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Attention: Ms Samantha Teeluckdhari

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RE: REQUEST FOR COMMENT FROM THE SUB-DIRECTORATE: COASTAL MANAGEMENT ON THE PRE-APPLICATION BASIC ASSESSMENT REPORT FOR THE PROPOSED STABILISATION OF THE KEURBOOMS RIVER EMBANKMENT SOUTH OF THE PLETTENBERG BAY ANGLING CLUB, RE 1 OF THE FARM HANGKLIP NO 305.

Good Day Madam,

Your request for comment from the Sub-directorate: Coastal Management on the above-mentioned pre-application basic assessment report received on 28 June 2024, refers.

1. CONTEXT

1.1. The Integrated Coastal Management Act, 2008 (Act No. 24 of 2008) ("NEM: ICMA") is a Specific Environmental Management Act under the umbrella of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA"). The NEM: ICMA sets out to manage the nation's coastal resources, promote social equity and best economic use of coastal resources whilst protecting the natural environment. In terms of Section 38 of the NEM: ICMA, the Department of Environmental Affairs and Development Planning ('the Department') is the provincial lead agency for coastal management in the Western Cape as well as the competent authority for the administration of the "Management of public launch sites in the coastal zone (GN No. 497, 27 June 2014) "Public Launch Site Regulations".

- 1.2. The Department, in pursuant of fulfilling its mandate, is implementing the Provincial Coastal Management Programme ("PCMP"). The PCMP is a five (5) year strategic document, and its purpose is to provide all departments and organisations with an integrated, coordinated and uniform approach to coastal management in the Province. The Department has developed the next generation PCMP that includes priority objectives for the next 5 years. This PCMP was adopted on 19 May 2023 and may be viewed at [Western Cape PCMP 2022-2027](#).
- 1.3. A key priority of the PCMP is the Estuary Management Programme, which is predominantly implemented through the Estuary Management Framework and Implementation Strategy ("EMFIS") project. The Department is implementing estuary management in accordance with the NEM: ICMA and the National Estuarine Management Protocol ("NEMP"). Relevant guidelines, Estuarine Management Plans, Mouth Management Plans need to be considered when any listed activities are triggered in the Estuarine Functional Zone. The Department is in the process of approving a series of Estuarine Management Plans. Both draft and approved plans may be viewed at [DEA&DP: Coastal Management](#).
- 1.4. The facilitation of public access to the coast is an objective of the NEM: ICMA as well as a Priority in the WC PCMP. The Department developed the Provincial Coastal Access Strategy and Plan, 2017 ("PCASP") and commissioned coastal access audits per municipal district to assist municipalities with identifying existing, historic, and desired public coastal access. These coastal access audits also identify hotspots or areas of conflict to assist the municipalities with facilitating public access in terms of Section 18 of the NEM: ICMA. The PCASP as well as the coastal access audits are available on the Departmental website at [DEA&DP: Coastal Management](#).

2. COMMENT

- 2.1 The sub-directorate: Coastal Management ("SD: CM") has reviewed the information as specified above and have the following commentary:
 - 2.1.1. The applicant is proposing the construction of engineered embankment stabilisation which will be 55m in length along a section of the Keurbooms River Estuary (Farm RE/1/305). The applicant stated that the proposed stabilisation of the embankment aligns with the management and protection of the property from future erosion due to storm surge events and the impact of the construction activities will be minimal as the development will most probably improve the natural functions of the river once erosion is reduced. Furthermore, according to the aquatic specialist (April 2024) the proposal is consistent with other bank stabilisation structures that have been implemented at other locations along the same estuary and thus will entail reprofiling of the bank using sand bags and covering them with a 0.3m x 0.3m reno mattress.

- 2.1.2. The applicant accurately identified critical biodiversity and ecological support areas in relation to the subject property and in accordance with to the Western Cape Biodiversity Spatial Plan (2017). Furthermore, according to the Estuarine Assessment Report (September 2023) the proposed development aligns with the management objectives of CBAs, as the proposed stabilisation will assist in the absorption of impacts from storm surges and high tides and will not interfere with seasonal migration of animals, hydrological regimes and also not cause habitat transformation, degradation and fragmentation which occur primarily through changes in land use or pressures which impact negatively on habitat conditions. The applicant thus stated that the proposed development should be authorised as it will promote natural functions of the river, reduce erosion and impact is minimal as post construction, the environment will restore itself.
- 2.1.3. The applicant noted Farm RE/1/305 location in relation to the Coastal Protection Zone ("CPZ") as defined in Section 16 of the NEM: ICMA and noted the purpose of the CPZ as well as the relevance of Section 62 and Section 63 of the NEM: ICMA.
- 2.1.4. Be advised that Farm RE/1/305 is located seaward of the Garden Route District Coastal Management Line ("CML"). The technical delineation of the CML was to ensure that development is regulated in a manner appropriate to risks and sensitivities in the coastal zone. The CML was informed by various layers of information including biodiversity, estuarine functionality, risk flooding, wave run-up modelling, *inter alia* and was delineated in conjunction with and supported by other organs of state including Local and District municipalities as well as CapeNature and all other organs of state represented on the steering committee for the Garden Route District CML project. The principal purpose of the CML is to protect coastal public property, private property, and public safety; to protect the coastal protection zone; and to preserve the aesthetic value of the coastal zone. The use of CMLs is of particular importance in response to the effects of climate change, as it involves both the quantification of risks and pro-active planning for future development.
- 2.1.5. The subject property falls within the estuarine functional zone ("EFZ") which equates to the 5m contour along an estuary as it encapsulates the most dynamic areas influenced by long-term estuarine sedimentary processes. It provides a buffer zone that allows an estuary to swell within the floodplain of an estuary in the event of flood events, inundation as well as sea-level rise due to climate change. It also allows for the inclusion of some terrestrial fringe vegetation that contribute detritus to the system and refuge areas for many animal species during floods.
- 2.1.6. Be advised that the [Western Cape EMFIS Best Practice Activity Guidelines \(2019\)](#) recommends in item 1.3. that *no development should be approved to take place in the EFZ or the highly littoral active zone*. These Guidelines further recommend that development must take into consideration any adopted CMLs and applicable controls, and/or coastal risk lines where high risk areas are identified. Appendix A2 clearly depicts the subject property in relation to the very high-risk coastal flood risk zone as submitted by

the applicant. Avoiding development in at-risk or sensitive areas will support the ecological integrity of the estuarine environment, prevent disruption of the natural coastal processes, maintain aesthetic quality, and ultimately protect coastal developments and people. Any infrastructure regardless of its nature or purpose must in alignment with the Estuarine Management Plan.

- 2.1.7. The SD: CM noted that the applicant referred to the Keurbooms-Bitou Estuarine Management Plan (2017) in this application. Be advised that an updated version of the [Keurbooms Estuarine Management Plan](#) was approved in 2023. This EMP specifically recommends that no new developments should be approved in the EFZ/below the 5m and planting of vegetation along the estuarine banks where it has been cleared would be preferred to rehabilitate riverbanks. Although flooding may have been a factor, it should be noted that severe erosion along the Keurbooms River Estuary may have been exacerbated through the initial removal of stabilising vegetation. Furthermore, engineered stabilising structures may offer short-term solutions to erosion but are not feasible in the long term and as such any such proposal must be considered in the context of the Municipal IDP as well as Disaster Risk Management Plans for the subject area.
- 2.1.8. The environmental reserve determination study conducted for the Keurbooms estuarine system in 2007 identified that the estuary had been significantly degraded through anthropogenic activities. This includes infill, inappropriate stabilisation, various roads, old bridge piers and transformation of riverine vegetation buffers. Restoration of critical areas is thus an important recommendation toward restoring estuarine integrity.
- 2.1.9. In terms of the [Departmental Circular: DEA&DP 0004/2021](#) regarding *'The consideration of coastal risk in land use decisions as well as the way forward with respect to the establishment and implementation of Coastal Management Lines in terms of the NEM: ICMA'*, a precautionary approach must be adopted with respect to land use decisions within risk areas and EFZs. The Circular also recommends development parameters to be considered for general risk and general estuarine risk areas. This includes maintaining coastal quality; reducing public liability; reducing risk to human life; preventing intensification of development in general risk areas but allow exercising of existing rights within reason; prevention of encroachment that will impact on the integrity of the shoreline ecology; and enables safe evacuation in an emergency. The Circular further states historic development within the EFZ has resulted in an increased need to actively manipulate ecological processes, such as breaching of an estuary, to protect human life. To ensure the resilience of coastal communities, especially within the EFZ, development and densification of urban areas within this zone should be prohibited as far as possible.
- 2.1.10. Considering the above, the applicant must be reminded that the erection of any protection measures against erosion or accretion is prohibited in terms of Section 15 of the NEM: ICMA, which states:

- (1) No person, owner or occupier of land adjacent to the seashore or other coastal public property capable of erosion or accretion may require any organ of state or may require any organ of state or any other person to take measures to prevent the erosion or accretion of the seashore or such other coastal public property, or of land adjacent to coastal public property, unless the erosion is caused by an intentional act or omission of that organ of state or other person;
- (2) No person may construct, maintain or extend any structure, or take measures on coastal public property to prevent or promote erosion or accretion of the seashore except as provided for in this Act, the NEMA or any other specific environmental management Act.

Erosion protection or bank stabilisation should only be considered in exceptional circumstances where such measures are in the interest of the whole community (which includes fauna and flora).

- 2.1.11. The [Western Cape EMFIS Best Practice Activity Guidelines \(2019\)](#) further states that any disturbance to the bank of a natural river or estuary may alter the hydrodynamics of the system, leading to a change in river flow conditions and subsequent channel modifications. Incorrectly designed structures could reflect wave action or stream flow, thereby increasing potential damage to nearby unprotected banks. It is therefore imperative that consultation and detailed investigation precede the planning and implementation of erosion management to correctly identify the cause of the erosion and ensure the selection of ecologically appropriate and effective bank stabilisation methods in conjunction with erosion mitigation, where management of erosion itself is not possible. It must be acknowledged that properties located along estuaries or riverbanks are subject to natural processes such as flooding, storm surges and inundation and as such adequate buffers must be preserved to allow natural processes to be unrestricted.
- 2.1.12. The SD: CM notes as part of the proposed stabilisation, that the applicant did not indicate where the sand for these sandbags would be sourced from. Sand used for protection measures must be sourced from the same environment and from areas with sufficient sand, it cannot be sourced from any dunes nor from other relatively undisturbed areas.
- 2.1.13. Based on the above **the SD: CM does not support the proposed bank stabilisation** on Farm RE/1/305 along the Keurbooms River Estuary.

3. The applicant must be reminded of their general duty of care and the remediation of environmental damage, in terms of Section 28(1) of NEMA, which, specifically states that: *"...Every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, to minimise and rectify such pollution or degradation of the environment..."* together with Section 58 of the NEM: ICMA which refers to one's duty to avoid causing adverse effects on the coastal environment.
4. The SD: CM reserves the right to revise or withdraw its comments and request further information from you based on any information that may be received.

Yours faithfully

leptieshaam Bekko
CONTROL ENVIRONMENTAL OFFICER
SUB-DIRECTORATE: COASTAL MANAGEMENT
DATE: 01 August 2024