



Eco Route

ENVIRONMENTAL CONSULTANCY
REGISTRATION NO. 1998/031976/23

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Draft Basic Assessment Report

FOR

Proposed Construction of a Boundary Wall and Storage Area with Viewing Deck, Erf 3132, St Francis Bay, Eastern Cape

DEDEAT Reference: EC08/C/LN1/19A/11-2024

*In terms of the
National Environmental Management Act, 1998 (Act No. 107 of 1998),
and the Environmental Impact Assessment Regulations, 2014 (as amended).*



PREPARED FOR:

BIG ROCK VENTURES PROPRIETARY LIMITED (MR. PETER VOGEL)

PREPARED BY:

ECO ROUTE ENVIRONMENTAL CONSULTANCY

DEPARTMENT REF:

TBC

AUTHOR:

SAMANTHA TEELUCKDHARI (EAPASA REG 2023/6443) – ASSISTED BY
LIZELLE GENADE (PENDING CANDIDATE EAP)

DATE:

April 2024

ECO-ROUTE ENVIRONMENTAL CONSULTANCY



REGISTRATION NO. 1998/031976/23

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STATEMENT OF INDEPENDENCE

I, **Samantha Teeluckdhari**, of Eco Route Environmental Consultancy, in terms of section 33 of the NEMA, 1998 (Act No. 107 of 1998), as amended, hereby declare that I provide services as an independent Environmental Assessment Practitioner (EAPASA Reg: **2023/6443**) and receive remuneration for services rendered for undertaking tasks required in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), and the Environmental Impact Assessment Regulations, 2014 (as amended). I have no financial or other vested interest in the project.

EAP SIGNATURE: S. Teeluckdhari

BASIC ASSESSMENT REPORT

(For official use only)

File Reference Number:

NEAS Number:

Date Received:

| |
|--|
| |
| |
| |

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:

1. 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.
9. 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.
10. 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 X | <input type="checkbox"/> |
|-------|--------------------------|

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

Eco Route Environmental Consultancy were appointed by the applicant, Peter Vogel as the independent Environmental Assessment Practitioner to conduct a Basic Assessment application process for the proposed development of Erf 3132 in St Francis Bay.

Erf 3132 is located between Lovemore Crescent and Harbour Road, Eastern Cape – GPS Coordinates: 34°10'13.67"S 24°49'57.27"E. Approximately half of the property (eastern side) has been surveyed as being within 100 meters of the High-Water Mark of the Sea.

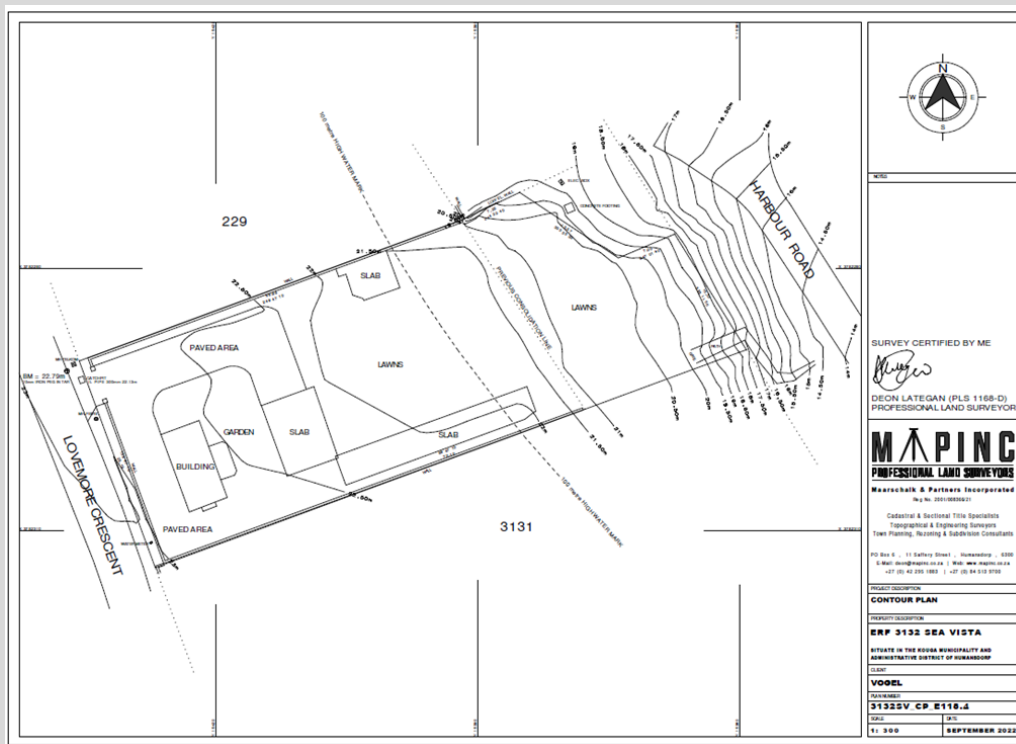
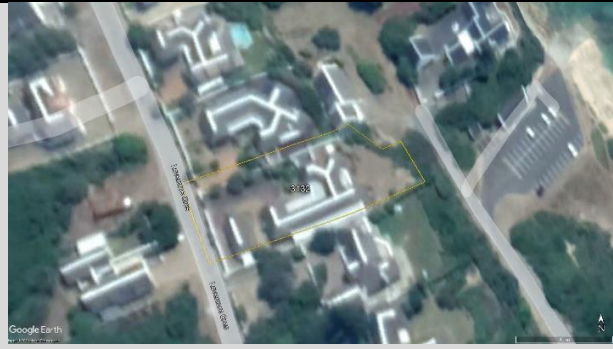


Figure 1: Survey showing part of the property within 100m of the HWM

History of the property: Most of the original house burned down in a fire from some years ago (likely December 2018 as per historic Google Imagery – figure 3 below) and was demolished to the slabs with the only building remaining being the cottage near the entrance way by Lovemore Crescent.



November 2018



December 2018

The proposed development will entail the construction of:

1. A boundary wall to join the existing one along the lateral edges and on the Harbour Road side. The wall will be 65m in length with a strip foundation of 600mm wide and 230mm deep.
2. A storage area measuring 7m wide x 5m long x 2,4m high with a viewing deck above.

The land underneath the deck is proposed to be excavated to make a storage space for water sports equipment, providing the owner easy access to get to the ocean with their necessary equipment using the existing pathway from the property leading onto Harbour Road.

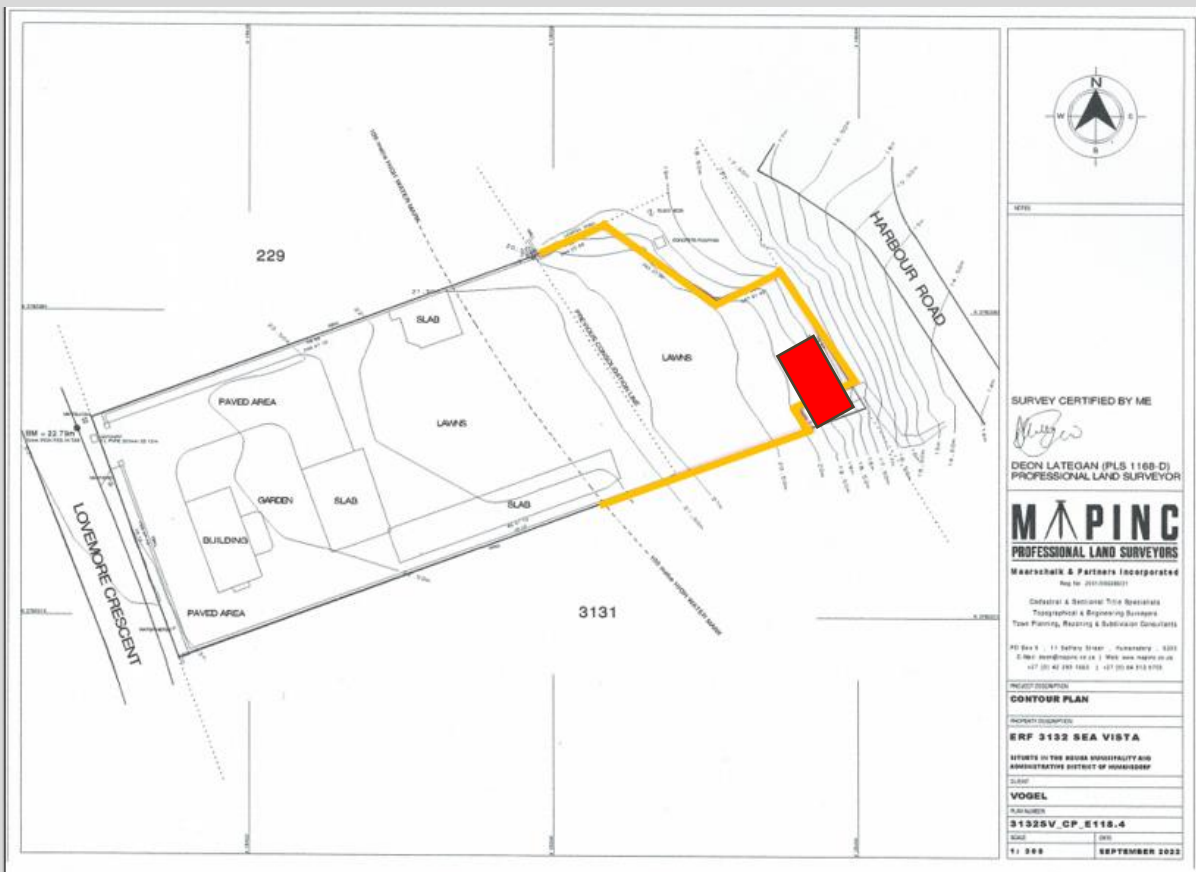


Figure 2: Remainder of boundary wall to be constructed (highlighted in orange) and proposed deck with storage area (highlighted in red).

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.

A) Property and site alternatives

The preferred site/A1 is located at GPS co-ordinates: 34°10'13.67"S 24°49'57.27"E. There are no other property or site alternatives being assessed as Erf 3132 is zoned for residential use and the applicant is the landowner.

B) Activity alternatives

There are no activity alternatives. The EIA was commissioned for the sole purpose of investigating the construction of a boundary wall and storage area.

C) Design or layout alternatives

There are no design or layout alternatives for the proposed wall extension as it will be constructed to match the existing boundary wall.

Preferred alternative A1: The preferred alternative will incorporate the use of green building methods. The deck and storage area is in an area of least disturbance and best suited for ease of access to the ocean for the purposes it is being constructed for – water sports equipment storage.

D) Technology alternatives

Energy efficient solutions -

Preferred alternative A1: energy efficient technology for lighting and other electrical purposes will be incorporated into the activity.

Alternative A2: this alternative would not make use of any green building methods in the design and function of the proposed activity, including the use of energy efficient technology for lighting and other electrical purposes. Therefore, this alternative does not meet the goals of sustainable development and is not supported by the EAP.

E) Operational alternatives

There are no operational alternatives. The EIA was commissioned for the sole purpose of investigating the construction of a boundary wall and a storage area with a deck. In addition, the property is zoned for residential development only.

F) No-go option

The no-go option would result in the status quo. This option is not feasible as this approach would deny the applicant his lawful right to develop on this property. The boundary wall in particular is necessary to safeguard the property and occupants against intruders.

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 ¹ (preferred or only site alternative) | 34° | 10'13.67" | 24° | 49'57.27" |
| Alternative S2 (if any) | 0 | ' | 0 | ' |
| Alternative S3 (if any) | 0 | ' | 0 | ' |

In the case of linear activities:

| Alternative: | Latitude (S): | | Longitude (E): | |
|--|---------------|---|----------------|---|
| Alternative S1 (preferred or only route alternative) | | | | |
| • Starting point of the activity | 0 | ' | 0 | ' |
| • Middle point of the activity | 0 | ' | 0 | ' |
| • End point of the activity | 0 | ' | 0 | ' |
| Alternative S2 (if any) | | | | |
| • Starting point of the activity | 0 | ' | 0 | ' |
| • Middle point of the activity | 0 | ' | 0 | ' |
| • End point of the activity | 0 | ' | 0 | ' |
| Alternative S3 (if any) | | | | |
| • Starting point of the activity | 0 | ' | 0 | ' |
| • Middle point of the activity | 0 | ' | 0 | ' |
| • End point of the activity | 0 | ' | 0 | ' |

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.

4. PHYSICAL SIZE OF THE ACTIVITY

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

| Alternative: | Size of the activity: |
|--|-----------------------|
| Alternative A1 ² (preferred activity alternative) | 74m ² |
| Alternative A2 (if any) | m ² |
| Alternative A3 (if any) | m ² |

or, for linear activities:

¹ "Alternative S.." refer to site alternatives.

² "Alternative A.." refer to activity, process, technology or other alternatives.

Alternative:

Alternative A1 (preferred activity alternative)

Alternative A2 (if any)

Alternative A3 (if any)

Length of the activity:

| |
|---|
| m |
| m |
| m |

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

Alternative:

Alternative A1 (preferred activity alternative)

Alternative A2 (if any)

Alternative A3 (if any)

Size of the site/servitude:

| |
|----------------|
| m ² |
| m ² |
| m ² |

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

Describe the type of access road planned:

N/A

| | |
|-----|-------------------------------------|
| YES | <input type="checkbox"/> |
| X | <input checked="" type="checkbox"/> |
| m | |

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.

6. 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:

- 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;
- 6.5 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.

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.

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.

9. ACTIVITY MOTIVATION

9(a) Socio-economic value of the activity

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

R750 000.00

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

R0

Will the activity contribute to service infrastructure?

NO

Is the activity a public amenity?

NO

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

Unknown at this stage

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

Approx.
R100 000.00

What percentage of this will accrue to previously disadvantaged individuals?

80%

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

N/A

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

| |
|-----|
| N/A |
| N/A |

What percentage of this will accrue to previously disadvantaged individuals?

9(b) Need and desirability of the activity

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

According to Appendix 1, section 3(1) A basic assessment report must contain the information that is necessary for the competent authority to consider and come to a decision on the application, and must include— (f) a motivation for the need and desirability for the proposed development including the need and desirability of the activity in the context of the preferred location.

Erf 3132 is zoned as Residential, and the proposed activities are permitted in terms of the existing land use rights and municipal zoning. The property does not occur within a CBA or ESA.

Due to the property being developed, there are no vegetation Species of Conservation Concern present; however, there were three protected plant species, in low abundance, identified on the site. The identification of these three protected plant species will result in a local low negative terrestrial biodiversity impact due to the development; however, this impact can be mitigated by the careful conservation of these plants by translocating and replanting elsewhere on the property prior to construction activities. Permits will be required from DEDEAT prior to translocating practices.

A soil test was undertaken by Outeniqua Geotechnical Services in September 2023 and the site was considered suitable for the proposed development with conventional construction methods but there were some minor geotechnical constraints, mainly compressible sands, which require consideration by the structural engineer. Preliminary recommendations were provided but all information should be **verified on site during construction**.

This development will create temporary employment during the construction phase of the project. A boundary wall to join the existing one along the lateral edges and on the Harbour Roadside will improve property safety and protection from illegal access and possible vagrants, creating a safer environment for the owners and users of the property.

A storage area underneath the deck is proposed to make a storage space for water sports equipment, providing the owner easy access to get to the ocean with their necessary equipment using the existing pathway from the property leading onto Harbour Road.

All specialist input provided is in favour of the construction activity.

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

N/A

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

N/A

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: |
|---|--|------------------------------------|
| Constitution of the Republic of South Africa. (Act 108 of 1996) | All State and Provincial Departments as well as Local Authorities that have been identified as relevant Competent Authorities. | Relevant Consideration |
| Environmental Conservation Act (Act 73 of 1989) | Department of Economic Development, Environmental Affairs & Tourism | Relevant Consideration |
| National Environmental Management Act (Act 107 of 1998) | Department of Economic Development, Environmental Affairs & Tourism | Authorization |
| National Environmental Management: Biodiversity Act (Act 10 of 2004) | Department of Economic Development, Environmental Affairs & Tourism | Relevant Consideration |
| National Environmental Management: Integrated Coastal Management Act (Act 24 of 2008) | Department of Forestry, Fisheries, and the Environment (DFFE), Branch Oceans & Coasts (O&C)/ Department of Economic Development, Environmental Affairs & Tourism | Comment/ Relevant Consideration |
| National Environmental Management: Protected Areas Act (Act 57 of 2003) | Department of Economic Development, Environmental Affairs & Tourism | Relevant Consideration |
| National Water Act (Act 36 of 1998) | Department of Water and Sanitation | Relevant Consideration |
| Conservation Of Agricultural Resources Act (Act 43 of 1983) | Department of Agriculture, Forestry and Fisheries | Relevant Consideration |
| National Heritage Resources Act (Act 25 of 1999) | Eastern Cape Provincial Heritage Resources Authority | Comment/ Relevant Consideration |

11. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

11(a) Solid waste management

Will the activity produce solid construction waste during the construction/initiation phase? Will be limited to the usual construction waste

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

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

| | |
|-----------------------|-------------------------------------|
| YES X | <input checked="" type="checkbox"/> |
| Unknown at this stage | |

Waste will be sorted, separated, and adequately managed according to the waste hierarchy. All waste material will be disposed of at appropriate waste facilities.

Construction material will be stored on site and removed on a regular basis.

Emergency spill response procedure will be formulated, and staff is to be trained in spill response. All necessary equipment for dealing with spills of fuels/chemicals must be available at the site. Spills must be cleaned up immediately and contaminated soil/ material disposed of appropriately at a registered site.

Exposed earth must be rehabilitated by planting suitable vegetation to protect the exposed soils.

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

At a registered licensed facility authorised to accept construction solid waste in the Kouga municipality district.

Will the activity produce solid waste during its operational phase?

| | |
|-------------------------------------|-----|
| <input checked="" type="checkbox"/> | NOX |
|-------------------------------------|-----|

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

| |
|----------------|
| m ³ |
|----------------|

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

N/A

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

N/A

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?

| | |
|-------------------------------------|-----|
| <input checked="" type="checkbox"/> | NOX |
|-------------------------------------|-----|

If yes, inform the competent authority and request a change to an application for scoping and EIA.

Is the activity that is being applied for a solid waste handling or treatment facility?

| | |
|-------------------------------------|-----|
| <input checked="" type="checkbox"/> | NOX |
|-------------------------------------|-----|

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.

11(b) Liquid effluent

Will the activity produce effluent, other than normal sewage, that will be disposed of in a municipal sewage system?

| | |
|-------------------------------------|-----|
| <input checked="" type="checkbox"/> | NOX |
|-------------------------------------|-----|

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?

| | |
|-------------------------------------|---------|
| <input checked="" type="checkbox"/> | NO X |
|-------------------------------------|---------|

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.

Will the activity produce effluent that will be treated and/or disposed of at another facility? N/A

| | |
|-------------------------------------|----|
| <input checked="" type="checkbox"/> | NO |
| <input type="checkbox"/> | X |

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:

Waste will be sorted, separated, and adequately managed according to the waste hierarchy. All waste material will be disposed of at appropriate waste facilities.

11(c) Emissions into the atmosphere

Will the activity release emissions into the atmosphere?

| | |
|-------------------------------------|-----|
| <input checked="" type="checkbox"/> | NOX |
| 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 emissions in terms of type and concentration:

| |
|--|
| |
|--|

11(d) Generation of noise

Will the activity generate noise?

| | |
|------|-------------------------------------|
| YESX | <input checked="" type="checkbox"/> |
| YESX | <input checked="" type="checkbox"/> |

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:

Normal construction noise, and machinery during earthworks.

12. WATER USE

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

| | | | | | |
|-----------------------|-------------|-------------|-------------------------------|-------|------------------------------------|
| Municipal X | water board | groundwater | river, stream, dam or lake | other | the activity will not use water |
|-----------------------|-------------|-------------|-------------------------------|-------|------------------------------------|

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:

| | |
|-------------------------------------|-----|
| None | |
| <input checked="" type="checkbox"/> | NOX |

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.

13. ENERGY EFFICIENCY

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

- Wall mounted motion sensor lights @ 2000mm high (in line with top of garage door)
- Waterproof plug point
- Wall mounted lights @ 1800mm high
- Dbl plug points @1000mm ffl
- Surface mounted plug point for automated garage door

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

No other alternative energy sources are required for the proposed activities.

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.

1

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 X | 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 |
|------|-------------|-------------|-------------|--------------|-------------|------------------|

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 X | YES | NO | YES | NO |
| Dolomite, sinkhole or doline areas | YES | NO X | YES | NO | YES | NO |
| Seasonally wet soils (often close to water bodies) | YES | NO X | YES | NO | YES | NO |

| | | | | | | |
|--|-----|-------------|-----|----|-----|----|
| Unstable rocky slopes or steep slopes with loose soil | YES | NO X | YES | NO | YES | NO |
| Dispersive soils (soils that dissolve in water) | YES | NO X | YES | NO | YES | NO |
| Soils with high clay content (clay fraction more than 40%) | YES | NO X | YES | NO | YES | NO |
| Any other unstable soil or geological feature | YES | NO X | YES | NO | YES | NO |
| An area sensitive to erosion | YES | NO X | YES | NO | 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).

A Geotech study was done by Outeniqua Geotechnical Services (See appendix D)

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 ^E | Natural veld with scattered aliens ^E | Natural veld with heavy alien infestation ^E | Veld dominated by alien species ^E | Gardens X |
| Sport field | Cultivated land | Paved surface | Building or other structure X | 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.

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

5.2 Low density residential

5.3 Medium density residential

5.4 High density residential

5.5 Informal residential

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^A

5.14 Quarry, sand or borrow pit

5.15 Dam or reservoir

5.16 Hospital/medical centre

5.17 School

5.18 Tertiary education facility

5.19 Church

5.20 Old age home

5.21 Sewage treatment plant^A

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

5.35 Nature conservation area

5.36 Mountain, koppie or ridge

5.37 Museum

5.38 Historical building. Museum.

5.39 Protected Area

5.40 Graveyard

5.41 Archaeological site

5.42 Other land uses (describe) Parking area

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

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:

|

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:

|

|

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 Archaeological or palaeontological sites, on or close (within 20m) to the site? | YES | NO X |
| | No sites have been found on the property. | |

If YES, explain:

| |
|--|
| |
|--|

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:

| |
|---|
| <p>As quoted from palaeontology specialist report (See appendix D):</p> <p>The activities are on the aeolian sand slope 18-21 m asl. at the terminal end of the Cape St. Francis headland bypass dune field. The old (1991) geological map (A) shows the site on recent aeolian sands (Qw- Schelm Hoek Formation), marginal to older aeolianites (dune deposits) assigned to the Nanaga Fm (T-Qn), both of which are rated as VERY HIGH/RED palaeontological sensitivity (B). On the later geomap (2019) (C) the site is on undifferentiated aeolianites (N-Qa) adjacent to recent loose sands of the Schelm Hoek Fm. (Qsc).</p> <p>ECPHRA (Eastern Cape Provincial Heritage Authority) FINAL COMMENTS in terms of Section 38(8) of the National Heritage Resources Act (25 of 1999). This matter was tabled at the Archaeology, Palaeontology and Meteorites (APM) Committee in a meeting held on 19 October 2023. ECPHRA approves and supports the proposed development, with no further heritage studies needed.</p> |
|---|

| | | |
|---|-----|-------------|
| Will any building or structure older than 60 years be affected in any way? | YES | NO X |
| Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)? | YES | NO X |

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.

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.

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.

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.

A Comments and Response Report will be submitted in the Final BAR once Public Participation has been undertaken.

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:

| STATE DEPARTMENTS | | | |
|--|-----------------|---|---|
| Name | Contact Person | Postal Address | Email |
| Eastern Cape Department of Economic Development, Environmental Affairs and Tourism | Andries Struwig | Private Bag X5001, Greenacres, Port Elizabeth, 6057 | Andries.Struwig@dedea.gov.za |
| Department of Environmental Affairs: Oceans and Coasts | Tabisile Mhlana | Private Bag X4390, Cape Town, 8000 | OCEIA@dffe.gov.za / tmhlana@dffe.gov.za |
| Eastern Cape Department of Agriculture, Forestry and Fisheries | Babalwa Layini | | Blayini@dffe.gov.za |
| Department of Water and Sanitation Eastern Cape | Ncamile Dweni | 140 Govan Mbeki Ave, 7 th Floor Starport Building Port Elizabeth, 6000 | DweniN@dws.gov.za |

A full I&AP register is available in Appendix E.

List of authorities from whom comments have been received:

Eastern Cape Provincial Heritage Resources Authority - Ayanda Mncwabe-Mama

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 |
| | X |

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

To be completed in the Final BAR

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.

To be completed in the Final BAR

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):

To be completed in Final BAR

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.

Criteria are ascribed for each predicted impact. These include the intensity (size or degree scale), which also includes the type of impact, being either a positive or negative impact; the duration (temporal scale); and the extent (spatial scale), as well as the probability (likelihood). The methodology is quantitative, whereby professional judgement is used to identify a rating for each criterion based on a seven-point scale (Table 1) and the significance is auto-generated using a spreadsheet through application of the calculations.

For each predicted impact, certain criteria are applied to establish the likely **significance** of the impact, firstly in the case of no mitigation being applied and then with the most effective mitigation measure(s) in place.

These criteria include the **intensity** (size or degree scale), which also includes the **nature** of impact, being either a positive or negative impact; the **duration** (temporal scale); and the **extent** (spatial scale). These numerical ratings are used in an equation whereby the **consequence** of the impact can be calculated. Consequence is calculated as follows:

$$\text{Consequence} = \text{type} \times (\text{intensity} + \text{duration} + \text{extent})$$

To calculate the significance of an impact, the **probability** (or likelihood) of that impact occurring is applied to the consequence.

$$\text{Significance} = \text{consequence} \times \text{probability}$$

Impacts foreseen during the construction phase:

| | |
|------------------------------|--|
| Project Phase | Construction |
| Impact | Clearance of terrestrial vegetation for the construction of the boundary wall and a storage area with a view deck. |
| Description of impact | Loss of terrestrial vegetation |

| | | | | |
|---------------------------|---|---|-----------------------|---|
| Mitigable | Low | Mitigation does not exist; or mitigation will slightly reduce the significance of impacts | | |
| Potential mitigation | <ul style="list-style-type: none"> the removal and translocation of plants should be undertaken prior to construction clearing activities. A permit is required prior to removal of any protected species on site (refer to table no.6 and figure 2 of the Comprehensive Biodiversity Statement dated 06/02/2024) Plants must either be moved to a safer, no-go area on the property or taken to a nursery for temporary storage until rehabilitation takes place. Construction works should be limited to the use of light machinery (TLB) or by hand. Only areas necessary for the development footprint should be cleared and excavated. | | | |
| Assessment | Without mitigation | | With mitigation | |
| Nature | Negative | | Low negative | |
| Duration | Permanent | Impact may be permanent, or in excess of 20 years | Permanent | Impact may be permanent, or in excess of 20years |
| Extent | Limited | Limited to the site and its immediate surroundings | Very limited | Limited to specific isolated parts of the site |
| Intensity | Very low | Natural and/ or social functions and/ or processes are slightly altered | Low | Natural and/ or social functions and/ or processes are somewhat altered |
| Probability | Probable | Has occurred here or elsewhere and could therefore occur | Rare / improbable | Conceivable, but only in extreme circumstances, and/or might occur for this project although this has rarely been known to result elsewhere |
| Confidence | High | Substantive supportive data exists to verify the assessment | Medium | Determination is based on common sense and general knowledge |
| Reversibility | Medium | The affected environment will only recover from the impact with significant intervention | High | The affected environment will be able to recover from the impact |
| Resource irreplaceability | Medium | The resource is damaged irreparably but is represented elsewhere | Low | The resource is not damaged irreparably or is not scarce |
| Significance | Minor - negative | | Negligible - negative | |
| Comment on significance | The previous clearing of vegetation and disturbance of topsoil at the site, together with the absence of plant SCC (high confidence) translates to a LOW site sensitivity. | | | |
| Cumulative impacts | The impact would result in insignificant cumulative effects. | | | |

| | | | |
|-----------------------|--|--|--|
| Project Phase | Construction | | |
| Impact | Geotechnical restraints | | |
| Description of impact | Settlement issues, slope stability problems | | |
| Mitigable | High | Mitigation exists and will considerably reduce significance of impacts | |
| Potential mitigation | <p>Earthworks:</p> <ul style="list-style-type: none"> Some minor earthworks and bush clearing is anticipated to clear vegetation and form level platforms for the proposed structures. Earthworks could be accomplished with light machinery (TLB) or by hand, and all excavations to a depth of at least 2m were classified as per SABS1200D as “soft”. The insitu sandy soils are suitable for general backfilling and compaction on platforms, under floors and foundations at the optimum moisture content. Any organic matter (roots, grass, etc) exposed in excavations should be entirely removed. Excavation sidewalls will be highly unstable at angles steeper than 35°, and adequate battering of excavations is recommended for safety reasons. Lateral support systems may be required for excavations adjacent to the boundary. | | |

| | | | | |
|----------------------------------|---|---|------------------------------|---|
| | Foundations and floors: | | | |
| | <ul style="list-style-type: none"> • Single or double storey masonry or timber structures can be founded on conventional lightly reinforced concrete strips and/or pads at a minimum recommended founding depth of 0.7m below GL on well compacted insitu soil (recommend <25mm/blow). Soil may require good watering to achieve the recommended compaction. • Bearing pressures should be limited to max 120kPa to minimise settlement. • Alternative foundation solutions, such as raft foundations can also be considered, depending on the structural design. • Filling under surface bed concrete floors should be compacted at the optimum moisture content to 100% of Mod AASHTO density. • No structures should be placed on, or within a distance of 2m of, slopes exceeding 1v:4h, unless special precautionary measures are taken by the engineer. | | | |
| Assessment | Without mitigation | | With mitigation | |
| Nature | Negative | | Negative | |
| Duration | Permanent | Impact may be permanent, or in excess of 20years | Brief | Impact will not last longer than 1 year |
| Extent | Very limited | Limited to specific isolated parts of the site | Very limited | Limited to specific isolated parts of the site |
| Intensity | Very high | Natural and/ or social functions and/ or processes are majorly altered | Low | Natural and/ or social functions and/ or processes are somewhat altered |
| Probability | Certain / Definite | There are sound scientific reasons to expect that the impact will definitely occur | Rare / improbable | Conceivable, but only in extreme circumstances, and/or might occur for this project although this has rarely been known to result elsewhere |
| Confidence | High | Substantive supportive data exists to verify the assessment | Medium | Determination is based on common sense and general knowledge |
| Reversibility | Low | The affected environment will not be able to recover from the impact - permanently modified | Medium | The affected environment will only recover from the impact with significant intervention |
| Resource irreplaceability | Not relevant | | Not relevant | |
| Significance | Moderate - negative | | Negligible - negative | |
| Comment on significance | The site is considered suitable for the proposed development with conventional construction methods but there were some minor geotechnical constraints, mainly compressible sands, which require consideration by the structural engineer. Preliminary recommendations were provided but all information should be verified on site during construction. | | | |
| Cumulative impacts | With mitigation, damage to the environment can be limited. | | | |

| | | | |
|------------------------------|---|--|--|
| Project Phase | Construction | | |
| Impact | Stormwater runoff and erosion | | |
| Description of impact | Erosion from exposed surfaces / earthworks for storage area and boundary wall. | | |
| Mitigable | High | Mitigation exists and will considerably reduce the significance of impacts | |
| Potential mitigation | <ul style="list-style-type: none"> • Adequate drainage and erosion protection must be provided around the site and where necessary. • Erosion prevention and control measures must be implemented. This may be with the use of mulch bags. • Minimise disturbance to the primary dune vegetation on the eastern boundary – wind and water erosion should be limited by using mesh netting set up around any cleared footprints as soon as clearing has taken place. • The stockpiling of topsoil for use in rehabilitation is required. • Stockpiles must not exceed 1.5m in height, must be covered with shade cloth or similar, to prevent erosion and any invasive alien species that begin to grow within it must be removed. • Revegetate all bare areas of soil post-construction with indigenous vegetation. | | |

| Assessment | Without mitigation | | With mitigation | |
|---------------------------|---|--|------------------|---|
| Nature | Negative | | Low Negative | |
| Duration | Short term | Impact will last between 1 and 5 years | Brief | Impact will not last longer than 1 year |
| Extent | Limited | Limited to the site and its immediate surroundings | Very limited | Limited to specific isolated parts of the site |
| Intensity | Low | Natural and/or social functions and/or processes are somewhat altered | Very low | Natural and/ or social functions and/ or processes are slightly altered |
| Probability | Almost certain | It is most likely that the impact will occur | Likely | The impact may occur |
| Confidence | High | Substantive supportive data exists to verify the assessment | High | Substantive supportive data exists to verify the assessment |
| Reversibility | Low | The affected environment will only recover from the impact with significant intervention | High | The affected environmental will be able to recover from the impact |
| Resource irreplaceability | Low | The resource is not damaged irreparably or is not scarce | Low | The resource is not damaged irreparably or is not scarce |
| Significance | Negligible - negative | | Minor - negative | |
| Comment on significance | The development has permeable dune sand soil conditions and noticeable runoff is not envisaged. There are also open areas where runoff can be dissipated. | | | |
| Cumulative impacts | Without mitigation this impact could result in potential erosion downhill of the site caused by stormwater flow. | | | |

| Project Phase | Construction | | | |
|-----------------------|---|--|-----------------|---|
| Impact | Waste Pollution | | | |
| Description of impact | Pollution caused by waste generated by the construction process. | | | |
| Mitigable | High | Mitigation exists and will considerably reduce significance of impacts | | |
| Potential mitigation | <ul style="list-style-type: none"> • All construction waste generated on-site during construction must be adequately managed. Separation and recycling of different waste materials should be supported. • All construction waste materials must be collected and disposed of at a suitable waste facility. • No dumping of construction material in any unlicensed facility or sensitive areas may take place. • Adequate sanitary facilities and ablutions must be provided for all personnel throughout the project area. Use of these facilities must be enforced and these facilities must be kept clean at all times. | | | |
| Assessment | Without mitigation | | With mitigation | |
| Nature | Negative | | Low negative | |
| Duration | Short term | Impact will last between 1 and 5 years | Brief | Impact will not last longer than 1 year |
| Extent | Very limited | Limited to the site and its immediate surroundings | Very limited | Limited to the site and its immediate surroundings |
| Intensity | Low | Natural and/or social functions and/or | Very low | Natural and/or social functions and/or processes are slightly altered |

| | | | | |
|----------------------------------|--|--|------------------------------|---|
| | | processes are somewhat altered | | |
| Probability | Likely | The impact may occur | Rare / improbable | Conceivable, but only in extreme circumstances, and/or might occur for this project although this has rarely been known to result elsewhere |
| Confidence | High | Substantive supportive data exists to verify the assessment | High | Substantive supportive data exists to verify the assessment |
| Reversibility | High | The affected environmental will be able to recover from the impact | High | The affected environmental will be able to recover from the impact |
| Resource irreplaceability | Low | The resource is not damaged irreparably or is not scarce | Low | The resource is not damaged irreparably or is not scarce |
| Significance | Negligible - negative | | Negligible - negative | |
| Comment on significance | Construction activities are likely to generate solid waste that could pollute the surrounding environment. | | | |
| Cumulative impacts | The impact would result in insignificant cumulative effects. | | | |

| | | | | |
|----------------------------------|--|---|----------------------------------|---|
| Project Phase | Construction | | | |
| Impact | Noise pollution | | | |
| Description of impact | Noise caused by machinery and staff | | | |
| Mitigable | Low | Mitigation does not exist; or mitigation will slightly reduce the significance of impacts | | |
| Potential mitigation | <ul style="list-style-type: none"> Construction activities must only take place during normal working times between 07:00-17:00 on weekdays. Machinery may be fitted with silences to dampen noise. Staff must be reminded that they are working within a residential area and noise levels must be kept low. | | | |
| Assessment | Without mitigation | | With mitigation | |
| Nature | Negative | | Negative | |
| Duration | Brief | Impact will not last longer than 1 year | Brief | Impact will not last longer than 1 year |
| Extent | Limited | Limited to the site and its immediate surroundings | Limited | Limited to the site and its immediate surroundings |
| Intensity | Very low | Natural and/ or social functions and/ or processes are slightly altered | Negligible | Natural and/ or social functions and/ or processes are negligibly altered |
| Probability | Almost certain / Highly probable | It is most likely that the impact will occur | Almost certain / Highly probable | It is most likely that the impact will occur |
| Confidence | Medium | Determination is based on common sense and general knowledge | Medium | Determination is based on common sense and general knowledge |
| Reversibility | High | The affected environmental will be able to recover from the impact | High | The affected environmental will be able to recover from the impact |
| Resource irreplaceability | Not relevant | | Not relevant | |
| Significance | Minor - negative | | Negligible - negative | |
| Comment on significance | Some extent of noise pollution during construction is expected; however, with mitigation the impact will be reduced. | | | |
| Cumulative impacts | No cumulative impacts exist. | | | |

| | | | | |
|----------------------------------|--|--|------------------------------|---|
| Project Phase | Construction | | | |
| Impact | Visual impact | | | |
| Description of impact | Visual & aesthetic consequences of the proposed project | | | |
| Mitigable | Medium | Mitigation exists and will notably reduce significance of impacts | | |
| Potential mitigation | <ul style="list-style-type: none"> Due to the proposed dwelling being surrounded by already existing dwellings, there is little to be done to mitigate against visual pollution; however, shade cloth may be used to demarcate and reduce visual consequences caused by construction. | | | |
| Assessment | Without mitigation | | With mitigation | |
| Nature | Negative | | Negative | |
| Duration | Short term | Impact will last approximately 1 year. | Short term | Impact will last approximately 1 year. |
| Extent | Limited | Limited to the site and its immediate surroundings | Limited | Limited to the site and its immediate surroundings |
| Intensity | Low | Natural and/ or social functions and/ or processes are somewhat altered | Very low | Natural and/ or social functions and/ or processes are slightly altered |
| Probability | Certain / Definite | There are sound scientific reasons to expect that the impact will definitely occur | Likely | The impact may occur |
| Confidence | Medium | Determination is based on common sense and general knowledge | Medium | Determination is based on common sense and general knowledge |
| Reversibility | Medium | The affected environment will only recover from the impact with significant intervention | High | The affected environmental will be able to recover from the impact |
| Resource irreplaceability | Not relevant | | Not relevant | |
| Significance | Minor - negative | | Negligible - negative | |
| Comment on significance | There is some visual/aesthetic consequences to be expected during construction. However, due to the surrounding area being residential, a low negative impact is expected, and little can be mitigated against. | | | |
| Cumulative impacts | No cumulative impacts exist. | | | |

| | | | | |
|------------------------------|--|--|----------------------------------|---|
| Project Phase | Construction | | | |
| Impact | Employment | | | |
| Description of impact | Empowerment of the local community members living in the area relating to temporary employment opportunities | | | |
| Mitigable | Medium | Mitigation only exists to ensure that the positive impact is followed through. | | |
| Potential mitigation | <ul style="list-style-type: none"> Use existing social structures and communication channels to ensure social representation. | | | |
| Assessment | Without mitigation | | With mitigation | |
| Nature | Negative | | Positive | |
| Duration | Short term | Impact will last approximately 1 year. | Short term | Impact will last approximately 1 year. |
| Extent | Local | Extending across the site and to nearby settlements | Local | Extending across the site and to nearby settlements |
| Intensity | Low | Natural and/ or social functions and/ or processes are somewhat altered | Low | Natural and/ or social functions and/ or processes are somewhat altered |
| Probability | Rare / improbable | Conceivable, but only in extreme circumstances, and/ or might occur for this project although this has rarely been known to result elsewhere | Almost certain / Highly probable | It is most likely that the impact will occur |

| | | | | |
|----------------------------------|---|---------------------------------|------------------------------|--|
| Confidence | Low | Judgement is based on intuition | Medium | Determination is based on common sense and general knowledge |
| Reversibility | Not relevant | | Not relevant | |
| Resource irreplaceability | Not relevant | | Not relevant | |
| Significance | Negligible - negative | | Negligible - positive | |
| Comment on significance | Due to the proposed development being on a small-scale, there is a low difference in impact without mitigation and with mitigation. However, as the impact would be positive for the local community to be employed during construction, mitigation is recommended to ensure this occurs. | | | |
| Cumulative impacts | Minor upliftment for the local community. | | | |

Impacts foreseen during the operational phase:

| | | | | |
|----------------------------------|--|--|------------------------------|---|
| Project Phase | Operation | | | |
| Impact | Visual / Sense of place | | | |
| Description of impact | Visual impacts of structures | | | |
| Mitigable | Medium | Mitigation exists and will notably reduce significance of impacts | | |
| Potential mitigation | <ul style="list-style-type: none"> • Municipal by-laws need to be adhered to regarding heights of structures, building materials and paint colours. • Re-vegetation and landscaping of disturbed areas with suitable indigenous vegetation must be undertaken. | | | |
| Assessment | Without mitigation | | With mitigation | |
| Nature | Negative | | Negative Low | |
| Duration | Permanent | Impact may be permanent, or in excess of 20 years | Brief | Impact will not last longer than 1 year |
| Extent | Limited | Limited to the site and its immediate surroundings | Limited | Limited to the site and its immediate surroundings |
| Intensity | Low | Natural and/ or social functions and/ or processes are somewhat altered | Negligible | Natural and/ or social functions and/ or processes are negligibly altered |
| Probability | Probable | Has occurred here or elsewhere and could therefore occur | Rare / improbable | Conceivable, but only in extreme circumstances, and/or might occur for this project although this has rarely been known to result elsewhere |
| Confidence | Medium | Determination is based on common sense and general knowledge | Medium | Determination is based on common sense and general knowledge |
| Reversibility | Medium | The affected environment will only recover from the impact with significant intervention | High | The affected environmental will be able to recover from the impact |
| Resource irreplaceability | Not relevant | | Not relevant | |
| Significance | Minor - negative | | Negligible - negative | |
| Comment on significance | Revegetation during rehabilitation activities will result in negligible visual impact. | | | |

| | |
|---------------------------|---|
| Cumulative impacts | Without mitigation the activity would not conform to municipal by-laws and visual impacts may be increased. |
|---------------------------|---|

| Project Phase | Operation | | | |
|----------------------------------|--|---|-----------------------|---|
| Impact | Light Pollution | | | |
| Description of impact | Visual/ aesthetic consequences due to incorrect or excessive lighting, especially outdoor lighting | | | |
| Mitigable | Medium | Mitigation exists and will notably reduce significance of impacts | | |
| Potential mitigation | <ul style="list-style-type: none"> • Municipal by-laws need to be adhered to. • It is strongly advised that only downward facing lights are used on the outside of the storage area. Motion sensor lights can be used so that light will not be on permanently at night. | | | |
| Assessment | Without mitigation | | With mitigation | |
| Nature | Negative | | Positive | |
| Duration | Permanent | Impact may be permanent, or in excess of 20 years | Brief | Impact will not last longer than 1 year |
| Extent | Limited | Limited to the site and its immediate surroundings | Very limited | Limited to specific isolated parts of the site |
| Intensity | Low | Natural and/ or social functions and/ or processes are somewhat altered | Negligible | Natural and/ or social functions and/ or processes are negligibly altered |
| Probability | Probable | Has occurred here or elsewhere and could therefore occur | Rare / improbable | Conceivable, but only in extreme circumstances, and/or might occur for this project although this has rarely been known to result elsewhere |
| Confidence | Medium | Determination is based on common sense and general knowledge | Medium | Determination is based on common sense and general knowledge |
| Reversibility | Low | The affected environment will not be able to recover from the impact - permanently modified | Medium | The affected environment will only recover from the impact with significant intervention |
| Resource irreplaceability | Not relevant | | Not relevant | |
| Significance | Minor - negative | | Negligible - positive | |
| Comment on significance | Lighting, specifically outdoor lighting is not only aesthetic, but it provides a level of security to property owners. Therefore, outdoor lighting is essential, but should be implemented in a way which does not cause negative impacts to neighbours. | | | |
| Cumulative impacts | Without mitigation the development would not be meeting design guidelines enforced by the municipality. Specifically design guidelines for the local area. | | | |

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:

- 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;
- 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;
- whether, and to what extent, the proposed development will result in the release of greenhouse gas (GHG) emissions;
- whether the proposed development is necessary to achieve long term decarbonisation goals;
- the impact of the development on social, economic, natural and built environment that are crucial for climate change, adaptation and resilience;
- 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.

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;

The proposed development of a residential dwelling will have a low to negligible negative impact on climate change.

The applicant is encouraged to participate in recycling and reuse of waste products produced during the construction phase.

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;

The proposed development includes the use of energy saving lighting and electrical solutions. This would result in a decreased contribution to the electricity grid.

In addition, the applicant is encouraged to participate in recycling and reuse of waste products produced during the construction phase in order to decrease the volume of waste heading to landfill sites.

c)whether, and to what extent, the proposed development will result in the release of greenhouse gas (GHG) emissions;

According to an article published by Mengpin Ge, Johannes Friedrich and Leandro Vigna in February 2020 and updated in June 2022, on the World Resources Institute webpage, regarding Greenhouse Gas Emissions by Countries and Sectors: the energy sector was found to be the biggest source of greenhouse gas emissions. *“The energy sector includes transportation, electricity and heat, buildings, manufacturing and construction, fugitive emissions and other fuel combustion.”*

The proposed development will contribute to GHG emissions in the form of construction and a minor volume of emissions released by construction vehicles. However, viewed in isolation, the proposed will result in low to negligible release of GHG.

d)whether the proposed development is necessary to achieve long term decarbonisation goals;

The proposed development is not 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;

The proposed development itself will not play a major role in negatively contributing to climate change.

f) the projected impact of climate change on proposed development; and surrounding environment, and implications for the development.

As the proposed development is situated within 100m of the HWM of the sea, there is always risk to properties along the coastline. However, the level of short term risk with regards to Climate Change Vulnerability for this property does not exist.

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

Coastal hazards will increase in negative impacts over the years due to climate change. This poses a risk to coastal development. Coastal impacts will affect areas differently depending on the coastline type. The proposed development is supported due to its location in the landscape – the site is located on a previously disturbed property. However, considering the long-term possibility of negative coastal impacts, monitoring of the coastal environment is a priority.

“the likelihood is that coastal erosion processes, including shoreline erosion / accretion, cliff retreat and dune migration will vary considerably with anticipated global climate change into the future and monitoring of changes in the coastal environment will be important.” (Geohazards in Coastal Areas, R. Wigley, Council for Geoscience,2011)

h) whether, and to what extent, the impacts identified in (a) -(g) can be mitigated.

Mitigation exists in the form of ensuring green building practices are followed for the design, construction and operation of the proposed development.

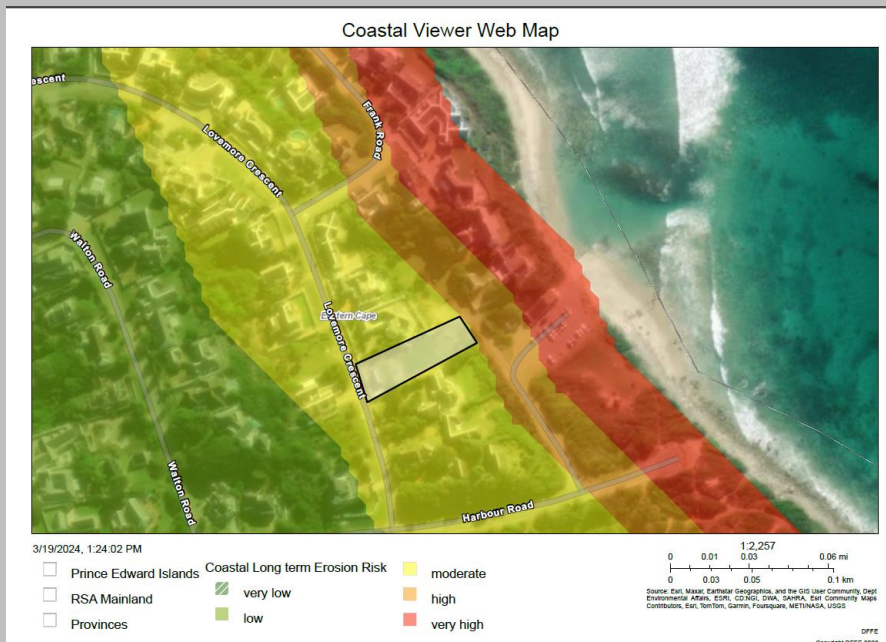
4. ENVIRONMENTAL IMPACT STATEMENT

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)

Loss of indigenous vegetation: due to construction, the property will be cleared of some of the vegetation present. Parts of the area have been previously disturbed. According to the Biodiversity report (See appendix D): *it is most likely that the site would historically have supported a primary dune ecosystem rather than dune thicket (or a mosaic of dune thicket and dune fynbos like St Francis Dune Thicket). At present, the site comprises a landscaped garden fronted by a small patch of primary dune on the east (Table 3), but which has been subject to significant historical disturbance for more than 50 years (Appendix 1). Vegetation will be removed and saved for rehabilitation after the completion of construction.*

Vulnerability to coastal dynamic: The coastal location of the proposed development indicates that it is inherently exposed to risks associated with natural and dynamic coastal processes. These risks provide significant impacts to the sustainability of any development within coastal areas. With inspection of coastal GIS mapping for South Africa; the Climate Change Coastal Vulnerability Assessment shows that the property is not within an area of short term erosion risk, however in terms of long-term erosion risk, the property is in an area with moderate coastal erosion.



Stormwater

The soil is highly permeable and site drainage is not envisaged to be a problem. The development site slopes seaward, so ponding will be minimal. The boundary wall will make allowance for water runoff.

Geotechnical restraints

The site was considered suitable for the proposed development with conventional construction methods but there were some minor geotechnical constraints, mainly compressible sands, which require consideration by the structural engineer.

Green technology in design and function

The preferred alternative will incorporate the use of green building methods and energy efficient technology for lighting and other electrical purposes.

Alternative A2 (not supported)

Design and Technology alternative – this alternative would not make use of any green building methods in the design and function of the proposed activity, including the use of energy efficient technology for lighting and other electrical purposes. Therefore, this alternative does not meet the goals of sustainable development and is not supported by the EAP.

No-go alternative (compulsory)

The No-Go alternative assumes that the wall and storage area will not be constructed as proposed, and the status quo will remain in place. This will ensure that the two protected plant species identified on the site are not removed and there would be no disturbance to the primary dune vegetation on the eastern boundary.

However, the above impacts can be easily mitigated to sufficiently protect the environment, especially as the environment is generally low on sensitivity and the proposed construction is unlikely to have a significant negative impact on biodiversity – as taken from the Comprehensive Biodiversity Compliance Statement (Appendix D). In addition, it is to be noted that the boundary wall is an extension of an existing boundary wall and this is a residential Erf - the Applicant has the legal right to develop on this Erf.

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)? **To be completed in the Final BAR**

| | |
|-----------------|----|
| YES | NO |
| YES X | 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):

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:

To be completed in the Final BAR

SECTION F: APPENDICES

The following appendices must be attached as appropriate:

Appendix A: Site plan(s)

Appendix B: Photographs

Appendix C: Facility illustration(s)

Appendix D: Specialist reports

Appendix E: Public Participation – newspaper tear sheet to be attached to final BAR

Appendix F: Environmental Management Programme (EMPr)

Appendix G: Other information