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Pre – Application
SITE SENSITIVITY VERIFICATION REPORT
For
PROPOSED DEVELOPMENT OF KINETIC CATAMARANS INDUSTRIAL FACILITY ON ERF 1339, AS WELL AS DEVELOPMENT / REDEVELOPMENT OF THE SOUTH AFRICAN SEA CADET CORPS INFRASTRUCTURE ON ERF 1316, KNYSNA, WESTERN CAPE

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I, **Jessica Christie** of Eco Route Environmental Consultancy, in terms of section 33 of the NEMA, 1998 (Act No. 107 of 1998), as amended, hereby declare that I provide services as an independent Environmental Assessment Practitioner (**EAPASA Reg: 2019/1855)** and receive remuneration for services rendered for undertaking tasks required in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), and the Environmental Impact Assessment Regulations, 2014 (as amended). I have no financial or other vested interest in the project.

EAP SIGNATURE:_____

1. INTRODUCTION

It should be noted that the proposed development encompasses two interrelated components. The first involves the expansion of the existing Kinetic Catamarans manufacturing facility, while the second entails the upgrade of the South African Sea Cadet Corps – TS Knysna facilities located on the adjoining property. Both components are being assessed collectively under a single Basic Assessment process and are hereafter referred to jointly as "the development area."

The development area is situated within the established industrial and maritime precinct along Main Road (N2) in Knysna, under the jurisdiction of the Knysna Local Municipality, Western Cape Province. The site occupies a prominent position on the northern shore of the Knysna Estuary, approximately 1.2 kilometres east of the Knysna Central Business District (CBD).

Table 1: Western Cape SG information of the [1]proposed development area of the factory and [2]the proposed development area of the sea cadets

[1]SG Region:	KNYSNA
[1]Erf Nr:	RE/1339
[1]Development Area (Ha):	± 0.3 Ha
[1]SG Code:	C03900050000133900000
[2]SG Region:	KNYSNA
[2]Erf Nr:	RE/1316
[2]Development Area (Ha):	± 0.15 Ha
[2]SG Code:	C03900050000131600000

Figure 1: Locality Map of RE/1339 as well as RE 1316 (indicating the development area) (Cape Farm Mapper)

1.1. Purpose of the Report

The Site Sensitivity Verification Report (SSVR) forms part of the Basic Assessment Process for the proposed development. This report addresses the findings of the Screening Tool Report, generated from the National Web Based Environmental Screening Tool, and provides a motivation for the

various specialist studies identified to be conducted. It also discusses whether the specialist studies forming part of this project are required to comply with the protocols.

The "Protocols for the Assessment and Minimum Criteria for Reporting on identified Environmental Themes ("the protocols") were promulgated in Government Notice No. 320, published in Government Gazette No. 43110 on the 20th of March 2020 and which came into effect on the 9th of May 2020. The Protocols are allowed for in terms of Sections 25(5)(a) and (h) and 44 of the National Environmental Management Act, 1998 (as amended) (Act No. 107 of 1998) ("NEMA").

The Protocols must be complied with for every new application for Environmental Authorisation (EA) that is submitted after 9 May 2020. According to the Protocols, the EAP must verify the current use of the site in question and its environmental sensitivity as identified in the screening tool to determine the need for specific specialist inputs.

2. ENVIRONMENTAL CONSIDERATIONS

This section reviews the available environmental data in conjunction with the specialist reports to provide an overview of the current state of the receiving environment. It considers historical classifications and identifications while incorporating ground-truthing data to contextualize the existing conditions. This method is crucial because desktop data may sometimes differ from actual on-site findings.

2.1. Vegetation

The National Vegetation Map produced by SANBI (VEGMAP, 2018) indicates that the entire built-up area of Knysna sustains the capability of hosting Garden Route Shale Fynbos (Figure 2). This includes the development area.

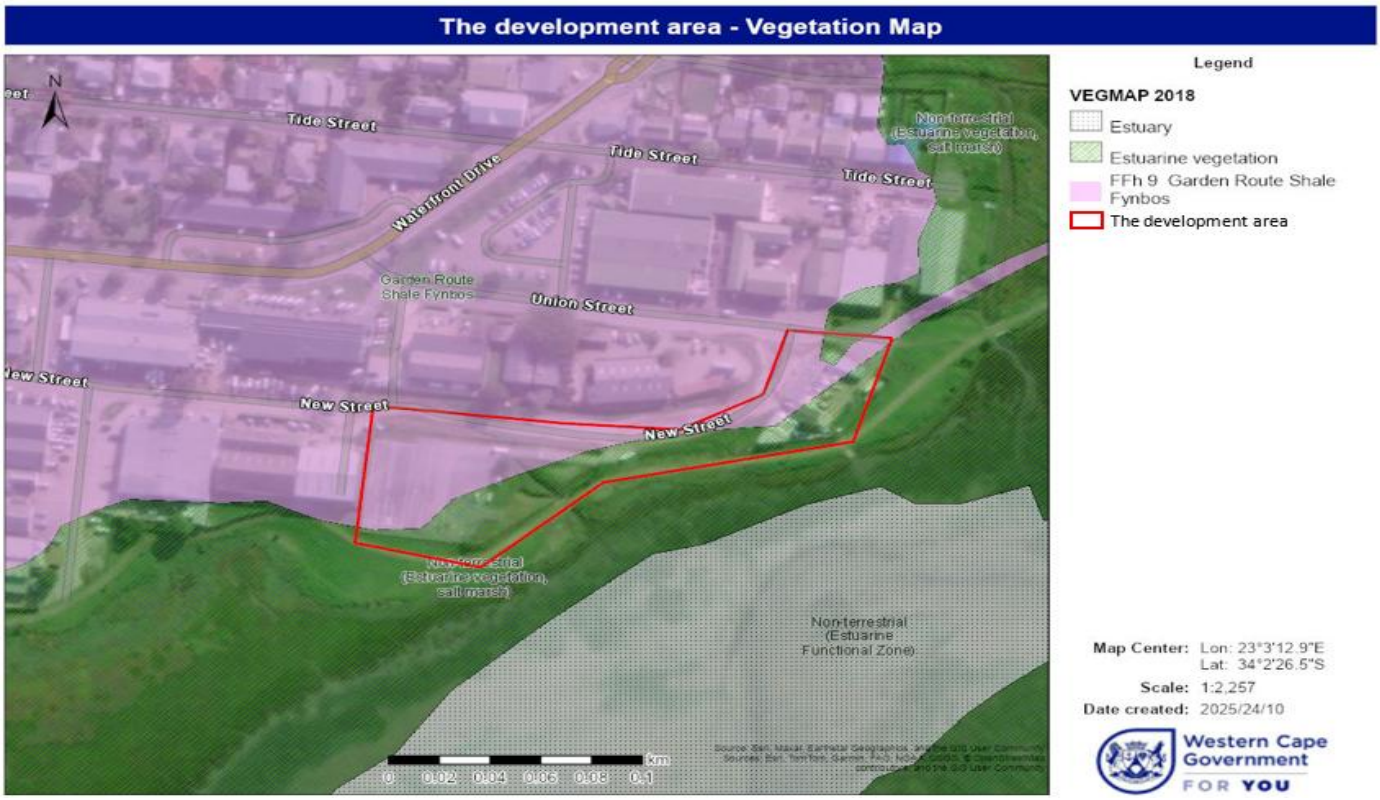

Figure 2: The development area vegetation map (VEGMAP, 2018)

The characteristics of this classified vegetation types include distinct landscape features and plant communities specific to the region –

- Garden Route Shale Fynbos

"Western and Eastern Cape Provinces: Patches along the coastal foothills of the Langeberg at Grootberg (northeast of Heidelberg), the Outeniqua Mountains from Cloete's Pass via the Groot Brak River Valley, Hoekwil, Karatara, Barrington and Knysna to Plettenberg Bay. Patches from the Bloukrans Pass along coastal platform shale bands south of the Tsitsikamma Mountains via Kleinbos and Fynboshoek to south of both Clarkson and the Kareedouw Mountains. Altitude 0–500 m. Undulating hills and moderately undulating plains on the coastal forelands. Structurally this is tall, dense proteoid and ericaceous fynbos in wetter areas, and graminoid fynbos (or shrubby grassland) in drier areas. Fynbos appears confined to flatter more extensive landscapes that are exposed to frequent fires—most of the shales are covered with afrotemperate forest. Fairly wide belts of Virgilia oroboides occur on the interface between fynbos and forest. Fire-safe habitats nearer the coast have small clumps of thicket, and valley floors have scrub forest (Vlok & Euston-Brown 2002)."

Along the southern boundary of the development area, mapping from the 2018 National Vegetation Map (VEGMAP) identifies a narrow band of Estuarine Vegetation (salt marsh) associated with the Knysna Estuary. This estuarine vegetation occurs outside of the proposed development footprint, within the natural intertidal and supratidal zones that form part of the Knysna Estuarine Functional Zone. The proposed development area is therefore located immediately adjacent to, but not within, the mapped estuarine zone.

It was observed that a grassed strip occurs between the proposed development footprint and the edge of the Knysna Estuary. This area, although anthropogenically maintained, provides a functional buffer between the industrial surfaces and the estuarine zone. The grassed patch assists in reducing surface runoff velocity, trapping sediments, and filtering potential pollutants, thereby serving an important protective role in mitigating indirect impacts from the adjacent developed area on the estuarine environment.

The vegetation originally mapped for this area was classified as having an Endangered ecosystem threat status (Figure 3). However, more recent (though not yet gazetted) updates to the national vegetation and ecosystem mapping indicate that the remaining extent of this vegetation type no longer includes the Knysna area, including the current development property (see Figure X). Site photographs further confirm that the development footprint remains in a previously disturbed state, with no remnant natural vegetation evident within the project area

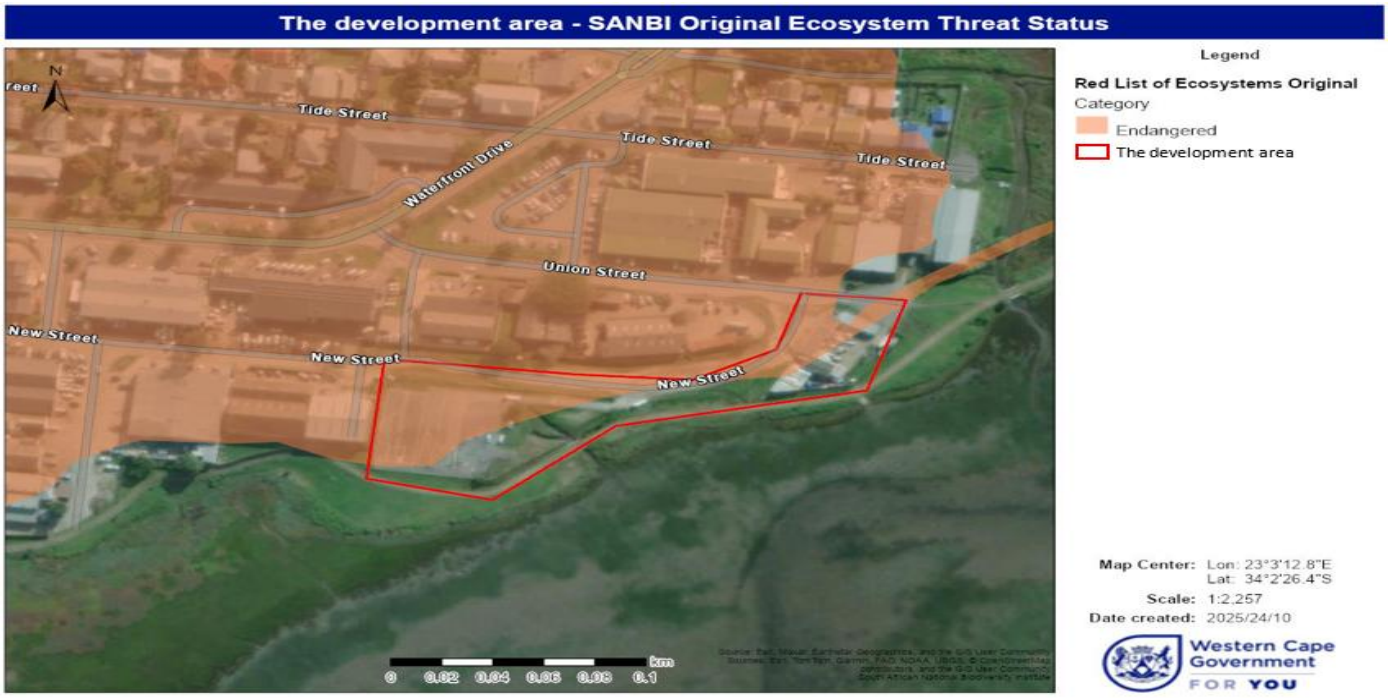

Figure 3: SANBI Original Ecosystem Threat Status

Figure 4: SANBI Remaining Ecosystem Threat Status

2.2. Sensitive areas (CBA, ESA, and PA)

According to the updated Western Cape Biodiversity Spatial Plan (WCBSP, 2023), the entire development area is mapped within a Protected Area. The following information is provided to give context to the meaning and implications of this designation within the WCBSP framework.

Definition:	Areas proclaimed as protected areas in terms of national or provincial legislation.
Management objective:	Must be kept in a natural state, with a management plan focused on maintaining or improving the state of biodiversity. A benchmark for biodiversity.

Figure 5: Western Cape Biodiversity Spatial Plan (WCBSP 2017) Sensitive areas

While the WCBSP (2023) identifies the development area as falling within a Protected Area, this mapping is not fully reflective of the site's current level of transformation. The entire property has been substantially altered through historical development, including the establishment of parking areas, buildings, and the existing Sea Cadet facilities. As such, no remaining natural habitat consistent with a Protected Area is present within the proposed development footprint. Notwithstanding this, the proposed development remains committed to upholding the management objectives of the WCBSP by implementing responsible environmental design, runoff control, and buffer protection measures that will help maintain and enhance the ecological integrity of the adjacent Knysna Estuary.

2.3. Aquatic sensitivities

It is indicated that the entire development area falls within the National Freshwater Ecosystem Priority Areas (FEPA) and the National Wetland Inventory (NWI) datasets, which broadly map aquatic and wetland systems of national ecological importance. These datasets are developed at a regional scale to identify areas that contribute to the maintenance of freshwater ecosystem functioning, hydrological connectivity, and water quality regulation. In this instance, the mapping reflects the proximity of the site to the Knysna Estuary and its associated salt marsh and tidal wetland habitats, rather than the presence of discrete wetland features within the development footprint itself.

Figure 6: National Freshwater Ecosystem Priority Areas (FEPA) – The Development Area

The appointed aquatic specialist, Upstream Consulting, further noted that the boundary of the Garden Route National Park (GRNP), which includes the Knysna Estuary, lies in close proximity to the proposed development area. Although the development footprint itself falls outside the formal park boundary, its location adjacent to a protected estuarine system necessitates careful consideration of potential indirect impacts such as surface runoff, pollution, and visual intrusion on the estuarine conservation zone.

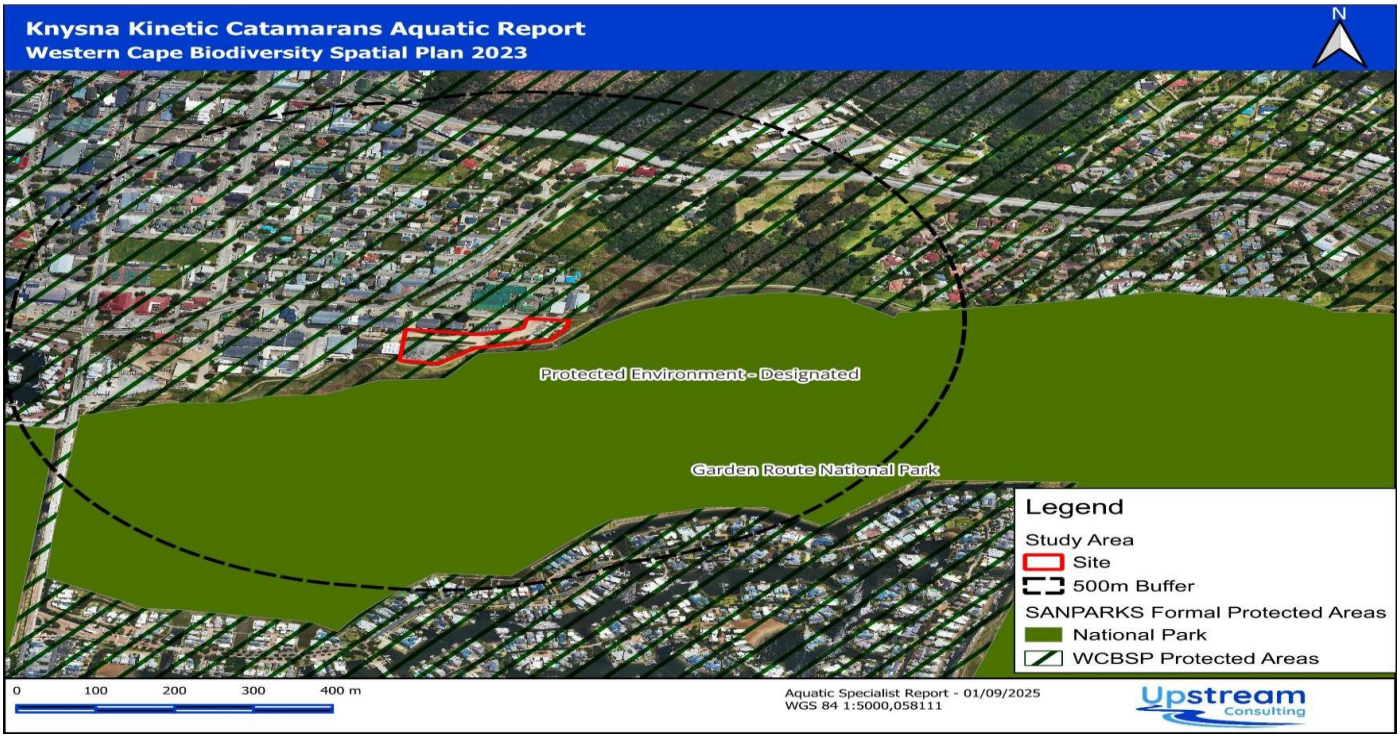

Figure 7: Aquatic sensitivities from desktop data (Upstream Consulting, 2025)

Following the contextualisation of the study area with the available desktop data, a site visit was conducted on the 17th of August 2025, to ground truth the findings and delineate the aquatic

habitat within study area. In total there are two different natural hydrogeomorphic (HGM) units identified and mapped within the 500m study area, the Knysna Estuary and an unnamed perennial riparian system to the far east of the study area. Only the Knysna Estuary will be impacted by the proposed scope of works. The additional information collected in the field allowed for the development of an improved baseline river and wetland delineation map (Figure 8).

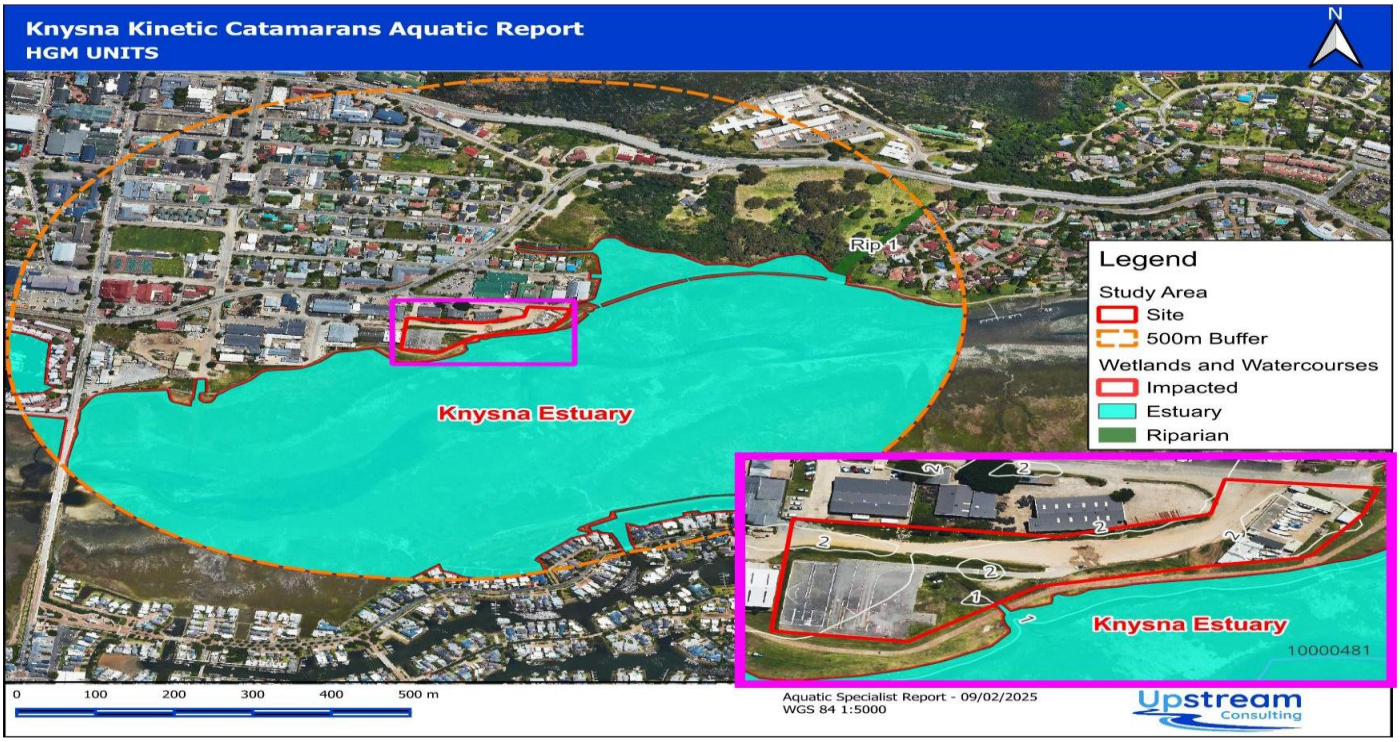

Figure 8: Map of the delineated aquatic habitat within the study area following site verification, pink box is zoomed in site with contours (Upstream Consulting, 2025)

Following the conclusion of the mapping exercise, this section provides a description of the systems that are currently being impacted by the state of the sewer system and will be impacted in the future construction / maintenance phases.

A) Knysna Estuary (Upstream Consulting, 2025)

The section of the Knysna Estuary adjacent to the study area, near the Costa Sarda and Ashmead Channel, has long functioned as an urban–industrial zone, dating back to before 1973. Despite historic modifications such as bank stabilisation, canal-edge development, and stormwater infrastructure, the estuarine margin retains notable natural features (Frames 1–12). Intertidal areas remain vegetated with saltmarsh species such as *Carpobrotus edulis, Sarcocornia perennis, Chenolea diffusa*, and *Triglochin striata*, while reedbeds of *Juncus kraussii* and *Phragmites australis* persist in stormwater-influenced sections.

Where vegetation is left undisturbed, dense saltmarsh cover develops, helping to slow surface runoff and reduce bank erosion (Frame 4). The underlying estuarine geomorphology remains stable, with no major erosion observed (Frame 12), and tidal flushing continues to support ecological functioning beyond the stormwater outlets located below the High-Water Mark (HWM) (Frames 4–6).

According to the Garden Route National Park Management Plan (2025–2029), this section of the estuary forms part of the Estuary Functional Zone, largely designated as low-intensity leisure use with

adjacent high-sensitivity quiet zones protecting saltmarsh and eelgrass habitats. Despite ongoing urban pressures, the area remains ecologically significant, providing nursery habitat for estuarine species and foraging grounds for waterbirds such as the Egyptian goose (Alopochen aegyptiaca) (Frame 9).


Frame 1


Frame 2


Frame 3


Frame 4


Frame 5


Frame 6


Frame 7


Frame 8


Frame 9


Frame 10

Frame 11

Frame 12

It should be additionally noted that a detailed high-water mark (HWM) survey was undertaken by Eden Geomatics during November 2024 – February 2025 as part of the topographical and engineering survey for the proposed development. The survey established the current high-water mark of the Knysna Estuary along the southern boundary of the application area, referencing historical Survey Record 2475/1966 for positional accuracy. The delineated high-water mark runs immediately south of the existing paved surface and fenced boundary of the former vehicle testing facility, confirming that the proposed yacht factory will be situated landward of the surveyed HWM and entirely within an already transformed and elevated platform approximately two metres above mean sea level.

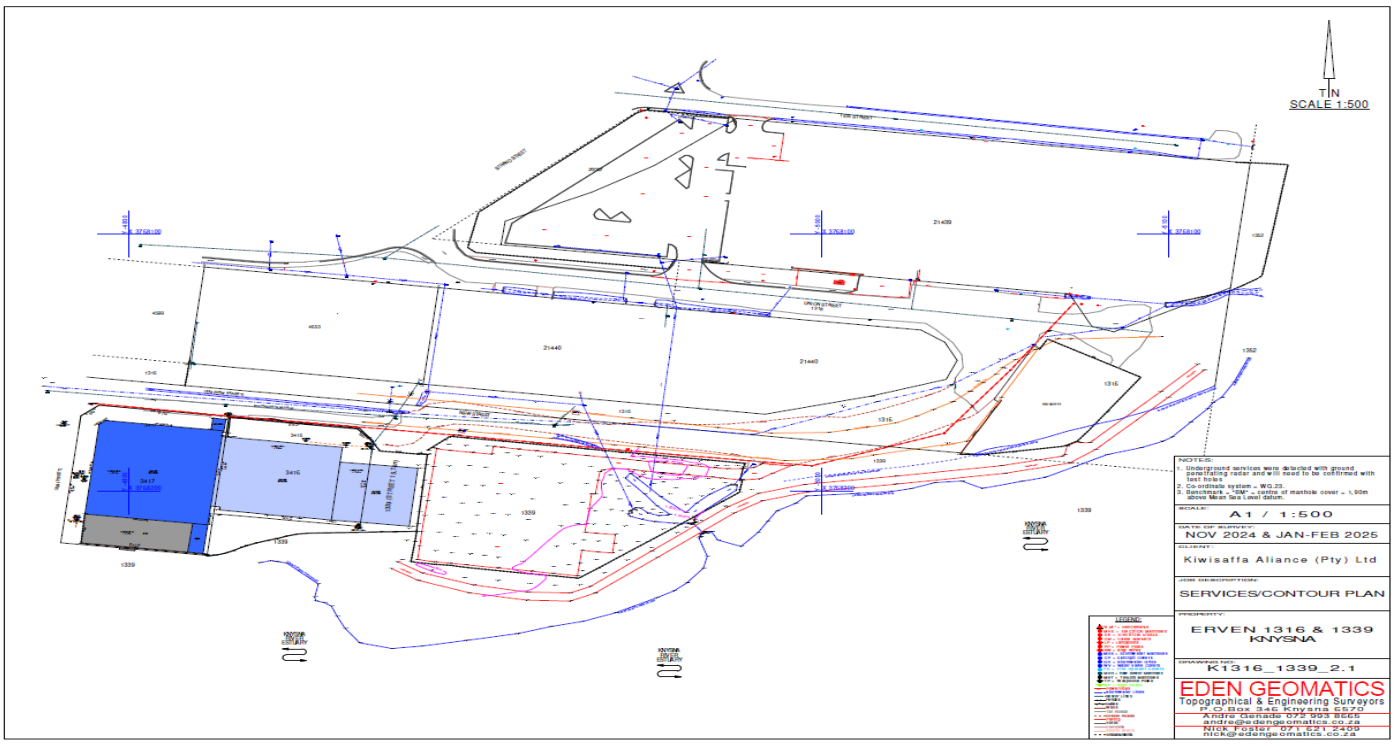

Figure 9: Topographical and Services Survey Plan for Erven 1316 and 1339, Knysna (Eden Geomatics, 2024–2025)

2.4. Topography

According to the topographical mapping (Figure 10), the entire development area is situated below the 5 m contour line, which places it within the low-lying coastal platform directly associated with the Knysna Estuary. The site exhibits a gentle southward slope toward the estuarine margin, creating a natural surface-water drainage gradient that channels stormwater runoff in the direction of the estuary. Due to extensive historical levelling and surfacing for industrial use, the terrain is now highly compacted and impervious, which limits infiltration and increases the potential for surface runoff and localised erosion if drainage is not properly managed.

Although the current hardened and grassed surfaces have reduced the likelihood of active soil erosion, the site's elevation relative to the estuary makes it sensitive to stormwater discharge and sediment transport. The grassed strip along the estuary edge provides a minor but functional buffer that helps dissipate runoff energy and capture sediment before water reaches the estuarine zone. Consequently, future development works must integrate effective stormwater attenuation and erosion control measures to maintain the stability of this low-lying platform and prevent indirect impacts on the Knysna Estuary's intertidal habitats.

Figure 10: Topography map of the development area

3. PROPOSED DEVELOPMENT (PREFERRED ALTERNATIVE – ALTERNATIVE A)

The proposed development involves the construction of a new yacht manufacturing facility and associated site upgrades for Kinetic Catamarans SA (Pty) Ltd on portions of the Remainder of Erven 1339 and 1316, Knysna, situated adjacent to the Knysna Estuary within the established Lower Industrial Precinct. The development forms part of a municipally initiated land revitalisation project, through which underutilised municipal land is being transferred to Kinetic Catamarans to enable the expansion of its existing marine manufacturing operations currently located on Erven 3416 and 3417. In addition to the yacht factory, the proposal includes the refurbishment and upgrade of the existing South African Sea Cadet building, located on the eastern portion of the site. The building, which currently serves as a training and storage facility, will undergo aesthetic and structural improvements to enhance its functionality and alignment with surrounding developments, while maintaining its existing educational and maritime training role. Together, these interventions aim to revitalise the lagoon-front precinct, converting a previously paved and fenced vehicle testing ground and adjacent underutilised land into a modern, environmentally managed industrial and community-oriented space that supports Knysna's long-standing boat-building heritage and local economic development.

Table 2: Summary of key infrastructure and environmental integration

Infrastructure component	**Design Description**	**Environmental Integration Measure**
Yacht Factory (12 m high, 2056 m²)	Steel structure with administrative mezzanine	Reuses existing disturbed footprint; height stepped to minimise lagoon visibility
Sea Cadets Facility (495 m²)	Refurbished existing structure	Retains existing footprint; future redevelopment to comply with EMPr
Public Park	Lagoon-front landscaped open space	Enhances public access and ecological buffer
Water Supply	Municipal link + 7 × 10 kL rainwater tanks	Rainwater reuse, reduced potable demand
Sewer	Connection to existing municipal network	No new servitude required; all underground
Stormwater	Upgraded catchpits and permeable paving	Improved runoff quality, controlled flow
Electricity	60 A three-phase + solar PV	Reduced reliance on grid power
Solid Waste	Sealed skips, private disposal	No on-site burning or open dumping

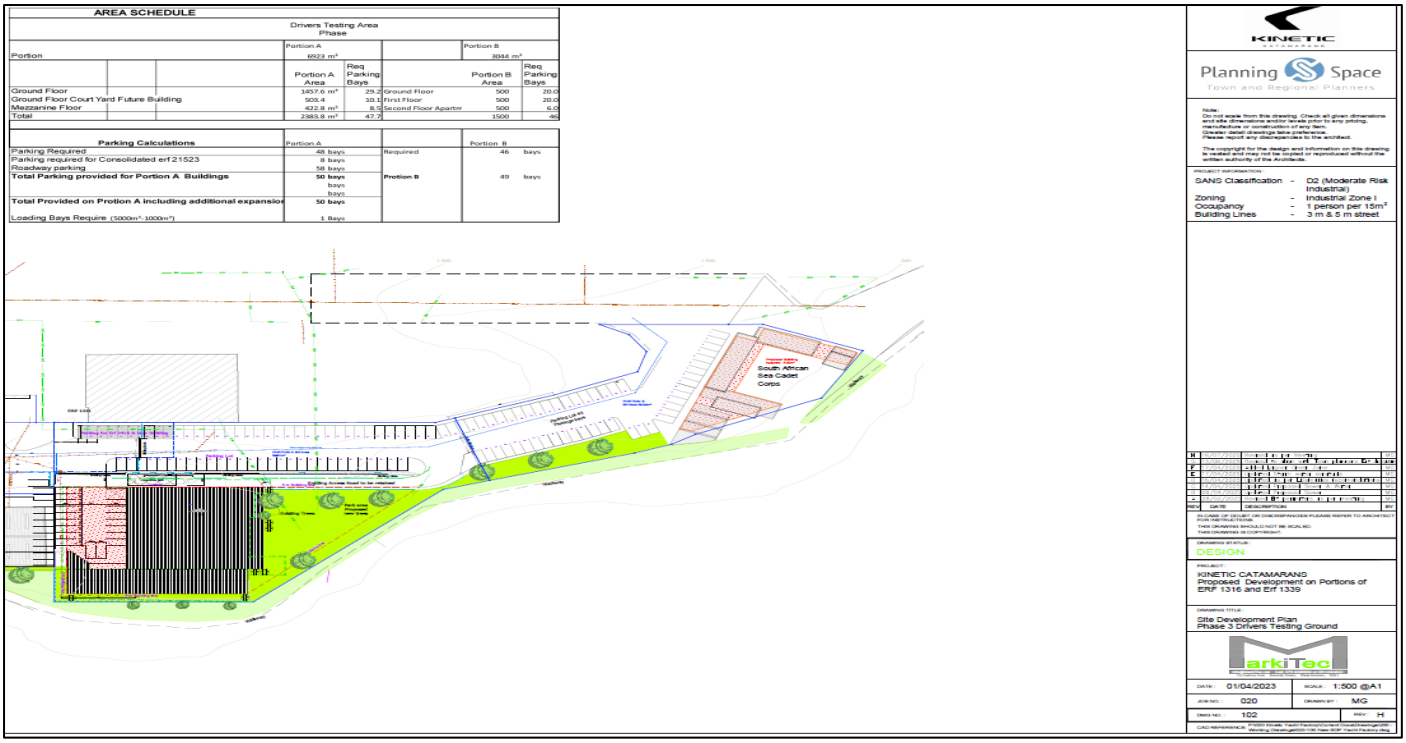

Figure 11: 020-103 Rev H New SDP Yacht Factory-103 SDP DTA (Mark Gale – 2023.04.01) (refer to Appendix B for detailed SDP)

3.1. Project components

A) <u>Yacht factory building (Portion A – 020-103 Rev H New SDP Yacht Factory-103 SDP DTA)</u>

The primary component of the development if for the establishment of a new yacht manufacturing building located on RE/1339, indicated on the site development plan (SDP) as Portion A. The proposal was designed to accommodate the production of large luxury catamarans up to 90 feet (27 meters) in length.

According to the provided documentation, the building footprint measures approximately 2,056 m², comprising:

- Factory floor area ± 1,560 m²
- **Mezzanine level (administration & offices):** ±496 m²
- **Overall height:** up to **12 m**, in line with approved height departure
- **SANS occupancy classification:** D2 (Moderate risk industrial)
- **Design capacity:** ±137 employees (1 person per 15 m² industrial floor space)

The structure is designed using steel framing with AZ200 IBR cladding and Kliptite 700 roof sheeting, with integrated roof insulation, polycarbonate translucent panels for daylighting, and solar PV installations to reduce grid dependency. The factory includes a loading bay, refuse handling area, and paved circulation areas suitable for light- and medium-duty vehicles. A single 12 m-wide access gate will serve the main delivery and dispatch area, while internal service circulation connects to New Street, which will be converted into a private access and parking area. The factory's southern façade, facing the Knysna Lagoon, has been visually softened through stepped rooflines and darker material tones to reduce glare and visual bulk when viewed from the water.

Architectural sections indicate that the building's lagoon-facing side is lower in elevation than the inland side to reduce visual prominence.

Figure 12: 3D Render from the Southeast Perspective of the proposed development on Portion A of the SDP (Mark Gale, 2024)

B) Sea Cadets Building (Portion B – 020-103 Rev H New SDP Yacht Factory-103 SDP DTA)

Portion B of the SDP currently accommodates the existing South African Sea Cadet Corps building, currently a 495 m² single-storey structure with an enclosed yard area used for boat storage and training. The current phase includes only refurbishment and external improvements to the building and its surroundings. A future mixed-use redevelopment is envisaged, potentially introducing a restaurant, retail units, and upper-level accommodation while maintaining the Sea Cadets' activities on the ground floor. This portion will be rezoned to Business Zone 1 to allow future flexibility. Access to Portion B will be from Union Street, with 20 parking bays provided on-site.

C) Public Park and Lagoon Interface

A public open space corridor will be established along the lagoon edge, forming part of a broader linear park system envisioned in the Knysna Spatial Development Framework.
The area will include:

- Indigenous landscaping and seating areas
- Low-level lighting for safety and evening use
- A pedestrian linkage between Union Street and the existing lagoon walkway

This intervention replaces the current degraded and uninviting lagoon frontage with a landscaped buffer that enhances public access and ecological interface.

3.2. Site access and traffic circulation

The development incorporates a reconfiguration of New Street, currently a public road traversing the site, into a privately maintained internal access route.
The proposal includes:

- Closure of ±185 m of New Street, to be repurposed as internal circulation and parking.
- Private servitudes securing access to adjacent properties (Erf 21440 and Erf 4653).
- 108 parking bays provided across the site (including factory, staff, and visitor bays).
- 1 x loading bay (4.5 m × 12 m) for the industrial section.

A Traffic Impact Assessment (ITS Engineers, 2025) confirmed that the development will not result in significant additional congestion or require road upgrades, with adequate capacity remaining across adjacent intersections.

3.3. Services infrastructure

A) Water supply

Potable water will be supplied via the existing municipal water main running along the northern boundary of the property. The engineers calculated an average daily demand of approximately 3,040 litres per day, based on an estimated occupancy of 137 people at a design density of one person per 15 m² of industrial floor space, as per the Red Book guidelines. The available municipal capacity is sufficient to meet this demand without any need for off-site infrastructure upgrades. To promote sustainability and reduce reliance on municipal supply, the proposed yacht factory will incorporate seven 10,000-litre rainwater harvesting tanks that will collect runoff from the roof. The captured water will be filtered and pumped into the building's internal reticulation system for use in ablutions, general cleaning, and wash-down activities. Municipal water will only supplement this system during dry periods and for emergency fire protection systems, such as hydrants and hose reels.

B) Sewerage

The proposed development area for Portion A is not currently connected to the municipal sewer network but can be connected to the existing 160 mm diameter municipal sewer in New Street. This will be done through an existing manhole on the northwestern side of Portion A. The sewer outflow will correspond proportionally with the calculated water demand for the facility. Two larger municipal sewer rising mains, with diameters of 350 mm and 375 mm, also traverse the property. These pipelines will not be relocated but rather retained in situ and protected within a registered municipal services servitude, ensuring long-term accessibility and compliance with municipal engineering standards.

The Sea Cadets building (Portion B) is already connected to the municipal sewer network. No alterations are required at this stage, and the existing connection will remain functional until such time as the building undergoes a more substantial redevelopment in a later phase.

C) Stormwater

The existing stormwater system on site consists of a combination of catchpits, underground pipes, and open channels that drain directly toward the Knysna Lagoon. The system will be upgraded and formalised to manage runoff from the new industrial building and associated parking areas in accordance with municipal standards. All new hard surfaces will be brick-paved and gently graded to channel runoff into the existing stormwater infrastructure. A series of kerbs and surface drains will prevent uncontrolled overland flow, while overflow from the rainwater tanks, designed to discharge at 70% capacity, will provide additional attenuation during high rainfall events. The existing natural depression south of Portion A will continue to function as an informal soakaway to accommodate peak flows. Overall, the proposed changes will improve stormwater quality by reducing sedimentation and siltation currently entering the lagoon from the unpaved and degraded areas.

D) Electrical supply

Electrical demand for the new yacht factory will be met through a new 60-amp three-phase connection to the municipal network. This connection will be taken from the existing overhead infrastructure situated along New Street. The design includes adequate provision for future capacity increases should production operations expand. The facility will also include solar photovoltaic panels installed on the roof to supplement the municipal supply and to provide uninterrupted power to critical equipment during load-shedding or network interruptions.

Portion B, accommodating the Sea Cadets, will retain its existing 80-amp three-phase connection, which remains sufficient for current operational needs.

All overhead lines traversing the property will be formalised within the municipal services servitude and clearly demarcated on the final Servitude Plan to prevent future encroachment or maintenance issues.

E) Solid Waste Management

Waste generated during both the construction and operational phases will be industrial in nature, primarily consisting of materials such as fibreglass off-cuts, resin containers, packaging materials, and general waste from staff facilities. No hazardous waste is anticipated beyond normal industrial residues, which will be properly contained and disposed of in accordance with the Knysna Municipality Integrated Waste Management Plan. Solid waste will be collected and stored in sealed skips within a designated refuse area on site. A licensed private contractor will be responsible for regular collection, transport, and disposal at an authorised landfill or recycling facility. Recyclable materials, including metal and cardboard, will be segregated at source to encourage resource recovery and reduce landfill pressure.

4. ENVIRONMENTAL SCREENING RESULTS AND ASSESSMENT OUTCOMES

A Department of Forestry, Fisheries, and the Environment (DFFE) national web-based screening tool was generated (18 September 2024) to review the environmental sensitivities for *Infrastructure / Localised infrastructure / Infrastructure in the Sea-Estuary-Littoral Active Zone-Development Setback_100M Inland or coastal public property*.

The screening report lists a variety of specialist studies to be undertaken based on the data informants of the tool at the study area.

The application classifications selected for the screening report was –

- *Infrastructure / Localised infrastructure / Infrastructure in the Sea-Estuary-Littoral Active Zone-Development Setback_100M Inland or coastal public property*

4.1. Environmental management frameworks relevant to the application

The Garden Route Environmental Management Framework is applicable to the proposed development.
(https://screening.environment.gov.za/ScreeningDownloads/EMF/gardenroute_finalreport.pdf)

The Basic Assessment process should consider impacts on biodiversity, water resources, soil stability, air quality, and noise. It must also address socio-economic factors, such as effects on the local community and cultural significance, while ensuring compliance with the National Environmental Management Act (Act 107 of 1998) and local zoning laws. Mitigation measures should include an Environmental Management Plan and continuous monitoring. Public participation is essential to involve and address concerns from stakeholders and the community.

4.2. Relevant development incentives, restrictions, exclusions or prohibitions

The proposed site is within both a South African Conservation Area (SACAD) and a South African Protected Area (SAPAD). In consideration of this governance and the proposed development, the property is within / near the Garden Route National Park, which is declared a Protected Area under Section 9 of the National Environmental Management Protected Areas Act (Act 57 of 2003).
In Section 50(5) it further states that –

- No development, construction or farming may be permitted in a national park, nature reserve or world heritage site without the prior written approval of the management authority.

Thereby, South African National Parks (SANParks) will be consulted for approval as they have been identified as the management authority of the Knysna Estuary.

4.3. Proposed development area environmental sensitivity

The Screening Tool Report generated for *Infrastructure / Localised infrastructure / Infrastructure in the Sea-Estuary-Littoral Active Zone-Development Setback_100M Inland or coastal public property* identifies the following summary of environmental sensitivities related to the property, highlighting

only the highest sensitivity areas. These identified environmental sensitivities for the proposed development footprint are indicative and have been verified on-site by registered qualified specialists.

Table 3: Environmental Sensitivities according to the DFFE screening tool report (05 Feb 2024)

Theme	Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Agriculture			X	
Animal Species		X		
Aquatic Biodiversity	X			
Archaeological & Cultural Heritage	X			
Civil Aviation			X	
Defence				X
Palaeontology			X	
Plant Species				X
Terrestrial Biodiversity	X			

4.4. Identified specialist input required

Based on the selected classifications (*Localised infrastructure / Infrastructure in the Sea-Estuary-Littoral Active Zone-Development Setback_100M Inland or coastal public property*). Including considerations of the environmental sensitivities of the proposed development footprint). The following specialist assessments have been identified for inclusion in the assessment report.

Table 4: Identified specialist assessments (Infrastructure / Localised infrastructure / Infrastructure in the Sea-Estuary-Littoral Active Zone-Development Setback_100M Inland or coastal public property).

No:	Specialist Assessment	Assessment Protocol
1	Landscape/Visual Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
2	Archaeological and Cultural Heritage Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
3	Palaeontology Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
4	Terrestrial Biodiversity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf
5	Aquatic Biodiversity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Aquatic_Biodiversity_Assessment_Protocols.pdf
6	Marine Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
7	Avian Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Avifauna_Assessment_Protocols.pdf

8	Geotechnical Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
9	Socio-Economic Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
10	Plant Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Plant_Species_Assessment_Protocols.pdf
11	Animal Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Animal_Species_Assessment_Protocols.pdf

5. SITE SENSITIVITY VERIFICATION METHODOLOGY

According to the protocols, the Site Sensitivity Verification must be conducted by the Environmental Assessment Practitioner (EAP), or in some cases, by a specialist. This verification process includes:

- Desktop analysis
- Site inspection

In this instance, satellite imagery from sources such as Google Earth Pro, Google Maps, Cape Farm Mapper, and QGIS was utilised to develop a clear understanding of the site's conditions prior to the proposal for the development. Additionally, site inspections were performed to validate and "ground-truth" the data collected through the desktop analysis.

6. SITE SENSITIVITY VERIFICATION

The DFFE Screening Tool (dated September 2024) identified a range of environmental sensitivity themes for the proposed Kinetic Catamarans development on Erven 1339 and 1316, Knysna. The purpose of this verification is to ground-truth the automatically generated sensitivities against actual site conditions using desktop analysis, recent aerial imagery, site visits, and specialist input.

The verification has been undertaken by Eco Route Environmental Consultancy in accordance with the National Environmental Management Act (Act No. 107 of 1998) and the associated Procedures for Site Sensitivity Verification (GN 320 of 2020).

Table 5: Site sensitivity verification of the identified environmental sensitivities

Theme	Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Agriculture			X (incorrectly reported – should be lower	X
Animal Species		X (incorrectly reported – should be lower		X
Aquatic Biodiversity	X (incorrectly reported –	X		

	should be lower			
Archaeological & Cultural Heritage	X (incorrectly reported – should be lower			X
Civil Aviation			X (incorrectly reported – should be lower	X
Defence				X
Palaeontology			X (incorrectly reported – should be lower	X
Plant Species				X
Terrestrial Biodiversity	X (incorrectly reported – should be lower			X

Agriculture Theme:

The Screening Tool flagged a Medium Agricultural Sensitivity.
However, the site is entirely transformed and paved, having been historically utilised as a vehicle training ground and hardstand. No arable soils, natural topsoil horizons, or irrigation infrastructure remain. The substrate consists primarily of compacted fill and asphalt, with no potential for agricultural use or soil conservation interest.

Verified Sensitivity: Low

Animal Species Theme:

A High to Medium sensitivity was generated due to the site's proximity to the Knysna Estuary and mapped faunal corridors. Verification confirmed that the site itself provides no suitable habitat for terrestrial fauna: all-natural vegetation has been removed, and the hardstand offers no cover or forage. Occasional movement of avifauna across the site is possible, but this is transient and of no conservation concern.

Verified Sensitivity: Low

Aquatic Biodiversity Theme:

The Screening Tool indicated a Very High Aquatic Sensitivity, which is confirmed. The site is situated immediately adjacent to the Knysna Estuary, a nationally recognised estuarine system and part of the Knysna Protected Area, managed by SANParks. However, the development footprint lies entirely outside the surveyed High-Water Mark (HWM), within an already transformed industrial platform. The Confluent Aquatic Specialist Assessment (2025) verified that the proposed activities

will not result in direct loss of estuarine habitat, and that with standard erosion and stormwater controls in place, impacts are of Low to Very Low significance after mitigation.

Verified Sensitivity: High (Confirmed – Managed through specialist mitigation)

Archaeological and Cultural Heritage Theme:

The Screening Tool classified the site as Very High Sensitivity for heritage and archaeology. Desktop review of SAHRIS and Heritage Western Cape datasets found no recorded heritage resources within the project footprint. The site has been heavily disturbed through past surface paving and fill placement, effectively removing any archaeological context. Nevertheless, given the general heritage richness of the Knysna area, the chance-find protocol prescribed under the EMPr will apply.

Verified Sensitivity: Low to Medium

Palaeontological Theme:

A Medium Sensitivity was identified. The site is underlain by fill material and Quaternary sands, with no natural bedrock or fossil-bearing formations exposed. Given the fully urbanised context, there is no likelihood of encountering palaeontological material during development.

Verified Sensitivity: Low

Plant Species Theme:

The Screening Tool mapped Low Sensitivity for plant species, which is confirmed. No indigenous vegetation remains within the site boundaries; the entire surface is artificial and impervious. Adjacent vegetated berms consist mainly of ruderal grass and alien species, offering no conservation value.

Verified Sensitivity: Low

Terrestrial Biodiversity Theme:

The Screening Tool produced a Very High Sensitivity rating, largely due to the site's proximity to the estuary and coastal vegetation layers. On-site verification and aerial imagery confirm that this sensitivity is incorrectly elevated, the property forms part of a fully developed industrial precinct, with no remnant natural vegetation or ecological corridors. The nearest natural habitats occur beyond the estuarine edge, outside the development area.

Verified Sensitivity: Low

Civil Aviation and Defence Themes:

Both the Civil Aviation and Defence themes are irrelevant to this development. The site is over 8 km from the nearest registered airfield (Plettenberg Bay) and the proposed structures are below 20 m

in height, posing no risk to air navigation. There are no military installations or defence servitudes in the vicinity.

Verified Sensitivity: Low

6.1. Justification of Specialist Studies

The DFFE Screening Tool recommended that eleven (11) potential specialist assessments be considered for the proposed Kinetic Catamarans development. Following site verification and contextual review, only one of these , the Aquatic Biodiversity Impact Assessment , was found to be relevant and has been undertaken by a suitably qualified specialist.

All other assessments were screened out based on the current highly transformed nature of the site, the urban-industrial context, and the absence of qualifying environmental triggers as defined in the gazetted assessment protocols.

Table 6: Justification of Specialist Studies Done / Not-Done

No.	Specialist Assessment Recommended	Justification for Exclusion / Inclusion
1	Landscape / Visual Impact Assessment	The proposed buildings are located within an established industrial precinct, surrounded by comparable industrial and municipal infrastructure. The site is visually contained and screened by existing development and vegetation. The activity will not alter the broader landscape character or affect any scenic vistas or tourism viewpoints. A visual assessment is therefore not warranted.
2	Archaeological and Cultural Heritage Impact Assessment	Desktop review of SAHRIS and HWC databases confirmed no heritage resources within or adjacent to the site. The footprint has been previously excavated, filled, and paved, eradicating any archaeological context. As such, a full HIA is unnecessary. A chance-find procedure, as included in the EMPr, will ensure compliance should unexpected artefacts be uncovered.
3	Palaeontology Impact Assessment	The site consists entirely of urban fill and compacted sand with no natural outcrops or fossil-bearing formations. The likelihood of encountering palaeontological material is negligible. A PIA is therefore not required.
4	Terrestrial Biodiversity Impact Assessment	The Screening Tool's "Very High" sensitivity reflects proximity to the Knysna Estuary rather than actual on-site ecological value. The entire footprint is paved and devoid of natural vegetation or faunal habitat. No Critical Biodiversity Areas (CBAs) intersect the site. The verified terrestrial sensitivity is Low, thus no TBA is required.
5	Aquatic Biodiversity Impact Assessment	The site lies directly adjacent to the Knysna Estuary, a sensitive aquatic environment. Although the development footprint is

		outside the surveyed High-Water Mark, indirect impacts (e.g., stormwater runoff, erosion, sedimentation) warranted specialist investigation. A full Aquatic Assessment was therefore undertaken (Confluent Environmental, 2025) and its findings integrated into the BAR and EMPr.
6	Marine Impact Assessment	The development is land-based and separated from the tidal estuarine system by a vegetated berm and concrete apron. No marine or subtidal components will be affected. Consequently, a Marine Impact Assessment is not applicable.
7	Avian Impact Assessment	The site supports no natural habitat for avifauna. Bird presence is limited to transient species associated with the estuary and surrounding urban area. The proposed development poses no risk to flight paths or roosting sites. An Avian Impact Assessment is not required.
8	Geotechnical Assessment	The project is situated on an existing developed platform previously used for heavy vehicle training and hardstand. The municipality already holds baseline geotechnical information for this precinct, and no deep excavation is planned. The engineer will conduct standard foundation verification during design. No environmental geotechnical study is required under NEMA.
9	Socio-Economic Assessment	The proposed facility aligns with municipal planning policy and represents an expansion of an existing local business (Kinetic Catamarans). It will provide local employment and industrial renewal without displacing existing land uses. As the socio-economic effects are positive and not significant in scale, a formal socio-economic impact assessment is not required.
10	Plant Species Assessment	No indigenous vegetation remains on site. The entire surface is paved or compacted with ruderal and alien grass patches limited to edges. There is no habitat capable of supporting listed plant species. A Plant Species Assessment is therefore not applicable.
11	Animal Species Assessment	The site provides no faunal refuge or habitat. Occasional urban-tolerant species (birds, rodents, insects) may occur but none of conservation significance. Verified sensitivity is Low. An Animal Species Assessment is not required.

7. CONCLUSION

Based on verified site conditions and the transformation level, only one specialist study, Aquatic Biodiversity, was deemed necessary to adequately assess potential environmental risks. All other recommended assessments were justifiably excluded because the site lacks natural habitat, palaeontological potential, or visual and socio-economic sensitivities that would trigger further specialist investigation under the relevant protocols.

This approach complies fully with the Procedures for Site Sensitivity Verification (GN 320 of 2020) and ensures that the scope of assessment is proportionate to the actual environmental risk of the proposed activity.