indicated as preliminary methods for construction:

- Construction of the collector sewer will be undertaken by the conventional method of trenching.
- A tractor loader backhoe (TLB) will be used for the excavating the pipeline trench.
- The pipeline will be placed inside the trench and materials from the trench will be replaced.

#### 1.4. Operational Phase

The KLM will be responsible for the operation and maintenance of the sewage infrastructure.

#### 1.5. EIA Process

An application for an Environmental Authorisation was submitted to the Eastern Cape Department of Economic Development, Environmental Affairs and Tourism (DEDEAT) on 14 February 2025 and resubmitted on 17 March 2025. The application reference number is EC08/C/LN3/M/14-2025.

In terms of the EIA Regulations, 2014 (as amended), made under Section 24(5) of NEMA, the following listed activities (**Table 1**) within Government Notice R. 327 and R.324 (of 7 April 2017) are triggered by the proposed development, thereby requiring environmental authorisation from the DEDEAT.

Table 1: EIA Listed Activities

Listed Activity	Description
GNR. 324 Listing Notice 3: Activity 12:	The portion of the sewer collector pipeline from Dolphin Drive to the pumpstation would be located
The clearance of an area of 300m <sup>2</sup> or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a	on land zoned as public open space, and more than 300m <sup>2</sup> of vegetation would be cleared.

maintenance management plan.

- a. Eastern Cape
- (v) On land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning.

#### **GNR. 324 Listing Notice 3: Activity 14:**

The development of—

(ii) infrastructure or structures with a physical footprint of 10 square metres or more;

where such development occurs—

- (a) within a watercourse; (b) in front of a development setback; or (c) if no development setback has been adopted, within 32 metres of a watercourse, measured from the edge of a watercourse:
- a. Eastern Cape
- i. Outside urban areas:
- (ff) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans.
- (hh) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve.
- (ii) Inside urban areas:
- (aa) Areas zoned for use as public open space

The collector sewer pipeline is located within an aquatic and terrestrial Ecological Support Area (ESA1), in terms of the Eastern Cape Biodiversity Conservation Plan (ECBCP) Critical Biodiversity Areas.

The collector sewer pipeline is located within 5km of the Seekoei River Nature Reserve and Noorsekloof Nature Reserve.

The portion of the sewer collector pipeline from Dolphin Drive to the pumpstation would be located on land zoned as public open space.

It is anticipated that the collector sewer pipeline will exceed 10m<sup>2</sup> footprint where the pipeline is located within 32m of a watercourse (Pietersgat River).

The following listed activities were considered as not applicable:

#### **GNR. 327 Listing Notice 1: Activity 10:**

The development and related operation of infrastructure exceeding 1 000 metres in length for the bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes- (i) with an internal diameter of 0.36 metres or more; or (ii) with a peak throughput of 120 litres per second or more;

excluding where-

(a) such infrastructure is for the bulk transportation of sewage, effluent, process water, waste water,

This activity is considered not applicable as the portion of the proposed Ocean View Collector Sewer along Rolihlanhla Street and Dolphin Drive will be located within road reserves and thus exclusion (a) applies and that the pipeline diameter is under the threshold of 360mm.

return water, industrial discharge or slimes inside a road reserve or railway line reserve; or (b) where such development will occur within an urban area. GNR. 327 Listing Notice 1: Activity 12: This activity is considered not applicable for the portion of the proposed Ocean View Collector Sewer The development of—... (ii) infrastructure or along Rolihlanhla Street and Dolphin Drive as there structures with a physical footprint of 100 square are no watercourses located within 32m of the metres or more; where such development occurs—; proposed pipeline. (c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse; excluding - ... (cc) activities listed in activity 14 in Listing Notice 2 of 2014 or activity 14 in Listing Notice 3 of 2014, in which case that activity applies; (dd) where such development occurs within an urban area; (ee) where such development occurs within existing

#### 1.6. Water Use Authorisation Process

roads, road reserves or railway line reserves; ...

The National Water Act, 1998 (Act No. 36 of 1998) [NWA] aims to regulate the use of water and activities, which may impact on water resources through the categorisation of 'listed water uses'. Such activities require authorisation by the Department of Water and Sanitation (DWS) before such an activity may take place.

Activities for the water uses in terms of Section 21 of the NWA associated with the proposed project are provided in **Table 2**:

The following has been undertaken as part of the water use authorisation application:

A pre-application enquiry was submitted to the DWS on 4 November 2025, and a pre-application meeting was held on 24 March 2025.

Proof of the water use authorisation application for Section 21 (c) and (i) activities is included as **Appendix G4**.

**Table 2: Water Use Listed Activities** 

Listed Activity	Description
Section 21 (c) impeding or diverting the flow of water in a watercourse	The proposed Ocean View Collector Sewer is located within 500m of wetlands.
Section 21 (i) altering the bed, banks, course or characteristics of a watercourse	

#### 2. FEASIBLE AND REASONABLE ALTERNATIVES

"alternatives", in relation to a proposed activity, means different means of meeting the general purpose and requirements of the activity, which may include alternatives to—

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

Describe alternatives that are considered in this application. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity could be accomplished in the specific instance taking account of the interest of the applicant in the activity. The no-go alternative must in all cases be included in the assessment phase as the baseline against which the impacts of the other alternatives are assessed. The determination of whether site or activity (including different processes etc.) or both is appropriate needs to be informed by the specific circumstances of the activity and its environment. After receipt of this report the competent authority may also request the applicant to assess additional alternatives that could possibly accomplish the purpose and need of the proposed activity if it is clear that realistic alternatives have not been considered to a reasonable extent.

#### **Description of Alternatives:**

#### a) Property or Location (Site) Alternatives

The proposed activities are property and location specific with no feasible or reasonable alternatives.

The proposed 315mm diameter sewer collector pipeline, from Dolphin Drive to the Ocean View sewer pumpstation, will be over a distance of approximately 150m. The 315mm diameter pipeline will follow an existing gravel road, from Dolphin Drive, and then turns and ties into the existing Ocean View sewer pumpstation.

The proposed Ocean View Collector Sewer is located in Ward 14 in the Kouga Local Municipality, Sarah Baartman District Municipality, Eastern Cape.

The geographic co-ordinates are:

Start 34° 3'53.73"S 24°54'25.64"E; Turn 1 34° 3'53.35"S 24°54'25.16"E Turn 2 34° 3'52.80"S 24°54'22.29"E; End 34° 3'53.45"S 24°54'21.95"E.

The property details are reflected below:

Erf / Farm Portion	SG 21 digit Code
Portion 125 of Farm Estate Klein Zeekoe River 335	C0340000000033500125

#### b) Activity Alternatives

No feasible or reasonable activity alternatives were identified for consideration. The proposed activity will not change the existing land use. The activity is proposed to reduce flow in the midblock sewer reticulation area of Ocean View.

#### c) Design or Layout Alternatives

There are no feasible or reasonable alternatives for the design or layout.

The proposed 315mm diameter sewer collector pipeline, from Dolphin Drive to the Ocean View sewer pumpstation, takes into consideration the upstream flow capacities and capacity of the Ocean View Sewer Pumpstation. No capacity increase is proposed for the existing Ocean View Sewer Pumpstation.

The layout of the pipeline follows previously disturbed and/or degraded areas.

#### d) Technology Alternatives

No feasible or reasonable technology alternatives were identified for consideration.

The vegetation will be cleared through a combination of mechanical (i.e. with machinery) means and by-hand. It is not feasible to clear the vegetation entirely by hand and as such this has not been considered as a separate alternative. Construction of the sewer collector will be undertaken by the conventional method of trenching with a TLB (tractor loader backhoe).

#### e) Operational Alternatives

No feasible or reasonable operational alternatives were identified for consideration.

The sewage is fed along the sewer collector and discharges into the Ocean View Sewer Pumpstation. Thereafter the sewage will be pumped via the various pumpstations to the Jeffreys Bay WWTW.

#### f) No-Go Alternative

The No-Go Alternative entails that the proposed Ocean View Collector Sewer is not undertaken and the status quo remains.

The existing sewer network blocks frequently and a collector sewer is proposed to reduce the flow in the midblock sewer reticulation area of Ocean View.

#### **Preferred Alternative**

In terms of the above, the following is presented as the preferred alternative which has been assessed in Section D:

- The proposed 315mm diameter sewer collector pipeline, from Dolphin Drive to the Ocean View sewer pumpstation, will be over a distance of approximately 150m. The 315mm diameter pipeline will follow an existing gravel road, from Dolphin Drive, and then turns and ties into the existing Ocean View sewer pumpstation.
- The pipeline diameter is 315mm.
- Construction of the collector sewer will be undertaken by the conventional method of trenching with a TLB (tractor loader backhoe), and clearance of any vegetation mainly by mechanical means.
- The sewage is fed along the sewer collector and discharges into the Ocean View Sewer Pumpstation.

#### **Assessment of Alternatives**

Impacts identified are assessed with the No-Go Alternative in **Section D** of this report.

Paragraphs 3 – 13 below should be completed for each alternative.

#### 3. ACTIVITY POSITION

Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in degrees and decimal minutes. The minutes should have at least three decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

List alternative sites if applicable.

Alternative:	Latitude (S):		Longitude (E):	
Alternative S1 <sup>1</sup> (preferred or only site alternative)	0	í	0	6
Alternative S2 (if any)	0	í	0	٤
	0	í	0	

#### In the case of linear activities:

Alternative S3 (if any)

Alternative:	Latitude (S):	Longitude (E):
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Alternative S1 (preferred or only route alternative)

- Starting point of the activity
- Turn 1
- Middle point of the activity
- Turn 2
- End point of the activity

Alternative S2 (if any)

- Starting point of the activity
- Middle point of the activity
- End point of the activity

Alternative S3 (if any)

- Starting point of the activity
- Middle point of the activity
- End point of the activity

34°	03.896'	24°	54.427'
34º	03.889'	24°	54.419'
34º	03.885'	24º	54.394'
34º	03.880'	24°	54.371'
34º	03.891'	24°	54.366'

0

0	٤	0	٤
0	í	0	ť
0	£	0	

0	í	0	ť
0	٤	0	6
0	٤	0	٤

For route alternatives that are longer than 500m, please provide an addendum with co-ordinates taken every 250 meters along the route for each alternative alignment.

Please refer to **Appendix A** for co-ordinates.

<sup>&</sup>lt;sup>1</sup> "Alternative S.." refer to site alternatives.

#### 4. PHYSICAL SIZE OF THE ACTIVITY

Indicate the physical size of the preferred activity/technology as well as alternative activities/technologies (footprints):

(100tprints).	
Alternative:	Size of the activity:
Alternative A1 <sup>2</sup> (preferred activity alternative)	750 m <sup>2</sup>
Alternative A2 (if any)	m <sup>2</sup>
Alternative A3 (if any)	m <sup>2</sup>
or, for linear activities:	
Alternative:	Length of the activity:
Alternative A1 (preferred activity alternative)	150 m
Alternative A2 (if any)	m
	_

Indicate the size of the alternative sites or servitudes (within which the above footprints will occur):

## Alternative: Size of the site / servitude:

Alternative A1 (preferred activity alternative)
Alternative A2 (if any)

Alternative A3 (if any)

Alternative A3 (if any)

1500 m <sup>2</sup>
m <sup>2</sup>
m <sup>2</sup>

m

#### 5. SITE ACCESS

Does ready access to the site exist?

If NO, what is the distance over which a new access road will be built

YES	NO
m	

Describe the type of access road planned:

Existing access is obtained from Dolphin Drive and from an unnamed gravel street.

Include the position of the access road on the site plan and required map, as well as an indication of the road in relation to the site.

Refer to	Append	lix A	for the	site r	olans

#### SITE OR ROUTE PLAN

A detailed site or route plan(s) must be prepared for each alternative site or alternative activity. It must be attached as Appendix A to this document.

The site or route plans must indicate the following:

<sup>&</sup>lt;sup>2</sup> "Alternative A.." refer to activity, process, technology or other alternatives.

- 6.1 the scale of the plan which must be at least a scale of 1:500;
- 6.2 the property boundaries and numbers of all the properties within 50 metres of the site;
- 6.3 the current land use as well as the land use zoning of each of the properties adjoining the site or sites;
- 6.4 the exact position of each element of the application as well as any other structures on the site;
- the position of services, including electricity supply cables (indicate above or underground), water supply pipelines, boreholes, street lights, sewage pipelines, storm water infrastructure and telecommunication infrastructure;
- 6.6 all trees and shrubs taller than 1.8 metres;
- 6.7 walls and fencing including details of the height and construction material;
- 6.8 servitudes indicating the purpose of the servitude;
- 6.9 sensitive environmental elements within 100 metres of the site or sites including (but not limited thereto):
  - rivers;
  - the 1:100 year flood line (where available or where it is required by DWA);
  - ridges;
  - cultural and historical features;
  - areas with indigenous vegetation (even if it is degraded or invested with alien species);
- 6.9 for gentle slopes the 1 metre contour intervals must be indicated on the plan and whenever the slope of the site exceeds 1:10, the 500mm contours must be indicated on the plan; and
- 6.10 the positions from where photographs of the site were taken.

Refer to **Appendix A** for site plans.

#### 7. SITE PHOTOGRAPHS

Colour photographs from the centre of the site must be taken in at least the eight major compass directions with a description of each photograph. Photographs must be attached under Appendix B to this form. It must be supplemented with additional photographs of relevant features on the site, if applicable.

Refer to **Appendix B** for site photographs.

#### 8. FACILITY ILLUSTRATION

A detailed illustration of the activity must be provided at a scale of 1:200 as Appendix C for activities that include structures. The illustrations must be to scale and must represent a realistic image of the planned activity. The illustration must give a representative view of the activity.

Refer to **Appendix C** for facility illustration.

#### 9. ACTIVITY MOTIVATION

#### 9(a) Socio-economic value of the activity

What is the expected capital value of the activity on completion?

What is the expected yearly income that will be generated by or as a result of the activity?

Will the activity contribute to service infrastructure?

Is the activity a public amenity?

How many new employment opportunities will be created in the development phase of the activity?

What is the expected value of the employment opportunities during the development phase?

What percentage of this will accrue to previously disadvantaged individuals?

How many permanent new employment opportunities will be created during the operational phase of the activity?

What is the expected current value of the employment opportunities during the first 10 years?

What percentage of this will accrue to previously disadvantaged individuals?

±R 4 360 000		
R 0		
YES ✓	NO	
YES	NO ✓	
+- 40		
+- R 550 000		
25%		
+- 5		
+- R 550 000		
25%		

#### 9(b) Need and desirability of the activity

Motivate and explain the need and desirability of the activity (including demand for the activity):

The existing sewer network blocks frequently and a collector sewer within the road reserve is proposed to reduce the flow in the midblock sewer reticulation area of Ocean View.

The new collector sewer will also make provision for new development in Ocean View and to reduce the flow in the existing sewer reticulation.

The new rising main would reduce any failures on the line, thus reducing sewage spills into the surrounding environment.

## ASPECTS RELATED TO SECURING ECOLOGICAL SUSTAINABLE DEVELOPMENT AND USE OF NATURAL RESOURCES

How will this development (and its separate elements/aspects) impact on the ecological integrity of the area, disturb or enhance ecosystems and/or result in the loss or protection of biological diversity?

Although the proposed Ocean View Collector Sewer is located within a Terrestrial Critical Biodiversity Area, namely an Ecological Support Area (ESA1), the area is largely transformed. A small section of the proposed Ocean View Collector Sewer, nearby the pump station, will be in proximity to a remnant but degraded pocket of Humansdorp Shale Renosterveld (Endangered Ecosystem), but any loss is likely to be negligible as the route follows a gravel track. No Protected, Endangered or Critically Endangered flora species were confirmed to be present nor are known to be present in the affected area. None of the plant species flagged was found to be present on site and due to the transformed nature of the site, it is not deemed to be suitable habitat for any species population (Pote, 2024).

In general, most impacts will have a high reversibility in the affected habitat, as well as transformed or degraded areas, except where hardening of surfaces or removal of topsoil may occur. Risks to irreplaceable biodiversity resources are considered to be low to very low. No residual risks or uncertainties are anticipated. No cumulative impacts are expected (Pote, 2024).

The areas along the Ocean View Collector Sewer route have been transformed / disturbed by past activities and the proposed Ocean View Collector Sewer will have no permanent threat to ecological functioning. The risk to disturbing the ecological functioning is low.

What measures were explored to firstly avoid these negative impacts, and where these negative impacts could not be avoided altogether, what measures were explored to minimise and remedy (including offsetting) the impacts?

The layout presented for the proposed Ocean View Collector Sewer avoids areas of high sensitivity. Where negative impacts could not be avoided these were minimised with mitigation measures.

The assessment approach is based on the principles of the mitigation hierarchy where impact avoidance has been considered first by identifying high sensitive areas that need to be avoided. Mitigation measures have been considered to reduce the risks and impacts.

## ASPECTS RELATED TO INTRA- AND INTER-GENERATIONAL EQUITY IN THE CONTEXT OF SUSTAINABILITY

Does the proposed location, type and scale of development promote a reduced dependency on resources? For example, can the development be located more appropriately to reduce the dependency of resources needed for service infrastructure?

The proposed Ocean View Collector Sewer will contribute to service delivery infrastructure. The Ocean View Collector Sewer will be located in a previously disturbed / transformed area thereby promoting a reduced dependency on resources.

What are the limits of current knowledge (note: the gaps, uncertainties and assumptions must be clearly stated)? What is the level of risk associated with the limits of current knowledge? Based on the limits of knowledge and the level of risk, how and to what extent was a risk-averse and cautious approach applied to the development?

The gaps, uncertainties and assumptions for the specialist studies are provided in the specialist reports and Appendix G of the BAR.

The assessment approach is based on the principles of the mitigation hierarchy where impact avoidance has been considered first by identifying high sensitive areas that need to be avoided. Mitigation measures have been considered to reduce the risks and impacts.

## How will the ecological impacts resulting from this development impact on people's environmental right?

Limited impacts of dust and noise generation will affect the nearby community, and will be temporary in nature.

The proposed Ocean View Collector Sewer will be a positive impact as it will limit and reduce any failures on the sewer network, thereby preventing / limiting sewage spillages into and pollution of the urban and natural environment.

Describe the linkages and dependencies between human wellbeing, livelihoods and ecosystem services applicable to the area in question and how the development's ecological impacts will result in socioeconomic impacts (e.g. on livelihoods, loss of heritage site, opportunity costs, etc.)?

The areas along the Ocean View Collector Sewer route have been transformed / disturbed by past activities and

the proposed Ocean View Collector Sewer will have no permanent threat to ecological functioning. The risk to disturbing the ecological functioning is low and the Ocean View Collector Sewer will contribute positively to the socio-economic environment by providing limited employment opportunities during construction and reducing sewage spillages and related health risks.

Based on all of the above, how will this development positively or negatively impact on ecological integrity objectives/targets/considerations of the area?

No significant negative impact on the ecological integrity is anticipated. Risks to irreplaceable biodiversity resources are considered to be low to very low. No residual risks or uncertainties are anticipated.

Describe the positive and negative cumulative ecological/biophysical impacts bearing in mind the size, scale, scope and nature of the project in relation to its location and existing and other planned developments in the area?

No cumulative impacts are expected due to the transformed nature of the vegetation and the localised impact of the proposed activity which is unlikely to pose significant risk to potential localised populations of species of conservation concern. The proposed activity will result in the limited transformation and loss of degraded natural habitat, limited to the construction footprint for the Ocean View Collector Sewer.

#### ASPECTS RELATED TO PROMOTING JUSTIFIABLE ECONOMIC AND SOCIAL DEVELOPMENT

What is the socio-economic context of the area, based on, amongst other considerations, the following considerations: The IDP and any other strategic plans, frameworks of policies applicable to the area; spatial priorities and desired spatial patterns (e.g. need for integrated of segregated communities, need to upgrade informal settlements, need for densification, etc.), spatial characteristics (e.g. existing land uses, planned land uses, cultural landscapes, etc.), and Municipal Economic Development Strategy?

The affected socio-economic environment involves the south western urban areas of Jeffreys Bay.

The Integrated Development Plan (IDP) of the Kouga Local Municipality includes the proposed Ocean View Collector Sewer as a project listed under Civil and Water Services.

The upgrading of the Ocean View Collector Sewer is in line with the Spatial Development Framework (SDF) for the Jeffreys Bay area of the Kouga Local Municipality.

Considering the socio-economic context, what will the socio-economic impacts be of the development (and its separate elements/aspects), and specifically also on the socio-economic objectives of the area?

Positive impacts relate to limited employment opportunities and economic benefits to the local and regional community mainly during construction. Refer to Section D for the socio-economic impacts.

How will this development disturb or enhance landscapes and/or sites that constitute the nation's cultural heritage? What measures were explored to firstly avoid these impacts, and where impacts could not be avoided altogether, what measures were explored to minimise and remedy (including offsetting) the impacts? What measures were explored to enhance positive impacts?

No archaeological sites/materials were observed during the investigation of the proposed study area. No known graves or buildings / structures older than 60 years were noted along the proposed pipeline route. It is unlikely that any significant fossils will be found, damaged, or lost during construction. The proposed Ocean View Collector Sewer will not disturb or enhance landscapes in terms of the nation's cultural heritage. Refer to Appendix D for the related heritage reports.

How will this development address the specific physical, psychological, developmental, cultural and social needs and interests of the relevant communities? Will the development result in equitable (intraand inter-generational) impact distribution, in the short- and long-term? Will the impact be socially and economically sustainable in the short- and long-term?

The construction phase for the proposed Ocean View Collector Sewer will see the creation of limited and temporary (short-term) employment opportunities. This will culminate in positive socio-economic impacts in the form of increased economic activity, poverty alleviation and favourable socio-economic implications (such as improved access to and consumption of goods and services) for the affected individuals and their dependants. Refer to Section D for the socio-economic impacts.

How were a risk-averse and cautious approach applied in terms of socio-economic impacts? What are the limits of current knowledge (note: the gaps, uncertainties and assumptions must be clearly stated)? What is the level of risk (note: related to inequality, social fabric, livelihoods, vulnerable communities, critical resources, economic vulnerability and sustainability) associated with the limits of current knowledge? Based on the limits of knowledge and the level of risk, how and to what extent was a risk-averse and cautious approach applied to the development (and its alternatives)?

The socio-economic impacts are positive and considered employment opportunities as well as economic contributions to the local economy. No high sensitive areas were identified that required avoidance and no additional mitigation measures were identified.

The gaps, uncertainties and assumptions for the specialist studies are provided in the specialist reports and Appendix G of the BAR. Refer to Section D for the socio-economic impacts.

## How will the socio-economic impacts resulting from this development impact on people's environmental right?

Health, safety and security risks are mitigated to reduce the impacts during construction. No additional mitigation was recommended for the enhancement of the positive impacts identified.

Considering the linkages and dependencies between human wellbeing, livelihoods and ecosystem services, describe the linkages and dependencies applicable to the area in question and how the development's socio-economic impacts will result in ecological impacts (e.g. over utilisation of natural resources, etc.)?

Over utilisation of natural resources (e.g. water) are not anticipated. The proposed Ocean View Collector Sewer will contribute to better service infrastructure and will reduce / limit sewage spills.

What measures were taken to pursue the selection of the "best practicable environmental option" in terms of socio-economic considerations? What measures were taken to pursue environmental justice 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 (who are the beneficiaries and is the development located appropriately)?

Local to regional communities will benefit through various economic opportunities, although these would be limited to the construction phase.

Negative impacts relating to dust and noise from construction are anticipated to impact the immediate surrounding community, however these impacts would be of a short duration.

The EMPr provides a management framework for impact management in the construction and operational phases.

Considering the need for social equity and justice, do the alternatives identified, allow the "best practicable environmental option" to be selected, or is there a need for other alternatives to be considered?

No additional alternatives were considered necessary.

What measures were taken to pursue equitable access to environmental resources, benefits and services to meet basic human needs and ensure human wellbeing, and what special measures were taken to ensure access thereto by categories of persons disadvantaged by unfair discrimination?

The development would not impact on access to environmental resources, benefits or services.

The proposed Ocean View Collector Sewer would contribute to service infrastructure in Jeffreys Bay.

What measures were taken to ensure that the responsibility for the environmental health and safety consequences of the development has been addressed throughout the development's life cycle?

Health, safety and security impacts were considered in the assessment. Management measures have been detailed in the EMPr.

What measures were taken to ensure that the interests, needs and values of all interested and affected parties were taken into account, and that adequate recognition were given to all forms of knowledge, including traditional and ordinary knowledge?

Public participation has been undertaken as required in the EIA Regulations, 2014 (as amended).

Considering the interests, needs and values of all the interested and affected parties, describe how the development will allow for opportunities for all the segments of the community (e.g. a mixture of low-, middle-, and high-income housing opportunities) that is consistent with the priority needs of the local area (or that is proportional to the needs of an area)?

The proposed development will make a positive contribution to service infrastructure / delivery and employment opportunities.

Indicate any benefits that the activity will have for society in general:

The main benefit to society in general is the provision of a sewage system that does not frequently fail and cause sewage spills, and will provide the required municipal services to the community of Ocean View in Jeffreys Bay.

Indicate any benefits that the activity will have for the local communities where the activity will be located:

The new collector sewer line will reduce the flow in the midblock sewer reticulation area of Ocean View in order to accommodate the existing constraints and the new collector sewer would reduce any failures on the line, thus reducing sewage spills into the surrounding environment.

During construction limited employment opportunities, empowerment in terms of skills development and transfer as well as economic contributions to the Kouga Local Municipality and local economy would occur.

#### 10. APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES

List all legislation, policies and/or guidelines of any sphere of government that are applicable to the application as contemplated in the EIA regulations, if applicable:

Title of legislation, policy or guideline: Administering authority: Date:

EIA Regulations, 2014, as amended, promulgated in terms of the National Environmental Management Act, 1998  Refer to Section A1 for the EIA listed activities.  National Environmental Management: Air Quality Act (Act No. 39 of 2004) and Dust Regulations No Air Quality listed activities are triggered.  National Environmental Management: Air Quality Act (Act No. 39 of 2004) (KLM) / DEDEAT  No Air Quality listed activities are triggered.  National Dust Control Regulations of 1 November 2013, prescribe acceptable dustfall rates for activities generating dust which may be applicable for the construction phase.  National Environmental Management: Biodiversity Act, 2004 (Act 10 of 2004), and regulations.  The collector sewer from Dolphin Drive to the Ocean View Pump Station falls within the Sundays Mesic Thicket, with a status of Least Concern.  The collector sewer along Rolihlantial Street and Dolphin Drive falls within the Humansdorp Shale Renosterveld Ecosystem which has a classification of Endangered. This section of the route is transformed with urban development and grassed road verges.  No Endangered or Critically Endangered flora species were confirmed to be present nor are known to be present in the affected area.  Control of alien and invasive species within the construction footprint.  National Environmental Management: Protected Areas Act (No. 59 of 2008), regulations, Norms and Standards.  No listed waste activities have been identified.  National Environmental Management: Protected Areas Act (No. 57 of 2003)  Garden Route Biosphere Reserve: The proposed collector sewer pipeline is located within the Transition Zone of the Garden Route Biosphere Reserve.  National Water Act (No 36 of 1998) and regulations  DWS 1998  Section 21 (c) and (i) water use activities are triggered which requires authorisation by the DWS.  The Water Use License application process is being undertaken.  National Heritage Resources Act (No 25 of 1999)  The ECPHRA has provided comment in terms of Section 38, refer to			
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Title of legislation, policy or guideline: Administering authority: Date:

Appendix E.		
National Forest Act (No 84 of 1998)	DFFE	1998
No protected tree species are located within the areas for the collector sewer pipeline.		
Eastern Cape Biodiversity Conservation Plan	DEDEAT	2019
The proposed collector sewer pipeline falls within the Terrestrial and Aquatic CBAs.		
Integrated Development Plan	KLM	2024
The proposed collector sewer pipeline is a project listed under Civil and Water Services.		
Spatial Development Framework	KLM	2020
The proposed collector sewer pipeline is in line with the SDF.		

#### 11. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

#### 11(a) Solid waste management

Will the activity produce solid construction waste during the construction/initiation phase?

YES ✓ NO
Undetermined m³

If yes, what estimated quantity will be produced per month?

How will the construction solid waste be disposed of (describe)?

General construction solid waste, e.g. concrete, miscellaneous general waste, and excavated material that will not be reused as infill, will be removed from the construction site by trucks.

Where will the construction solid waste be disposed of (describe)?

Solid waste that cannot be reused or recycled (e.g. used as infill) will be disposed of at a licensed waste disposal (landfill) site, namely Jeffreys Bay.

Will the activity produce solid waste during its operational phase?

YES **NO ✓**0 m³

If yes, what estimated quantity will be produced per month?

How will the solid waste be disposed of (describe)?

No solid waste is anticipated in the operational phase.

Where will the solid waste be disposed if it does not feed into a municipal waste stream (describe)?

No solid waste is anticipated in the operational phase.

If the solid waste (construction or operational phases) will not be disposed of in a registered landfill site or be taken up in a municipal waste stream, then the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA. Can any part of the solid waste be classified as hazardous in terms of the relevant legislation? YES NO ✓ If yes, inform the competent authority and request a change to an application for scoping and EIA. The existing sewer pipeline will be left in-situ and will not be removed. YES NO ✓ Is the activity that is being applied for a solid waste handling or treatment facility? If yes, then the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA. Liquid effluent 11(b) Will the activity produce effluent, other than normal sewage, that will be disposed of in a municipal YES NO ✓ sewage system? If yes, what estimated quantity will be produced per month?  $m^3$ Will the activity produce any effluent that will be treated and/or disposed of on site? NO ✓ Yes If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA. YES NO ✓ Will the activity produce effluent that will be treated and/or disposed of at another facility? If yes, provide the particulars of the facility: Facility name: Contact person: Postal address: Postal code: Telephone: Cell: E-mail: Fax: Describe the measures that will be taken to ensure the optimal reuse or recycling of waste water, if any: The reuse of treated wastewater from wastewater treatment works is being considered as a source of water for dust suppression. 11(c) **Emissions into the atmosphere** Will the activity release emissions into the atmosphere?

YES ✓ Construction phase	NO
YES ✓	NO

If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

If no, describe the emissions in terms of type and concentration:

The National Dust Control Regulations of 1 November 2013, prescribe acceptable dustfall rates for activities generating dust.

Dust will occur during the construction phase as a result of clearing of vegetation, excavations, stockpiles, construction vehicles and/or equipment movement. Mitigation measures are given in Section D to limit the occurrence and impacts of dust pollution during the construction phase.

Dust levels are not to exceed 1200mg/m²/day (30 day average) for industrial and rural areas (non-residential areas). In residential areas, dust is not to exceed 600mg/m²/day (30 day average).

Standard emissions from construction vehicles and generators will be at low levels during construction.

No dust is anticipated during the operational phase.

No listed activities in terms of Section 21 of the National Environmental Management: Air Quality Act (Act No 39 of 2004) would be applicable.

#### 11(d) Generation of noise

Will the activity generate noise?

YES ✓ Construction phase	NO
YES ✓	NO

If yes, is it controlled by any legislation of any sphere of government?

If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

If no, describe the noise in terms of type and level:

The Noise Control Regulations (GNR154 of 10 January 1992) published in terms of Section 25 of the Environment Conservation Act, 1989:

The restriction of the use of any power tool or power equipment for construction work, drilling work or demolition work, or allow it to be used in a residential area during the following hours: (i) Before 06:00 and after 18:00 Monday to Saturday; (ii) at any time on Sundays or specified public holidays.

During construction, noise will be generated by generators and construction equipment (e.g. grader), construction vehicles. This will, however, be limited to daylight hours and will be temporary, i.e. occurring only during construction.

No noise impacts are anticipated during the operational phase.

#### 12. WATER USE

Please indicate the source(s) of water that will be used for the activity by ticking the appropriate box(es)

	Municipal ✓ (Construction)	water board	groundwater	river, stream, dam or lake	Other	the activity will not use water ✓ (Operations)	
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Water sources for construction:

- Water for construction purposes will be obtained from the Kouga Local Municipality.
- Contractors would be required to provide drinking water for construction staff.

If water is to be extracted from groundwater, river, stream, dam, lake or any other natural feature, please indicate

the volume that will be extracted per month:

N/A litres

YES ✓

NO

Does the activity require a water use permit from the Department of Water Affairs?

If yes, please submit the necessary application to the Department of Water Affairs and attach proof thereof to this application if it has been submitted.

Activities for the water uses in terms of Section 21 of the National Water Act (Act No 36 of 1998) [NWA] associated with the proposed project, include the following:

- Section 21 (c) impeding or diverting the flow of water in a watercourse
- Section 21 (i) altering the bed, banks, course or characteristics of a watercourse

The Section 21 (c) and (i) water use activities are applicable as the proposed collector sewer pipeline is located within 500m of wetlands.

The following has been undertaken as part of the water use authorisation application to date:

A pre-application enquiry was submitted to the DWS on 4 November 2025, and a pre-application meeting was held on 24 March 2025.

Proof of the water use authorisation application for Section 21 (c) and (i) activities is included as Appendix G4.

#### 13. ENERGY EFFICIENCY

Describe the design measures, if any, that have been taken to ensure that the activity is energy efficient:

None.

Describe how alternative energy sources have been taken into account or been built into the design of the activity, if any:

None.

#### SECTION B: SITE/AREA/PROPERTY DESCRIPTION

#### Important notes:

1. For linear activities (pipelines, etc) as well as activities that cover very large sites, it may be necessary to complete this section for each part of the site that has a significantly different environment. In such cases please complete copies of Section C and indicate the area, which is covered by each copy No. on the Site Plan.

Section C Copy No. (e.g. A):

- 2. Paragraphs 1 6 below must be completed for each alternative.
- 3. Has a specialist been consulted to assist with the completion of this section?

YES ✓ NO

If YES, please complete form XX for each specialist thus appointed:

All specialist reports must be contained in Appendix D.

#### 1. GRADIENT OF THE SITE

Indicate the general gradient of the site.

#### Alternative S1:

Flat ✓	1:50 – 1:20 ✓	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5	
Alternative S2 (if any):							
Flat	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5	
Alternative S3 (if any):							
Flat	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5	

The proposed collector sewer pipeline begins at an elevation of approximately 20m and ends at 20m above mean sea level. The highest elevation along the route is approximately 23m

#### 2. LOCATION IN LANDSCAPE

Indicate the landform(s) that best describes the site:

- 2.1 Ridgeline
- 2.2 Plateau
- 2.3 Side slope of hill/mountain
- 2.4 Closed valley

#### 2.5 Open valley ✓

- 2.6 Plain
- 2.7 Undulating plain / low hills
- 2.8 Dune
- 2.9 Seafront

#### 3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

Is the site(s) located on any of the following (tick the appropriate boxes)?

	Alternative S1:		Alternative S2 (if any):		Alternative S3 (if any):		
Shallow water table (less than 1.5m deep)	YES	NO ✓	YES	NO	YES	NO	
Dolomite, sinkhole or doline areas	YES	NO ✓	YES	NO	YES	NO	
Seasonally wet soils (often close to water bodies)	YES	NO ✓	YES	NO	YES	NO	
Unstable rocky slopes or steep slopes with loose soil	YES	NO ✓	YES	NO	YES	NO	
Dispersive soils (soils that dissolve in water)	YES	NO ✓	YES	NO	YES	NO	
Soils with high clay content (clay fraction more than 40%)	YES	NO ✓	YES	NO	YES	NO	
Any other unstable soil or geological feature	YES	NO ✓	YES	NO	YES	NO	
An area sensitive to erosion	YES	NO ✓	YES	NO	YES	YES NO	

If you are unsure about any of the above or if you are concerned that any of the above aspects may be an issue of concern in the application, an appropriate specialist should be appointed to assist in the completion of this section. (Information in respect of the above will often be available as part of the project information or at the planning sections of local authorities. Where it exists, the 1:50 000 scale Regional Geotechnical Maps prepared by the Council for Geo Science may also be consulted).

The site is underlain by the Ceres Subgroup, with characteristic features of mudrock, shale, siltstone, feldspathic arenite and wacke.

#### 4. GROUNDCOVER

Indicate the types of groundcover present on the site:

- 4.1 Natural veld good condition E
- 4.2 Natural veld scattered aliens E
- 4.3 Natural veld with heavy alien infestation E
- 4.4 Veld dominated by alien species E
- 4.5 Gardens
- 4.6 Sport field
- 4.7 Cultivated land
- 4.8 Paved surface
- 4.9 Building or other structure
- 4.10 Bare soil

The location of all identified rare or endangered species or other elements should be accurately indicated on the site plan(s).

Natural veld - good condition <sup>E</sup>	Natural veld with scattered aliens <sup>E</sup> ✓	Natural veld with heavy alien infestation <sup>E</sup>	Veld dominated by alien species <sup>E</sup>	Gardens
Sport field	Cultivated land	Paved surface ✓	Building or other structure ✓	Bare soil ✓

If any of the boxes marked with an "E" is ticked, please consult an appropriate specialist to assist in the completion of this section if the environmental assessment practitioner doesn't have the necessary expertise.

The area surrounding the Ocean View Pump Station is largely transformed. The area has a few small, isolated pockets of near-natural Humansdorp Shale Renosterveld (Endangered Ecosystem) between the Ocean View pump station and Dolphin Drive to the south. These small pockets are generally degraded and ecologically insignificant and also bisected by several access tracks, pathways and other sewer lines. The collector sewer will follow an existing gravel track (Pote, 2024).

The Ocean View Collector Sewer is located within an Ecological Support Area (ESA1) corridor, in terms of the Eastern Cape Biodiversity Conservation Plan (ECBSP, 2019). The site is located within degraded / transformed habitat (Pote, 2024).

No Endangered or Critically Endangered flora species were confirmed to be present nor are known to be present in the affected area (Pote, 2024).

Eight (8) alien invasive and other weed species were noted within the site and surrounding area. Of these, six (6) species were noted as a listed alien invasive species, either as a Category 1b or Category 2 (Pote, 2024).

The site is largely considered to have a low sensitivity due to the disturbed and transformed nature. A small section near the Ocean View Pump Station is designated moderate sensitivity as it will be in proximity to some remnant Humansdorp Shale Renosterveld (Pote, 2024).

Refer to **Appendix D1** for the Terrestrial Biodiversity and Plant Species Assessment report.

#### 5. LAND USE CHARACTER OF SURROUNDING AREA

Indicate land uses and/or prominent features that currently occur within a 500m radius of the site and give description of how this influences the application or may be impacted upon by the application:

#### 5.1 Natural area

Natural areas are located along the Pietersgaat River, and to the east of Dolphin Drive.

- 5.2 Low density residential
- 5.3 Medium density residential

#### 5.4 High density residential

The Ocean View Township is located to the north and west of the Ocean View collector sewer. The Pellsrus Township is located to the north east.

#### 5.5 Informal residential

The Ocean View Township includes an informal area located to the north of the Ocean View collector sewer pipeline.

- 5.6 Retail commercial & warehousing
- 5.7 Light industrial
- 5.8 Medium industrial AN

- 5.9 Heavy industrial AN
- 5.10 Power station
- 5.11 Office/consulting room
- 5.12 Military or police base/station/compound
- 5.13 Spoil heap or slimes dam<sup>A</sup>
- 5.14 Quarry, sand or borrow pit
- 5.15 Dam or reservoir
- 5.16 Hospital/medical centre

#### 5.17 School

#### The King's College is located to the northeast of the collector sewer pipeline along Dolphin Drive.

- 5.18 Tertiary education facility
- 5.19 Church
- 5.20 Old age home
- 5.21 Sewage treatment plant<sup>A</sup>
- 5.22 Train station or shunting yard N
- 5.23 Railway line N
- 5.24 Major road (4 lanes or more) N
- 5.25 Airport N
- 5.26 Harbour
- 5.27 Sport facilities
- 5.28 Golf course
- 5.29 Polo fields
- 5.30 Filling station H
- 5.31 Landfill or waste treatment site
- 5.32 Plantation
- 5.33 Agriculture

#### 5.34 River, stream or wetland

Aquatic features within 500m of the site included the following (Colloty, 2024):

- Unchanneled valley bottom wetland
- Artificial dam
- Riverine watercourse (Pietersgaat River)
- Transformed depressions

The proposed Ocean View Collector Sewer is located near localised watercourses which have no direct connection to any mainstem systems or estuaries within the K90G Kabeljous quaternary catchment.

The wetland areas are fragmented, contain higher levels of solid waste and grazed frequently; resulting in a reduction in wetland species diversity (plants). The Present Ecological Score (PES) is Class D - Largely modified and Ecological Importance and Sensitivity is Low.

There are no Strategic Water Source Areas mapped near the site.

The southwestern end of the sewer alignment is located within a Wetland Cluster.

The Eastern Cape Biodiversity Conservation Plan (ECBCP, 2019) indicates the site is located within an Aquatic Ecological Support Area (ESA 1).

No endemic, conservation worthy species or species of special concern (Listed or Protected) were observed or have been recorded within the proposed route areas. The proposed Ocean View Collector Sewer is located outside riverine / wetland areas and are currently within highly transformed areas.

Dominant plant species found in included:

- © Ficinia lateralis
- © Cyperus obtusiflorus var. obtusiflorus
- Setaria sphacelata var. sphacelata
- Stenotaphrum secundatum
- Imperata cylindrica

#### Refer to **Appendix D-2** for the Aquatic specialist study.

- 5.35 Nature conservation area
- 5.36 Mountain, koppie or ridge
- 5.37 Museum
- 5.38 Historical building
- 5.39 Protected Area
- 5.40 Graveyard
- 5.41 Archaeological site
- 5.42 Other land uses (describe) -

If any of the boxes marked with an "N "are ticked, how will this impact / be impacted upon by the proposed activity.

N		1	Λ
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If any of the boxes marked with an "An" are ticked, how will this impact / be impacted upon by the proposed activity.

If YES, specify and explain:

If YES, specify:

N/A.

If any of the boxes marked with an "H" are ticked, how will this impact / be impacted upon by the proposed activity.

If YES, specify and explain:

If YES, specify:

N/A.

#### 6. CULTURAL/HISTORICAL FEATURES

Are there any signs of culturally or historically significant elements, as defined in section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999), including

YES NO ✓

Archaeological or palaeontological sites, on or close (within 20m) to the site?

Uncertain

If YES, explain:

N/A

If uncertain, conduct a specialist investigation by a recognised specialist in the field to establish whether there is such a feature(s) present on or close to the site.

Briefly explain the findings of the specialist:

No archaeological sites/materials were observed during the investigation of the proposed study area. Although it is unlikely that archaeological remains will be found in situ, there is always a possibility that human remains and/or other archaeological and historical material may be uncovered during the development. Several archaeological assessments have been conducted in the general area of the proposed development. In the assessments conducted in close proximity to Dolphin Road only isolated Early Stone Age (ESA) and Middle Stone Age (MSA) were identified. These finds were not in situ and it was not associated with any other cultural material. The majority of the development area does however fall within the 5 kilometer radius from the coast that is regarded as an archaeological sensitive zone where archaeological sites / material such as shell middens can be expected. The proposed

development area appears to be of low archaeological sensitivity, and it is therefore unlikely that any significant archaeological remains will be found on the property. The proposed development may therefore proceed as planned (Reichert, 2024).

The study site is underlain by the Ceres Subgroup of the Bokkeveld Group of the Cape Supergroup. The Ceres Subgroup is well known for its invertebrate benthic marine fossils and is marked as very sensitive from a palaeontological point of view. The area is covered with a soil layer and vegetation. As seen in other localities in the area any rock under this layer is highly fractured, with rock cleavage running across bedding planes. Although possible, it is unlikely that any significant fossils will be found, damaged, or lost during construction. Therefore, the proposed activity may proceed (Wilken, 2024).

Refer to **Appendix D3 and D4** for the specialist studies.

Will any building or structure older than 60 years be affected in any way?

Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?

YES

NO ✓

If yes, please submit or, make sure that the applicant or a specialist submits the necessary application to SAHRA or the relevant provincial heritage agency and attach proof thereof to this application if such application has been made.

#### **SECTION C: PUBLIC PARTICIPATION**

#### 1. ADVERTISEMENT

The person conducting a public participation process must take into account any guidelines applicable to public participation as contemplated in section 24J of the Act and must give notice to all potential interested and affected parties of the application which is subjected to public participation by—

- (a) fixing a notice board (of a size at least 60cm by 42cm; and must display the required information in lettering and in a format as may be determined by the competent authority) at a place conspicuous to the public at the boundary or on the fence of—
  - (i) the site where the activity to which the application relates is or is to be undertaken; and
  - (ii) any alternative site mentioned in the application;
- (b) giving written notice to—
  - (i) the owner or person in control of that land if the applicant is not the owner or person in control of the land:
  - (ii) the occupiers of the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;
  - (iii) owners 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;
  - (iv) 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;
  - (v) the municipality which has jurisdiction in the area;
  - (vi) any organ of state having jurisdiction in respect of any aspect of the activity; and
  - (vii) any other party as required by the competent authority;
- (c) placing an advertisement in-
  - (i) one local newspaper; or
  - (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;
- (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 local municipality in which it is or will be undertaken: Provided that this paragraph need not be complied with if an advertisement has been placed in an official *Gazette* referred to in subregulation 54(c)(ii); and
- (e) using reasonable alternative methods, as agreed to by the competent authority, in those instances where a person is desiring of but unable to participate in the process due to—
  - (i) illiteracy;
  - (ii) disability; or
  - (iii) any other disadvantage.

#### **Pre-application Public Participation:**

The Pre-Application Public Participation announced the EIA and WUL application and a 30 day comment and registration period was from 25 October to 25 November 2024.

Two (2) A2-sized site notice boards were placed on 25 October 2024, at the following points:

- 1. Entrance to the Ocean View Sewer Pumpstation, 34° 3'52.74"S 24°54'22.01"E, in English and Afrikaans
- 2. Dolphin Drive; 34° 3'39.94"S, 24°54'41.34"E, in English and Xhosa

Refer to **Appendix E1** for details of the site notice.

Newspaper advertisements were placed in The Herald (English) and Die Burger (Afrikaans), on 25 October 2024. Refer to **Appendix E2** for details and copies of the newspaper advertisements.

Written notifications were distributed to identified stakeholders, including the landowners and adjacent landowners, and State Departments on 25 October 2024. This included a Notification and Background Information Document (BID). Refer to **Appendix E3** for the notifications and **Appendix E4** for correspondence with I&APs.

#### **Post-Application Public Participation:**

The Draft Basic Assessment Report will be made available for a 30 day review period to registered I&APs, relevant authorities and other stakeholders, from **9 May – 9 June 2025** (excluding public holidays). Refer to **Appendix E5** for the Draft Basic Assessment Report notifications and **Appendix E6** for correspondence with I&APs.

Refer **Appendix E7** for the Stakeholder and I&APs Database.

Please note that contact details for I&APs are not reflected in the I&AP database due to the Protection of Personal Information Act, (No. 2 of 2013). This information is available on request to relevant authorities and will not be distributed in the public domain.

#### 2. CONTENT OF ADVERTISEMENTS AND NOTICES

A notice board, advertisement or notices must:

- (a) indicate the details of the application which is subjected to public participation; and
- (b) state—
  - (i) that the application has been submitted to the competent authority in terms of these Regulations, as the case may be;
  - (ii) whether basic assessment or scoping procedures are being applied to the application, in the case of an application for environmental authorisation;
  - (iii) the nature and location of the activity to which the application relates;
  - (iv) where further information on the application or activity can be obtained; and
  - (iv) the manner in which and the person to whom representations in respect of the application may be made.

Refer to **Appendix E** for details of the site notice and newspaper advertisement.

#### 3. PLACEMENT OF ADVERTISEMENTS AND NOTICES

Where the proposed activity may have impacts that extend beyond the municipal area where it is located, a notice must be placed in at least one provincial newspaper or national newspaper, indicating that an application will be submitted to the competent authority in terms of these regulations, the nature and location of the activity, where further information on the proposed activity can be obtained and the manner in which representations in respect of the application can be made, unless a notice has been placed in any *Gazette* that is published specifically for the purpose of providing notice to the public of applications made in terms of the EIA regulations.

Advertisements and notices must make provision for all alternatives.

Refer to **Appendix E** for details of the site notice and newspaper advertisements.

#### 4. DETERMINATION OF APPROPRIATE MEASURES

The practitioner must ensure that the public participation is adequate and must determine whether a public meeting or any other additional measure is appropriate or not based on the particular nature of each case. Special attention should be given to the involvement of local community structures such as Ward Committees, ratepayers associations and traditional authorities where appropriate. Please note that public concerns that emerge at a later stage that should have been addressed may cause the competent authority to withdraw any authorisation it may have issued if it becomes apparent that the public participation process was inadequate.

#### 5. COMMENTS AND RESPONSE REPORT

The practitioner must record all comments and respond to each comment of the public before the application is submitted. The comments and responses must be captured in a comments and response report as prescribed in the EIA regulations and be attached to this application. The comments and response report must be attached under Appendix E.

Refer to **Appendix E8** for the Comments and Response Report.

#### 6. AUTHORITY PARTICIPATION

Authorities are key interested and affected parties in each application and no decision on any application will be made before the relevant local authority is provided with the opportunity to give input. The planning and the environmental sections of the local authority must be informed of the application at least 30 (thirty) calendar days before the submission of the application.

List of authorities informed:

Department of Economic Development, Environmental Affairs and Tourism (DEDEAT)

Department of Water and Sanitation (DWS)

Department of Forestry, Fisheries and Environment (DFFE): Forestry

Department of Road & Public Works: Roads

Kouga Local Municipality (KLM)

Sarah Baartman District Municipality (SBDM)

Eastern Cape Provincial Heritage Resources Agency (ECPHRA)

List of authorities from whom comments have been received:

Eastern Cape Provincial Heritage Resources Agency (ECPHRA):

ECPHRA acknowledges and accepts the submitted NID (Notice of Intent to Develop). Based on the information shared, ECPHRA further requests a Heritage Impact Assessment (HIA) which should comprise of the following: • Desktop AIA (archaeological impact assessment) and • Desktop PIA (paleontological impact assessment.

Department of Water and Sanitation (DWS):

The DWS requested clarification on when the Ocean View Pump Station was built and if it forms part of the Jeffreys Bay Waste Water Treatment Works Water Use Licence.

Refer to **Appendix E8** for the Comments and Response Register.

#### 7. CONSULTATION WITH OTHER STAKEHOLDERS

Note that, for linear activities, or where deviation from the public participation requirements may be appropriate, the person conducting the public participation process may deviate from the requirements of that subregulation to the extent and in the manner as may be agreed to by the competent authority.

Any stakeholder that has a direct interest in the site or property, such as servitude holders and service providers, should be informed of the application at least 30 (thirty) calendar days before the submission of the application and be provided with the opportunity to comment.

Has any comment been received from stakeholders?

YES NO✓

If "YES", briefly describe the feedback below (also attach copies of any correspondence to and from the stakeholders to this application):

Pre-application Correspondence: None to date.

Post-application: To be updated in Final BAR

Refer to **Appendix E8** for the comments and response register.

#### SECTION D: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2014 as amended, and should take applicable official guidelines into account. The issues raised by interested and affected parties should also be addressed in the assessment of impacts.

#### 1. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

List the main issues raised by interested and affected parties.

1. Requirement for a Desktop AIA (archaeological impact assessment) and Desktop PIA (paleontological impact assessment.

Response from the practitioner to the issues raised by the interested and affected parties (A full response must be given in the Comments and Response Report that must be attached to this report):

1. An archaeological assessment was undertaken and resulted in a Letter of Recommendation from the exemption of a full phase 1 archaeological impact assessment. A paleontological impact assessment has been undertaken. Refer to **Section D** of the BAR and **Appendices D4 and D5**.

# 2. IMPACTS THAT MAY RESULT FROM THE PLANNING AND DESIGN, CONSTRUCTION, OPERATIONAL, DECOMMISSIONING AND CLOSURE PHASES AS WELL AS PROPOSED MANAGEMENT OF IDENTIFIED IMPACTS AND PROPOSED MITIGATION MEASURES

List the potential direct, indirect and cumulative property/activity/design/technology/operational alternative related impacts (as appropriate) that are likely to occur as a result of the planning and design phase, construction phase, operational phase, decommissioning and closure phase, including impacts relating to the choice of site/activity/technology alternatives as well as the mitigation measures that may eliminate or reduce the potential impacts listed.

A site verification process was undertaken in relation to the Screening Tool Report. Refer to **Appendix G-1** for the Screening Tool Report, **Appendix G-2** for the Site Verification Report and **Appendix D** for specialist verifications / studies.

The following presents a summary of the site sensitivity outcomes:

Theme	Screening Tool Report Sensitivity	Verification Outcomes	Specialist Studies
Agriculture	High	Low	No specialist study or assessment required.
Animal Species	Medium	Low	Compliance Statement
Aquatic Biodiversity	Very High	Low	Impact Assessment
Archaeological & Cultural Heritage	Low	Low	Letter of Recommendation
Civil Aviation	High	Low	No specialist study required
Defence	Low	Low	No specialist study required

Palaeontology	Very High	Very High	Impact Assessment
Plant Species	Medium	Low	Impact Assessment
Terrestrial Biodiversity	Very High	Low	Impact Assessment

Additional specialist assessments identified in the Screening Tool Report but not related to Themes include:

- 1. Landscape/Visual Impact Assessment
- 2. Hydrology Assessment
- 3. Socio-Economic Assessment

The following specialist studies were deemed to be of low sensitivity and no specialist study is considered to be required:

Agriculture: No agricultural land falls within the site boundary and no agricultural lands would be impacted upon.

**Civil Aviation:** The site is located within an urban and transformed area, and the proposed Ocean View Collector Sewer will be located underground. The site is considered to be of a Low sensitivity as no impacts on civil aviation are expected.

**Defence**: The site is considered to be of a Low sensitivity in relation to defence installations as no impacts on defence installations are expected.

**Landscape/Visual:** A landscape / visual impact assessment is not applicable as the development will not result in changes to the current landscape. The site is located within a transformed area consisting of the existing sewer lines, pump station and roads.

**Hydrology:** The site is located within a transformed area consisting of the existing sewer lines, pump station and roads. The proposed Ocean View Collector Sewer will not be located within any watercourse.

#### Alternative (preferred alternative)

Refer to **Appendix G-3** for the Impact Assessment Methodology.

#### Direct impacts:

#### 1. TERRESTRIAL BIODIVERSITY AND PLANT SPECIES

The Specialist disputes the Very High Terrestrial Biodiversity Sensitivity identified in the Screening Tool Report and deems the site to be of Low Sensitivity. Although the proposed Ocean View Collector Sewer is located within a Terrestrial Critical Biodiversity Area, namely an Ecological Support Area (ESA1), the area is largely transformed. A small section of the proposed Ocean View Collector Sewer, nearby the pump station, will be in proximity to a remnant but degraded pocket of Humansdorp Shale Renosterveld (Endangered Ecosystem), but any loss is likely to be negligible as the route follows a gravel track (Pote, 2024).

The Specialist disputes the Medium Plant Species sensitivity rating, and has indicated the sensitivity as Low. None of the plant species flagged was found to be present on site and due to the transformed nature of the site, it is not deemed to be suitable habitat for any species population (Pote, 2024).

No Protected, Endangered or Critically Endangered flora species were confirmed to be present nor are known to be present in the affected area.

Eight (8) alien invasive and other weed species were noted within the site and surrounding area. Of these, six (6) species were noted as a listed alien invasive species, either as a Category 1b or Category 2 (Pote, 2024).

The Ocean View Collector Sewer will cut across an area having pockets of remnant but degraded and ecologically insignificant Humansdorp Shale Renosterveld, but follows an existing gravel track, hence loss of any natural vegetation will likely be negligible and unlikely that any significant loss of natural or indigenous vegetation will occur (Pote, 2024).

In general, most impacts will have a high reversibility in the affected habitat, as well as transformed or degraded

areas, except where hardening of surfaces or removal of topsoil may occur. Risks to irreplaceable biodiversity resources are considered to be low to very low. No residual risks or uncertainties are anticipated. No cumulative impacts are expected because of the development of the site, providing recommendation and mitigation measures are adhered to, due to the limited disturbance area (Pote, 2024).

The specialist's opinion is that the proposed Ocean View Collector Sewer is unlikely to pose any risk to natural ecological processes, vegetation or plant species of conservation concern. Care is to be taken in the pump station vicinity to either avoid or minimise any loss of the pockets of the Humansdorp Shale Renosterveld. No-go areas are not identified or required along the Ocean View Collector Sewer route (Pote, 2024).

Refer to **Appendix D-1** for the Terrestrial Biodiversity and Plant Species Specialist Report.

#### 1.1. Impact: Loss of natural vegetation

**Construction & Operation:** Clearing will result in the temporary loss of approx. 800m² of vegetation during construction. The Ocean View Collector Sewer will cut across an area having pockets of remnant but degraded and ecologically insignificant Humansdorp Shale Renosterveld, and follows an existing gravel track, hence loss of any natural vegetation will likely be negligible and unlikely that any significant loss of natural or indigenous vegetation will occur (Pote, 2024). Maintenance activities may result in clearance of vegetation, i.e. in areas where vegetation has re-established. This is expected to be limited to areas requiring maintenance and of limited extent. The loss of natural vegetation would be of a low negative significance mitigated to a very low negative significance.

**No-Go Alternative:** There is no impact associated with the No-Go Alternative as there would be no change in status to the site.

The specialist has recommended the following mitigation and/or management measures for inclusion in the EMPr (Pote, 2024):

#### **Construction and Operation Mitigation and Management Measures:**

- No clearing outside of footprint to take place.
- Surrounding intact Humansdorp Shale Renosterveld is to be conserved and not harmed during the construction process unnecessarily.

Terrestrial Biodiversity - Impact: Loss of natural vegetation				
Phase	Preferred Alternative		No Go Alternative	
	Construction Phase	Operational Phase		
Nature	Loss of vegetation	Loss of vegetation	No change in status	
Status	Negative, Direct	Negative, Direct		
Extent	Site - 1	Site - 1		
Duration	Short term - 1	Short term - 1		
Intensity	Low – 2	Low – 2		
Reversible	Reversible - 1	Reversible - 1	No change in status	
Replaceable	Low – 2	Low – 2		
Cumulative	Very Low – 1	Very Low – 1		
Probability	Definite - 4	Definite - 4		
Level of	(1+1+2+1+2+1)*4=32	(1+1+2+1+2+1)*4=32		
significance	Low -	Low -	No impact / Neutral	
Level of				
significance	Very Low -	Very Low -	No impact / Neutral	
with mitigation				
Confidence	High	High	High	

#### 1.2. Impact: Loss of plant (flora) species of conservation concern

**Construction & Operation:** No Endangered or Critically Endangered Flora species were recorded. Several species known from the general area were screened and it was confirmed that none are present or affected. Although several range restricted flora species are potentially present in the surrounding area and vegetation types, none were recorded in proximity to the site (Pote, 2024). The loss of plant (flora) species of conservation concern would be of a low negative significance mitigated to a very low negative significance.

**No-Go Alternative:** There is no impact associated with the No-Go Alternative as there would be no change in status to the site.

The specialist has recommended the following mitigation and/or management measures (Pote, 2024):

#### **Construction Mitigation and Management Measures:**

• A flora search and rescue is unlikely to be required and no protected flora was found to be present.

Phase	Preferred Alternative		No Go Alternative
	Construction Phase	Operational Phase	
Nature	Loss of plant species of	Loss of plant species of	No change in status
Nature	conservation concern	conservation concern	No change in status
Status	Negative, Direct	Negative, Direct	
Extent	Local - 2	Local - 2	
Duration	Short term - 1	Short term - 1	
Intensity	Low – 2	Low – 2	
Reversibility	Reversible - 1	Reversible - 1	No change in status
Replaceable	Low – 2	Low – 2	
Cumulative	Very Low – 1	Very Low – 1	
Probability	Probable - 2	Probable - 2	
Level of	(2+1+2+1+2+1)*2=18	(2+1+2+1+2+1)*2=18	
significance	Low -	Low -	No impact / Neutral
Level of			
significance	Very Low -	Very Low -	No impact / Neutral
with mitigation			
Confidence	Medium	Medium	High

#### 1.3. Impact: Spread of alien and invasive plant species

**Construction & Operation:** Susceptibility of post construction disturbed areas to invasion by exotic and alien invasive species and removal of exotic and alien invasive species during construction. Post construction disturbed areas having no vegetation cover are often susceptible to invasion by weedy and alien species, which can not only become invasive but also prevent natural flora from becoming established (Pote, 2024). The spread of alien and invasive plant species would be of a low negative significance mitigated to a very low negative significance.

**No-Go Alternative:** The possibility of further encroachment by alien and invasive plant species may continue, which may further degrade the terrestrial environment. This impact would be of long term duration and of low negative significance.

The specialist has recommended the following mitigation and/or management measures for inclusion in the EMPr (Pote, 2024):

#### **Construction & Operation Mitigation and Management Measures:**

 A suitable weed management strategy to be implemented along the pipeline after completion of construction.

Terrestrial Biodiversity - Impact: Spread of alien and invasive plant species					
Phase	Preferred Alternative		No Go Alternative		
	Construction Phase	Operational Phase			
Nature	Increased risk of alien plant	Increased risk of alien plant	Degradation of site due to alien		
Nature	species invasion	species invasion	invasive plant growth		
Status	Negative, Direct	Negative, Direct	Negative, Direct		
Extent	Local - 2	Local - 2	Regional - 3		
Duration	Medium Term - 2	Medium Term - 2	Long Term - 3		
Intensity	Low - 2	Low - 2	Medium - 3		
Reversibility	Reversible - 1	Reversible - 1	Reversible - 1		
Replaceable	Low - 2	Low - 2	Low - 2		
Cumulative	Very Low – 1	Very Low – 1	Low - 2		
Probability	Highly Probable – 3	Highly Probable – 3	Probable - 2		
Level of	(2+2+2+1+2+1)*3=30	(2+2+2+1+2+1)*3=30	(3+3+3+1+2+2)*2=28		
significance	Low -	Low -	Low -		
Level of					
significance	Very Low -	Very Low -	Low -		
with mitigation					
Confidence	High	High	High		

#### 1.4. Impact: Erosion

**Construction & Operation:** Susceptibility of some areas to erosion because of construction related disturbances. Removal of vegetation cover and soil disturbance may result in some areas being susceptible to soil erosion after completion of the activity (Pote, 2024). The erosion of soil stockpiles would be of a low negative significance mitigated to a very low negative significance.

**No-Go Alternative:** There is no impact associated with the No-Go Alternative as there would be no change in status to the site.

The specialist has recommended the following mitigation and/or management measures (Pote, 2024):

#### **Construction & Operation Mitigation and Management Measures:**

- Suitable measures must be implemented in areas that are susceptible to erosion. Areas must be rehabilitated, and a suitable cover crop planted.
- If natural vegetation re-establishment does not occur, a suitable grass must be applied. Possible grasses include *Cynodon dactylon, Eragrostis curvula & Digitaria eriantha*.

Terrestrial Biodiversity - Impact: Erosion					
Phase	Preferred Alternative		No Go Alternative		
	<b>Construction Phase</b>	Operational Phase			
Nature	Soil erosion	Soil erosion	No change in status		
Status	Negative, Direct	Negative, Direct			
Extent	Local - 2	Local - 2			
Duration	Medium Term - 2	Medium Term - 2			
Intensity	Low - 2	Low - 2			
Reversibility	Reversible - 1	Reversible - 1	No change in status		
Replaceable	Low - 2	Low - 2			
Cumulative	Very Low – 1	Very Low – 1			
Probability	Probable - 2	Probable - 2			
Level of	(2+2+2+1+2+1)*2=20	(2+2+2+1+2+1)*2=20			
significance	Low -	Low -	No impact / Neutral		

Level of significance with mitigation	Very Low -	Very Low -	No impact / Neutral
Confidence	Medium	Medium	High

#### 1.5. Impact: Disturbance to ecological processes

**Construction & Operation:** Activity may result in disturbances to ecological processes (Pote, 2024). Maintenance activities may result in clearance of vegetation, i.e. in areas where vegetation has re-established. This is expected to be limited to areas requiring maintenance and of limited extent. The Disturbance to ecological processes would be of a low negative significance mitigated to a very low negative significance.

**No-Go Alternative:** There is no impact associated with the No-Go Alternative as there would be no change in status to the site.

The specialist has not recommended any additional mitigation and/or management measures.

Terrestrial Biodiversity - Impact: Disturbance to ecological processes					
Phase	Preferred Alternative		No Go Alternative		
	Construction Phase	Operational Phase			
Nature	Disturbance to ecological	Disturbance to ecological	No change in status		
Nature	processes	processes	No change in status		
Status	Negative, Direct	Negative, Direct			
Extent	Local - 2	Local - 2			
Duration	Short Term - 1	Short Term - 1			
Intensity	Low - 2	Low - 2			
Reversibility	Reversible - 1	Reversible - 1	No change in status		
Replaceable	Low - 2	Low - 2			
Cumulative	Very Low – 1	Very Low – 1			
Probability	Probable - 2	Probable - 2			
Level of	(2+1+2+1+2+1)*2=18	(2+1+2+1+2+1)*2=18			
significance	Low -	Low -	No impact / Neutral		
Level of					
significance	Very Low -	Very Low -	No impact / Neutral		
with mitigation					
Confidence	High	High	High		

#### 2. ANIMAL SPECIES

The Animal Species Specialist disputes the Medium Sensitivity rating and has indicated the sensitivity as Low. This is due to the low suitability of the project area for animal Species of Conservation Concern (SCC) due to significant anthropogenic threats (Landman, 2024).

Although Lanner falcons (*Falco biarmicus*) may be present, there are no suitable breeding sites for them within the project area, and their use of the area is likely limited to foraging. Given the small size of the project area and the extent of anthropogenic threats, it is unlikely that the project area holds significant importance for Lanner falcons. Consequently, impacts of the proposed project on this species can be considered negligible (Landman, 2024).

No amphibian, reptile, or mammal SCC is likely to occur in the project area. With regards to the SCC identified by the DFFE Screening Tool: Habitats within the project area are not suitable for the Duthie's golden mole (*Chlorotalpa duthieae*), Sensitive species 8, Crowned eagles (*Stephanoaetus coronatus*) and the Yellow-winged agile grasshopper (*Aneuryphymus montanus*) and these species are unlikely to occur (Landmand, 2024).

No alien invasive animal species listed in terms of the NEMBA are likely to occur in the project area (Landman, 2024).

**Construction:** As a result of the findings of the specialist, potential impacts from the proposed project on animal SCC are considered negligible.

**Operation:** No impacts are anticipated.

**No-Go Alternative:** There is no impact associated with the No-Go Alternative as there would be no change in status to the site.

**Mitigation and Management Measures:** No additional management actions to mitigate impacts on animal species are recommended for inclusion in the Environmental Management Programme, beyond those that are considered standard good practise (Landman, 2024).

The specialist has indicated the following (Landman, 2024):

Some common species (including most amphibians, reptiles, and birds) that potentially occur in the project area are protected under the Nature and Environmental Conservation Ordinance (NECO) (Ordinance 19 of 1974). Where applicable, a permit is required for the capture and relocation of protected species during the construction phase of the project. For example, tortoises listed on Schedule 2 of the NCO will require permits for capture if necessary. Similarly, a permit is required for activities that disturb protected bird species, particularly during the breeding season. Sites with eggs or chicks are considered protected sites. Permit applications must be submitted to Eastern Cape Department of Economic Development, Environmental Affairs, and Tourism, and relocations should be to suitable habitats near the project area.

Refer to **Appendix D-3** for the Animal Species Compliance Statement.

#### 3. AQUATIC BIODIVERSITY

The specialist disputes the Very High Sensitivity identified in the Screening Tool Report and deems the site to be of Low Sensitivity as the proposed Ocean View Collector Sewer would be located within previously disturbed areas and riverine / wetland areas.

The proposed Ocean View Collector Sewer is located near localised watercourses which have no direct connection to any mainstem systems or estuaries within the K90G Kabeljous quaternary catchment (Colloty, 2024).

The wetland areas are fragmented, contain higher levels of solid waste and grazed frequently; resulting in a reduction in wetland species diversity (plants). The Present Ecological Score (PES) is Class D - Largely modified and Ecological Importance and Sensitivity is Low (Colloty, 2024).

There are no Strategic Water Source Areas mapped near the site. The southwestern end of the sewer alignment is located within a Wetland Cluster. The Eastern Cape Biodiversity Conservation Plan (ECBCP, 2019) indicates the site is located within an Aquatic Ecological Support Area (ESA 1) (Colloty, 2024).

No endemic, conservation worthy species or species of special concern (Listed or Protected) were observed or have been recorded within the proposed route areas. The proposed Ocean View Collector Sewer is located outside riverine / wetland areas and are currently within highly transformed areas (Colloty, 2024).

Due to the nature of the project and the requirement for gravity fed dependent systems, applying an aquatic buffer zone would not be possible. Further, most of the areas within the buffer portions are already disturbed (Colloty, 2024).

The specialist has no objection to the proposed Ocean View Collector Sewer in relation to the proposed layout, assuming all recommendations and mitigations are implemented (Colloty, 2024).

Refer to **Appendix D-2** for the Aquatic Assessment.

### 3.1. Impact: Loss of intact wetland or aquatic faunal habitats that could contain various species of special concern, Critical Biodiversity Areas

**Construction & Operation:** The clearing of aquatic habitat within the construction footprint of the Ocean View Collector Sewer. No protected or species of special concern (fauna & flora) were observed within the wetland areas (Colloty, 2024). Maintenance activities may result in clearance of vegetation, i.e. in areas where vegetation has re-established. This is expected to be limited to areas requiring maintenance and of limited extent. The loss of intact wetland or aquatic faunal habitats would be of a medium negative significance mitigated to a low negative significance.

**No-Go Alternative:** There is no impact associated with the No-Go Alternative as there would be no change in status to the site.

The specialist has recommended the following mitigation and/or management measures (Colloty, 2024):

#### **Construction and Operational Mitigation and Management Measures:**

- The proposed footprint has avoided any aquatic areas, which will then also avoid any listed / protected species.
- The appointed environmental site team should have these areas demarcated to prevent any additional disturbance outside the proposed works areas.

Aquatic Biodiversity Impact: Loss of intact wetland or aquatic faunal habitats				
Phase	Preferred Alternative		No Go Alternative	
	Construction Phase	Operational Phase		
Nature	Clearing of aquatic habitat.	Clearing of aquatic habitat	No change in status	
Status	Negative, Direct	Negative, Direct		
Extent	Site - 1	Site - 1		
Duration	Short Term - 1	Long Term - 3		
Intensity	Medium - 3	Medium - 3		
Reversibility	Reversible - 1	Reversible - 1	No change in status	
Replaceable	Medium - 3	Medium - 3		
Cumulative	Medium - 3	Medium - 3		
Probability	Definite – 4	Definite - 4		
Level of	(1+1+3+1+3+4)*4=52	(1+3+3+1+3+3)*4=56		
significance	Medium -	Medium -	No impact / Neutral	
Level of				
significance	Low -	Low -	No impact / Neutral	
with mitigation				
Confidence	High	High	High	

### 3.2. Impact: Disturbance of aquatic features and habitat fragmentation (aquatic), especially areas linked to Ecological Support Areas

**Construction & Operation:** The reduction in ecosystem corridors (ESA1 in terms of the ECBCP) in the aquatic environment is unlikely based on the proposed development footprint (Colloty, 2024). The disturbance of aquatic features and aquatic habitat fragmentation would be of a medium negative significance mitigated to a low negative significance.

**No-Go Alternative:** There is no impact associated with the No-Go Alternative as there would be no change in status to the site.

The specialist has recommended the following mitigation and/or management measures (Colloty, 2024):

#### **Construction & Maintenance Mitigation and Management Measures:**

- The proposed footprint has been optimised to avoid any High Sensitivity areas.
- No additional mitigation or management measures provided.

Aquatic Biodiversity Impact: Disturbance of aquatic features and habitat fragmentation				
Phase	Preferred Alternative	No Go Alternative		
	Construction Phase	Operational Phase		
Nature	Disturbance of aquatic features	Disturbance of aquatic features	No change in status	
Nature	and habitat fragmentation	and habitat fragmentation	No change in status	
Status	Negative, Direct	Negative, Direct		
Extent	Site - 1	Site - 1		
Duration	Short Term - 1	Long Term - 3		
Intensity	Medium - 3	Medium - 3		
Reversibility	Reversible - 1	Reversible - 1	No change in status	
Replaceable	Medium - 3	Medium - 3		
Cumulative	Low - 2	Low - 2		
Probability	Definite – 4	Definite - 4		
Level of	(1+1+3+1+3+2)*4=44	(1+3+3+1+3+2)*4=52		
significance	Medium -	Medium -	No impact / Neutral	
Level of				
significance	Low -	Low -	No impact / Neutral	
with mitigation				
Confidence	High	High	High	

#### 3.3. Impact: Increase in sedimentation and erosion due to improper stormwater management

**Construction and Operation:** Several areas with disturbed soils coupled to the creation of hard surfaces could increase amount of sedimentation and downstream erosion if not properly managed related to any pipeline excavations (Colloty, 2024). Increase in sedimentation and erosion would be of a medium negative significance mitigated to a low negative significance.

**No-Go Alternative:** There is no impact associated with the No-Go Alternative as there would be no change in status to the site.

The specialist has recommended the following mitigation and/or management measures (Colloty, 2024):

#### **Construction & Maintenance Mitigation and Management Measures:**

 It is assumed that all pipelines will be buried and that this would not have an impact of surface water runoff when backfilled and compacted, which would result in no stormwater management issues.

Aquatic Biodiv	versity Impact: Increase in sedi	mentation and erosion	
Phase	Preferred Alternative		No Go Alternative
	<b>Construction Phase</b>	Operational Phase	
Nature	Increase in sedimentation and erosion due to improper stormwater management	Increase in sedimentation and erosion due to improper stormwater management	No change in status
Status	Negative, Direct	Negative, Direct	
Extent	Site - 1	Site - 1	No change in status
Duration	Short Term - 1	Long Term - 3	140 Change III Status
Intensity	Medium - 3	Medium - 3	

Reversibility	Reversible - 1	Reversible - 1	
Replaceable	Medium - 3	Medium - 3	
Cumulative	Low - 2	Low - 2	
Probability	Definite – 4	Definite - 4	
Level of	(1+1+3+1+3+2)*4=44	(1+3+3+1+3+2)*4=52	
significance	Medium -	Medium -	No impact / Neutral
- 5	Micaidili -	MCGIGITI -	140 impaot/ Hoatiai
Level of significance with mitigation	Low -	Low -	No impact / Neutral

#### 3.4. Impact: Risks on the aquatic environment due to water quality impacts

**Construction & Operation:** This impact is mostly related to the construction related impacts i.e. Accidental spills such as fuels, oils and or chemicals from construction plant or works areas (concrete & cement)and to a larger degree the operational phase related to the leaks from block sewers (Colloty, 2024). Maintenance activities during operation may result in accidental spills such as fuels, oils and or chemicals. This is expected to be limited to areas requiring maintenance and of limited extent. Water quality impacts would be of a medium negative significance mitigated to a low negative significance.

**No-Go Alternative:** It is assumed that the site would continue to degrade due to the poor sanitation services within Oceanview and the impact on water quality from the current sewer network would remain. This would continue into the long-term with a higher intensity that would impact on the regional scale. Little in the way of mitigation could be proposed due to the social needs other than this proposed reticulation upgrade (Colloty, 2024).

The specialist has recommended the following mitigation and/or management measures (Colloty, 2024):

#### **Construction & Maintenance Mitigation and Management Measures:**

- Limit any spills from plant, machines or camps during the construction phase.
- Any use of chemical, cement or paint must be carefully monitored and the necessary spill kits should be in place.
- Provide suitable solid / liquid waste management that is serviced regularly.

#### **Operation Mitigation and Management Measures:**

 Any operations of the sewers, must be in line with the DWS Aid Memoire related to the management of these systems. This will need to form part of the WULA submission, but it has been assumed that this project has been proposed to improve the network and reduce potential water quality issues that are currently present.

Aquatic Biodiversity Impact: Risks on the aquatic environment due to water quality			
Phase	Preferred Alternative		No Go Alternative
	Construction Phase	Operational Phase	
Nature	Risks on the aquatic environment due to water quality impacts	Risks on the aquatic environment due to water quality impacts	Risks on the aquatic environment due to water quality impacts
Status	Negative, Direct	Negative, Direct	Negative, Direct
Extent	Site - 1	Site - 1	Regional - 3
Duration	Short Term - 1	Long Term - 3	Long Term - 3
Intensity	Medium - 3	Medium - 3	Medium - 3
Reversibility	Reversible - 1	Reversible - 1	Reversible - 1
Replaceable	Medium - 3	Medium - 3	Medium - 3
Cumulative	Medium - 3	Medium - 3	Medium - 3

Probability	Definite – 4	Definite - 4	Definite - 4
Level of	(1+1+3+1+3+3)*4=48	(1+3+3+1+3+3)*4=56	(3+3+3+1+3+3)*4=64
significance	Medium -	Medium -	High -
Level of significance with mitigation	Low -	Low -	High -
Confidence	High	High	High

#### 4. ARCHAEOLOGICAL & CULTURAL HERITAGE

The Archaeological Specialist confirms the Low Sensitivity identified in the Screening Tool Report due to:

- No archaeological sites/materials were observed.
- It is unlikely that any significant archaeological remains will be found in situ.
- No known graves or buildings / structures older than 60 years along the proposed pipeline route.

The main impact on possible archaeological sites/remains will be the physical disturbance of the material and its context. Several archaeological assessments have been conducted in the general area of the proposed development. In some of the assessments conducted in close proximity to Dolphin Road only isolated Earlier Stone Age (ESA) and Middle Stone Age (MSA) tools were identified. These finds were not *in situ* and it was not associated with any other cultural material. A letter of recommendation (with conditions) for the exemption of a full Phase 1 Archaeological Impact Assessment was also issued for one of these projects that included an assessment of the route for the existing sewer pipeline along Dolphin Drive as well as the location of the Oceanview Sewer Pumpstation. The majority of the development area does fall within the 5 kilometer radius from the coast that is regarded as an archaeological sensitive zone where archaeological sites / material such as shell middens can be expected. Although it is unlikely that archaeological remains will be found *in situ*, there is always a possibility that human remains and/or other archaeological and historical material may be uncovered during the development (Reichert, 2024).

**Construction:** As a result of the findings of the specialist, a very low negative / no impact is anticipated for construction phase.

**Operation:** No impacts are anticipated.

**No-Go Alternative:** There is no impact associated with the No-Go Alternative as there would be no change in status to the site.

The specialist has recommended the following mitigation or management measures for inclusion in the EMPr (Reichert, 2024):

- Should archaeological and historical material be exposed then all work must cease in the immediate area and it must be reported to the Albany Museum in Makhanda (Tel: 046 622 2312) or to the Eastern Cape Provincial Heritage Resources Authority (Tel.: 043 492 1940/1/2), so that a systematic and professional investigation can be undertaken.
- Sufficient time should be allowed to remove/collect such material.
- The applicant must finance the costs should additional investigations be required.

Refer to **Appendix D-3** for the Archaeological Letter of Recommendation.

#### 5. PALAEONTOLOGY

The Paleontological Specialist confirms the Very High Sensitivity identified in the Screening Tool Report due to the study site is underlain by the Ceres Subgroup of the Bokkeveld Group of the Cape Supergroup that is considered to have a Very High Palaeontological Sensitivity.

The area is underlain by the Ceres Subgroup of the Bokkeveld Group in the Cape Supergroup. The Ceres Subgroup is well known for its invertebrate benthic marine fossils. The area is completely covered in a red muddy soil layer or vegetation. The area is underlain by an extremely jointed and fractured rock, with rock cleavage cutting through bedding planes. This decreases the chance of any fossil finds. Although possible, it is unlikely that any significant fossils will be found, damaged, or lost, during construction of the proposed Ocean View Collector Sewer (Wilken, 2024).

#### Impact: Disturbance or destruction of fossils

**Construction:** The main impact on possible palaeontological sites will be the physical disturbance or destruction of fossils during site clearance. The palaeontological impact during construction would be of low negative significance mitigated to a very low negative significance.

Operation: No impacts are anticipated.

**No-Go Alternative:** There is no impact associated with the No-Go Alternative as there would be no change in status to the site.

The specialist has recommended the following mitigation or management measures for inclusion in the EMPr:

#### **Construction Mitigation and Management Measures:**

Procedure for chance palaeontological finds:

- Workmen and foremen need to be trained in the procedure to follow in instances of accidental discovery of fossil material.
- The Contractor must report any possible fossil material to the ECO or Site Agent.
- All work is to cease immediately in the vicinity of the area where the fossil or fossils have been found.
- The ECO or Site Agent must inform ECPHRA (i.e. The Eastern Cape Provincial Heritage Resources Authority) of the find immediately and to compile a Preliminary Report. This information must include photographs of the findings and GPS co-ordinates.
- Upon receipt of this Preliminary Report, ECPHRA will inform the ECO or site agent whether a rescue excavation or rescue collection by a palaeontologist is necessary.
- Exposed finds must be stabilised where they are unstable and the site capped, e.g., with a plastic sheet or sandbags. This protection should allow for the later excavation of the finds with due scientific care and diligence. ECPHRA can advise on the most appropriate method for stabilisation.
- If the find cannot be stabilised, the fossil may be collected with extreme care by the ECO or the site agent and put aside and protected until ECPHRA advises on further action. Finds collected in this way must be safely and securely stored in tissue paper and an appropriate box. Care must be taken to remove all the fossil material and any breakage of fossil material must be avoided at all costs.
- No work may continue in the vicinity of the find until ECPHRA has indicated, in writing, that it is appropriate to proceed.

Refer to **Appendix D-4** for the Palaeontological Assessment.

Palaeontological Impact: Disturbance or destruction of fossils				
Phase	Preferred Alternative		No Go Alternative	
	Construction Phase	Operational Phase		
Nature	Disturbance or destruction of fossils	N/A	No change in status	
Status	Negative, Direct	N/A		
Extent	Site - 1	N/A	No change in status	
Duration	Permanent - 4	N/A		

Intensity	Medium - 3	N/A	
Reversibility	Irreversible - 4	N/A	
Replaceable	Medium - 3	N/A	
Cumulative	Low - 2	N/A	
Probability	Unlikely - 1	N/A	
Level of	(1+4+3+4+3+2)*1=17	N/A	
significance	Low -	No impact	No impact / Neutral
Level of significance with mitigation	Very Low -	No impact	No impact / Neutral
Confidence	High	High	High

#### 6. SOCIO-ECONOMIC

#### 6.1. Impact: Employment opportunities

**Construction:** The proposed Ocean View Collector Sewer would require a capital amount of approximately R4.4 million. Employment opportunities for skilled workers are approximately 15 positions and 25 positions for un-skilled workers. These employment opportunities would be for a limited duration. The creation of employment opportunities is likely to have a low positive socio-economic impact in the form of increased economic activity, poverty alleviation and favourable socio-economic implications.

**Operation:** Limited employment opportunities will be created during the operational phase and these are estimated at 5 positions for skilled and un-skilled workers. The socio-economic impact during operations would be of a low positive significance.

**No-Go Alternative:** The socio-economic impact of employment opportunities would not occur and would be of a medium negative significance.

**Mitigation Measures:** No additional mitigation measures have been identified for the construction or operational phase.

Phase	Preferred Alternative		No Go Alternative
	Construction Phase	Operational Phase	
Nature	Employment opportunities	Employment opportunities	Employment opportunities are not provided
Status	Positive, Direct	Positive, Direct	Negative, Direct
Extent	Local - 2	Local - 2	Local - 2
Duration	Short Term - 1	Long Term - 3	Long Term - 3
Intensity	Low - 2	Low - 2	Low - 2
Reversibility	Reversible - 1	Reversible - 1	Reversible - 1
Replaceable	Replaceable - 1	Replaceable - 1	Replaceable - 1
Cumulative	Low - 2	Low - 2	Low - 2
Probability	Definite - 4	Highly Probable - 3	Definite - 4
Level of	(2+1+2+1+1+2)*4=36	(2+3+2+1+1+2)*3=33	(2+3+2+1+1+2)*4=44
significance	Low +	Low +	Medium -
Level of significance with mitigation	Low+	Low +	Medium -
Confidence	High	High	High

#### 6.2. Impacts: Contribution to local economy

**Construction:** Although the actual contribution of the proposed Ocean View Collector Sewer to the local Gross Domestic Product (GDP) may be relatively small in real terms (although positive), it will occur at a time when the local economy is still struggling. The impact would be of low positive significance.

**Operation:** No impacts are anticipated.

**No-Go Alternative:** The socio-economic impact of contribution to the local economy would not occur and would be of a low negative significance.

**Mitigation Measures:** No additional mitigation measures have been identified for the construction phase.

Socio-Economic Impact: Contribution to local economy			
Phase	Preferred Alternative		No Go Alternative
	Construction Phase	Operational Phase	
Nature	Contribution to local	N/A	Contribution to local economy
Nature	economy	IV/A	Contribution to local economy
Status	Positive, Direct	N/A	Negative, Direct
Extent	Local - 2	N/A	Local - 2
Duration	Short Term - 1	N/A	Short Term - 1
Intensity	Medium - 3	N/A	Medium - 3
Reversibility	Reversible - 1	N/A	Reversible - 1
Replaceable	Replaceable - 1	N/A	Replaceable - 1
Cumulative	Low - 2	N/A	Low - 2
Probability	Highly Probable - 3	N/A	Highly Probable - 3
Level of	(2+1+3+1+1+2)*3=30	N/A	(2+1+3+1+1+2)*3=30
significance	Low +	No impact	Low -
Level of			
significance	Low +	No impact	Low -
with mitigation			
Confidence	High	High	High

#### Indirect impacts:

#### 7. AIR QUALITY

#### 7.1 Impact: Dust pollution

**Construction:** Dust pollution relates to the construction activities on-site for the site preparation, associated earth works and from soil stockpiles or bare ground. This will be of temporary duration, and large volumes of dust are not expected. The impact would be of low negative significance.

**Operation:** Dust impacts are anticipated during the operational phase for when maintenance activities are undertaken which require excavations and the movement of soils. The impact would be of very low negative significance.

**No-Go Alternative:** There is no impact associated with the No-Go Alternative as there would be no change in status to the site.

#### **Construction and Operation Mitigation and Management Measures:**

• On-going implementation of dust suppression and control measures on any dust generating surface during construction and maintenance activities. Potable water is not to be used for dust suppression.

Air Quality Impac	t: Dust pollution		
Phase	Preferred Alternative		No Go Alternative
	Construction Phase	Operational Phase	
Nature	Dust generated from	Dust generated from	No change in status
Nature	clearing and earthworks	clearing and earthworks	No change in status
Status	Negative, Indirect	Negative, Indirect	
Extent	Local - 2	Site - 1	
Duration	Short Term - 1	Short Term - 1	
Intensity	Medium - 3	Low - 2	
Reversibility	Reversible - 1	Reversible - 1	No change in status
Replaceable	Replaceable - 1	Replaceable - 1	
Cumulative	Low - 2	Low - 2	
Probability	Highly Probable - 3	Probable - 2	
Level of	(2+1+3+1+1+2)*3=30	(1+1+2+1+1+2)*2=16	
significance	Low -	Very Low -	No impact / Neutral
Level of			
significance	Low -	Very Low -	No impact / Neutral
with mitigation			
Confidence	High	High	High

#### 8. NOISE

#### Impact: Noise pollution

**Construction:** Noise creation from construction workers and vehicles may impact on surrounding neighbours. This includes noise emanating from construction machinery, power tools and compressors, construction vehicles and general construction activity. This will be temporary, i.e. occurring only during construction. The impact would be of low negative significance.

**Operation:** Noise impacts are anticipated during the operational phase for when maintenance activities are undertaken which require construction machinery and vehicles. The impact would be of very low negative significance.

**No-Go Alternative:** There is no impact associated with the No-Go Alternative as there would be no change in status to the site.

#### **Construction and Operation Mitigation and Management Measures:**

- All construction vehicles and equipment must be in sound working order with the prescribed mufflers and silencers.
- Construction and maintenance work to be undertaken as per the Kouga Local Municipality Bylaws.

Air Quality Impa	ct: Noise pollution		
Phase	Preferred Alternative		No Go Alternative
	Construction Phase	Operational Phase	
Nature	Noise generated from construction works and equipment	Noise generated from maintenance works	No change in status
Status	Negative, Indirect	Negative, Indirect	
Extent	Local - 2	Site - 1	
Duration	Short Term - 1	Short Term - 1	No change in status
Intensity	Medium - 3	Low - 2	No change in status
Reversibility	Reversible - 1	Reversible - 1	
Replaceable	Replaceable - 1	Replaceable - 1	

Cumulative	Low - 2	Low - 2	
Probability	Highly Probable - 3	Probable - 2	
Level of	(2+1+3+1+1+2)*3=30	(1+1+2+1+1+2)*2=16	
significance	Low -	Very Low -	No impact / Neutral
Level of significance with mitigation	Low -	Very Low -	No impact / Neutral
Confidence	High	High	High

#### 9. TRAFFIC IMPACTS

#### Impact: Increase in traffic and deterioration of pavement conditions

Potential traffic impacts relate primarily to the anticipated increase in vehicle usage of roads and to the possible deterioration of the pavement conditions of these roads, by heavy vehicles. This includes material delivery vehicles and vehicles that will travel daily to and from the site.

**Construction:** During the construction phase a higher number of vehicles are anticipated to use the surrounding road network; however it is not expected that the traffic volumes will significantly increase over this period. Construction trucks and vehicles are not expected to significantly impact the pavement conditions. The related traffic impacts would be temporary, i.e. limited to the construction phase, and of low negative significance.

**Operations:** No traffic impacts are anticipated during the operational phase.

**No-Go Alternative:** There is no impact associated with the No-Go Alternative as there would be no change in status to the site.

#### **Construction Mitigation and Management Measures:**

- Construction vehicles must adhere to the speed limits.
- Signage is to be displayed regarding construction activities.

Traffic Impact Phase	Preferred Alternative		No Go Alternative
	Construction Phase	Operational Phase	
Nature	Additional traffic volumes & road pavement conditions	N/A	No change in status
Status	Negative (-), Indirect	N/A	No change in status
Extent	Regional - 3	N/A	
Duration	Short term - 1	N/A	
Intensity	Low - 2	N/A	
Reversibility	Reversible - 1	N/A	
Replaceable	Replaceable - 1	N/A	
Cumulative	Low - 2	N/A	
Probability	Probable - 2	N/A	
Level of	(3+1+2+1+1+2)*2=20	N/A	
significance	Low -	No impact	No impact / Neutral
Level of significance with mitigation	Low -	No impact	No impact / Neutral
Confidence	Medium	Medium	Medium

#### 10. WASTE MANAGEMENT IMPACTS

**Construction:** Impacts relating to ineffective waste management procedures may lead to the dumping of building rubble, littering and pollution of the surrounding areas as well as unsanitary (toilet) conditions. Construction waste will increase the amount of waste disposed to landfill. The impact would be of low negative significance mitigated to a very low negative significance.

**Operation:** No solid waste is anticipated during the operations.

**No-Go Alternative:** There is no impact associated with the No-Go Alternative as there would be no change in status to the site.

#### **Construction Mitigation and Management Measures:**

- Good housekeeping to be undertaken at all times.
- No illegal dumping or burning of waste allowed. Waste is not to be buried.
- Awareness raising to be undertaken with the construction workers regarding health and environmental impacts from illegal dumping.
- Waste bins are to be located at the construction office. Bins are to have secured lids to prevent waste from being blown into the surrounding area and to prevent animals scavenging in the bins.
- Domestic and general construction waste to be disposed of at a licensed landfill site, unless this waste can be recycled or reused. The Contractor may not utilise the municipal waste collection services. Proof of disposal must be kept at the site office by the Contractor.
- Chemical toilet facilities to be provided at construction areas and secured to the ground, and to be cleaned at least weekly.
- No hazardous waste material to be disposed of as general waste. Hazardous waste to be stored separately in impermeable (i.e. leak proof) containers, and if possible sent for recycling.
- Recycling measures to be implemented for paper, plastic and metals.

Phase	Preferred Alternative		No Go Alternative	
	Construction Phase	Operational Phase		
Nature	Ineffective waste management procedures may lead to the dumping of building rubble, littering and pollution	N/A	No change in status	
Status	Negative (-), Indirect	N/A	No change in status	
Extent	Regional - 3	N/A		
Duration	Short term - 1	N/A		
Intensity	Low - 2	N/A		
Reversibility	Reversible - 1	N/A		
Replaceable	Replaceable - 1	N/A		
Cumulative	Low - 2	N/A		
Probability	Probable - 2	N/A		
Level of	(3+1+2+1+1+2)*2=20	N/A		
significance	Low -	No impact	No impact / Neutral	
Level of significance with mitigation	Very Low -	No impact	No impact / Neutral	
Confidence	Medium	Medium	Medium	

#### 11. HEALTH, SAFETY AND SECURITY IMPACTS

Construction: Health related impacts anticipated for the construction phase relates to damage to the existing sewer pipelines and/or working adjacent to areas where failures have occurred on the sewer pipelines resulting in exposure to sewage and contaminated soils. Safety and security impacts refer to the increased risks of veld fires in the open space area due to construction worker practices (e.g. smoking, hot work on high fire danger days and heating with fires), the increased risk of vehicular and pedestrian accidents because of construction vehicle movements, general risks related to construction activities (e.g. excavations) as well as the perceived increase in crime because of outsiders being in the area. The health, safety and security impacts during the construction phase are considered to be of a low negative significance without mitigation and changes to a very low negative significance with mitigation.

**Operations:** Health risks from sewage spillages will be reduced with the new Ocean View Collector Sewer and no overflows would be experienced from flow restraints. No impacts on safety and security area are anticipated. The impact related to health during operations would be of medium positive significance.

**No-Go Alternative:** The existing sewer main will remain in use and failures on the sewer main will continue. Sewage spillages would continue to impact on the local community. The associated health risks / impact would be of a medium negative significance.

#### **Construction Mitigation and Management Measures:**

- Existing services and sewage connections to be identified by the contractor prior to excavation for the pipeline.
- Firefighting equipment (according to the fire risk) to be available on site at all times.
- No "hot work" is to be undertaken on days where the Fire Danger Index is "orange" or "red". Hot work is any work that involves burning, welding, cutting, brazing, soldering, grinding, using fire- or spark-producing tools, or other work that produces a source of ignition.
- The construction area must be demarcated and access controlled for the duration of the construction period.
- Signs must be erected at strategic locations throughout the construction areas, warning the public and site visitors about the hazards around the construction site and the presence of heavy vehicles.
- Compliance with the relevant health and safety procedures and regulations during construction.

#### **Operational Mitigation and Management Measures:**

- Sewer rising main to be monitored for any leaks.
- Leaks or pipe bursts to be fixed immediately.

Health, Safety and Security Impact				
Phase	e Preferred Alternative		No Go Alternative	
	Construction Phase	Operational Phase		
	Health, safety and security	Health risks reduced from	Health risks from sewage spillages on	
Nature	risks from construction	sewage spillages on	surrounding environment	
	activities	surrounding environment	Surrounding environment	
Status	Negative (-), Indirect	Positive (+), Indirect	Negative (-), Indirect	
Extent	Local – 2	Local – 2	Local – 2	
Duration	Short term - 1	Long term - 3	Long term - 3	
Intensity	Medium - 3	Medium - 3	Medium - 3	
Reversibility	Low - 2	Low - 2	Low - 2	
Replaceable	Low - 2	Low - 2	Low - 2	
Cumulative	Very Low - 1	Low - 2	Low - 2	
Probability	Probable - 2	Highly Probable - 3	Highly Probable - 3	
Level of	(2+1+3+2+2+1)*2=22	(2+3+3+2+2+2)*3=42	(2+3+3+2+2+2)*3=42	
significance	Low -	Medium +	Medium -	

Level of significance with mitigation	Very Low -	Medium +	Medium -
Confidence	Medium	Medium	Medium

#### Cumulative impacts:

Cumulative impacts have been taken into consideration in the above impact assessments.

#### 3. CLIMATE CHANGE ASSESSMENT

Climate change issues must be considered as part of the EIA process Please consider the Climate Change guideline. EAP must determine:

- a)The potential impact of climate change on society and the economy, whether the impact is negative or positive, considering that society needs to be at the centre of the proposed development;
- b)The potential alternatives of the proposed development, alternatives that will have less impact on climate change (environment and generation of waste included), the society and economy;
- c) whether, and to what extent, the proposed development will result in the release of greenhouse gas (GHG) emissions;
- d)whether the proposed development is necessary to achieve long term decarbonisation goals;
- e)the impact of the development on social, economic, natural and built environment that are crucial for climate change, adaptation and resilience;
- f) the projected impact of climate change on proposed development; and surrounding environment, and implications for the development.
- g)Explanation of how the impacts is likely to be exacerbated or minimised as result of climate change and what measures are likely to be implemented to accommodate and manage (adapt to) the anticipated worst scenario where applicable h) whether, and to what extent, the impacts identified in (a) -(g) can be mitigated.

Jeffreys Bay is a coastal town and subjected to increased storm surges and would be at a potential risk to sea level increases. The proposed Ocean View Collector Sewer is not located in close proximity to a coastal area and is unlikely that risks associated with storm surges or sea level increase will impact on the proposed Ocean View Collector Sewer.

The proposed Ocean View Collector Sewer forms part of the Kouga Local Municipality service delivery, where the municipality is required to provide wastewater / sewer collection systems to the Jeffreys Bay society. The proposed Ocean View Collector Sewer will reduce the failures on the existing pipelines and will contribute positively to the society.

Raw sewage spills from the existing sewer pipelines may contribute to greenhouse gas emissions (e.g. methane, carbon dioxide) however this is likely to be of low amounts. Climate change could result in additional flows in the sewer, either from increased rainfall entering the system or from additional water use due to higher temperatures. The proposed Ocean View Collector Sewer will cater for flow capacities thereby limiting or reducing raw sewage spills and will convey the wastewater to a central point for treatment.

The proposed Ocean View Collector Sewer will have an overall positive impact, no additional mitigation measures are proposed in relation to the climate change impact.

#### 4. ENVIRONMENTAL IMPACT STATEMENT

Taking the assessment of potential impacts into account, please provide an environmental impact statement that summarises the impact that the proposed activity and its alternatives may have on the environment after the management and mitigation of impacts have been taken into account, with specific reference to types of impact, duration of impacts, likelihood of potential impacts actually occurring and the significance of impacts.

#### **Alternative A (preferred alternative)**

The proposed development footprint of the proposed Ocean View Collector Sewer from Dolphin Drive to the Ocean View Collector Sewer Pumpstation is considered suitable for development.

Terrestrial Biodiversity and Plant Species: The proposed Ocean View Collector Sewer is located within a Terrestrial Critical Biodiversity Area, namely an Ecological Support Area (ESA1), the area is largely transformed. A small section of the proposed Ocean View Collector Sewer, nearby the pump station, will be in proximity to a remnant but degraded pocket of Humansdorp Shale Renosterveld (Endangered Ecosystem), but any loss is likely to be negligible as the route follows a gravel track. No Protected, Endangered or Critically Endangered flora species were confirmed to be present nor are known to be present in the affected area. Eight (8) alien invasive and other weed species were noted within the site and surrounding area. Of these, six (6) species were noted as a listed alien invasive species, either as a Category 1b or Category 2 (Pote, 2024). The following impacts would be of a low negative significance mitigated to a very low negative significance: Loss of natural vegetation, Loss of plant (flora) species of conservation concern, Spread of alien and invasive plant species, Erosion and Disturbance to ecological processes.

Animal Species: The site is of low sensitivity due to the low suitability of the project area for animal Species of Conservation Concern (SCC) due to significant anthropogenic threats. Although Lanner falcons (*Falco biarmicus*) may be present, there are no suitable breeding sites for them within the project area, and their use of the area is likely limited to foraging. Given the small size of the project area and the extent of anthropogenic threats, it is unlikely that the project area holds significant importance for Lanner falcons. No amphibian, reptile, or mammal SCC is likely to occur in the project area due to unsuitable habitats. No alien invasive animal species listed in terms of the NEMBA are likely to occur in the project area. Potential impacts from the proposed project on animal SCC are considered negligible (Landman, 2024).

Aquatic Biodiversity: The proposed Ocean View Collector Sewer is located near localised watercourses which have no direct connection to any mainstem systems or estuaries within the K90G Kabeljous quaternary catchment. The wetland areas are fragmented, contain higher levels of solid waste and grazed frequently; resulting in a reduction in wetland species diversity (plants). The Present Ecological Score (PES) is Class D -Largely modified and Ecological Importance and Sensitivity is Low. There are no Strategic Water Source Areas mapped near the site. The southwestern end of the sewer alignment is located within a Wetland Cluster. The Eastern Cape Biodiversity Conservation Plan (ECBCP, 2019) indicates the site is located within an Aquatic Ecological Support Area (ESA 1). No endemic, conservation worthy species or species of special concern (Listed or Protected) were observed or have been recorded within the proposed route areas. The proposed Ocean View Collector Sewer is located outside riverine / wetland areas and are currently within highly transformed areas. Due to the nature of the project and the requirement for gravity fed dependent systems, applying an aquatic buffer zone would not be possible. Further, most of the areas within the buffer portions are already disturbed (Colloty, 2024). The following impacts would be of a medium negative significance mitigated to a low negative significance: Loss of intact wetland or aquatic faunal habitats that could contain various species of special concern, Critical Biodiversity Areas, Disturbance of aquatic features and habitat fragmentation (aquatic), especially areas linked to Ecological Support Areas, Increase in sedimentation and erosion due to improper stormwater management and Risks on the aquatic environment due to water quality.

Archaeological and Heritage: The site is of a low sensitivity in terms of archaeological and heritage aspects as no archaeological sites / materials were observed on site. The majority of the development area does fall within the 5 kilometer radius from the coast that is regarded as an archaeological sensitive zone. Although it is unlikely that archaeological remains will be found in situ, there is always a possibility that human remains and/or other archaeological and historical material may be uncovered during the development. No known graves or buildings / structures older than 60 years were observed along the route. A very low negative / no impact is anticipated for construction phase and no impact during the operational phase.

Palaeontology: In terms of palaeontology the site is of very high sensitivity due to the site underlain by the

Ceres Subgroup of the Bokkeveld Group of the Cape Supergroup. The area is completely covered in a red muddy soil layer or vegetation. The area is underlain by an extremely jointed and fractured rock, with rock cleavage cutting through bedding planes. This decreases the chance of any fossil finds. Although possible, it is unlikely that any significant fossils will be found, damaged, or lost, during construction of the proposed Ocean View Collector Sewer (Wilken, 2024). The main impact on possible palaeontological sites will be the physical disturbance or destruction of fossils during site clearance and construction. The palaeontological impact during construction would be of low negative significance mitigated to a very low negative significance. No palaeontology impacts are anticipated during the operational phase.

**Socio-Economic:** The proposed Ocean View Collector Sewer would require a capital amount of approximately R4.4 million. Employment opportunities for skilled workers are approximately 15 positions and 25 positions for un-skilled workers. These employment opportunities would be for a limited duration. The creation of employment opportunities during construction is likely to have a low positive socio-economic impact in the form of increased economic activity, poverty alleviation and favourable socio-economic implications. Limited employment opportunities will be created during the operational phase and these are estimated at 5 positions for skilled and un-skilled workers. The socio-economic impact during operations would be of a low positive significance. Although the actual contribution of the proposed Ocean View Collector Sewer to the local Gross Domestic Product (GDP) may be relatively small in real terms (although positive), it will occur at a time when the local economy is still struggling. The impact to the local economy would be of low positive significance.

**Air quality:** Dust pollution relates to the construction activities on-site for the site preparation, associated earth works and from soil stockpiles or bare ground. This will be of temporary duration, and large volumes of dust are not expected. The impact of dust pollution during construction would be of low negative significance. Dust impacts are anticipated during the operational phase for when maintenance activities are undertaken which require excavations and the movement of soils. The impact of dust pollution during maintenance activities would be of very low negative significance.

**Noise:** Noise pollution impacts relates to noise creation from construction workers and vehicles which may impact on surrounding neighbours. This includes noise emanating from construction machinery, power tools and compressors, construction vehicles and general construction activity. Noise pollution during construction will be temporary, i.e. occurring only during construction and would be of low negative significance. Noise impacts are anticipated during the operational phase for when maintenance activities are undertaken which require construction machinery and vehicles. The impact would be temporary and of very low negative significance.

**Traffic:** During the construction phase a higher number of vehicles are anticipated to use the surrounding road network; however it is not expected that the traffic volumes will significantly increase over this period. Construction trucks and vehicles are not expected to significantly impact the pavement conditions. The related traffic impacts would be temporary, i.e. limited to the construction phase, and of low negative significance. No traffic impacts are anticipated during the operational phase.

**Waste management:** Impacts relating to ineffective waste management procedures may lead to the dumping of building rubble, littering and pollution of the surrounding areas as well as unsanitary (toilet) conditions. Construction waste will increase the amount of waste disposed to landfill. The impact would be of low negative significance mitigated to a very low negative significance. No solid waste is anticipated during the operations.

Health, safety and security: Health related impacts anticipated for the construction phase relates to damage to the existing sewer pipelines and/or working adjacent to areas where failures have occurred on the sewer pipelines resulting in exposure to sewage and contaminated soils. Safety and security impacts refer to the increased risks of veld fires in the open space area due to construction worker practices (e.g. smoking, hot work on high fire danger days and heating with fires), the increased risk of vehicular and pedestrian accidents because of construction vehicle movements, general risks related to construction activities (e.g. excavations) as well as the perceived increase in crime because of outsiders being in the area. The health, safety and security impacts during the construction phase are considered to be of a low negative significance without mitigation and

changes to a very low negative significance with mitigation. During the operational phase, health risks from sewage spillages will be reduced with the new Ocean View Collector Sewer and no overflows would be experienced from flow restraints. No impacts on safety and security area are anticipated. The impact related to health during operations would be of medium positive significance.

#### NO-GO ALTERNATIVE (COMPULSORY)

The possibility of further encroachment by alien and invasive plant species may continue, which may further degrade the terrestrial environment. This impact would be of long term duration and of low negative significance.

It is assumed that the site would continue to degrade due to the poor sanitation services within Oceanview and the impact on water quality from the current sewer network would remain. This would continue into the long-term with a higher intensity that would impact on the regional scale. Little in the way of mitigation could be proposed due to the social needs other than this proposed reticulation upgrade. The aquatic biodiversity impact relating to risks on the aquatic environment due to water quality would be of a high negative significance.

The socio-economic impact of employment opportunities would not occur and would be of a medium negative significance. The contribution to the local economy would not occur and would be of a low negative significance.

The existing sewer main will remain in use and failures on the sewer main will continue. Sewage spillages would continue to impact on the local community. The associated health risks / impact would be of a medium negative significance.

The following presents a summary of the site sensitivity and potential impacts identified:

Impact	Sensitivity	Construction	Operational	No-Go Alternative
	Verification	With Mitigation		
Agriculture	Low	No Impact	No Impact	No Impact
Animal Species	Low	Very Low -	No Impact	No Impact
Aquatic Biodiversity	Low			
Loss of intact wetland or aquatic faunal habitats		Low -	Low -	No Impact
Disturbance of aquatic features and habitat fragmentation		Low -	Low -	No Impact
Increase in sedimentation and erosion		Low -	Low -	No Impact
Water quality impacts		Low -	Low -	High -
Archaeological & Cultural Heritage	Low	Very Low -	No Impact	No Impact
Civil Aviation	Low	No Impact	No Impact	No Impact
Defence	Low	No Impact	No Impact	No Impact
Palaeontology	Very High	Very Low -	No Impact	No Impact
Plant Species - Loss of plant species of conservation concern	Low	Very Low -	Very Low -	No Impact
Terrestrial Biodiversity	Low			

Impact	Sensitivity	Construction	Operational	No-Go Alternative
	Verification	With M	litigation	
Loss of vegetation		Very Low -	Very Low -	No Impact
Spread of alien and invasive plant species		Very Low -	Very Low -	Low -
Erosion		Very Low -	Very Low -	No Impact
Disturbance to ecological processes		Very Low -	Very Low -	No Impact
Socio-Economic: Employment opportunities		Low +	Low +	Medium -
Socio-Economic: Contribution to local economy		Low +	No Impact	Low -
Air Quality		Low -	Very Low -	No Impact
Noise		Low -	Very Low -	No Impact
Traffic		Low -	No Impact	No Impact
Waste		Very Low -	No Impact	No Impact
Health, Safety & Security		Very Low -	Medium +	Medium -

#### SECTION E. RECOMMENDATIONS OF PRACTITIONER

Is the information contained in this report and the documentation attached hereto sufficient to make a decision in respect of the activity applied for (in the view of the environmental assessment practitioner)?

YES ✓	NO
YES ✓	NO

Is an EMPr attached?

The EMPr must be attached as Appendix F.

If "NO", indicate the aspects that should be assessed further as part of a Scoping and EIA process before a decision can be made (list the aspects that require further assessment):

N/A

If "YES", please list any recommended conditions, including mitigation measures that should be considered for inclusion in any authorisation that may be granted by the competent authority in respect of the application:

Validity for the construction is recommended for 5 years.

The EAP is of the opinion that the environmental assessment and associated public participation for the proposed Ocean View Collector Sewer fulfils the process requirements of the NEMA, specifically the EIA Regulations of 2014, as amended, and the principles of Section 2 of the NEMA.

The assessment of the issues identified indicated that the significance of potential impacts associated with the proposed Ocean View Collector Sewer are of a medium / low negative significance and can be mitigated to low / very low negative significance. Positive impacts relate to employment opportunities, economic contributions and reduction to health risks from sewage spills.

The EAP is of the opinion that the proposed Ocean View Collector Sewer should be authorized, as per the Preferred Alternative, with following conditions:

- 1) All mitigation measures in the Basic Assessment Report have been included in the Environmental and Maintenance Management Programme (EMPr, Appendix F). The EMPr to be implemented.
- 2) Completion of the construction to be within 5 years.

#### **SECTION F: APPENDICES**

The following appendixes must be attached as appropriate:
Appendix A: Site plan(s)
Appendix B: Photographs
Appendix C: Facility illustration(s)
Appendix D: Specialist reports
Appendix E: Comments and responses report
Appendix F: Environmental Management Programme (EMPr)
Appendix G: Other information

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