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DRAFT PLAN OF STUDY FOR THE ENVIRONMENTAL IMPACT ASSESSMENT (POSEIA)

For the

Proposed Mixed-Use Development on Portion 7 & 8 of the Farm Kranshoek No. 432, Bitou Local Municipality, Garden Route District Municipality, Western Cape.

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

APPLICANT:	Krans Development (Pty) Ltd. Contact: Andre Vlok
ENVIRONMENTAL CONSULTANT:	Sharples Environmental Services cc Responsible EAP: Madeleine Knoetze (EAPASA: 2021/3230) Overseeing EAP: Betsy Ditcham (EAPASA: 2020/1480)
DEA & DP NOI PROJECT REFERENCE:	16/3/3/6/7/2/D1/13/0181/24
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DATE:	16 September 2025

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1. Introduction

This Plan of Study for the Environmental Impact Assessment (EIA) has been compiled in terms of the content requirements listed under Regulation 2(h) of Appendix 2 of the National Environmental Management Act, as amended (NEMA; Act No. 107 of 1998, amended by the National Environmental Management: Laws Amendment Act 2 of 2022) Environmental Impact Assessment (EIA) Regulations of 2014, as amended (Government Notice Regulations (GNR) 982; as amended by GNR 326 of 2017). The **Plan of Study for the EIA (POSEIA) describes how the EIA Phase will proceed** and includes details of the specialist studies already undertaken and those still proposed.

The proposed mixed-use development on Portions 7 and 8 of the Farm Kranshoek 432, Bitou Local Municipality, Garden Route District Municipality, Western Cape.

The proposal entails the development of local community housing on two farm portions located adjacent to and directly east of the existing Kranshoek town. The proposed housing development is expected to result in the transformation of land and the associated clearance of indigenous vegetation in close proximity to existing houses associated with Kranshoek. The project will entail the development of a number of housing units of varying densities, educational facilities, open spaces and business development zones. The proposed development will also see to the installation of the auxiliary services infrastructure including sewer, water, stormwater, electricity and road infrastructure.

This Appendix must be read alongside the Scoping Report Compiled for proposed mixed-use development on Portions 7 and 8 of the Farm Kranshoek 432, Bitou Local Municipality, Garden Route District Municipality, Western Cape.

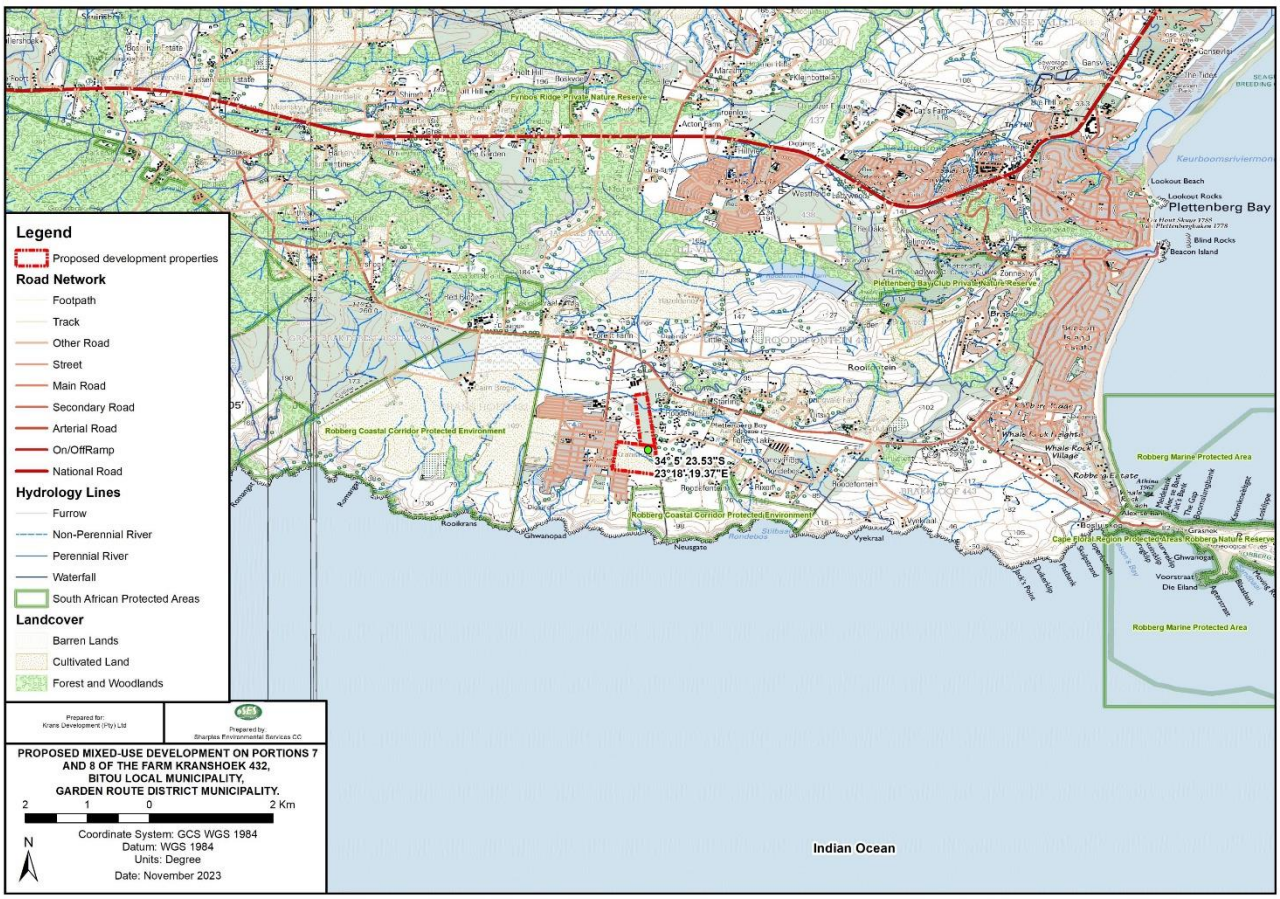

Figure 1. The proposed site for the mixed-use development (red boundary).

As a direct result of time restrictions associated with the EIA Regulations of 2014, as amended most of the specialist environmental impact assessments are now required to take place upfront, prior to the submission of the Application Form and Final Scoping Report to the Western Cape Department of Environmental Affairs and Development Planning (WCDEADP). Another reason why the impact assessment specialist studies are required prior to the submission of the Final Scoping Report is because the content requirements of the Scoping Report now require the EAP to describe the impacts of the proposed development, including the nature, extent, significance, duration and possible mitigation measures.

Scoping Phase Specialist input has therefore already been obtained to inform the findings of the Scoping Report as well as the preferred layout alternative of the proposed development.

The table below summarizes the compliance of this report with the requirements of Sub-Regulation 2(h) of Appendix 2 of the EIA Regulations of 2014, as amended.

Sub-regulation	Description	Compliance
(h)(i)	A description of the alternatives to be considered and assessed within the preferred site, including the option of not proceeding with the activity.	Section 3
(h)(ii)	A description of the aspects to be assessed as part of the Environmental Impact Assessment process	Section 4
(h)(iii)	Aspects to be assessed by specialists	Section 5
(h)(iv)	A description of the proposed method of assessing the environmental aspects, including aspects to be assessed by specialists	Section 6

Sub-regulation	Description	Compliance
(h)(v)	A description of the proposed method of assessing duration and significance	Section 6
(h)(vi)	An indication of the stages at which the competent authority will be consulted	Section 7
(h)(vii)	Particulars of the public participation process that will be conducted during the environmental impact assessment process.	Section 8
(h)(viii)	A description of the tasks that will be undertaken as part of the environmental impact assessment process.	Section 9
(h)(ix)	Identify suitable measures to avoid, reverse, mitigate or manage identified impacts and to determine the residual risks that need to be managed and monitored.	Section 10

2. Objectives of the Environmental Impact Assessment Process

The objective of the **environmental impact assessment (EIA) process** is to, through a consultative process:

- Determine the policy and legislative context within which the activity is located and document how the proposed activity complies with and responds to the policy and legislative context;
- Describe the need and desirability of the proposed activity, including the need and desirability of the activity in the context of the development footprint on the approved site as contemplated in the accepted Scoping Report:
- Identify the location of the development footprint within the approved site as contemplated in the accepted Scoping Report based on an impact and risk assessment process inclusive of cumulative impacts and a ranking process of all the identified development footprint alternatives focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects of the environment;
- Determine the--
    - nature, significance, consequence, extent, duration and probability of the impacts occurring to inform identified preferred alternatives; and
    - degree to which these impacts-
        - (aa) can be reversed;
        - (bb) may cause irreplaceable loss of resources, and
        - (cc) can be avoided, managed or mitigated;
- Identify the most ideal location for the activity within the development footprint of the approved site as contemplated in the accepted Scoping Report based on the lowest level of environmental sensitivity identified during the assessment.
- Identify, assess, and rank the impacts the activity will impose on the development footprint on the approved site as contemplated in the accepted Scoping Report through the life cycle of the activity.
- Identify suitable measures to avoid, manage or mitigate identified impacts; and
- Identify residual risks that need to be managed and monitored.

The EIA Phase of the EIA Process will **further address potential environmental aspects, impacts** and benefits (direct, indirect and cumulative) associated with all of the life cycle stages of the project, including pre-construction, construction and operational stages of the life cycle of the development. The EIA Phase will also effectively **respond to all input received from interested and affected parties and key Authorities** that provide comments on the Scoping Report and Plan of Study for the EIA. The

EIA will **provide the Authorities with sufficient information to make an informed decision** on whether or not the development should be authorized.

3. Description of the proposed project

3.1 Site and Layout

Consideration was given to the following aspects:

- Landowner requirements: Upon initial inspection (as conducted by the EAP highlighted in the Site Sensitivity Verification Report (SSVR) included as an appendix to the Scoping Report), and further liaison with the directly affected landowners.
- Specialists' verification: Numerous specialists were appointed to undertake baseline assessments on the various farm portions under consideration. The following baseline specialist contribution were used to inform the layout of the proposed development:

    - Heritage and cultural resources and Palaeontological resources;
    - Botanical, Faunal and Terrestrial Biodiversity Impact Assessment;
    - Aquatic Impact Assessment; and
    - Agricultural Compliance Statement.

Krans Development (Pty) Ltd proposes to construct a mixed-use development including associated service infrastructure on Portions 7 and 8 of the Farm Kranshoek 432 (as per Figure 1 below). **These properties fall within the urban edge of the Bitou Municipality as per the Bitou Local Municipality (BSDF, 2022, as approved in 2023)**. It is proposed to construct approximately 863 housing units consisting of a mix of affordable housing and business properties, schooling facilities, places of worship, and Public & Private Open Spaces. The Open Space Zones account for > 18% of the development proposal (Please see Figure 4 below).

The proposed development is positioned to the east of the town of Kranshoek and abuts Trekkerspad. Kranshoek is a residential township located west of the town of Plettenberg Bay in the Bitou Municipal Area. It is to the south of Robberg Road which connects the western parts of Plettenberg Bay to the N2 further west of Kranshoek, and north of the Indian Ocean coast.

Kranshoek is comprised of township extensions linked by gravel and tar roads. Urban development to the west of the proposed site are affordable housing and a school with mostly vacant land to the north and agricultural farm portions (Portions 7 and 8) to the east and south.

3.2 Technology/Design Alternative

"Alternatives", in relation to a proposed activity, denotes different means of meeting the general purposes 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.

3.2.1 Description of process to Reach the Preferred Alternative

Process to Reach Preferred Alternative Location & Layout

The site layout plan shown in the figure below is the first layout option that was designed. This site layout plan was specifically designed to take into consideration of the anticipated watercourse areas (mapped CBA (ESA) area in alignment with the contours). The social amenities and facilities provided for on the layout plan were specifically provided according to the guidelines in the Development Parameters for the provision of facilities within settlements in the Western Cape and more specifically as required from a town planning perspective. This location was chosen as an ideal location as it is located within the Plettenberg Bay Urban Edge, directly adjacent to the existing Kranshoek Settlement as well as the approved mixed-use development on Portion 8 of the Farm Kranshoek 432 and has been specifically set aside and planned for to be a future extension of the existing Kranshoek residential area in various Municipal Planning Frameworks, including the SDF and IDP.

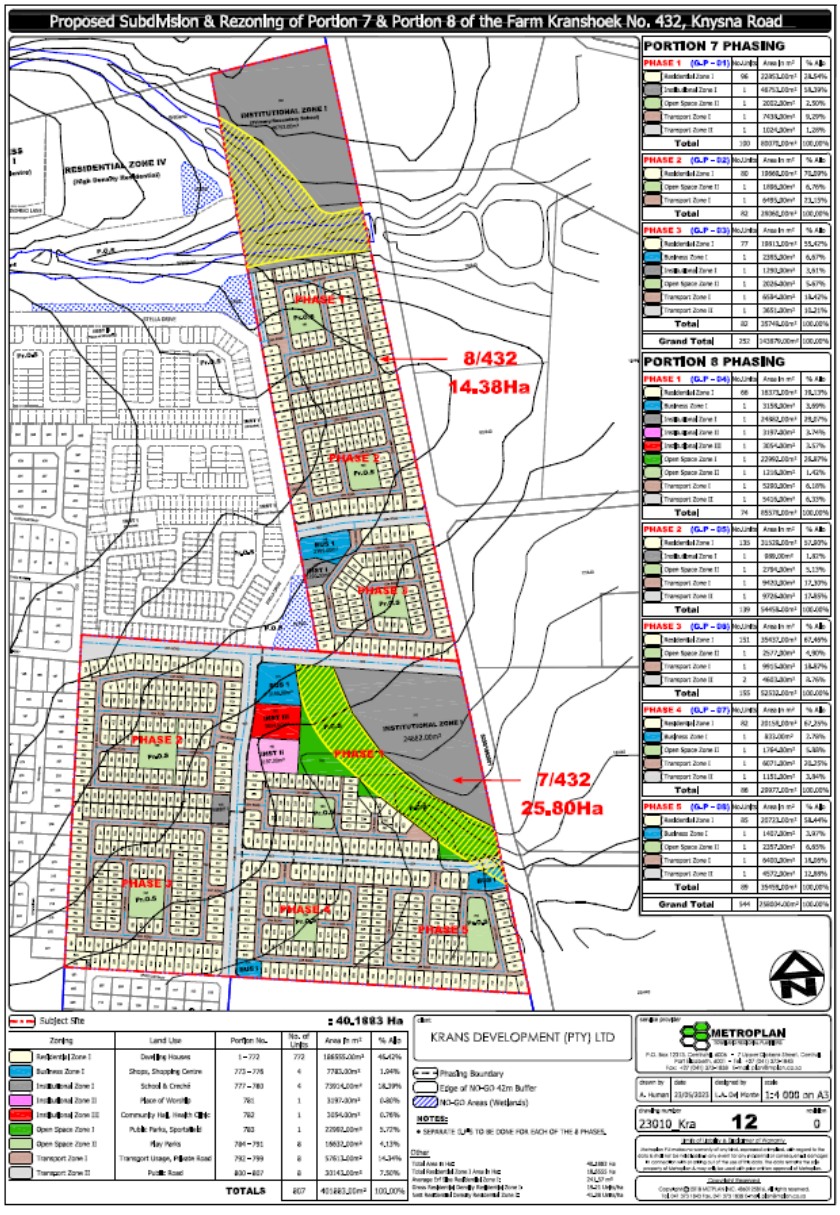

Figure 2. Original Conceptual Site Layout Plan (Alternative A: Option 1) as per Appendix C2 of the Scoping Report.

Following the conceptual design of the first version of the site layout plan shown above, a Freshwater Biodiversity, Terrestrial Biodiversity & Plant Species, Animal Species, and Heritage investigations were undertaken by appropriately registered specialists on this original site layout plan.

Following discussions with the appointed specialists, the Site Development Plan was revised to take the following recommendations into account:

Aquatic Biodiversity Sensitivities:

- Three Hydrogeomorphic (HGM) units were identified within the study area. The northern most HGM unit (HGM 1) corresponds to the Aquatic Ecologic Support Area (ESA) 1 identified on site, whereas the southern HGM unit corresponds with the ESA 2 (HGM 3).
- A 42 m buffer area must be maintained along the main edge of the northern system (HGM 1 and 2) and a 15 m buffer area must be maintained along the main edge of the southern system (HGM 3).
- Limited activities are to be permitted within the buffer areas. Specifically, within the 42m buffer area of the northern system, the specialist indicated that a sports field would be permissible, however, the areas are to be considered No-go for all other infrastructure (including stormwater outlet infrastructure).

Terrestrial Biodiversity and Plant Species sensitive areas:

- During the site visit, the terrestrial biodiversity specialist identified only one vegetation type of high sensitivity. This vegetation type is the aquatic areas on site.
- In the northern most reaches of the development site (Portion 8), a stand of invasive tree species was identified. For the most part, the specialist indicated that the site is covered by degraded fynbos vegetation (in various stages of degradation) and fallow lands (as a result of recent agricultural practices).
- No buffer areas were applied to the areas of high sensitivity and the specialist did not highlight any plant species of conservation concern.
- The watercourse delineation (of the Aquatic Biodiversity Specialist) was adopted for the proposed development, and the Terrestrial Biodiversity specialist was afforded the opportunity to comment on the revised layout. No further comments or changes were made regarding the layout.

Animal Species Sensitive areas:

- The animal species specialist identified various habitat types within the proposed development site. The most notable habitat areas were the aquatic habitat in the northern reaches of portion 8 and the stand of alien invasive species located north thereof.
- The sensitivity of these two units were informed by the presence of subpopulation of the Vulnerable species, *Chlorotalpa duthieae* (Duthie's golden mole).
- Subsequently, the specialist indicated that a buffer would be required around these habitats. After discussions with the specialist, it was indicated that a 30 m buffer would be sufficient.
- The revised layout was submitted to the specialist, and no further changes or comments were made regarding the layout.

Heritage Sensitive areas:

- During the site visit a building older than 60 years was identified on site. Therefore, requiring a permit in terms of the NHRA.
- Confirmation has been received from the local community regarding the historical significance of the building and it was subsequently confirmed that the building holds no historical significance for the area.
- A demolition permit will be applied for and the area has been incorporated into the proposed layout.

- The revised layout was submitted to the specialist, and no further changes or comments were made regarding the layout.

Other Sensitive areas:

- Due to the presence of the poultry farm, Dagbreek Eiers, located North of Portion 8, a 300 m buffer area has been adopted around the active operational are of the establishment. All buildings have been buffered by 500 m from the establishment.

- The Western Cape Department of Health (DoH) has been identified as an Interested and Affected Party (I&AP) of the proposed development.

Based on the findings and recommendation made by the specialists, the site layout plan was amended to firstly avoid the various areas identified and the associated impacts, and where unavoidable, they were reduced (mitigated). This included the avoidance of any hard structures within the buffered areas, and the removal of a road previously intersecting the southern watercourse (Alternative B / Preferred Option).

Following the establishment of the No-Go areas and obtaining the allowable activities within the buffered areas, further adjustments were made to the internal structure of the layouts. No changes were made to the area of impact. The internal densities were slightly adjusted to increase the feasibility of the mixed-use development (Preferred layout / Option 3).

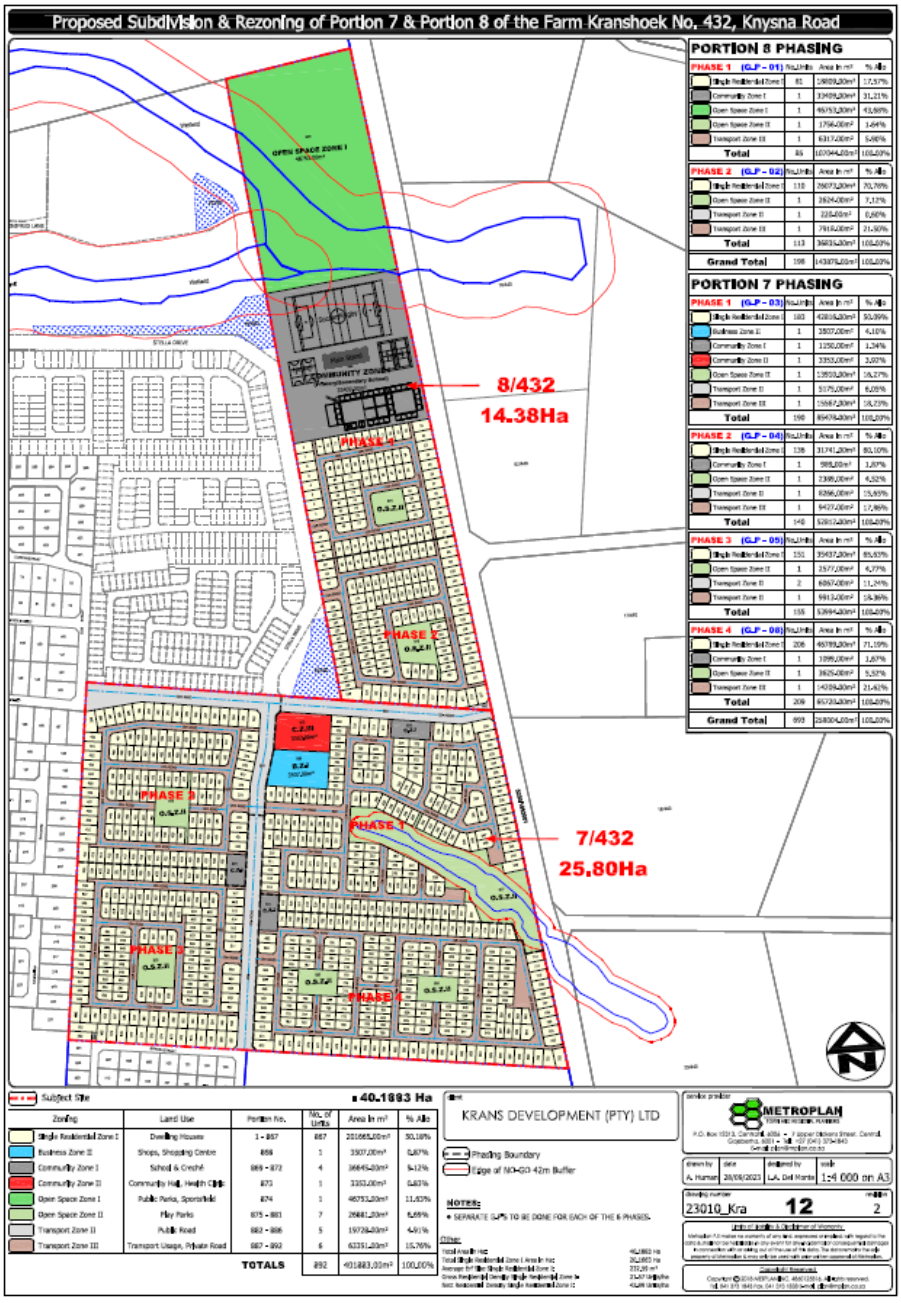

Figure 3. Revised Conceptual Site Layout Plan (Alternative B: Option 2).

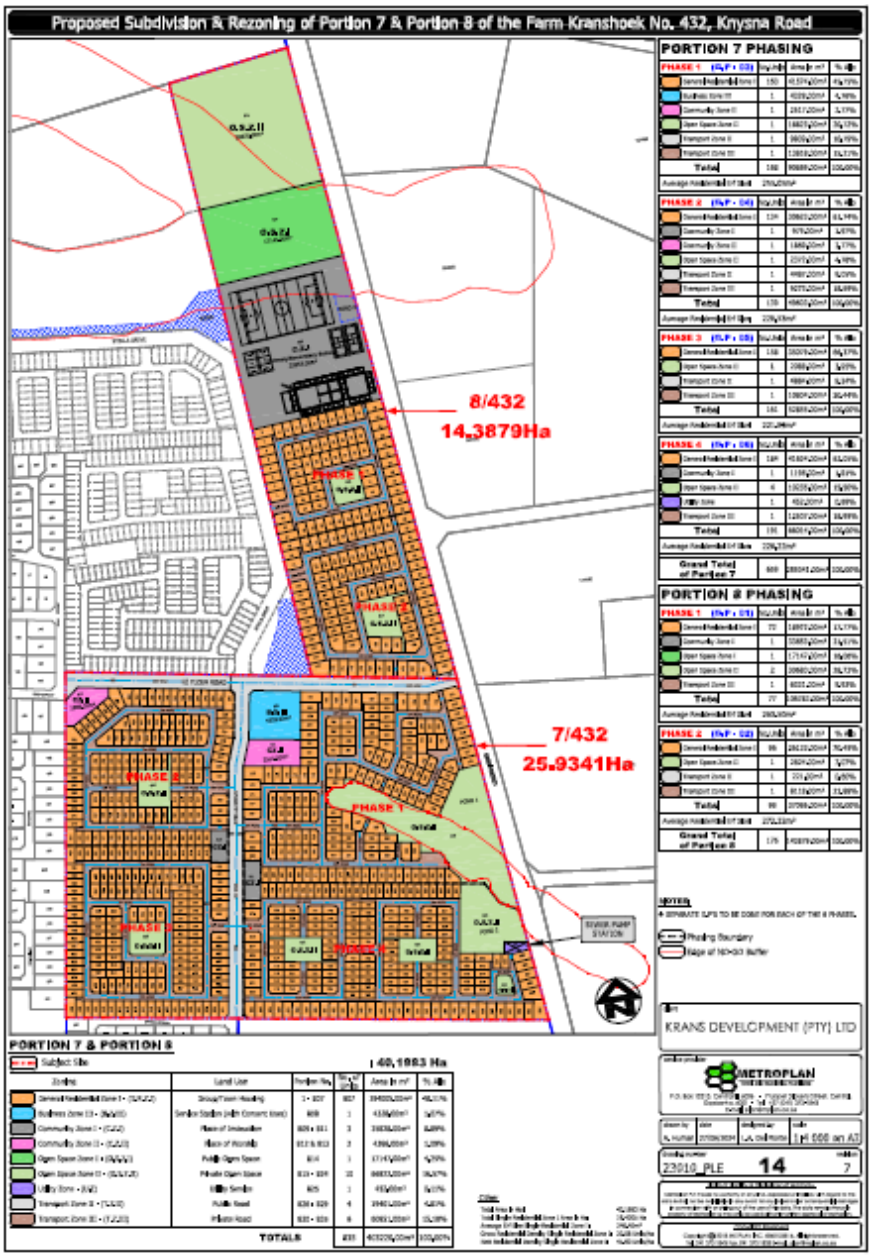

Figure 4. Revised Conceptual Site Layout Plan (Alternative B: Preferred Layout).

Table 1: below identifies the site layout differences between the three Alternatives.

	Alternative Layout (Alternative A)		Alternative Layout (Alternative B – Option 1)		Preferred Layout (Alternative B – Option 2)	
Development Proposed	**No.**	**Size (ha)**	**No.**	**Size (ha)**	**No.**	**Size (ha)**
Single Residential Zone 1: Dwelling Houses	772	18.66	867	20.17	807	19.40
Business Zone 1: Business Premises	4	0.78	1	0.35	-	-
Business Zone 3: Service Station	-	-	-	-	1	0.43
Community Zone 1: Place of Instruction	4	7.39	4	3.67	3	3.58
Community Zone 2: Place of Worship	1	0.32	1	0.34	2	0.44
Institutional Zone 3: Community Hall, Health Clinic	1	0.31	-	-	-	-
Public Open Space 1; Public Open Space	-	-	-	-	1	1.17

	Alternative Layout (Alternative A)		Alternative Layout (Alternative B – Option 1)		Preferred Layout (Alternative B – Option 2)	
Open Space Zone 2: Private Open Space	8	1.67	7	2.69	10	6.68
Transport Zone 1: Public Road	-	3.01	5	1.97	4	1.94
Transport Zone 2: Private Roads	-	5.61	6	6.34	6	6.09
Utility Zone	-	-	-	-	1	0.04
TOTAL DEVELOPMENT FOOTPRINT (EXCLUDING PUBLIC OPEN SPACE ZONE 1)	806	±37.75 Ha	891	±35.5Ha	864	±40.3Ha

3.3 No-Go Alternative

The "No Go" alternative is the option of not developing the proposed affordable housing development and associated infrastructure. The no-development option would result in a lost opportunity in terms of the employment opportunities associated with the construction and operation phase as well as the benefits associated with the provision of more than 800 houses and much needed social facilities.

As indicated by the appointed specialists, the current condition of the natural resources on site have already been degraded to various degrees. With intervention required to improve the quality of the identified resources.

The "no-go" alternative will result in the visual environment staying the same with the natural character of the area contributing to the "sense of place".

4. Description of Aspects to be Further Assessed by Specialists in the EIA Phase

4.1 Description of Identified Aspects (Impacts)

This section includes the identified potential environmental impacts and risks identified for each alternative. Potential significance ratings and mitigations have been included in the Scoping Report. These impact tables have however only at this "scoping" stage been informed by the Scoping Phase Terrestrial Biodiversity and Plant Species Assessment, Freshwater Biodiversity Assessment, Scoping Animal Species Assessment and Heritage and Palaeontological Investigations. The findings of the impact tables therefore at this stage are based on specialist input and the professional opinion of the EAP and may change considerably once more detailed specialist impact assessments occur and once we have received input for the public and the Authorities.

4.1.1 Pre-Construction/Planning

- **Climate Change Risks:** When finalising the design, climate change risks must be considered, and planned for, where possible. All relevant financial and time allowances for meeting the requirements of any conditions or requirements of the approved licenses/permits/authorizations, including the approved EMPr, must be planned for and integrated into appropriate tender documents and other relevant agreements. All relevant approvals/licenses/permits must be obtained and valid before construction commences, or the specific activity is commenced with, if relevant (such as Water Use Authorizations, for specific activities).
- **Legislative Compliance and Sustainability Impacts**: Failure to secure applicable legislative permits/licenses/authorizations/agreements, or failure to or plan for the incorporation of their relevant conditions, can lead to delays in terms of timeframes, as well as cost implications. Where legal non-compliance/s are observed, this can have legal penalties for the applicant.

4.1.2 Construction Phase

The following potential environmental impacts have been identified by the EAP and by initial input from Botanical and Freshwater specialists as impacts that may occur during the construction phase that need to firstly be avoided and if unavoidable, mitigated to an acceptable level of impact significance.

- **Agricultural Potential Impact - Loss of agricultural land** that has the potential to be used for cultivation of crops or other agricultural purposes (opportunity cost).
- **Terrestrial Biodiversity Impact** - **Permanent loss of vegetation cover as a result of site clearing:** Site clearing before construction will result in the blanket clearing of vegetation within the affected footprint. Although no Floral SCCs were identified on site, such loss could be seen, and should subsequently be prevented.
- **Terrestrial Biodiversity Impact – Alien Invasive Infestation:** Due to the heavily invaded state of the proposed development site, management of alien invasive vegetation will be critical during the construction phase of the proposed development.
- **Terrestrial Biodiversity Impact - Susceptibility of some areas to erosion as a result of construction related disturbance:** Removal of vegetation cover and soil disturbance may result in some areas being susceptible to soil erosion after completion of the activity.
- **Terrestrial Biodiversity Impact – Impact on Faunal Species and habitats:** Removal of vegetation cover and soil disturbance may result in the loss of the faunal SCC identified on site.
- **Terrestrial Biodiversity Impact – Impact on Ecological Processes:** Removal of vegetation cover and soil disturbance may result in the altering of Ecological and Aquatic, processes.
- **Dust & Noise Impact:** Limited dust and noise impacts may result due to construction activities on the site. Excavations and associated earth-moving activities may generate noise and vibration which may pose a nuisance to surrounding residents and other land users. Movement of heavy vehicles to & from the site may generate noise, which may affect surrounding residents.
- **Faunal Impact - Loss of Faunal Habitat and Species of Conservation Concern (SCCs):** Activity will result in the loss of habitat for faunal species. Additionally, the appointed specialist identified the Vulnerable species, Duthie's Golden Mole within the northern reaches of Portion 8.
- **Freshwater Resources Impact – Disturbance/Loss of aquatic vegetation and habitat:** Disturbance of aquatic habitat biota from clearance of vegetation, earthworks, and further invasive alien plant infestation, which can result in further deterioration in freshwater ecosystem integrity, and a reduction in the supply of ecosystem services.
- **Freshwater Resources Impact – Erosion of the banks and sedimentation of the watercourses:** Changes to hydrological regimes that could also lead to sedimentation and erosion, that could also occur in the operational phase. Concentrated stormwater flow paths and altered flow patterns causing increased erosion within the watercourses and sedimentation as the disturbed soils are carried by unmanaged surface runoff down slope. These impacts can result in the deterioration of aquatic ecosystem integrity and a reduction/loss of habitat for flora & fauna.
- **Freshwater Resources Impact – Changes to water quality:** There is potential for surface runoff to be contaminated and enter the watercourses, especially during flood events. During construction, earthworks will expose and mobilise earth materials, and a number of materials as well as chemicals will be imported and used on site and may end up in the surface water. In the operational phase, hydrocarbons and chemicals could potentially enter the watercourses. If not prevented, litter, and contaminants, including sand, silt, and dirt particles, will enter storm water runoff and pollute the watercourse. Micro-litter such as cigarette butts may travel through certain stormwater grids and grids may not be regularly cleared. Sewage leaks are probable and of high risk. This can result in possible deterioration in aquatic ecosystem integrity and species diversity. However, the HGM1 wetland is already highly contaminated by raw effluent.

- **Freshwater Resources Impact – Changes to hydrological regime:** Possible increase in surface water runoff/ patterns on hydrological form and function during the construction and into the operational phase. Poor stormwater management could result in localised changes to flows (volume) that would result in form and function changes within aquatic habitat. The impact can result in further deterioration in freshwater ecosystem integrity, and a reduction in the supply of ecosystem services.
- **Heritage Impact** - The loss of Heritage resources, including Archaeological and Paleontological: Due to land clearing and excavations on the site.
- **Pollution & Contamination of Soil and Water Resources:** Construction activities will generate waste. In addition, fuel, oil, lubricants and other pollutants may leak from vehicles/
- machinery and contaminate the soil. Pollution and soil contamination could also occur from chemical toilets, cement mixing directly on the soil and storm water runoff may flow over the site camp area and carry contaminants off-site.
- **Socio-Economic Impact – Creation of business and employment opportunities:** The majority of work during the construction phase is likely to be undertaken by local contractors and builders. The proposed development will therefore represent a positive benefit for the local construction and building sector in the Garden Route District Municipality (GRDM) and Bitou Local Municipality (BLM). The majority of the building materials associated with the construction phase will be sourced from locally based suppliers from the GRDM and BLM. A significant portion of the annual wage bill will be spent in the local GRDM and BLM.
- **Traffic & Safety Impact:** It is proposed to deliver a significant amount of materials and equipment to the site during the construction phase of the development. Numerous truck trips will be required every day that could cause a temporary disturbance to traffic in the area. Impacts are expected to occur to the traffic in the area due to increased truck and construction vehicle traffic expected during the construction phase. Construction vehicles may impact on the existing road conditions (road capacity and congestion). Vehicles may impact on road safety conditions due to an increase in construction phase vehicles entering and exiting the site and they may impact on the condition of the existing road network.
- **Visual Impact:** The construction phase is associated with temporary disturbance as a result of construction (trench excavations, vehicles, machinery, fencing & signage) that may have a negative visual impact to the area.

4.1.3 Operation Phase

- **Terrestrial Biodiversity Impact** - **Permanent loss of vegetation cover as a result of site clearing:** The impacts of the construction phase, specifically regarding the re-establishment of vegetation within the proposed development site is likely to persist as the site camp is removed from the development footprint and private open space areas (integrated within the proposed development area) are revegetated.
- **Terrestrial Biodiversity Impact – Alien Invasive Infestation:** Due to the heavily invaded state of the proposed development site, management of alien invasive vegetation will be critical during the operational phase of the proposed development.
- **Terrestrial Biodiversity Impact - Susceptibility of some areas to erosion as a result of construction related disturbance:** Removal of vegetation cover and soil disturbance may result in some areas being susceptible to soil erosion after completion of the activity. Such impact from the construction phase may still be present during the operational activities and should be mitigated accordingly.
- **Terrestrial Biodiversity Impact – Impact on Faunal Species and habitats:** Removal of vegetation cover and soil disturbance may result in the disturbance of the faunal SCC identified on site, this impact could possibly be seen throughout the operational phase of the proposed development.
- **Terrestrial Biodiversity Impact – Impact on Ecological Processes:** Removal of vegetation cover and soil disturbance may result in the disruption of the ecological and aquatic processes of the sensitive receptors on site. This impact is likely to persist during the operational phase of the proposed development as the open space areas will not fenced-off from the public.

- **Freshwater Resources Impact – Erosion of the banks and sedimentation of the watercourses:** Where soil erosion problems and bank stability concerns initiated during the construction phase are not timeously and adequately addressed, these can persist into the operational phase of the development project and continue to have a negative impact downstream. The increase in hardened surface by development, and the impact of road and pipe crossings will be considerable and, if not mitigated against, will result in further erosion. Surface runoff and velocities will be increased, and flows will be concentrated by stormwater infrastructure.
- **Freshwater Resources Impact – Water Pollution:** In the operational phase, hydrocarbons and chemicals could potentially enter the watercourses. If not prevented, litter, and contaminants, including sand, silt, and dirt particles, will enter storm water runoff and pollute the watercourse. Micro-litter such as cigarette butts may travel through certain stormwater grids and grids may not be regularly cleared. Sewage leaks are probable and of high risk. This can result in possible deterioration in aquatic ecosystem integrity and species diversity.
- **Freshwater Resources Impact – Flow Modification:** increase in surface water runoff/ patterns on hydrological form and function during the construction and into the operational phase. Poor stormwater management could result in localised changes to flows (volume) that would result in form and function changes within aquatic habitat. The impact can result in further deterioration in freshwater ecosystem integrity, and a reduction in the supply of ecosystem services.
- **Socio-Economic Impact - Provision of affordable income housing: T**he proposed development will assist to address the housing backlog in the area, specifically the housing needs of the low and middle income households. This will represent a significant social benefit for the households in the local municipality that currently live in informal areas.
- **Socio-Economic Impact - Provision of schools and public spaces:** The proposed development makes provision for the establishment of schools, public open spaces and private open spaces etc. These components will all contribute to an improved quality of life for many residents in the local municipality who currently live in informal areas that are not well serviced and lack public facilities, such as parks and open spaces.
- **Socio-Economic Impact - Employment and business:** The business and commercial components will create employment opportunities for local residents. The residential component may also create some opportunities for domestic workers and gardeners etc. However due the low-income levels these opportunities are likely to be limited. Additional employment opportunities will also be created by the proposed schools and health clinic. The majority of the employment opportunities are likely to benefit Historically Disadvantaged Individuals (HDIs). Given the high unemployment levels in the surrounding areas, coupled with the low income and education levels, this would represent a positive social impact. The operational phase will also create opportunities for local businesses, such as local maintenance and building companies, garden services and security companies, petrol stations, shops and restaurants etc. and create opportunities for new businesses to develop. The increased number of households will also create opportunities for the taxi sector. The local estate agencies in the area and legal firms would also benefit from the sale and resale of properties associated with the new development.
- **Socio-Economic Impact - Broaden the rates base:** The development will result in an increase in the rates base. In addition, the proposed development would also generate revenue for the local municipality from the consumption of water and electricity.
- **Traffic & safety impact:** A significant increase in traffic is expected to occur in the area as a result of more than 855 erven (including various social amenities) proposed. Vehicles may impact on the existing road network and road safety conditions due to an increase in vehicles entering and exiting the site.
- **Visual Impact – Land use character & "sense of place":** It is proposed to change the land use character and existing sense of place of the site from a largely undeveloped site in a rural environment to a built up mixed use development of approximately 36ha. The proposed development could impact on the "sense of place" of the area to sensitive receptors that can see the development.

4.2 Aspects Considered in the Scoping Phase

The following **Specialist Baseline Assessment** input has been undertaken, in order **to inform the design, layout and infrastructure requirements** of the development proposal and **fulfill the content requirements of the Scoping Report in terms of the expected impact significance**:

- Faunal Species impact assessment – Blueskies: Dr Jacobus Visser
- Heritage and Paleontology Notice of Intent to Develop – ASHA consulting: Jayson Orton
- Terrestrial Biodiversity and Plant Species Impact Assessment – Jamie Pote
- Aquatic Biodiversity Impact Assessment – Upstream Consulting – Debbie Fordham
- Agricultural Compliance Statement – SoilZA - Johann Lanz

The assessments listed above have therefore informed the Scoping Report and associated proposed preferred layout plan.

4.3 Aspects Proposed to be considered during the EIA Phase

It is proposed to undertake the following additional Specialist Impact Assessment Studies and Technical Reports during the EIA Phase:

- A Terrestrial Biodiversity and Plant Species Impact Assessment that must include a comparative assessment of the three options for the proposed development layout.
- An Animal Species Impact Assessment that must include a comparative assessment of the three options for the proposed development layout.
- An Aquatic Biodiversity Impact Assessment that must include a comparative assessment of the three options for the proposed development layout.
- An Agricultural Compliance Statement that must include a determination of the sensitivity of the proposed development area and determine the impact of any development option on the agricultural resources viability.
- An Engineering Services Report further describing Stormwater Management on site, placement of proposed services, confirmation of services capacity (water, wastewater, stormwater, electricity, waste etc) and resource conservation measures.

5. Methodology for Assessing the Environmental Aspects

5.1 Methodology for Agricultural Input

Phase 1 (Status Quo of Study Area & Site Visit & Baseline Report – to be included in Scoping Report)

- ✓ Undertake site sensitivity verification including:
  - a desk top analysis, using satellite imagery;
  - a preliminary on-site inspection; and
  - any other available and relevant information.
  - The outcome of the site sensitivity verification must be recorded in the form of a report that:
    - confirms or disputes the current use of the land and the environmental sensitivity as identified by the screening tool, such as new developments or infrastructure, the change in vegetation cover or status etc.;
    - contains a motivation and evidence (e.g. photographs) of either the verified or different use of the land and environmental sensitivity; and
    - is submitted together with the relevant assessment report prepared in accordance with the requirements of the Environmental Impact Assessment Regulations.
- ✓ A baseline description of the agro-ecosystem must be provided. The Baseline description must explain any current agricultural activities, the existing environmental attributes and impacts on any alternative sites.

- ✓ Identify and list all legislation and permit requirements that are relevant to the development proposal in context of the study.
- ✓ Detailed features required of the baseline description is provided in the Gazetted Protocols, this includes:
    - The assessment must be undertaken based on a site inspection as well as an investigation of the current production figures, where the land is under cultivation or has been within the past 5 years, and must identify:
        - the extent of the impact of the proposed development on the agricultural resources; and
        - whether or not the proposed development will have an unacceptable impact on the agricultural production capability of the site, and in the event where it does, whether such a negative impact is outweighed by the positive impact of the proposed development on agricultural resources.
    - The status quo of the site must be described, including the following aspects which must be considered as a minimum in the baseline description of the agroecosystem:
        - the soil form/s, soil depth (effective and total soil depth), top and sub-soil clay percentage, terrain unit and slope;
        - where applicable, the vegetation composition, available water sources as well as agro-climatic information;
        - the current productivity of the land based on production figures for all agricultural activities undertaken on the land for the past 5 years, expressed as an annual figure and broken down into production units;
        - the current employment figures (both permanent and casual) for the land for the past 3 years, expressed as an annual figure; and
        - existing impacts on the site, located on a map (e.g. erosion, alien vegetation, non-agricultural infrastructure, waste, etc.).
    - Confirm Sensitivity of the Site.
- ✓ Based on the findings the specialist is to heed the section 1.1. of the protocol which indicates that, "An applicant intending to undertake an activity identified in the scope of this protocol on a site identified by the screening tool as being of "very high" or "high" sensitivity for agricultural resources must submit an Agricultural Agro-Ecosystem Specialist Assessment, unless:

  1.1.1. the application includes a linear activity for which impacts to the agricultural resource are temporary and the land in the opinion of the soil scientist or agricultural specialist, based on the mitigation and remedial measures, can be returned to the current land capability within two years of the completion of the construction phase;

  1.1.2. the impact on agricultural resources is from an electricity pylon; or

  1.1.3. information gathered from the site sensitivity verification differs from the designation of "very high" or "high" agricultural sensitivity, and it is found to be of a "medium" or "low" sensitivity.

  1.2. Should paragraphs 1.1.1; 1.1.2; or 1.1.3 apply, an Agricultural Compliance Statement must be submitted.

Phase 2, (Compliance Statement Content – to be included in the EIA)

- ✓ The compliance statement must be prepared by a soil scientist or agricultural specialist registered with the SACNASP.
- ✓ be applicable to the preferred site and proposed development footprint;
- ✓ confirm that the site is of "low" or "medium" sensitivity for agriculture; and

- ✓ indicate whether or not the proposed development will have an unacceptable impact on the agricultural production capability of the site.
- ✓ The compliance statement must contain, as a minimum, the following information:
  - o contact details and relevant experience as well as the SACNASP registration number of the soil scientist or agricultural specialist preparing the assessment including a curriculum vitae;
  - o a signed statement of independence;
  - o a map showing the proposed development footprint (including supporting infrastructure) with a 50m buffered development envelope, overlaid on the agricultural sensitivity map generated by the screening tool;
  - o calculations of the physical development footprint area for each land parcel as well as the total physical development footprint area of the proposed development including supporting infrastructure;
  - o confirmation that the development footprint is in line with the allowable development limits.
  - o confirmation from the specialist that all reasonable measures have been taken through micro-siting to avoid or minimise fragmentation and disturbance of agricultural activities;
  - o a substantiated statement from the soil scientist or agricultural specialist on the acceptability, or not, of the proposed development and a recommendation on the approval, or not, of the proposed development;
  - o any conditions to which this statement is subjected;
  - o in the case of a linear activity, confirmation from the agricultural specialist or soil scientist, that in their opinion, based on the mitigation and remedial measures proposed, the land can be returned to the current state within two years of completion of the construction phase;
  - o where required, proposed impact management outcomes or any monitoring requirements for inclusion in the EMPr; and
  - o a description of the assumptions made and any uncertainties or gaps in knowledge or data.

5.2 Methodology for Animal Input

Phase 1 (Status Quo Assessment – to be included in Scoping Report)

- ✓ The assessment must contextualize the study area in order to provide a baseline description of the ecological system, the terrestrial biodiversity and any significant terrestrial features must be provided.
- ✓ The assessment must identify the following;
  - ✓ Potential for habitat or ecosystem on receiving environment, if any.
  - ✓ Potential for Species of Conservation Concern (SCC) or lack thereof.
  - ✓ Confirmation of the presence or lack of, of animal features identified in the screening tool.
- ✓ Undertake a site visit and ground-truth biodiversity information. Where required, undertake baseline surveys and/or studies to supplement the information base and inform the assessment. The site inspection to determine the presence or likely presence of SCC must be undertaken in accordance with the Species Environmental Assessment Guidelines.
- ✓ Estimate the trajectory of change in the context of the 'No-Go' Alternative due to existing impacts.
- ✓ Assessment criteria to be aligned with the promulgated Procedures for the Assessment and Minimum Criteria for Reporting on Identified Environmental Themes (October 2020).
- ✓ The Specialist must inform the EAP of the final outcome of the baseline study for scoping, advising whether a compliance statement or impact assessment was applicable.

Phase 2 (Terrestrial Animal Species Specialist Assessment Report – to be included in EIA)

- ✓ In accordance with the Gazetted Protocols, the findings of the assessment must be written up in a Terrestrial Animal Species Specialist Assessment Report.
- ✓ A baseline study must be provided to advise the scoping phase of the EIA, and thereafter a detailed impact assessment must be provided.
- ✓ Terrestrial Animal Species Specialist Assessment Report must include the following;
    - ✓ The Identification, prediction and description of potential impacts on terrestrial ecology during the construction and operational phases of the project. Impacts are described in terms of their extent, intensity, and duration. The other aspects that must be included in the evaluation are probability, reversibility, irreplaceability, mitigation potential, and confidence in the evaluation.
    - ✓ This must be undertaken for all of the alternatives and must be rated with and without mitigation to determine the significance of the impacts.
    - ✓ The degree to which the impacts and risks can cause loss of irreplaceable resources.
    - ✓ Recommend actions that should be taken to avoid impacts on sensitive ecology, in alignment with the mitigation hierarchy, and any measures necessary to restore disturbed areas or ecological processes.
    - ✓ Identify areas of high importance or sensitivity on which impacts should *preferably* be *avoided or prevented* or, where they cannot altogether be avoided, should at least be *minimized* (e.g. through buffers or setbacks).
    - ✓ Identify areas that are known to be important for biodiversity but are degraded or invaded by alien species and require rehabilitation/restoration, including areas that could improve connectivity and reduce fragmentation in the landscape.
    - ✓ An accurate description and map of the areas and features of importance to biodiversity and their sensitivity to the proposed development. Possibly recommend alternatives.
    - ✓ Rehabilitation guidelines for disturbed areas associated with the proposed project.
    - ✓ Any monitoring protocol that is deemed necessary
- ✓ A substantiated statement, based on the findings of the specialist assessment, regarding the acceptability, or not, of the proposed development, if it should receive approval or not must be included.
- ✓ As a minimum, as per the Gazetted Protocol (October 2020), the assessment must be undertaken in accordance with the Species Environmental Assessment Guideline; and must;
    - ✓ identify the SCC which were found, observed or are likely to occur within the study area;
    - ✓ provide evidence (photographs or sound recordings) of each SCC found or observed within the study area, which must be disseminated by the specialist to a recognized online database facility (the preferred platform is iNaturalist.org but any other national or international virtual museum), immediately after the site inspection has been performed;
    - ✓ identify the distribution, location, viability and provide a detailed description of population size of the SCC, identified within the study area;
    - ✓ identify the nature and the extent of the potential impact of the proposed development on the population of the SCC located within the study area;
    - ✓ determine the importance of the conservation of the population of the SCC identified within the study area, based on information available in national and international databases, including the IUCN Red List of Threatened Species, South African Red List of Species, and/or other relevant databases;
    - ✓ determine the potential impact of the proposed development on the habitat of the SCC located within the study area;

- ✓ include a review of relevant literature on the population size of the SCC, the conservation interventions as well as any national or provincial species management plans for the SCC. This review must provide information on the need to conserve the SCC and indicate whether the development is compliant with the applicable species management plans and if not, include a motivation for the deviation;
- ✓ identify any dynamic ecological processes occurring within the broader landscape that might be disrupted by the development and result in negative impact on the identified SCC, for example, fires in fire-prone systems;
- ✓ identify any potential impact of ecological connectivity in relation to the broader landscape, resulting in impacts on the identified SCC and its long term viability;
- ✓ determine buffer distances as per the Species Environmental Assessment Guidelines used for the population of each SCC;
- ✓ discuss the presence or likelihood of additional SCC including threatened species not identified by the screening tool, Data Deficient or Near Threatened Species, as well as any undescribed species (should be assessed as "High Sensitivity); or roosting and breeding or foraging areas used by migratory species where these species show significant congregations, occurring in the vicinity; and
- ✓ identify any alternative development footprints within the preferred site which would be of "low" or "medium" sensitivity as identified by the screening tool and verified through the site sensitivity verification.

5.3 Methodology for Aquatic Input

Phase 1 (Contextualisation of study area – included in the Scoping Report)

- ✓ Contextualization of the study area in terms of important biophysical characteristics and the latest available aquatic conservation planning information (including but not limited to vegetation, CBAs, Threatened ecosystems, any Red data book information, NFEPA data, broader catchment drainage and protected areas).
- ✓ Desktop delineation and illustration of all watercourses within and surrounding the study area utilising available site-specific data such as aerial photography, contour data and water resource data.
- ✓ A risk/screening assessment of the identified aquatic ecosystems to determine which ones will be impacted upon by the proposed development and therefore require ground truthing and detailed assessment.

It should be noted that following the site verification visit, as per point 1: General Matters of the Protocol For the Specialist Assessment and Minimum Report Content Requirements for Environmental Impacts on Aquatic Biodiversity,

" 1.2. Where the information gathered from the site sensitivity verification differs from the screening tool designation of "very high" aquatic biodiversity sensitivity, and it is found to be of a "low" sensitivity, an Aquatic Biodiversity Compliance Statement must be submitted."

And,

"1.4. If any part of the proposed development footprint falls within an area of "very high" sensitivity, the assessment and reporting requirements prescribed for the "very high" sensitivity apply to the entire footprint, excluding a linear activity for which impacts on aquatic biodiversity are temporary and the land in the opinion of the aquatic biodiversity specialist, based on the mitigation and remedial measures, can be returned to the current state within two years of the completion of the construction phase, in which case a compliance statement applies. In the context of this protocol, development

footprint means the area on which the proposed development will take place and includes any area that will be disturbed."

Phase 2 (Delineation and classification – included in the Scoping Report)

- ✓ Ground truthing, infield identification, delineation and mapping of any potentially affected aquatic ecosystems in terms of the Department of Water and Sanitation (DWAF 2008) Updated Manual for the Identification and Delineation of Wetlands and Riparian Areas.
- ✓ Field delineation must follow the accepted national protocol and should result in a map that includes the identified boundary and the field data collection points (which should include at least one point outside the wetland or riparian area), and a report that explains how and when the boundary was determined.
- ✓ Classification of the identified aquatic ecosystems in accordance with the, 'National Wetland Classification System for Wetlands and other Aquatic Ecosystems in South Africa' (Ollis et al. 2013) and WET-Ecoservices (Kotze et al. 2009).
- ✓ Description of the identified watercourses with photographic evidence.

A baseline description of the site is to be compiled and is to reflect the following aspects

- ✓ The aquatic ecosystem types, the presence of aquatic species, and composition of aquatic species communities, their habitat, distribution and movement patterns.
- ✓ The threat status of the ecosystem and species as identified by the screening tool.
- ✓ An indication of the national and provincial priority status of the aquatic ecosystem, including a description of the criteria for the given status (i.e. if the site includes a wetland or a river freshwater ecosystem priority area or sub catchment, a strategic water source area, a priority estuary, whether or not they are free -flowing rivers, wetland clusters, a critical biodiversity or ecologically sensitivity area).
- ✓ A description of the ecological importance and sensitivity of the aquatic ecosystem including:
    - the description (spatially, if possible) of the ecosystem processes that operate in relation to the aquatic ecosystems on and immediately adjacent to the site (e.g. movement of surface and subsurface water, recharge, discharge, sediment transport, etc.); and (b) the historic ecological condition (reference) as well as present ecological state of rivers (in-stream, riparian and floodplain habitat), wetlands and/or estuaries in terms of possible changes to the channel and flow regime (surface and groundwater).
    - Ecological infrastructure, processes and services within the site and immediate surroundings.
- ✓ Identify alternative development footprints within the preferred site which would be of a "low" sensitivity as identified by the screening tool and verified through the site sensitivity verification and which were not considered appropriate.

In the case of the specialist identifying that the sensitivity is low and as per 1.4 above, a Compliance Statement should be undertaken, as follows:

Phase 3 (Aquatic Assessment – included in the EIA)

- ✓ Conduct a Present Ecological State (PES), functional importance assessment and Ecological Importance and Sensitivity (EIS) assessment of the delineated wetland habitats, utilising the latest tools, such as:

    →Level 2 WET-Health tool (Macfarlane et al., 2009/2018) – PES

    → WET-Ecoservices (Kotze et al., 2009/2018) and/or the Wetland EIS assessment tool of Roundtree and Kotze (2013). - Functional assessment
- ✓ Conduct a Present Ecological State (PES) and Present Ecological Importance and Sensitivity (EIS) assessment of the delineated river/riparian habitats, utilising:

    → Qualitative Index of Habitat Integrity (IHI) tool adapted from (Kleynhans, 1996) – PES

→ DWAF (DWS) River EIS tool (Kleynhans, 1999) – EIS

- ✓ Indicate the Recommended Ecological Category (REC) of the potentially impacted aquatic ecosystems.

Phase 4 (Impact Assessment – included in the EIA)

- ✓ Identification, prediction and description of potential impacts on aquatic habitat during the construction and operational phases of the project. Impacts are described in terms of their extent, intensity, and duration. The other aspects that must be included in the evaluation are probability, reversibility, irreplaceability, mitigation potential, and confidence in the evaluation.
- ✓ All direct, indirect, and cumulative impacts for each alternative must be rated with and without mitigation to determine the significance of the impacts.

Confirm:

- ✓ Is the proposed development consistent with maintaining the priority aquatic ecosystem in its current state and according to the stated goal.
- ✓ is the proposed development consistent with maintaining the resource quality objectives for the aquatic ecosystems present.
- ✓ how will the proposed development impact on fixed and dynamic ecological processes that operate within or across the site? This must include:
  - impacts on hydrological functioning at a landscape level and across the site which can arise from changes to flood regimes (e.g. suppression of floods, loss of flood attenuation capacity, unseasonal flooding or destruction of floodplain processes);
  - will the proposed development change the sediment regime of the aquatic ecosystem and its sub-catchment (e.g. sand movement, meandering river mouth or estuary, flooding or sedimentation patterns);
  - what will the extent of the modification in relation to the overall aquatic ecosystem be (e.g. at the source, upstream or downstream portion, in the temporary / seasonal / permanent zone of a wetland, in the riparian zone or within the channel of a watercourse, etc.); and
  - to what extent will the risks associated with water uses and related activities change;
- ✓ how will the proposed development impact on the functioning of the aquatic feature? This must include:
  - base flows (e.g. too little or too much water in terms of characteristics and requirements of the system);
  - quantity of water including change in the hydrological regime or hydroperiod of the aquatic ecosystem (e.g. seasonal to temporary or permanent; impact of over-abstraction or instream or off-stream impoundment of a wetland or river);
  - change in the hydrogeomorphic typing of the aquatic ecosystem (e.g. change from an unchannelled valley-bottom wetland to a channelled valley-bottom wetland);
  - quality of water (e.g. due to increased sediment load, contamination by chemical and/or organic effluent, and/or eutrophication);
  - fragmentation (e.g. road or pipeline crossing a wetland) and loss of ecological connectivity (lateral and longitudinal); and
  - the loss or degradation of all or part of any unique or important features associated with or within the aquatic ecosystem (e.g. waterfalls, springs, oxbow lakes, meandering or braided channels, peat soils, etc.);
- ✓ how will the proposed development impact on key ecosystems regulating and supporting services especially: (a) flood attenuation; (b) streamflow regulation; (c) sediment trapping; (d) phosphate assimilation; (e) nitrate assimilation; (f) toxicant assimilation; (g) erosion control; and (h) carbon storage

- ✓ how will the proposed development impact community composition (numbers and density of species) and integrity (condition, viability, predator-prey ratios, dispersal rates, etc.) of the faunal and vegetation communities inhabiting the site?

Phase 5 (Mitigation and monitoring – included in the EIA)

- ✓ Recommend actions that should be taken to avoid impacts on aquatic habitat, in alignment with the mitigation hierarchy, and any measures necessary to restore disturbed areas or ecological processes.
- ✓ Determination and mapping of any necessary buffer zones with consideration to the Buffer zone guidelines for rivers, wetlands and estuaries (Macfarlane & Bredin, 2016).
- ✓ Rehabilitation guidelines for disturbed areas associated with the proposed project and monitoring.

5.4 Methodology for Heritage Input

Phase 1 (Status Quo Assessment – Site Verification (NID) – Included in Scoping Report)

- ✓ The assessment must contextualize the study area in order to provide a baseline description of the heritage resources.
- ✓ Review available historic information the AIA.
- ✓ Review legal and planning context.
- ✓ Defining the Heritage and Aesthetic components of the environment.
- ✓ Analyze and identify the types of Historic resources present from tangibles like landscape, to intangibles like traditions, and knowledge.
- ✓ Determine the significance of the identified resources.
- ✓ Grade the heritage resources on site and the site in terms of its context in the landscape.
- ✓ Compile NID and submit with Compliance Statement, or if it is determined that an impact assessment is required, continue on with Phase 2.

Phase 2 (Assessment and analysis – Included in the Scoping Report)

- ✓ The report must include a heritage resource analysis and constraints map.
- ✓ Provide an assessment of the character of the landscape to determine historic characteristics, scenic resources, historic sensitive areas and historic resources must be included
- ✓ Explain the correlation between the above to determine the varying levels of potential impact.
- ✓ Establish any further heritage constraints to guide the development process through establishing thresholds of impact significance.

Phase 3 (Impact Assessment in EIA)

- ✓ Assess the degree of and nature of significance.
- ✓ Assess both positive and negative impacts based on social history, public memory and cultural landscape information.
- ✓ Include an interpretation of the regional cultural landscape issues and the impact of the development in relation to these issues.
- ✓ Address heritage issues that arose during the process.
- ✓ Describe variables that could influence the historic landscape. 6. Incorporating the heritage related studies with an integrated set of recommendations
- ✓ Conclude the Heritage Impact and cumulate impacts.
- ✓ Suggest mitigating and management guidelines.
- ✓ A substantiated statement, based on the findings of the specialist assessment, regarding the acceptability, or not, of the proposed development, if it should receive approval or not must be included

Please note that based on the feedback received from Heritage Western Cape, no further assessment is required in terms of the proposed development. The Notice of Intent to Develop, as submitted to Heritage Western Cape, has been included as an appendix of the Scoping Report.

5.5 Methodology for Plant Species Input

Phase 1 (Status Quo Assessment – Included in Scoping Report)

- ✓ The assessment must contextualize the study area in order to provide a baseline description of the ecological system, the terrestrial plant biodiversity and any significant terrestrial features must be provided.
- ✓ The assessment must identify the following;
  - ✓ Terrestrial critical biodiversity areas (CBAs)
  - ✓ Terrestrial ecological support areas (ESAs)
  - ✓ Protected areas as defined by the National Environmental Management: Protected Areas Act, 2004
  - ✓ Priority areas for protected area expansion
  - ✓ Indigenous forests
- ✓ Undertake a site visit and ground-truth biodiversity information. Where required, undertake baseline surveys and/or studies to supplement the information base and inform the assessment.
- ✓ Estimate the trajectory of change in the context of the 'No-Go' Alternative due to existing impacts.
- ✓ Assessment criteria to be aligned with the promulgated Procedures for the Assessment and Minimum Criteria for Reporting on Identified Environmental Themes (October 2020).

Following the site verification visit, in which the Specialist confirms the presence, likely presence or confirmed absence of a SCC identified within the site identified as "low" sensitivity by the screening tool, the Specialist is to confirm the need for a Compliance Statement or a Terrestrial Plant Species Assessment and undertake this report/statement in accordance with the Gazetted Protocol (October 2020).

Phase 3: (Terrestrial Plant Specialist Assessment Report - EIA)

- ✓ In accordance with the Gazetted Protocols, the findings of the assessment must be written up in a Terrestrial Plant Specialist Assessment Report.
- ✓ A baseline study must be compiled to inform the scoping phase. Thereafter the specialist may complete the final detailed study.
- ✓ Terrestrial Plant Specialist Assessment Report must include the following;
  - The Identification, prediction and description of potential impacts on terrestrial ecology during the construction and operational phases of the project. Impacts are described in terms of their extent, intensity, and duration. The other aspects that must be included in the evaluation are probability, reversibility, irreplaceability, mitigation potential, and confidence in the evaluation.
  - This must be undertaken for all of the alternatives and must be rated with and without mitigation to determine the significance of the impacts.
  - The degree to which the impacts and risks can cause loss of irreplaceable resources.
  - Recommend actions that should be taken to avoid impacts on sensitive ecology, in alignment with the mitigation hierarchy, and any measures necessary to restore disturbed areas or ecological processes.
  - Identify areas of high importance or sensitivity on which impacts should preferably be avoided or prevented or, where they cannot altogether be avoided, should at least be minimized (e.g. through buffers or setbacks).

- Identify areas that are known to be important for biodiversity but are degraded or invaded by alien species and require rehabilitation/restoration, including areas that could improve connectivity and reduce fragmentation in the landscape.
- An accurate description and map of the areas and features of importance to biodiversity and their sensitivity to the proposed development. Possibly recommend alternatives.
- Rehabilitation guidelines for disturbed areas associated with the proposed project.
- Any monitoring protocol that is deemed necessary

✓ A substantiated statement, based on the findings of the specialist assessment, regarding the acceptability, or not, of the proposed development, if it should receive approval or not must be included

✓ Minimum requirements for report content include that the assessment must be undertaken in accordance with the Species Environmental Assessment Guideline and must:

- Identify the SCC which were found, observed or are likely to occur within the study area;
- provide evidence (photographs) of each SCC found or observed within the study area, which must be disseminated by the specialist to a recognized online database facility9 immediately after the site inspection has been performed
- identify the distribution, location, viability and detailed description of population size of the SCC identified within the study area;
- identify the nature and the extent of the potential impact of the proposed development to the population of the SCC located within the study area;
- determine the importance of the conservation of the population of the SCC identified within the study area, based on information available in national and international databases including the IUCN Red List of Threatened Species, South African Red List of Species, and/or other relevant databases;
- determine the potential impact of the proposed development on the habitat of the SCC located within the study area;
- include a review of relevant literature on the population size of the SCC, the conservation interventions as well as any national or provincial species management plans for the SCC.
- This review must provide information on the need to conserve the SCC and indicate whether the development is compliant with the applicable species management plans and if not, a motivation for the deviation;
- identify any dynamic ecological processes occurring within the broader landscape, that might be disrupted by the development and result in negative impact on the identified SCC, for example, fires in fire-prone systems;
- identify any potential impact on ecological connectivity within the broader landscape, and resulting impacts on the identified SCC and its long-term viability;
- determine buffer distances as per the Species Environmental Assessment Guidelines used for the population of each SCC; and
- discuss the presence or likelihood of additional SCC including threatened species not identified by the screening tool, Data Deficient or Near Threatened Species, as well as any undescribed species and
- identify any alternative development footprints within the preferred development site which would be of "low" sensitivity" or "medium" sensitivity as identified by the screening tool and verified through the site sensitivity verification.

5.6 Methodology for Terrestrial Biodiversity Input

Phase 1: (Baseline Study – Included in Scoping Report)

The assessment must provide a baseline description of the site which includes, as a minimum, the following aspects:

- ✓ A description of the ecological drivers or processes of the system and how the proposed development will impact these;
- ✓ A description of the ecological infrastructure, functioning, processes and services (e.g. fire, migration, pollination, etc.) that operate within the preferred site;
- ✓ A description of the ecological corridors that the proposed development would impede including migration and movement of flora and fauna;
- ✓ Indicate whether or not the proposed development will have any impact on biodiversity features;
- ✓ An indication and description of any significant terrestrial landscape features, including rare or important flora- faunal associations, presence of strategic water source areas (SWSAs) or freshwater ecosystem priority area (FEPA) sub catchments;
- ✓ A description of terrestrial biodiversity and ecosystems on the preferred site, including:
    - o main vegetation types;
    - o threatened ecosystems, including listed ecosystems as well as locally important habitat types identified;
    - o ecological connectivity, habitat fragmentation, ecological processes and fine - scale habitats; and
    - o species, distribution, important habitats (e.g. feeding grounds, nesting sites, etc.) and movement patterns identified;
    - o Species of Conservation Concern
- ✓ Make reference to the allocated sensitivity as per the screening tool, state whether or not this sensitivity is accurate and recommend appropriate reclassification if it is not.
- ✓ The assessment must identify any alternative development footprints within the preferred site which would be of a "low" sensitivity as identified by the screening tool and verified through the site sensitivity verification.
- ✓ The specialist must confirm the need for either a Compliance Statement or an Impact Assessment.

Based on the results of a site visit, the following aspects are to be identified, discussed and applied to form the base for assessment:

- ✓ Terrestrial Critical Biodiversity Areas (CBAs), including:
    - o the reasons why an area has been identified as a CBA;
    - o an indication of whether or not the proposed development is consistent with maintaining the CBA in a natural or near natural state or in achieving the goal of rehabilitation;
    - o percentage of site (erven/farm portions) covered by CBA
    - o percentage of CBA (specify degraded/transformed and pristine) lost to proposed development layout alternatives (if layout is available).
    - o the impact on species composition and structure of vegetation with an indication of the extent of clearing activities in proportion to the remaining extent of the ecosystem type(s);
    - o the impact on ecosystem threat status;
    - o the impact on explicit subtypes in the vegetation;
    - o the impact on overall species and ecosystem diversity of the site; and
    - o the impact on any changes to threat status of populations of species of conservation concern in the CBA;
    - o Inclusion of any necessary buffer areas, including the identification of zones of sensitivity within the CBA that are priority to maintain ecological integrity.
- ✓ Terrestrial Ecological Support Areas (ESAs), including:
    - o Percentage/quantity of site (erven/farm portions) covered by ESA

  - percentage of ESA lost to development (if layout is available)
  - the impact on the ecological processes that operate within or across the site;
  - the extent the proposed development will impact on the functionality of the ESA; and
  - loss of ecological connectivity (on site, and in relation to the broader landscape) due to the degradation and severing of ecological corridors or introducing barriers that impede migration and movement of flora and fauna;
  - Inclusion of any necessary buffer areas, including the identification of zones of sensitivity within the ESA that are priority to maintain ecological integrity.
- ✓ Protected areas as defined by the National Environmental Management: Protected Areas Act, 2004 including-
  - an opinion on whether the proposed development aligns with the objectives or purpose of the protected area and the zoning as per the protected area management plan;
- ✓ Priority areas for protected area expansion, including-
  - the way in which in which the proposed development will compromise or contribute to the expansion of the protected area network;
- ✓ SWSAs including:
  - the impact(s) on the terrestrial habitat of a SWSA; and
  - the impacts of the proposed development on the SWSA water quality and quantity (e.g. describing potential increased runoff)
- ✓ FEPA sub catchments, including-
  - the impacts of the proposed development on habitat condition and species in the FEPA sub catchment;
- ✓ Indigenous forests, including:
  - impact on the ecological integrity of the forest; and
  - percentage of natural or near natural indigenous forest area lost and a statement on the implications in relation to the remaining areas.
- ✓ Vegetation present onsite, including:
  - percentage of vegetation cover on the proposed site (erven/farm portions)
    - percentage of indigenous vegetation cover
    - percentage of alien invasive vegetation cover
  - percentage of vegetation cover to be lost due to development (provision of layouts depending)
    - percentage indigenous vegetation lost
    - percentage of alien invasive vegetation to be cleared
  - visualisation (map/illustration) of alien and indigenous vegetation loci.
- ✓ Identification of core ecosystem areas within the proposed site, as well as a description of the Ecosystem services and process provided.
- ✓ An indication and description of any Species of Conservation Concern
  - If search and rescue is recommended please provide a description of appropriate removal, maintenance and reinstatement methodology.
- ✓ Specify location of the areas not suitable for development, which are to be avoided during construction and operation (where relevant)
- ✓ Determine the need for a Compliance Statement or a Terrestrial Biodiversity Assessment Report, as per point 1: General Information of the Protocol for the Specialist Assessment and Minimum Report Content Requirements for Environmental Impacts on Terrestrial Biodiversity, it is stated:
  - 1.3. However, where the information gathered from the site sensitivity verification differs from the designation of "very high" terrestrial biodiversity sensitivity on the screening tool and it is found to be of a "low" sensitivity, then a Terrestrial Biodiversity Compliance Statement must be submitted.

Phase 3: (Terrestrial Biodiversity Assessment Report – Included in EIA)

The Terrestrial Biodiversity Specialist Assessment Report must discuss the following aspects:

- ✓ A description of the areas not suitable for development, which are to be avoided during construction and operation (where relevant);
- ✓ additional environmental impacts expected from the proposed development;
- ✓ any direct, indirect and cumulative impacts of the proposed development;
- ✓ the degree to which impacts and risks can be mitigated;
- ✓ the degree to which the impacts and risks can be reversed;
- ✓ the degree to which the impacts and risks can cause loss of irreplaceable resources;
- ✓ proposed impact management actions and impact management outcomes proposed by the specialist for inclusion in the Environmental Management Programme (EMPr);
- ✓ how the mitigation hierarchy was applied when determining mitigation measures and recommendations.
- ✓ a motivation must be provided if there were development footprints identified as the site verification visit, that were identified as having a "low" terrestrial biodiversity sensitivity and that were not considered appropriate;
- ✓ a substantiated statement, based on the findings of the specialist assessment, regarding the acceptability, or not, of the proposed development, if it should receive approval or not; and
- ✓ any conditions to which this statement is subjected.
- ✓ Identification of any buffer areas.

6. Impact Assessment Methodology

The following assessment methodology should be applied by the Visual Impact Specialist:

Determination of Extent (Scale):

Site Specific	The impact is limited to the development site (development footprint) or part thereof.
Local	The impacted area includes the whole or a measurable portion of the site, but could affect the area surrounding the development, including the neighbouring properties and wider municipal area.
Regional	The impact would affect the broader region (e.g. neighbouring towns) beyond the boundaries of the adjacent properties.
National	The impact would affect the whole country (if applicable).

Determination of Duration:

Temporary	The impact will be limited to part of the construction phase or less than one month.
Short term	The impact will continue for the duration of the construction phase, or less than one year.
Medium term	The impact will continue for part the operational phase
Long term	The impact will continue for the entire operational lifetime of the development, but will be mitigated by direct human action or by natural processes thereafter.
Permanent	This is the only class of impact that will be non-transitory. Such impacts are regarded to be irreversible, irrespective of what mitigation is applied.

Determination of Probability:

Improbable	The possibility of the impact occurring is very low, due either to the circumstances, design or experience.
Probable	There is a possibility that the impact will occur to the extent that provisions must therefore be made.
Highly probable	It is most likely that the impacts will occur at some stage of the development. Plans must be drawn up to mitigate the activity before the activity commences.
Definite	The impact will take place regardless of any prevention plans.

Determination of Significance (without mitigation):

No significance	The impact is not substantial and does not require any mitigation action.
Low	The impact is of little importance, but may require limited mitigation.
Medium	The impact is of sufficient importance and is therefore considered to have a negative impact. Mitigation is required to reduce the negative impacts to acceptable levels.
Medium-High	The impact is of high importance and is therefore considered to have a negative impact. Mitigation is required to manage the negative impacts to acceptable levels.
High	The impact is of great importance. Failure to mitigate, with the objective of reducing the impact to acceptable levels, could render the entire development option or entire project proposal unacceptable. Mitigation is therefore essential.
Very High	The impact is critical. Mitigation measures cannot reduce the impact to acceptable levels. As such the impact renders the proposal unacceptable.

Determination of Significance (with mitigation):

No significance	The impact will be mitigated to the point where it is regarded to be insubstantial.
Low	The impact will be mitigated to the point where it is of limited importance.
Medium	Notwithstanding the successful implementation of the mitigation measures, the impact will remain of significance. However, taken within the overall context of the project, such a persistent impact does not constitute a fatal flaw.
High	Mitigation of the impact is not possible on a cost-effective basis. The impact continues to be of great importance, and, taken within the overall context of the project, is considered to be a fatal flaw in the project proposal.

Determination of Reversibility:

Completely Reversible	The impact is reversible with implementation of minor mitigation measures
Partly Reversible	The impact is partly reversible but more intense mitigation measures
Barely Reversible	The impact is unlikely to be reversed even with intense mitigation measures
Irreversible	The impact is irreversible and no mitigation measures exist

Determination of Degree to which an Impact can be Mitigated:

Can be mitigated	The impact can be completely mitigated
Can be partly mitigated	The impact can be partly mitigated
Can be barely mitigated	It is possible to mitigate the impact only slightly
Not able to mitigate	It is not possible to mitigate the impacts

Determination of Loss of Resources:

No loss of resource	The impact will not result in the loss of any resources
Marginal loss of resource	The impact will result in marginal loss of resources
Significant loss of resources	The impact will result in significant loss of resources
Complete loss of resources	The impact will result in a complete loss of all resources

Determination of Cumulative Impact:

Negligible	The impact would result in negligible to no cumulative effects
Low	The impact would result in insignificant cumulative effects
Medium	The impact would result in minor cumulative effects
High	The impact would result in significant cumulative effects

6.1 Terms of Reference Provided to All Specialists

Specialists in their field of expertise verified site sensitivity as per the relevant applicable themes, as identified in the National Department of Forestry, Fisheries and Environment (DFFE) Environmental Screening Tool, and advise on appropriate reporting format, ie: Compliance Statement or Impact Assessment Report as per the relevant theme, which includes: Agriculture, Aquatic, Animal, Archaeological, Heritage and Cultural, Paleontological, Plant and Terrestrial Biodiversity.

Further to this Specialists must consider baseline data and identify and assess impacts according to predefined rating scales. Specialists will also suggest optional or essential ways in which to mitigate negative impacts and enhance positive impacts. Further, specialists will, where possible, take into consideration the cumulative effects associated with this and other projects which are either developed or in the process of being developed in the local area. The results of these specialist studies will be integrated into the Environmental Impact Assessment (EIAR) Report.

Specialists' reports must comply with content requirements as listed in the specific environmental theme protocols for the Specialist Assessment and Minimum Report Content Requirements for Environmental Impacts, published in Government Notice No: 320, Government Gazette 43110, and Government Notice No. 1150 Government Gazette 43855, on March 2020 and October 2020, respectively, where applicable.

The specific environmental theme protocol is to replace Appendix 6 of the EIA Regulations, 2014 (as amended 2017), as promulgated in terms of Section 24 (5) of the NEMA 1998 (Act No. 107 of 1998), however where a specialist assessment is required and no specific environmental theme protocol has been prescribed, the required level of assessment must be based on the findings of the site sensitivity verification and must comply with Appendix 6 of the EIA Regulations.

Environmental themes as per the DFFE Screening Tool and Relevant Protocols include:

Impact Assessment	Protocol	Sensitivity	Conducted	Appointed Specialist	Findings of screening Tool	Comments and findings
Agriculture	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Agriculture_Assessment_Protocols.pdf	Medium	Yes	Johann Lanz	• High – Rainfed Annual Crop Cultivation / Planted Pastures • High. – 09 Moderate High • High – 10. Moderate High • Very High – 11. High • Very High – 12. High -Very High	The Baseline assessment undertaken for the proposed development has been included as part of Annexure H of the Scoping Report.
Archeological & Cultural Heritage	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pd	Low	Yes	ASHA Consulting (Jayson Orton)	• Low Sensitivity	The initial site investigation was undertaken by ASHA Consulting (Jayson Orton). There was a possible heritage significance on site. The identified structure related to a possible heritage significance is a cottage on Portion 7 Kranshoek owned by the Le Fleur family. Because Kranshoek was originally settled by the Griqua community, a statement was sought to determine whether this cottage had any connections to the early settlement. They note that the cottage does not have any old significance to the Griqua community, and no objection has been raised regarding its demolition to make way for the expansion of the town. The specialist has also noted that it is highly unlikely that any graves or cemeteries will be present on site, but there is a small possibility of unmarked precolonial burials occurring. No features of archaeological concern were observed on site. A Notice of Intent to Develop has been compiled and submitted to Heritage Western Cape (HWC) for consideration. Accordingly, HWC indicated that no further assessment of the proposed development site would be required.
Paleontology		High		ASHA Consulting Prof. Marion Bamford	• High Sensitivity - Features with a High paleontological sensitivity	Prof. Marion Bamford was appointed by ASHA Consulting to provide palaeontological insights into potential impacts of the proposed development on the potential resources. With regard to the geological environment, the specialist noted that the project lies in the south central part of the Cape Supergroup where the Ordovician to Silurian Table Mountain Group quartzites are exposed. They are unconformably overlain by the younger conglomerates and rocks of the Upper Jurassic Enon Group. It is evident from the geological map that the Enon conglomerate is not present on the site but occurs a short distance to the northeast. It is, however, likely to be the source of the gravel clasts seen on site. While trace fossils, tracks and burrows are expected to occur in the Peninsula Formation sandstone and associated

Impact Assessment	Protocol	Sensitivity	Conducted	Appointed Specialist	Findings of screening Tool	Comments and findings
						mudstones, the obvious thick covering of unconsolidated sand, soil and light gravel with no bedrock exposed means that it is extremely unlikely that fossils will be present on site. Furthermore, geological test excavation carried out on Portion 9 immediately to the west showed that no bedrock was present in any of their holes which extended between 2.3 m and 3.1 m deep.
Socio-Economic	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pd	Not Provided	No	N/A	Not Provided	Due to the alignment of the proposed development with the strategic goals of the municipality, a Socio-Economic Assessment is not planned at present. The Socio-Economic Context of the proposed development will be further elaborated upon during the planned EIA process.
Landscape/ Visual	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pd	Not Provided	No	N/A	Not Provided	Due to the lack of relevant sensitive features and the nature if the proposed development (leading to the continuity of the existing Kranshoek settlement), a Landscape & Visual Impact Assessment is not planned at present.
Civil Aviation	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Civil_Aviation_Installations_Assessment_Protocols.pdf	High		N/A	• High - Within 8 km of other civil aviation aerodrome	The Plettenberg Bay Airport is located approximately 1,5 km east of the proposed development site. The altitude of the proposed development is approximately 15 m higher than the Plettenberg Bay Airport. The built-up area of the proposed development is not located within the landing or departing flight path of the airport and the structures on that for part of the proposed development are not expected to exceed 8 meters in height (double story building including the roof). Therefore, the proposed development is not expected to contribute as obstacles in terms of the definition of the Civil Aviation Regulations. The proposed development is however located within the Noise contour of the airport. The South African Civil Aviation Authority (CAA) and Plettenberg Bay Airport will be included as I&APs and we will await their response with regards to requiring further specialist input. Furthermore, the Civil Aviation Regulations, specifically as they pertain to Obstacles will be taken into consideration during the Environmental Impact Assessment process to be followed for the proposed development.
Defense Assessment	https://screening.environment.gov.za/Sc	Low		N/A	• Low – Low Sensitivity	No Defense features of concern were identified within proximity to the proposed development area. Therefore, no

Impact Assessment	Protocol	Sensitivity	Conducted	Appointed Specialist	Findings of screening Tool	Comments and findings
	reeningDownloads/AssessmentProtocols/Gazetted_Defence_Installations_Assessment_Protocols.pdf					assessment will be undertaken to evaluate the impact of the proposal on the theme.
Aquatic Biodiversity	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Aquatic_Biodiversity_Assessment_Protocols.pdf	Very High	Yes	Upstream Consulting - Debbie Fordham	• Very High – ESA 1: Aquatic • FEPA: Sub-catchment • SWSA (SW)_ Outeniqua	Upstream Consulting (Debbie Fordham) was appointed to do the aquatic site sensitivity verification of the proposed development site. The sensitivity verification site visit was conducted on the 9th of July 2023 in order to confirm the findings of the desktop assessment. During the site visit, the specialist confirmed the presence of three Hydrogeomorphic (HGM) Units within the proposed development footprint. On Portion 8 of the Farm Kranshoek 432, two wetland units were delineated, HGM 1 and HGM 2. A 42 m buffer was recommended around the wetlands. A wetland was also delineated on Portion 7 of the Farm Kranshoek 432 (HGM 3) and a 15 m buffer was recommended around the wetland. The appointed specialist has also noted that the proposed development would require a Water Use License (WUL) in terms of Chapter 4 and Section 21 (c) and (i) of the National Water Act (NWA; Act No. 36 of 1998) and this must be secured prior to the commencement of construction. Please note, the WULA has been lodged for the proposed development.
Animal Species	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Animal_Species_Assessment_Protocols.pdf	High		Blueskies: Dr Jacobus Visser	• High Aves-*Circus ranivorus* • High Aves-*Neotis denhami* • High Aves -*Bradypterus sylvaticus* • Medium Amphibia-*Afrixalus knysnae* • Medium - Aves- *Neotis denhami* • Medium - Aves-*Bradypterus sylvaticus* • Medium Insecta-*Aloeides thyra orientis* • Medium Mammalia-*Chlorotalpa duthieae* • Medium - Sensitive species 8	During the site visit, the specialist identified six (6) mammals, three (3) amphibian species and thirty-five (35) Avian species on site. confirmed the presence of the Species of Conservation Concern (SCC), the Duthie's Golden Mole (*Chlorotalpa duthieae*), on site. The species presence was confirmed and restricted to the northern non-perennial stream and non-indigenous forest. The specialist has also recommended that based on the occurrence of SCCs on site, the associated habitats need to be avoided and a 30m buffer applies around the development footprint. The Site Ecological Importance (SEI) is of a high concern.

Impact Assessment	Protocol	Sensitivity	Conducted	Appointed Specialist	Findings of screening Tool	Comments and findings
					• Medium - Invertebrate- *Aneuryphymus montanus*	
Plant Species	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Plant_Species_Assessment_Protocols.pdf	Medium		Jamie Pote	• Medium • *Aspalathus bowieana* • *Sensitive species 131* • *Leucospermum glabrum* • *Mimetes pauciflorus* • *Erica glandulosa subsp. fourcadei* • *Pterygodium newdigateae* • *Osteospermum pterigoideum* • *Acmadenia alternifolia* • *Muraltia knysnaensis* • *Erica glumiflora* • *Pterygodium cleistogamum*	The site area is found to be within the South Outeniqua Sandstone Fynbos that is regarded as being of 'least concern'. it is noted that there is a very high presence of alien invasion mainly in the northern region of Portion 8. Furthermore, towards the southern region the alien invasion is moderate and in Portion 7 is regarded as being low. The factors regarding erosion are low, as the terrain is largely even. However, increase erosion will be a factor when considering the water courses while the alien species is cleared. The fynbos vegetation is largely transformed, secondary or significantly invaded by alien species. In accordance with the specialist findings on site there was no presence of species that are of conservation concern within the site boundary. Special care needs to be taken during the construction phase, however and a search and rescue plan must be implemented.
Terrestrial Biodiversity	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf	Very High		Jamie Pote	• ESA 2: Restore from other land use. • CBA: Terrestrial • CBA2: Terrestrial • FEPA Sub-catchment • SWSA (SW) _ Outeniqua	The site verification confirms that the development area falls within the terrestrial biodiversity screening tool designated Ecological Support Area (ESA) 1 Associated along Portion 8 and Critical Biodiversity Areas. These designations of a buffer around watercourses and are standard in the WC BSP across the Western Cape Province and represent important ecological corridors.

General requirements of all protocols (specific environmental and general) state that:

- A site sensitivity verification must be undertaken by an environmental assessment practitioner or a specialist.
- The outcome of the site sensitivity verification must be recorded in the form of a report that--
  (a) confirms or disputes the current use of the land and the environmental sensitivity as identified by the screening tool, such as new developments or infrastructure, the change in vegetation cover or status etc.;
  (b) contains a motivation and evidence (e.g. photographs) of either the verified or different use of the land and environmental sensitivity; and
  (c) is submitted together with the relevant assessment report prepared in accordance with the requirements of the Environmental Impact Assessment Regulations (EIA Regulations).
- Specialist reports may only be undertaken by a specialist registered with the South African Council for Natural Scientific Professionals (SACNASP) with expertise in the relevant field.

Specialist reports should include as a minimum:

1. Details of-
   a. the specialist who prepared the report; and
   b. the expertise of that specialist to compile a specialist report including a curriculum vitae;
2. A declaration that the specialist is independent in a form as may be specified by the competent authority;
3. An indication of the scope of, and the purpose for which, the report was prepared;
4. An indication of the quality and age of base data used for the specialist report;
5. A description of existing impacts on the site, cumulative impacts of the proposed development and levels of acceptable change;
6. The duration, date and season of the site investigation and the relevance of the season to the outcome of the assessment;
7. A description of the methodology adopted in preparing the report or carrying out the specialised process inclusive of equipment and modelling used;
8. Details of an assessment of the specific identified sensitivity of the site related to the proposed activity or activities and its associated structures and infrastructure, inclusive of a site plan identifying site alternatives;
9. An identification of any areas to be avoided, including buffers;
10. A map superimposing the activity including the associated structures and infrastructure on the environmental sensitivities of the site including areas to be avoided, including buffers;
11. A description of any assumptions made and any uncertainties or gaps in knowledge;
12. A description of the findings and potential implications of such findings on the impact of the proposed activity, or activities.
13. Any mitigation measures for inclusion in the EMPr;
14. Any conditions for inclusion in the environmental authorisation;
15. Any monitoring requirements for inclusion in the EMPr or environmental authorisation;
16. A reasoned opinion-
    a. whether the proposed activity, activities or portions thereof should be authorised;
    b. regarding the acceptability of the proposed activity or activities; and
    c. if the opinion is that the proposed activity, activities or portions thereof should be authorised, any avoidance, management and mitigation measures that should be included in the EMPr, and where applicable, the closure plan;

17. A description of any consultation process that was undertaken during the course of preparing the specialist report;
18. A summary and copies of any comments received during any consultation process and where applicable all responses thereto; and
19. Any other information requested by the competent authority.

In addition to the above, specialists are expected to:

- Review the Scoping Report to familiarize themselves with all relevant issues or concerns relevant to their field of expertise;
- In addition to the impacts listed in the Scoping Report, identify any issue or aspect that needs to be assessed and provide expert opinion on any issue in their field of expertise that they deem necessary in order to avoid potential detrimental impacts;
- Assess the degree and extent of impacts employing the criteria and methodology set out in the Scoping Report of all identified impacts and issues that the preferred project activity and its proposed alternatives, **including that of the no-go alternative**, may have;
- Identify and list all legislation and permit requirements, relevant to their field of study, required before construction may commence.
- Reference all sources of information and literature consulted; and
- Include an executive summary to the report.

The specialist is expected to prepare a report that addresses the scope of the work as set out above, and as per the specific environmental theme protocol, where applicable.

The following assessment methodology will be provided to all the specialists so that the same impact significance methodology is used across the board:

7. Consultation with the Competent Authority

Section 7 (Duties of Competent Authorities (CA)) of the NEMA EIA Regulations of 2014, as amended (GNR 326 of 2017) states that "*Where a Competent Authority is requested by an applicant to comment in terms of these Regulations, such competent Authority must submit its comments within 30 days*". In an effort to ensure that the Final EIA Report contains sufficient information for DEADP to make an informed decision and to ensure they satisfy the content requirements listed in the EIA Regulations of 2014, as amended, DEADP will be requested to provide comment on the draft Environmental Impact Assessment Report when it is made available for a period of 30 days Public Participation.

The CA could comment on whether they deem it necessary to conduct additional specialist assessments other than what is proposed already in this POSEIA when they have reached a decision on the Final Scoping Report.

The CA for the proposed development has been identified as the Western Cape Department of Environmental Affairs and Development Planning (DEADP).

8. Public Participation Process (PPP) during the EIA Phase

The Environmental Impact Assessment Report (EIAR), still to be compiled, will take into account all comments received from interested and affected parties (I&APs), commenting Authorities and the CA during the Public Participation Phase/s on the Scoping Report. The EIAR will respond to each written comment received in a "Comments & Response" Table. In addition, further changes to the

layout, development proposal or proposed specialist input to be undertaken, will be informed by the comments received during the Scoping Phase 30-day Public Participation Period.
This process will comply with the NEMA, 1998 (Act 107 of 1998), of the EIA Regulations of 2014, as amended (GNR 326 of 2017), section 41 "Public Participation Process".

There is, however, only 1 opportunity for the public and commenting authorities to provide input during the EIA Process. There is **one 30-day PP period** on the Draft EIA Report, after which the report is revised and submitted for final decision making.

9. Description of Tasks to be undertaken during the EIA Phase

The following tasks are proposed to be undertaken during the EIA Phase:

Environmental Impact Assessment Report & Specialist Assessments & WULA

- Compilation of the Terms of Reference for additional specialist input for the EIA phase specialist reports required / addendums to previous impact reports.
- Management of the appointment of the additional specialists and input;
- Review of specialist assessments and provide detailed comments for amendment (if required).
- Project management meetings with applicant and specialists.
- Additional site visits with specialists, authorities and I & AP's, if required.
- Co-ordination of various specialists input to produce sensitivity maps and site layouts for inclusion in the EIA Report.
- Compile EIA Report;
- Compile Environmental Management Programme;
- Submit EIA & EMPr to DEADP.
- Compile WULA Report. The WULA will be undertaken by an appropriately registered specialist;

30 days Public Participation on EIA Report (including WULA)

- Conduct 30 days PP on EIA Report – including printing hardcopies and courier to all key commenting Authorities & will be presented at the Kranshoek Library;
- Written Notification letters to I & AP's;
- Uploading onto website;
- Respond to each comment received;
- Project management meetings and focus group meetings with I & AP's;
- Update Comments & Response Table;
- Update I & AP Database;
- Update EIA Report and EMP based on all comments received during PP;
- Printing and submission of Final EIAR to DEADP and to client.
- Submit WULA to DWS.

As per the EIA Regulation of 2014, as amended, 106 days are afforded to submit the EIA Report from the day the Scoping Report is accepted. During which time 30 days PP must be undertaken on the EIA Report and the EIA Phase specialist assessments. The EIA Report and EMPr must also be updated prior to submission of the final reports.

10. Measures to Avoid, Reverse, Mitigate or Manage Impacts

Based on general impact identification, the relevant management measures and mitigation has been addressed in the Scoping Report, Section 9.4 – 9.6.