



APPLICATION - FINAL BASIC ASSESSMENT 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



PREPARED FOR:	Kinetic Catamarans (Leon Scheepers and Rob Hayward)
PREPARED BY:	Eco Route Environmental Practitioners Jessica Christie (EAPASA Reg: 2019/1855); assisted by Justin Brittion (Can. EAPASA 2023/6648)
DOCUMENT REFERENCE:	2026.26.12 - Application FINAL BAR - Kinetic Catamarans
DFFE REF NO:	14/12/16/3/3/1/3305
DATE:	August 2026
SUBMITTED TO:	Competent Authority (DFFE) I&AP's

CONDITIONS OF USE OF THE REPORT

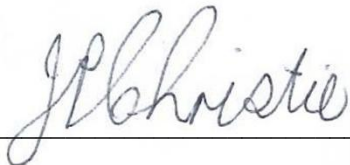
The report is the property of **Eco Route Environmental Consultancy**, who may publish it, in whole, provided that:

1. Eco Route Environmental Consultancy are indemnified against any claim for damages that may result from publication.
2. Eco Route Environmental Consultancy accepts no responsibility by the Applicant/Client for failure to follow or comply with the recommended programme, specifications or recommendations contained in this report.
3. Eco Route Environmental Consultancy accepts no responsibility for deviation or non-compliance of any specifications or guidelines provided in the report.
4. This document remains the confidential and proprietary information of Eco Route Environmental Consultancy and is protected by copyright in favour of Eco Route Environmental Consultancy and may not be reproduced or used without the written consent from Eco Route Environmental Consultancy, which has been obtained beforehand.
5. This document is prepared exclusively for **Kinetic Catamarans (PTY) Ltd** and is subject to all confidentiality, copyright and trade secrets, rules, intellectual property law and practices of South Africa.

STATEMENT OF INDEPENDENCE

I, **Jessica Christie**, of Eco Route Environmental Consultancy, in terms of Regulation 13 of the Environmental Impact Assessment Regulations, 2014 (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: _____



ASSUMPTIONS & LIMITATIONS

This section provides a brief overview of specific assumptions and limitations having an impact on this environmental application process:

- It is assumed that the information on which this report is based (specialist studies and project information, as well as existing information) is correct, factual and truthful.
- The proposed development is in line with the statutory planning vision for the area (namely the Local Spatial Development Plan), and thus it is assumed that issues such as the cumulative impact of development in terms of character of the area and its resources, have been considered during the strategic planning for the area.
- It is assumed that all the relevant mitigation and management measures and agreements specified in this report will be implemented in order to ensure minimal negative impacts and maximum environmental benefits.
- It is assumed that Stakeholders and Interested and Affected Parties notified of the availability of draft reports during the PPP will submit comments within the designated 30-days review and comment period, for consideration in the environmental assessment process.

Table of Contents

SECTION A – ADMINISTRATIVE DETAILS	12
SECTION B – DESCRIPTIVE DETAILS	14
1. LOCATION DESCRIPTION	14
2. PROPERTY DESCRIPTION	15
SECTION C – RECEIVING ENVIRONMENTAL CONSIDERATIONS	17
1. VEGETATION.....	17
2. SENSITIVE AREAS (CBA, ESA, and PA).....	19
3. AQUATIC SENSITIVITIES.....	20
3.1. Knysna Estuary (Upstream Consulting, 2025).....	22
4. TOPOGRAPHY	24
5. SOCIO-ECONOMIC AND HERITAGE	25
SECTION D – ENVIRONMENTAL SCREENING TOOL INPUT.....	27
1. ENVIRONMENTAL MANAGEMENT FRAMEWORKS RELEVANT TO THE APPLICATION	27
2. RELEVANT DEVELOPMENT INCENTIVES, RESTRICTIONS, EXCLUSIONS OR PROHIBITIONS.....	27
3. PROPOSED DEVELOPMENT AREA ENVIRONMENTAL SENSITIVITY	27
4. IDENTIFIED SPECIALIST INPUT REQUIRED	28
SECTION E – PROJECT SCOPE	31
1. OVERVIEW OF PROPOSED DEVELOPMENT (PREFERRED ALTERNATIVE – ALTERNATIVE A)	31
2. PROJECT COMPONENTS.....	32
2.1. Yacht factory building (Portion A – 020-51 New SDP Yacht Factory Coordinated-51 SDP DTA) 32	
2.2. Sea Cadets Building (Portion B – 020-51 New SDP Yacht Factory Coordinated-51 SDP DTA) 34	
2.3. Public Park and Lagoon Interface	35
3. SITE ACCESS AND TRAFFIC CIRCULATION.....	35
4. SERVICES INFRASTRUCTURE.....	35
4.1. Water supply.....	35
4.2. Sewerage	36
4.3. Stormwater.....	37
4.4. Electrical Supply	38
4.5. Solid Waste Management.....	38
5. CONSIDERATION OF DEVELOPMENT ALTERNATIVE(S) (ALTERNATIVE B).....	40
5.1. Site Alternatives	40
5.2. Layout and Design Alternatives	41
5.3. Technology and Process Alternatives	41

5.4. "No-Go" alternatives	41
6. MOTIVATION FOR PREFERRED ALTERNATIVE	41
6.1. Strategic Context	42
6.2. Rationale for the Yacht Factory	42
6.3. Motivation for the upgrade of the Sea Cadet Facility	42
6.4. Environmental Motivation	43
6.5. Socio-Economic Motivation	43
7. NEED AND DESIREABILITY	44
7.1. Principle of Ecological Sustainability	44
7.2. Principle of Justifiable Economic and Social Development	44
7.3. Alignment with Strategic Planning Frameworks	45
7.4. Optimisation of Urban Land and Existing Resources	45
7.5. Public Interest and Local Benefits	46
SECTION F – APPLICABLE LISTED ACTIVITIES	47
SECTION G – ADDITIONAL POLICIES AND LEGISLATIVE CONTEXT	53
SECTION H – IMPACT ASSESSMENT	59
1. METHODOLOGY FOR ASSESSMENT OF IMPACTS	59
2. (ALTERNATIVE A – PREFERRED) IMPACTS ASSOCIATED WITH THE CONSTRUCTION PHASE	61
3. (ALTERNATIVE A - PREFERRED) IMPACTS ASSOCIATED WITH THE OPERATIONAL PHASE	71
4. NO GO' OR NO DEVELOPMENT SCENARIO	77
4.1. Environmental Implication	77
4.2. Socio-economic implications	78
5. Mitigation measures as proposed by the aquatic specialist (Upstream Consulting, 2025)	78
SECTION I – CONSIDERATIONS REGARDING OFFSETS	83
1. APPLICATION TO THE PROPOSED DEVELOPMENT	83
SECTION J – DETAILS OF THE PUBLIC PARTICIPATION PROCESS	85
SECTION K – CONCLUSION AND RECOMMENDATIONS	88
1. SUMMARY OF PROJECT SCOPE	88
2. SUMMARY OF ENVIRONMENTAL IMPACT	88
3. RECOMMENDATIONS FROM THE ENVIRONMENTAL ASSESSMENT PRACTITIONER	89

ATTACHMENTS

Table 1: Applicable Basic Assessment Report Attachments

Appendix	Description
Appendix A	Locality map of The Proposed Development Area
Appendix B	Site development Plans (Alternative A)
Appendix C	Environmental consideration Maps
Appendix D1	Aquatic Biodiversity Site Sensitivity Verification and Impact Assessment
Appendix E	Site Sensitivity Verification Report
Appendix G	Screening Tool Report (Infrastructure / Localised infrastructure / Infrastructure in the Sea-Estuary-Littoral Active Zone-Development Setback_100M Inland or coastal public property).
Appendix H	Jessica Christie (EAPASA Reg: 2019/1855)
Appendix H1	Justin Brittion CV (Can. EAPASA 2023/6648)
Appendix I	RE-1316 Knysna HWC Confirmation
Appendix I1	Heritage Western Cape - Section 38(8) NID Confirmation (No Trigger), Case No. 29084RB0625
Appendix J	RE1339 and 1316 Knysna PBAR SANParks Comments 20260402
Appendix K	Pre Application Minutes of Meeting
Appendix L	Services Report Kinetic Catamarans REV.1
Appendix M	Declaration of EAP and Undertaking Under Oath or Affirmation – Jessica Christie
Appendix M1	Declaration of EAP and Undertaking Under Oath or Affirmation – Justin Brittion

SCOPE OF ASSESSMENT AND CONTENT OF BASIC ASSESSMENT REPORT

Appendix 1 of Regulation 982 of the 2014 EIA Regulations describes the contents required to complete a basic assessment report. The below table indicates how Appendix 1 requirements were incorporated into the basic assessment report:

Scope of assessment and content of basic assessment reports	Index
(1) A basic assessment report must contain the information that is necessary for the competent authority to consider and come to a decision on the application, and must include -	
(a) Details of – (i) The EAP who prepared the report; and (ii) The expertise of the EAP, including curriculum vitae.	Appendix H and H1
(b) The location of the activity, including – (i) The 21 digit surveyor General Code of each cadastral land parcel. (ii) Where available the physical address and farm name. (iii) Where the required information items (i) and (ii) is not available, the co-ordinates of the boundary of the property.	Section B
(c) a plan which locates the proposed activity, or activities applied for as well as the associated structures and infrastructure at an appropriate scale, or, if it is (i) A linear Activity, a description and coordinates of the corridor in which the proposed activity or activities is to be undertaken; or (ii) On land where the property has not been defined, the coordinates within which the activity is to be undertaken.	Section B
(d) a description of the scope of the proposed activity, including – (i) All listed and specified activities triggered and being applied for; and (ii) A description of the activities to be undertaken including associated structures and infrastructure	Section E and F
(e) A description of the policy and legislative context within which the development is proposed, including – (i) An identification of all legislation, policies, plans, guidelines, spatial tools, municipal development planning frameworks and instruments that are applicable to this activity and have been considered in preparation of the report; and (ii) How the proposed activity complies with and responds to the legislation and policy context, plans, guidelines, tools frameworks and instruments.	Section G

(f) A motivation for the need and desirability for the proposed development, including the need and desirability of the activity in the context of the preferred location.	Section E
(g) A motivation for the preferred site, activity and technology alternative	Section E
(h) A full description of the process followed to reach the proposed preferred alternative within the site including: (i) Details of all alternatives considered. (ii) Details of the public participation process undertaken in terms of regulation 41 of the regulations, including copies and supporting documents and inputs. (iii) A Summary of the issues raised by interested and affected parties, and an indication of the manner in which the issues were incorporated, or the reasons for not including them. (iv) The environmental attributes associated with the alternatives focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects. (v) The impacts and risks identified for each alternative, including the nature, significance, consequence, extent, duration and probability of the impacts, including the degree to which these impacts – (aa) can be reversed (bb) may cause irreplaceable loss of resources; and (cc) can be avoided, managed or mitigated. (vi) The methodology used in determining and ranking the nature, significance, consequences, extent, duration and probability of potential environmental impacts and risks associated with the alternatives. (vii) Positive and negative impacts that the proposed activity and alternatives will have on the environment and on the community that may be affected focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects. (viii) The possible mitigation measures that could be applied and level residual risk (ix) The outcome of the site selection matrix (x) If no alternatives, including alternative locations for the activity were investigated, the motivation for not considering such; and	(i) Section E (ii) Section J to be completed in Draft and Final BAR. (iii) Section J to be completed in Draft and Final BAR. (iv) Section E (v) Section H (vi) Section H (vii) Section H (viii) Section H and Section K (ix) Section H (x) N/A (xi) Section E

(xi) A concluding statement indicating the preferred alternatives, including the preferred location of the activity.	
(i) A full description of the process undertaken to identify, assess and rank the impacts the activity will impose on the preferred location through the life of the activity, including - A description of all environmental issues and risks that were identified during the basic assessment process; and An assessment of the significance of each issue and risk and an indication of the extent to which the issue and risk could be avoided or addressed by the adoption of mitigation measures	Section H
(j) An assessment of each identified potentially significant impact and risk, including - Cumulative impacts; The nature, significance and consequences of the impact and risk; The extent and duration of the impact and risk; The probability of the impact and risk occurring; The degree to which the impact and risk can be reversed; The degree to which the impact and risk may cause irreplaceable loss of resources; and The degree to which the impact and risk can be mitigated	Section H
(k) Where applicable, a summary of the findings and impact management measures identified in any specialist report complying with Appendix 6 to these Regulations and an indication as to how these findings and recommendations have been included in the final assessment report.	Section H and Section K
(l) An environmental impact statement which contains: • A summary of the key findings of the environmental impact assessment; • A map at an appropriate scale which superimposes the proposed activity and its associated structures and infrastructure on the environmental sensitivities of the preferred site indicating any areas that should be avoided, including buffers; and • A summary of the positive and negative impacts and risks of the proposed activity and identified alternatives	Section C, Section E, Section F / Appendix C and D1
(m) Based on the assessment, and where applicable, impact management measures from specialist reports, the recording of proposed impact management objectives, and the impact management outcomes for the development for inclusion in the EMPr.	The specific impact management objectives, mitigation measures recommended by specialist studies, and impact management outcomes for each identified impact are recorded in the Final Environmental Management Programme (EMPr) (Eco Route Environmental Consultancy, Document Reference: 2026.26.13), which forms part of this application and must be read together with Section H and Section K of this report.
(n) Any aspects which were conditional to the findings of the assessment either by the EAP or	Aspects arising from the findings of the EAP and the specialist studies that are recommended for inclusion as conditions of the Environmental

specialist which are to be included as conditions of authorisation.	Authorisation are set out in the recommendations in Section K.3 of this report and in the mitigation and monitoring measures contained in the EMPr, both of which the EAP recommends be incorporated as conditions of authorisation.
(o) A description of assumptions, uncertainties and gaps in knowledge which relate to the assessment and mitigation measures proposed	Refer to the Assumptions & Limitations section at the front of this report, which records the assumptions and limitations applicable to this Basic Assessment process. No material gaps in knowledge were identified during the assessment that would prevent the reasoned opinion recorded in Section K of this report from being reached.
(p) A reasoned opinion as to whether the proposed activity should or should not be authorised, and if the opinion is that it should be authorised, any conditions that should be made in respect of that authorisation.	Refer to Section K.3 (Recommendations from the Environmental Assessment Practitioner) of this report, in which the EAP's reasoned opinion on the proposed activity, and the conditions recommended in respect of that opinion, are set out in full.
(q) Where the proposed activity does not include operational aspects, the period for which the environmental authorisation is required, the date on which the activity will be concluded and the post construction monitoring requirements finalised.	Not applicable. The proposed activity includes operational aspects (the ongoing operation of the yacht manufacturing facility and the Sea Cadets facility); this requirement, which applies only where the proposed activity does not include operational aspects, therefore does not apply to this application.
(r) An undertaking under oath or affirmation by the EAP in relation to: The correctness of the information provided in the reports; The inclusion of comments and inputs from stakeholders and I&APs; The inclusion of inputs and recommendations from the specialist reports where relevant; and Any information provided by the EAP to interested and affected parties and any responses by the EAP to comments or inputs made by interested and affected parties	Refer to Appendix M and Appendix M1: the signed Declaration of EAP and Undertaking Under Oath or Affirmation for Jessica Christie and Justin Britton respectively, made in terms of Regulation 13 of the Environmental Impact Assessment Regulations, 2014 (as amended), covering the correctness of the information provided, the inclusion of comments and inputs from stakeholders and Interested and Affected Parties, the inclusion of specialist report inputs and recommendations, and the EAP's responses to I&AP comments as reflected in the Comments and Response Report accompanying this application.
(s) Where applicable, details of any financial provisions for the rehabilitation, closure and ongoing post decommissioning management of negative environmental impacts	Not applicable in the conventional sense. The proposed development is not expected to be decommissioned; the EMPr therefore does not provide for closure or post-decommissioning financial provision. Should decommissioning occur in future, rehabilitation of the site would be managed and funded by the Applicant in accordance with the Rehabilitation and Maintenance and Decommission phase requirements of the EMPr (Eco Route Environmental Consultancy, Document Reference: 2026.26.13).
(t) Any specific information that may be required by the competent authority.	None. No additional or specific information beyond that contained in this report and its appendices has been requested by the competent authority to date. Should any further information be requested

	during application-phase review, it will be provided as a supplement to this report.
(u) Any other matters required in terms of section 24(4)(a) and (b) of the Act.	None. No other matters relevant to section 24(4)(a) and (b) of the Act, beyond those already addressed elsewhere in this report and its appendices, have been identified.

SECTION A – ADMINISTRATIVE DETAILS

Applicant details:

Title	Mr
Name of the Applicant	Leon
Surname of the Applicant	Scheepers
Name of contact person for applicant (name and surname) (if other)	-
Company/ Trading name (if any)	Kinetic Catamarans SA (PTY) Ltd
Company Registration Number	2018/334988/07
Physical address	12 New Street, Knysna Western Cape South Africa
Postal address	-
Postal code	6570
Telephone	-
Cell phone	044 382 0439
E-mail	leon@kineticcatamarans.com

Landowner details:

Name of the Landowner	Same as applicant
Surname of the Landowner	
Postal address	
Postal code	
Telephone	
Cell phone	
E-mail	

Provincial Authority details:

Provincial Environmental Authority:	Provincial Environmental Authority:
Name of contact person in Environmental Section (name and surname)	Danie Swanepoel
Postal address	4th Floor, York Park Building, 93 York Street,
Postal code	6529
Telephone	044 814 2002
Cell phone	-
E-mail	Danie.Swanepoel@westerncape.gov.za

Local Municipal details:

Municipality	Knysna Municipality
Name of contact person in Environmental Section (name and surname)	Mulalo Musekene
Postal address	5 Clyde Street, Knysna
Postal code	6570
Telephone	044 302 6300
Cell phone	044 302 6375
E-mail:	mmusekene@knysna.gov.za

Environmental Assessment Practitioner details:

Company of Environmental Assessment Practitioner (EAP)	Eco Route Environmental Consultancy
EAP name and surname	Jessica Christie (registered EAP - 2019/1855) assisted by Justin Brittion (candidate EAP – 2023/6648)
EAP Qualifications and Professional affiliations	Jessica Christie – BSc (Hons) Zoology - EAPASA Justin Brittion – MSc Environmental Science – Can. EAPASA
Physical address	6 Tinktinkie Street (C/o Hoepoe and Parakiet), Sedgefield
Postal code	6573
Telephone	-
Cell phone	076 514 2701 (Jessica) / 081 208 2170 (Justin)
E-mail	jessica@ecoroute.co.za / justin@ecoroute.co.za / admin@ecoroute.co.za

SECTION B – DESCRIPTIVE DETAILS

1. LOCATION DESCRIPTION

The proposed development comprises two related components assessed under a single Basic Assessment process. The first component entails the development/expansion of the Kinetic Catamarans manufacturing facility, and the second entails upgrades to the South African Sea Cadet Corps – TS Knysna facilities on the adjoining property. For purposes of this report, both components are collectively referred to as “the development area”.

The development area is located within the established industrial/maritime precinct of Knysna, within the jurisdiction of the Knysna Local Municipality, Western Cape. The site is situated adjacent to the northern shoreline of the Knysna Estuary, approximately 1.2 km east of the Knysna Central Business District (CBD).

Table 2: Western Cape SG information of the ¹proposed development area of the factory and ²the 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)

2. PROPERTY DESCRIPTION

Historical satellite imagery and aerial data confirm that the development area has been subject to long-term disturbance. The earliest available high-resolution imagery (SPOT-5, 2012) indicates that the site had already been cleared of natural vegetation and developed as a vehicle manoeuvring and training area, with hardened and compacted surfaces associated with adjacent industrial infrastructure and the South African Sea Cadet Corps – TS Knysna facilities.

Subsequent imagery from 2016, 2018 and 2024 confirms that the site has remained in a consistently transformed state, with no evidence of natural vegetation regeneration or greenfield conditions. The land has continuously been characterised by paved and compacted surfaces, defined operational boundaries, and surrounding industrial and maritime-related land uses.

This persistent pattern of disturbance over a period exceeding a decade demonstrates that the development area has not functioned as natural habitat since at least 2012. The site forms part of the broader industrial and maritime precinct along the Knysna Estuary, supported by existing municipal services, hardened surfaces, and adjoining commercial activity.

Importantly, the proposed development is confined entirely to this already transformed footprint. No infill, reclamation, or extension into undisturbed estuarine or saltmarsh vegetation is proposed, and no works are anticipated below the high-water mark of the Knysna Estuary. The proposal therefore constitutes a redevelopment and upgrading of existing disturbed land rather than the transformation of previously natural terrain.



Figure 2: Brief overview of the property between 2012 and 2024

In terms of the Knysna Zoning Scheme, the portion of land associated with the proposed factory development (RE/1339) is currently zoned Undetermined Use Zone, while the South African Sea Cadet Corps property (RE/1316) is zoned Transport Zone II. The Undetermined Use Zone applies to areas where land use rights have not yet been formalised under the current zoning scheme, and any new development or alteration of land use requires rezoning or formal amendment through a town planning process. As such, the proposed industrial/manufacturing activities on RE/1339 cannot proceed until appropriate zoning rights are secured.

The Transport Zone II zoning applicable to RE/1316 generally accommodates transport-related infrastructure and associated public service uses. The existing Sea Cadet training facility and proposed upgrades are therefore being addressed through the relevant town planning mechanisms to ensure land use compliance.

To resolve these zoning inconsistencies, a parallel town planning process is currently underway, which includes formal cadastral reconfiguration (subdivision and consolidation) and rezoning applications to align erf boundaries and zoning with the intended industrial and maritime training functions. This process is being pursued concurrently with the environmental assessment to ensure that the proposed development is fully aligned with municipal spatial planning objectives, including the reinforcement of the Knysna estuarine industrial-maritime precinct as a strategic economic node within the urban edge.

SECTION C – RECEIVING 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.

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 3). This includes the development area.

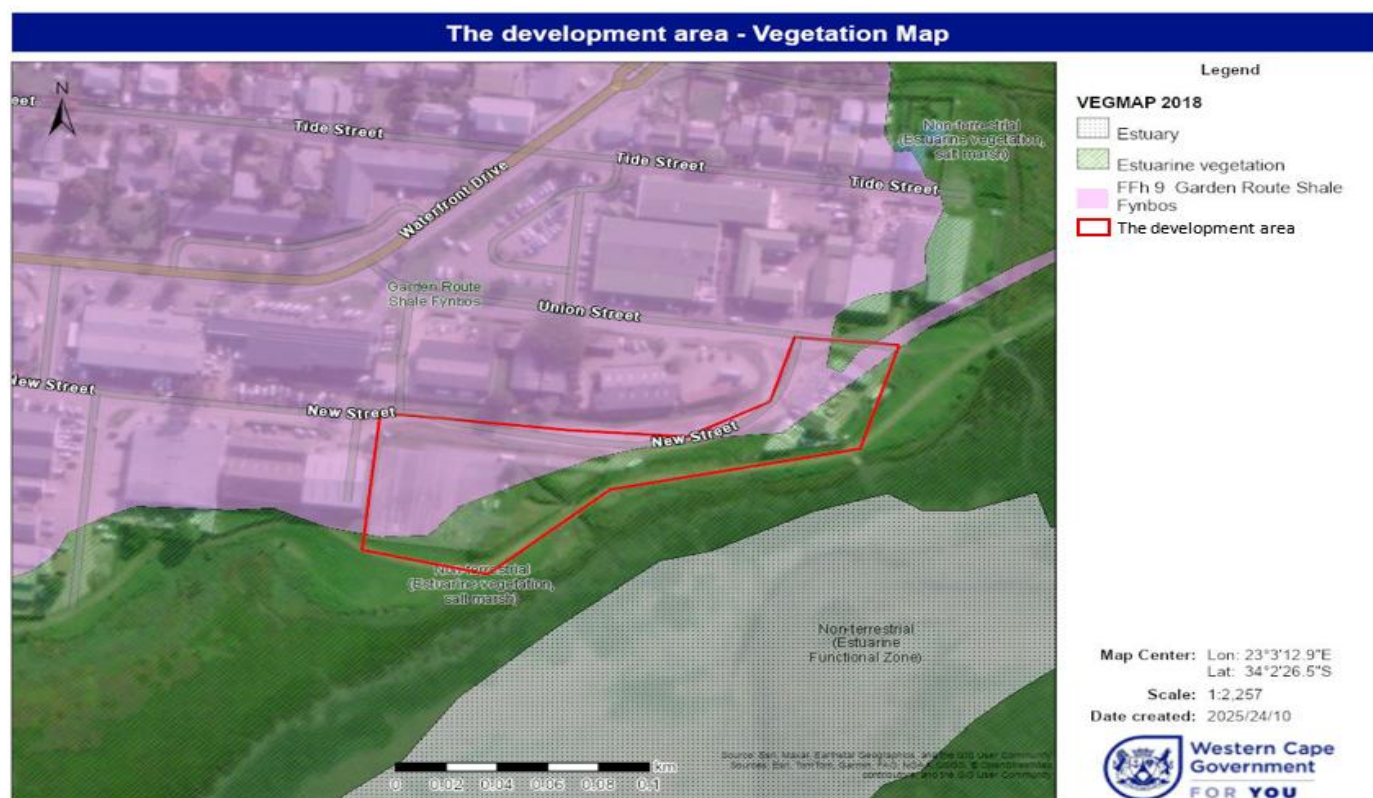


Figure 3: The development area vegetation map (VEGMAP, 2018)

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 4). 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 4: SANBI Original Ecosystem Threat Status



Figure 5: SANBI Remaining Ecosystem Threat Status

2. SENSITIVE AREAS (CBA, ESA, and PA)

According to the updated Western Cape Biodiversity Spatial Plan (WCBS, 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 WCBS 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 6: Western Cape Biodiversity Spatial Plan (WCBS 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.

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 7: 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.

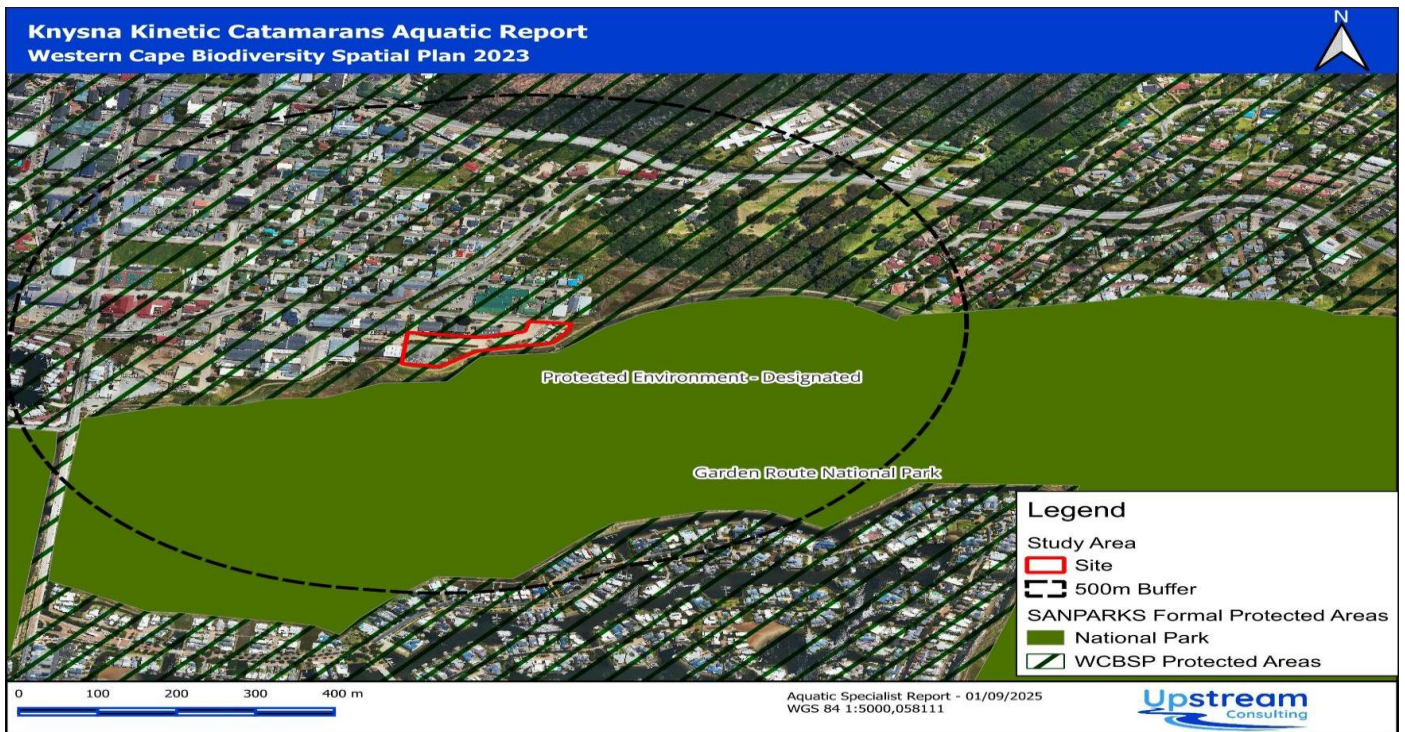


Figure 8: Aquatic sensitivities from desktop data (Upstream Consulting, 2025)

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 9).

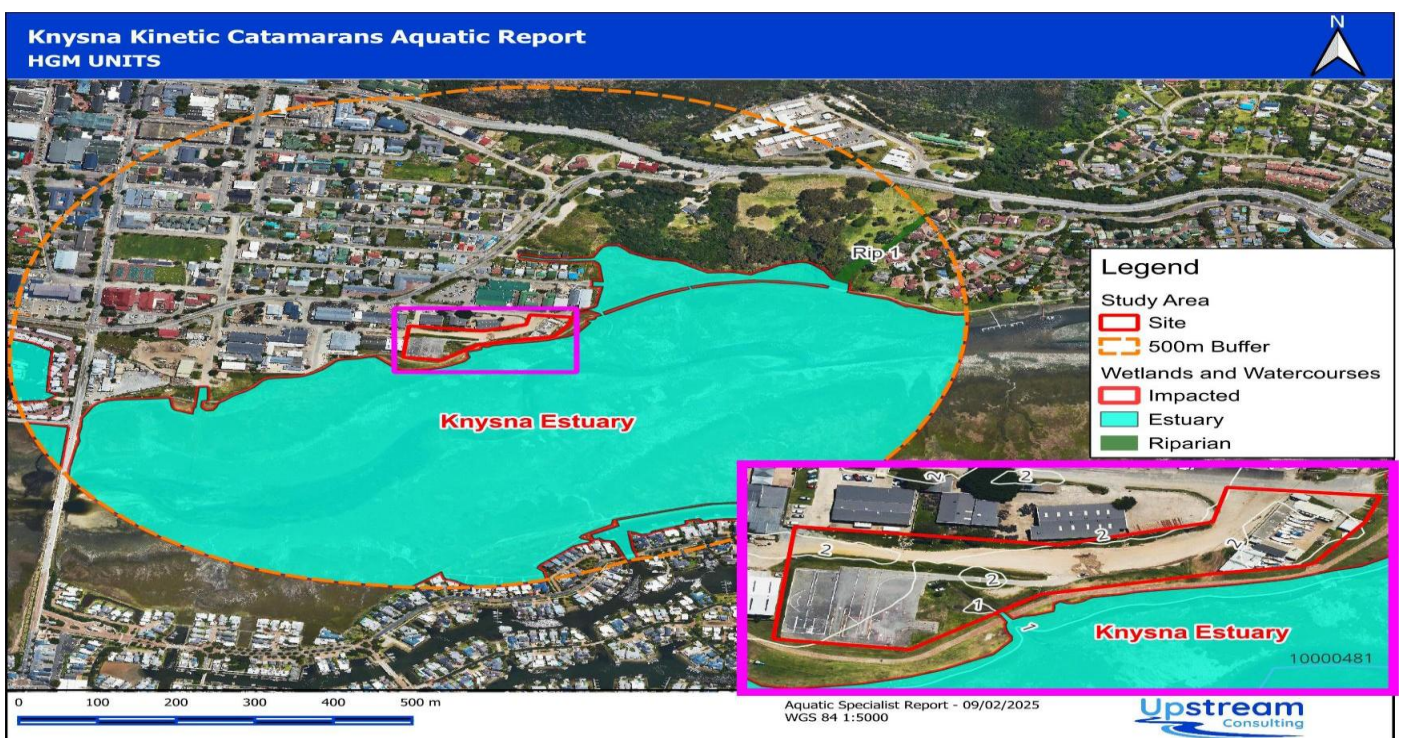


Figure 9: Map of the delineated aquatic habitat within the study area following site verification, pink box is zoomed in site with contours (Upstream Consulting, 2025)

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.

3.1. 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 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.

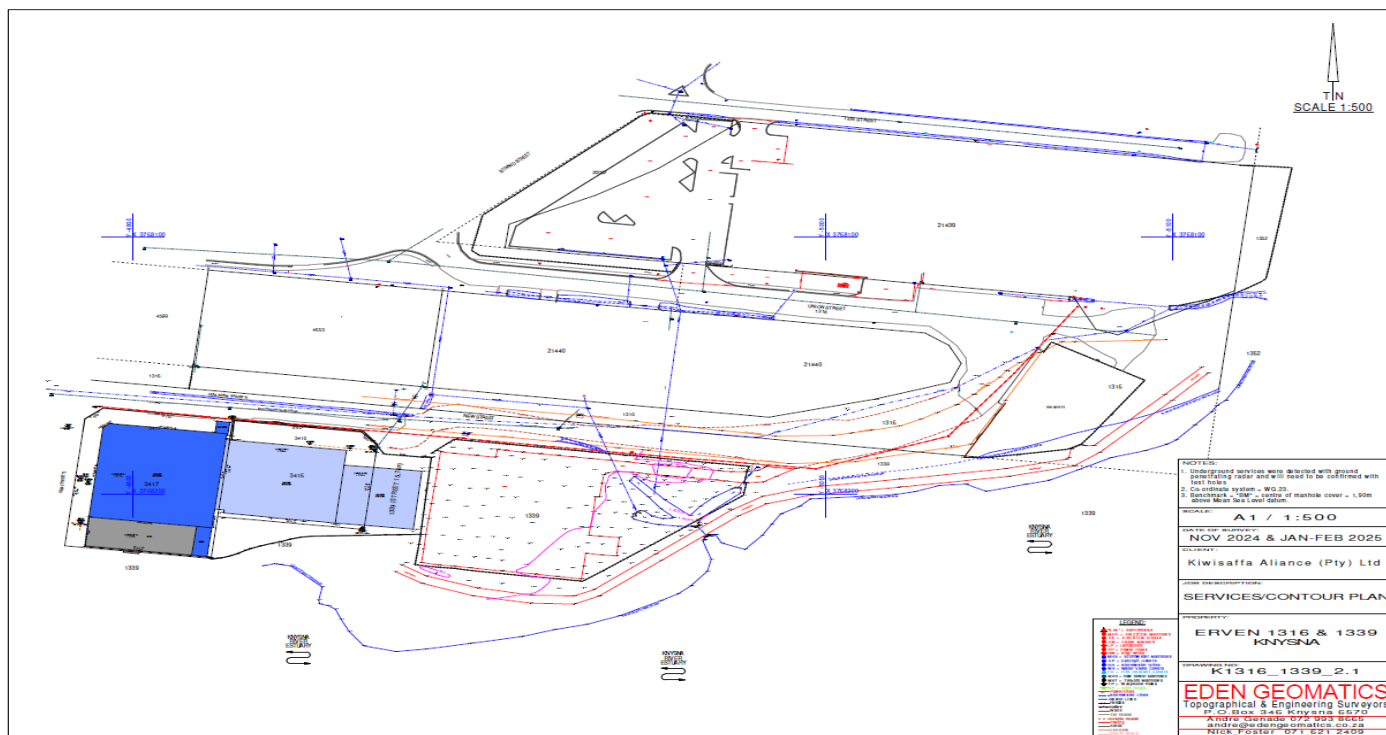


Figure 10: Topographical and Services Survey Plan for Erven 1316 and 1339, Knysna (Eden Geomatics, 2024–2025)

4. TOPOGRAPHY

According to the topographical mapping (Figure 11), 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 11: Topography map of the development area

5. SOCIO-ECONOMIC AND HERITAGE

The proposed development is located within the established industrial and maritime precinct of Knysna, an area long associated with boatbuilding, marine engineering, and manufacturing activities. The Knysna Estuary and its adjoining waterfront form a critical component of the local economy, supporting tourism, recreation, and marine-based industries. The existing Kinetic Catamarans facility contributes directly to this economic framework through local employment, technical training, and export-oriented production, aligning with the Knysna Municipality's Spatial Development Framework (SDF), which promotes the growth of the maritime sector as a key local economic driver.

The surrounding urban fabric includes a mix of industrial, commercial, and limited residential land uses, with supporting infrastructure such as roads, utilities, and services already in place. The development area therefore represents an infill and intensification of existing industrial land use rather than new transformation of undeveloped land. The project is expected to enhance job stability within the sector, stimulate skills transfer through ongoing apprenticeship programmes, and reinforce Knysna's reputation as a specialist centre for boat-building excellence.

From a heritage perspective, no formal heritage sites or archaeological resources are recorded within the development footprint according to the South African Heritage Resources Information System (SAHRIS) and municipal databases. The property itself has been historically disturbed and developed since before the 1970s. However, the South African Sea Cadet Corps facility located on the western portion of the site carries local cultural significance due to its long-standing role in maritime youth training. This historical association will be retained and enhanced through proposed facility upgrades, ensuring the continuation of its educational and social value within the community.

In summary, the proposed development will support local economic growth and social upliftment while maintaining compatibility with the existing industrial and cultural landscape of the Knysna

Estuary precinct. No adverse heritage impacts are anticipated, and the project will contribute positively to the socio-economic vitality and maritime identity of Knysna.

Heritage Western Cape was formally consulted on this proposal. HWC has provided written confirmation (attached as Appendix I) that no structures older than 60 years are present on the property and that the provisions of Section 34(1) of the National Heritage Resources Act are accordingly not applicable. A Notification of Intent to Develop (NID) was subsequently submitted to Heritage Western Cape in terms of Section 38(8) of the NHRA. Following consideration at the Heritage Officers' Meeting held on 6 August 2026, HWC confirmed (Case No. 29084RB0625; attached as Appendix II) that the proposed development does not trigger Section 38(1) of the National Heritage Resources Act and is therefore not applicable in terms of impacts to heritage resources. A heritage chance-finds protocol is included as a binding requirement of the EMPr.

SECTION D – ENVIRONMENTAL SCREENING TOOL INPUT

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*

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.

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.

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			

For a more detailed understanding of the environmental sensitivities of the property, it is recommended that the Site Sensitivity Verification Report (SSVR) in APPENDIX E be read in conjunction with the Basic Assessment Report.

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

The Site Sensitivity Verification Report (Appendix E) provides detailed confirmation of the environmental sensitivities associated with the development area. Desktop mapping initially identified Garden Route Shale Fynbos and estuarine vegetation; however, site verification confirmed that the development footprint itself is entirely transformed, with no remnant natural vegetation present. The mapped estuarine vegetation occurs outside of the proposed footprint, within the intertidal and supratidal zones of the Knysna Estuary, and is buffered by a grassed strip that already functions to slow runoff, trap sediment, and filter pollutants. This ground-truthing demonstrates that the footprint does not directly overlap with sensitive vegetation units, and that indirect impacts can be effectively mitigated through buffer management and stormwater controls.

The SSVR further confirmed that while the Western Cape Biodiversity Spatial Plan (2023) maps the site within a Protected Area, this designation does not reflect the current transformed state of the property. Historical development, including paving, fencing, and the Sea Cadet facilities, has removed natural habitat within the footprint. As such, the Protected Area mapping is of contextual relevance only, and does not necessitate additional specialist studies beyond those already undertaken. The management objectives of the WCBSP can be met through responsible design and mitigation measures, rather than further baseline investigations.

With respect to aquatic sensitivities, the SSVR and Aquatic Biodiversity Impact Assessment both identified the Knysna Estuary as the only system potentially affected. The estuary margin adjacent to the site has long functioned as an urban-industrial zone, with stormwater infrastructure and bank stabilisation dating back to the 1970s. Despite this, tidal flushing maintains ecological functioning, and saltmarsh vegetation persists where left unmown. The high-water mark survey undertaken by Eden Geomatics (2024–2025) confirmed that the proposed yacht factory will be situated landward of the HWM, on an elevated platform approximately two metres above mean sea level. This finding eliminates the need for further hydrological or geomorphological studies, including a dedicated coastal erosion specialist study, as the risk of direct inundation and long-term coastal erosion is already addressed through the site's existing elevation and design.

SANParks noted during the pre-application phase that no formal Visual Impact Assessment (VIA) had been undertaken. In response, the project team has incorporated visual mitigation measures directly into the design and environmental management framework. The yacht factory's lagoon-facing façade has been visually softened through stepped rooflines and darker material

tones, reducing glare and bulk when viewed from the estuary. Solar panels will be positioned only on non-estuary-facing roofs to avoid glint and glare, while night lighting will be shielded and low-level to prevent light pollution. Building colours will be selected to blend with the estuary interface, ensuring compatibility with the surrounding landscape. Given these design refinements, together with SANParks' confirmation during site visits that visual impacts can be managed through mitigation, the commissioning of a separate VIA is considered unnecessary. The matter is adequately addressed through architectural design and the EMP commitments.

In light of these verified findings, additional specialist studies would be redundant. The sensitivities have been comprehensively assessed through the SSVR, aquatic specialist input, and multiple site inspections with DFFE and SANParks. All relevant risks are already captured and addressed in the existing documentation. The focus of the application phase should therefore be on implementing and monitoring the recommended mitigation measures.

It is after consideration of site sensitivity verification that the following specialist assessments were done –

Table 5: Executed 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
5	Aquatic Biodiversity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Aquatic_Biodiversity_Assessment_Protocols.pdf

SECTION E – PROJECT SCOPE

1. OVERVIEW OF 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.

The scope of works has been expanded to explicitly include the existing Sea Cadets slipway. While no immediate upgrade plans have been prepared, the slipway has been incorporated into this Basic Assessment to ensure that any future works are authorised under the current application. It is recommended that a condition be attached to the authorisation requiring the submission of a detailed method statement to the competent authority for approval prior to implementation of any slipway upgrade. This approach ensures that potential impacts associated with vessel launching and slipway use are comprehensively addressed within a single, integrated authorisation process, avoiding the need for separate future applications.

Engineering services have been confirmed through the Site Development Plan and supporting engineering inputs. The development will connect to the municipal water and sewer networks, supplemented by seven 10 kL rainwater harvesting tanks to reduce potable demand and provide emergency supply for hose reels. Sewer connections have been designed with appropriate gradients to ensure reliable flow, while stormwater management will be upgraded through new catchpits, permeable paving, and controlled discharge to prevent estuarine contamination. Electrical supply will be provided via a 60 A three-phase connection, supported by solar PV installations to reduce reliance on grid power. Solid waste will be managed through sealed skips and private disposal, with no on-site burning or dumping permitted.

Table 6: Summary of key infrastructure and environmental integration

Infrastructure component	Design Description	Environmental Integration Measure
Yacht Factory (12 m high, 2056 m ²)	Steel structure with administrative mezzanine	Reuses existing disturbed footprint; height stepped to minimise lagoon visibility
Sea Cadets Facility (495 m ²)	Refurbished existing structure	Retains existing footprint; future redevelopment to comply with EMPr and method statement

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

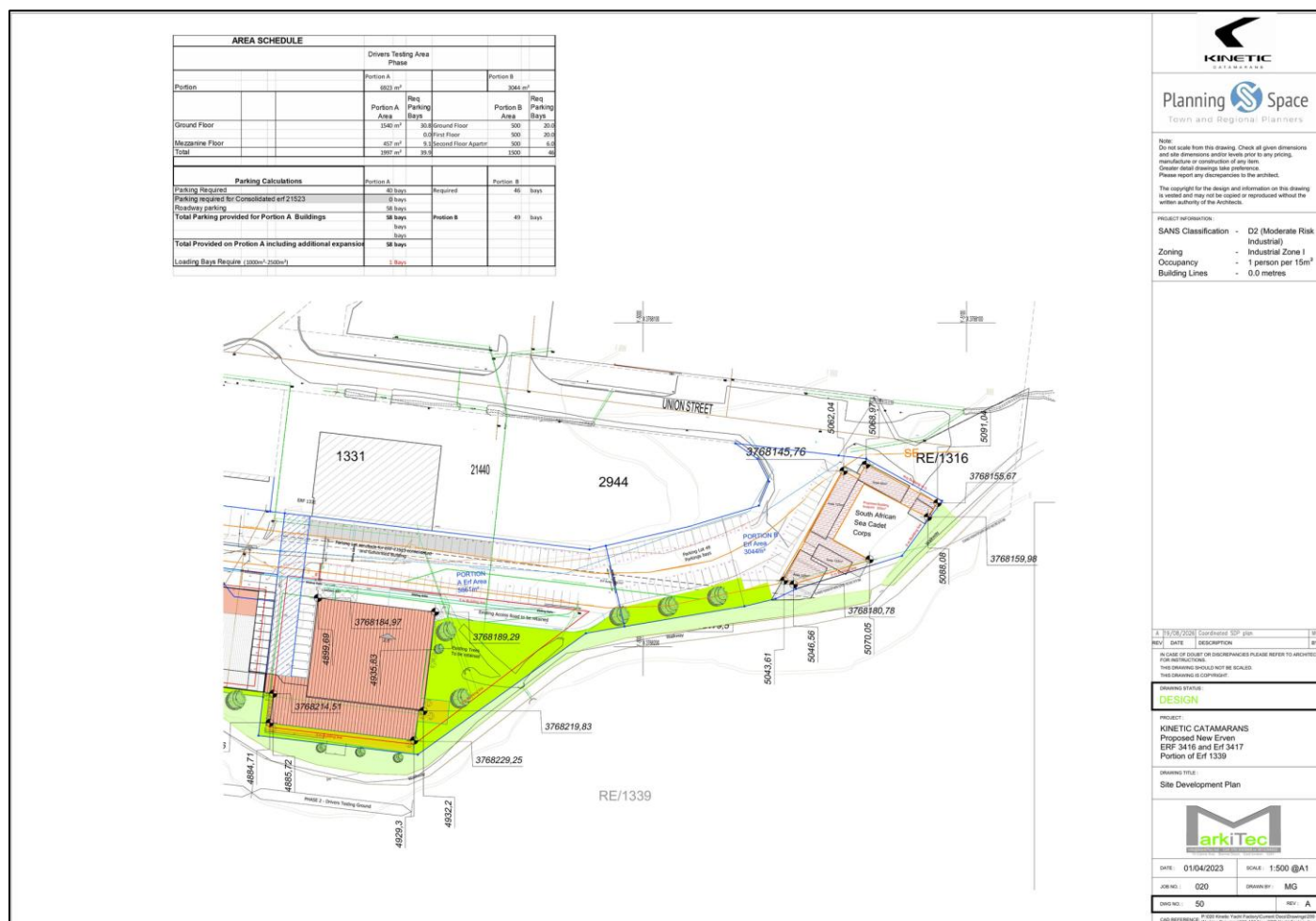


Figure 12: 020-51 New SDP Yacht Factory Coordinated-51 SDP DTA (Mark Gale – 19/08/2026) (refer to Appendix B for detailed SDP)

2. PROJECT COMPONENTS

2.1. Yacht factory building (Portion A – 020-51 New SDP Yacht Factory Coordinated-51 SDP DTA)

The primary component of the development is 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 metres) 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)
- Proposed finished floor level: 2.89 m above mean sea level (m.a.m.s.l.), approximately 800 mm above existing natural ground level (±2.29 m a.m.s.l.), in accordance with climate change adaptation and coastal flood resilience requirements as guided by the project engineer and architect
- Approximate building ridge height: ±14.1 m a.m.s.l. (comprising the 12 m structure above the finished floor level of 2.89 m a.m.s.l.), with a 200 mm construction tolerance applied

The structure is designed using steel framing with AZ200 IBR cladding and Kliprite 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 confirm that the building's lagoon-facing side is lower in elevation than the inland side to reduce visual prominence. Building colours have been selected to blend with the estuary interface, in accordance with the requirements of SANParks, and will be confirmed in the final architectural drawings prior to construction. Solar PV installations are restricted to north-facing roof surfaces only. No panels have been positioned on south-facing roof surfaces facing the Knysna Estuary, thereby eliminating the risk of solar glint or glare as viewed from across the lagoon and from within the Garden Route National Park buffer zone. External security lighting is fixed at high level on the building structure and is directed inward over the site. The lighting design has been developed to prevent light pollution over the Knysna Estuary, in accordance with SANParks' requirements and the conditions recommended for inclusion in the Environmental Authorisation.



KINETIC CATAMARANS SA
South East Perspective
Revised 12/12/2024



Figure 13: 3D Render from the Southeast Perspective of the proposed development on Portion A of the SDP (Mark Gale, 2024)

2.2. Sea Cadets Building (Portion B – 020-51 New SDP Yacht Factory Coordinated-51 SDP DTA)

Portion B of the SDP currently accommodates the existing South African Sea Cadet Corps building, 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.

All refurbishment and future redevelopment activities associated with Portion B must adhere to the Environmental Management Programme (EMPr), ensuring that construction practices, operational controls, and mitigation measures are implemented to protect the adjacent estuarine environment. In particular, the management of stormwater, waste, and landscaping must comply with EMPr provisions to prevent indirect impacts on the Knysna Estuary.

The scope of the Basic Assessment has also been expanded to include the existing Sea Cadets slipway. While no immediate upgrade plans have been prepared, the slipway has been incorporated into this authorisation to ensure that any future works are assessed under the current application. In line with specialist recommendations, slipway activities must adhere to precautionary measures such as limiting works to dry conditions and implementing sediment control. Importantly, no slipway upgrade may proceed without the prior submission and approval of a detailed method statement to the competent authority. This condition ensures that potential

impacts associated with vessel launching and slipway use are comprehensively managed before implementation.

2.3. 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. 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.

4. SERVICES INFRASTRUCTURE

4.1. Water supply

Potable water will be supplied via the existing 75mm diameter municipal water main running along the northern boundary of the property, which operates at a confirmed pressure of 6–8 bar. Engineering calculations confirm 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, in line with Red Book guidelines. The available municipal capacity is sufficient to meet this demand without requiring off-site infrastructure upgrades. The size of the final connection will be determined in consultation with the relevant fire authority to meet fire protection requirements.

To promote sustainability and reduce reliance on municipal supply, the proposed yacht factory will incorporate seven 10,000-litre rainwater harvesting tanks, providing a total storage capacity of 70,000 litres, fed from roof runoff collected via gutters and downpipes. Captured water will be filtered and pumped into the internal reticulation system for ablutions, general cleaning, and

factory floor wash-down activities. A dedicated filtration system will be fitted to the reticulation lines supplying the ablution facilities to ensure water quality compliance. The 70kL tank system will additionally be connected to hose reels to facilitate factory floor cleaning and wash-down of the manufacturing area, reducing reliance on municipal potable water for non-drinking purposes. Municipal water will supplement this system only during dry periods and for emergency fire protection systems, including hydrants and hose reels. This dual-supply approach ensures resilience, reduces potable demand, and aligns with the project's environmental integration objectives and SANParks' requirement for sustainable building design.

4.2. Sewerage

The proposed development area for Portion A is not currently connected to the municipal sewer network but will be linked to the existing 160mm diameter municipal sewer in New Street via an established manhole on the northwestern side of the site. The manhole invert level is confirmed at 0.68m above mean sea level, and a gravity connection to Portion A has been confirmed as feasible by the project engineer. The internal reticulation will comprise 100mm and 160mm diameter uPVC sewer pipes, designed at gradients of 1:40 and 1:60 respectively, ensuring effective conveyance in accordance with municipal engineering standards. The kitchen facility within Portion A has been repositioned in the revised building layout to facilitate a clean and direct sewer connection. Engineering inputs confirm that the sewer outflow will correspond proportionally with the calculated water demand of approximately 3,040 litres per day, ensuring reliable capacity within the existing municipal network.

To safeguard long-term accessibility and compliance with municipal engineering standards, two larger municipal sewer rising mains (350mm and 375mm diameter) that traverse the property will be retained in situ and protected within a registered municipal services servitude.

The Sea Cadets building (Portion B) is already connected to the municipal sewer network, and no alterations are required at this stage. The existing connection will remain functional until such time as the building undergoes a more substantial redevelopment in a later phase. Any future redevelopment or upgrade of sewerage infrastructure associated with Portion B will be required to adhere to the Environmental Management Programme (EMPr), ensuring that construction practices and operational controls prevent contamination of the adjacent estuarine environment.

Sewer Connection Approval Process

In accordance with the requirements of SANParks, the project engineer (Hofmeyr & Associates) has confirmed the technical feasibility of connecting Portion A to the existing 160mm municipal sewer in New Street, and has confirmed that the municipal network has sufficient capacity to receive and manage sewage generated by the development. It is noted that Knysna Municipality does not typically enter into formal Service Level Agreements with developers; rather, the municipality's standard practice is to review and approve engineering drawings submitted for construction. Accordingly, formal engineering drawings for the proposed internal sewer reticulation will be submitted to Knysna Municipality for approval prior to construction, and this approval will serve as the municipality's confirmation of the connection and its capacity to service the development. This approach has been confirmed as the appropriate and accepted mechanism by the project engineer. All sewage infrastructure design, construction, and operational controls will be incorporated into the Construction and Operational EMPr to ensure ongoing protection of the Knysna Estuary.

Existing Sewer Infrastructure Integrity

SANParks and the Garden Route District Municipality have both raised concerns regarding the structural integrity and operating condition of the existing municipal sewer rising mains and associated pump stations in New Street, citing known prior spill incidents in the vicinity. This is a matter concerning the condition of existing Knysna Municipality infrastructure, separate from the technical feasibility and capacity of the proposed new connection addressed above, and falls outside the scope of matters that can be resolved through this environmental application. It is recommended that written confirmation of the structural integrity and operational condition of these municipal assets be sought by the project engineer from Knysna Municipality's Technical Services Department, as part of the standard building-plan / engineering drawing approval process prior to construction, rather than as a pre-condition of this Basic Assessment.

4.3. Stormwater

The existing stormwater system on site comprises a combination of catchpits, underground pipes, and open unlined channels that drain toward the Knysna Lagoon. Historically, stormwater outlets from this and surrounding areas have contributed to nutrient enrichment and eutrophication within the Ashmead Channel, resulting in the loss of eelgrass beds and degradation of saltmarsh habitat along the estuarine margin. Although the estuary margin in this area is characterised as urban-industrial, tidal flushing continues to maintain broader ecological functioning. Stormwater management has accordingly been identified as a key environmental sensitivity for this development, and a comprehensive drainage strategy has been developed in response to concerns raised by SANParks, the aquatic specialist, and other stakeholders.

The existing 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 graded to direct runoff into the upgraded stormwater infrastructure. Kerbs and surface drains will be installed to prevent uncontrolled overland flow, and all stormwaters will be managed through controlled systems with no direct discharge to the Knysna Estuary.

Particular care will be exercised with respect to the existing drainage channel that runs through the former vehicle testing ground and enters the estuary via a culvert. This channel has been specifically identified by SANParks as a risk pathway for pollutants and sediment. The stormwater design ensures that this channel is retained within the upgraded system and that any runoff entering it is managed and attenuated before reaching the estuarine environment.

In response to concerns raised by SANParks and informed by the findings of the Aquatic Specialist Report (Upstream Consulting, 2025), the stormwater design incorporates Sustainable Urban Drainage Systems (SuDS) principles to improve water quality and reduce discharge volumes. The aquatic specialist identified untreated runoff as a key risk factor for aquatic biodiversity, with the potential to increase sedimentation, nutrient loading, and contamination of the estuary. The following integrated measures have been incorporated into the stormwater management design:

- Seven 10,000-litre rainwater harvesting tanks, providing a total attenuation capacity of 70,000 litres, fed from roof runoff via gutters and downpipes. Tanks are designed to discharge at 70% of capacity, retaining a 30% buffer to absorb peak flows during high-

intensity rainfall events. Tank overflow will be directed to the natural soakaway depression south of Portion A.

- Brick-paved surfaces with kerbs and catchpits to direct and control runoff, improving water quality by eliminating sedimentation and siltation from unbound surfaces currently entering the lagoon from the degraded gravel parade ground.
- The natural depression south of Portion A will be retained and will continue to function as an informal soakaway, further slowing and filtering runoff before it reaches the estuarine margin.
- Permeable paving and grass block surfacing will be utilised where practicable to reduce hard surface runoff and promote infiltration in accordance with SuDS principles.

In addition, a 5-metre vegetated buffer zone will be maintained along the saltmarsh habitat boundary, managed in accordance with a "Grow don't Mow" policy as recommended by the aquatic specialist. This buffer will slow surface runoff, stabilise banks, and reduce the risk of sediment and nutrient transfer into the estuary.

Hazardous materials associated with factory operations, including chemicals, resins, and fuels, will be stored in a secure bunded facility positioned as far from the estuary as practicable. Pollution sump catch pits will be designed and constructed to intercept and contain any hazardous substances before they can enter the stormwater system or reach the estuary, in accordance with SANParks' requirements and the recommendations of the aquatic specialist.

All stormwater management measures will be incorporated into the Construction and Operational Environmental Management Programme (EMPr) and will be subject to monitoring and oversight by the appointed Environmental Control Officer (ECO) during both construction and operational phases. With the implementation of the above mitigation measures, stormwater impacts on the Knysna Estuary are assessed as being of Low significance, which is considered acceptable given the urban-industrial nature of the existing site and the significant improvements the proposed stormwater system represents over current conditions.

4.4. 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.

4.5. Solid Waste Management

Waste management for the proposed development has been informed by the existing Environmental Management Plan (EMP) and Operational Environmental Management Plan (OEMP) developed for the current Kinetic Catamarans facility, which provide an established operational baseline for waste handling practices on site.

Construction Phase

Waste generated during the construction phase will be industrial and general in nature, including excavation material, concrete offcuts, packaging, timber offcuts, metal off-cuts, and general contractor waste. The following measures will apply throughout the construction phase:

- All solid construction waste will be stored in covered skips or drums within designated areas within the construction camp, located in already-disturbed portions of the site. Regular removal of waste to approved municipal landfill sites will be carried out in accordance with arrangements agreed with the relevant authorities. Recyclable construction materials, including timber, metal, and packaging, will be segregated at source and directed to appropriate recycling facilities where feasible. No burning or indiscriminate dumping of any waste material will be permitted on site or in the surrounding environment.
- Hazardous materials used during construction, including fuels, petrochemicals, oils, and chemical substances, will be stored in secure, bunded storage areas with restricted access and appropriate hazard signage. All hazardous material storage facilities will be subject to approval by the appointed Environmental Control Officer (ECO) prior to use. Spill kits and firefighting equipment will be maintained on site at all times. No wastewater or effluent disposal will be permitted within 100 metres of any watercourse, in compliance with the requirements of the National Water Act (Act No. 36 of 1998).
- Sanitation for construction workers will be provided by way of chemical toilets at a minimum ratio of one unit per 15 workers. Toilets will be regularly serviced and maintained by a licensed contractor, screened from public view, and connected to conservancy tanks where required. Where feasible, connection to the municipal sewer network will be implemented.

Operational Phase

Waste generated during factory operations will be industrial in nature, primarily consisting of fibreglass off-cuts, resin containers, packaging materials, and general waste from staff facilities and ablution areas. Waste will be managed in accordance with the following measures, informed by the existing Kinetic OEMP and aligned with the Knysna Municipality Integrated Waste Management Plan:

- Solid manufacturing waste will be stored in sealed, covered skips within the designated refuse area on site, positioned away from the estuary-facing southern boundary of Portion A. A licensed private contractor will be responsible for regular collection, transport, and disposal at an authorised landfill or recycling facility. A recycling policy will be implemented on site, with clearly labelled wheely bins provided for different waste streams. Recyclable materials, including metal, cardboard, and clean plastics, will be segregated at source to encourage resource recovery and reduce landfill pressure.
- Dust and airborne waste generated by manufacturing processes, including CNC cutting, timber processing, and painting activities, will be managed through dedicated extraction systems fitted with replaceable filters in cutting and processing areas. A centralised dust

collection system and dedicated paint filtration system will be implemented to prevent particulate emissions from impacting the surrounding environment, including the adjacent estuarine buffer zone.

- Hazardous manufacturing waste, including resins, solvents, and chemical containers, will be stored in secure, bunded facilities positioned as far from the estuary as practicable, with restricted access and appropriate hazard signage maintained at all times. A flammable liquid store will be located away from the estuary boundary. A bunded containment area will be provided to contain firefighting water in the event of a fire emergency, preventing contaminated firefighting runoff from reaching the Knysna Estuary. Should any soil contamination be identified during site clearing or construction, from any historic land use, contaminated material will be removed and disposed of at an approved hazardous waste facility in accordance with the requirements of the National Environmental Management: Waste Act (Act No. 59 of 2008).

All waste management practices during both construction and operational phases will be incorporated into the Construction and Operational EMPr and will be subject to monitoring and oversight by the appointed ECO. The ECO will monitor waste storage, disposal, and recycling practices and will report on compliance on a regular basis. Non-compliance will be escalated through the EMPr enforcement procedure.

5. CONSIDERATION OF DEVELOPMENT ALTERNATIVE(S) (ALTERNATIVE B)

In accordance with the requirements of the Environmental Impact Assessment (EIA) Regulations, 2014 (as amended), promulgated under the National Environmental Management Act, 1998 (Act No. 107 of 1998), an environmental assessment must include a description of the reasonable alternatives to the proposed development. These may include location, layout, activity, process, technology, and no-go alternatives, each assessed in terms of their feasibility, environmental consequences, and ability to meet the applicant's objectives.

In this instance, no feasible alternatives to the proposed development exist, as discussed below. The project footprint and associated infrastructure have been designed to occur entirely within an already disturbed area, and the development proposal represents the only practical and environmentally responsible option to achieve the intended outcome.

5.1. Site Alternatives

No alternative sites were considered. The land forming part of the application, portions of the Remainder of Erven 1316 and 1339, Knysna, was specifically identified by the Knysna Municipality through a public tender process for the revitalisation of municipal land within the Lower Industrial Precinct. The tender was awarded to Kinetic Catamarans SA (Pty) Ltd based on their capacity to expand existing marine manufacturing operations adjacent to this location. The proposed site directly adjoins the company's existing production facilities on Erven 3416 and 3417, providing operational continuity and allowing the factory expansion to integrate with existing infrastructure, workforce, and logistics. Relocating the proposed development to another property would fragment operations, increase transport requirements, and compromise the functional efficiency of the boat-building process. Furthermore, alternative locations within Knysna would likely occur on undeveloped or vegetated land, resulting in greater environmental disturbance compared to the

current fully transformed site. Accordingly, the current site represents the most suitable and least environmentally damaging location for the proposed development.

5.2. Layout and Design Alternatives

Given the limited available area within the disturbed footprint, the layout of the proposed factory and associated infrastructure has been optimised to fit within the existing paved and fenced boundary of the former vehicle testing ground. The design ensures that no encroachment occurs into the natural lagoon buffer or any undeveloped open space. The building orientation and height were dictated by operational needs (such as the accommodation of large catamarans up to 90 feet in length) and by the requirement to minimise visual impact along the lagoon edge. The architectural design includes stepped rooflines and lagoon-facing articulation to soften the building's appearance. Therefore, no viable alternative layout or configuration exists that would further reduce environmental impact or improve functional efficiency.

5.3. Technology and Process Alternatives

The manufacturing process proposed for the new facility will follow the same proven techniques currently employed by Kinetic Catamarans at its neighbouring site. These processes are already established as environmentally compliant, relying on controlled composite fabrication, enclosed lamination areas, and standardised waste-handling procedures. Alternative manufacturing technologies were not considered necessary or practical, as the proposed methods already represent best practice for this sector and are regulated through the facility's operational Environmental Management Programme (EMPr).

5.4. “No-Go” alternatives

The “no-go” alternative, in which the proposed development does not proceed, would result in the continued underutilisation and degradation of municipal land currently used as a disused vehicle testing facility and informal parking area. This would perpetuate the visual and functional decline of the precinct and forego significant socio-economic benefits, including local job creation, skills development, and the strengthening of Knysna's marine manufacturing economy. From an environmental perspective, the “no-go” alternative offers no measurable benefit, as the site is already completely transformed, containing existing hard surfaces, fencing, and buried infrastructure. No natural vegetation or aquatic features would be protected through non-development. Accordingly, while the “no-go” alternative is acknowledged as part of the NEMA process, it is not regarded as an environmentally preferable or reasonable option.

6. MOTIVATION FOR PREFERRED ALTERNATIVE

The proposed development entails the construction of a new yacht manufacturing facility and the refurbishment of the existing South African Sea Cadet building on portions of the Remainder of Erven 1339 and 1316, Knysna. The project forms part of a broader, municipally driven initiative aimed at revitalising underutilised land along the Knysna Lagoon within the Lower Industrial Precinct.

The motivation for the development is founded on three core objectives:

1. To expand Kinetic Catamarans SA (Pty) Ltd's operational capacity to meet global demand for larger luxury yachts.
2. To optimise the use of existing municipal land that has been previously disturbed and paved.
3. To enhance the public and community interface along the lagoon through refurbishment of the Sea Cadet facility and the upgrading of the surrounding precinct.

The project demonstrates strong alignment with the spatial, environmental, and socio-economic priorities of the Knysna Municipality and the principles of sustainable development as defined in the National Environmental Management Act (Act 107 of 1998).

6.1. Strategic Context

The development site was identified and tendered by the Knysna Municipality as part of its strategy to stimulate investment in the central industrial area and strengthen Knysna's position as a national hub for marine manufacturing. Following a transparent public tender process, the land was awarded to Kinetic Catamarans SA, a company that has successfully operated adjacent facilities on Erven 3416 and 3417 since 2018. The location of the proposed development is strategically significant, it lies directly adjacent to the existing factory complex, enabling direct logistical and operational integration with existing production activities. The site's positioning within the established industrial zone ensures optimal access to existing infrastructure, services, and transportation networks while avoiding the need for greenfield development elsewhere in the municipality.

6.2. Rationale for the Yacht Factory

Kinetic Catamarans has established itself as a globally recognised South African boat manufacturer, producing high-performance luxury catamarans for international export. The company's current facilities can accommodate yachts of up to approximately 62 feet, but increasing global demand requires expansion to build larger vessels of up to 90 feet. The proposed new factory will provide the necessary vertical clearance (12 metres) and floor area ($\pm 2,056 \text{ m}^2$) to accommodate the full assembly of these larger vessels, while integrating advanced fabrication and assembly systems. The new facility will also include administrative offices, loading infrastructure, and staff amenities to support a growing workforce of approximately 150 employees.

From a municipal and environmental perspective, this development is particularly desirable as it occurs entirely within a pre-disturbed footprint, previously used as a paved driver testing facility. No natural vegetation, wetland, or undeveloped land will be impacted. The expansion will also facilitate the rehabilitation of degraded surfaces, the formalisation of stormwater management, and the introduction of rainwater harvesting and solar energy systems, thereby improving the environmental performance of the site compared to its current state.

The expansion of Kinetic Catamarans directly contributes to the local economic development priorities of Knysna, generating skilled employment opportunities, encouraging supplier growth, and strengthening the town's global maritime identity.

6.3. Motivation for the upgrade of the Sea Cadet Facility

The existing South African Sea Cadet Corps building, situated on the eastern portion of the site, forms an important element of Knysna's maritime and youth development network. The structure is currently in a state of disrepair, with aged finishes and limited aesthetic integration into the surrounding urban fabric. As part of the overall precinct revitalisation, the proposal includes refurbishment and aesthetic improvement of this building, including external repairs, façade upgrades, and landscaping of the adjacent yard area. The objective is to retain and enhance the Sea Cadets' presence on site, supporting maritime education and training in a more modern, functional facility. In the longer term, this area may accommodate mixed-use redevelopment, potentially introducing small commercial or educational facilities alongside the Sea Cadets' operations. This future vision aligns with the municipality's goal of creating a vibrant, multi-use lagoon-front environment that integrates community, tourism, and industry.

6.4. Environmental Motivation

From an environmental standpoint, the proposed development is considered low-impact and sustainable for the following reasons:

- The development occurs entirely within an existing disturbed footprint, avoiding disturbance of any natural habitats or aquatic systems.
- The high-water mark of the Knysna Estuary has been surveyed and confirmed by Eden Geomatics (February 2025), and the entire development is located landward of this delineation.
- The project includes stormwater and wastewater management upgrades that will improve runoff quality and prevent pollution of the lagoon.
- The introduction of rainwater harvesting, solar energy systems, and waste recycling measures will reduce the facility's environmental footprint.
- The building design and landscape interface along the lagoon incorporate visual mitigation, with reduced height profiles and indigenous vegetation planting to soften the industrial edge.

Accordingly, the proposal embodies the principles of sustainable urban redevelopment by transforming an underutilised paved area into a productive, managed, and environmentally regulated space.

6.5. Socio-Economic Motivation

The development represents a significant economic catalyst for Knysna, both in direct and indirect terms. The yacht factory expansion is expected to increase permanent employment from 85 to approximately 150 positions, with additional opportunities during the construction phase. The project also provides a platform for skills development and youth training, particularly through the enhanced Sea Cadet facility, which fosters maritime education and community engagement.

Indirect benefits include increased demand for local suppliers, maintenance contractors, and service providers, along with potential synergies between marine manufacturing and tourism sectors. The visual and functional upgrading of this section of the lagoon-front will contribute to the overall urban renewal of the town centre, aligning with the municipality's vision of a dynamic, mixed-use waterfront area.

7. NEED AND DESIREABILITY

In terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) and the associated Environmental Impact Assessment (EIA) Regulations, 2014 (as amended), the assessment of need and desirability forms a critical component of the environmental decision-making process. The Department of Forestry, Fisheries and the Environment (DFFE) defines “need and desirability” as the process of evaluating whether the development should take place in a particular location and whether it represents the most sustainable use of land, resources, and infrastructure.

The proposed yacht manufacturing facility and Sea Cadet building upgrade on portions of Erven 1339 and 1316, Knysna must therefore be motivated not only on the basis of technical feasibility, but also in terms of its contribution to the principles of sustainable development as articulated in the National Development Plan (NDP, 2030), the Western Cape Provincial Spatial Development Framework (WCPSDF, 2019), the Knysna Spatial Development Framework (KSDF, 2020), and the Integrated Development Plan (IDP, 2023–2027).

7.1. Principle of Ecological Sustainability

The proposed development represents a low ecological risk activity. The project footprint is situated entirely within a previously transformed and hardened surface, consisting of the former municipal driver testing yard and existing paved infrastructure. No natural vegetation, wetland habitat, or aquatic features will be disturbed. A high-water mark survey undertaken by Eden Geomatics (February 2025) confirmed that the development is located landward of the Knysna Estuary's high-water mark, ensuring that the proposal complies with applicable estuarine buffer requirements. Furthermore, the project incorporates stormwater attenuation measures, rainwater harvesting, solar energy systems, and waste segregation, all of which contribute to reduced resource consumption and improved environmental performance. The reuse of previously disturbed urban land eliminates the need for new land transformation elsewhere, directly supporting the NEMA principle of avoiding disturbance of sensitive, natural, or undeveloped areas.

7.2. Principle of Justifiable Economic and Social Development

The expansion of Kinetic Catamarans SA (Pty) Ltd represents a strategic economic intervention for Knysna. The company is one of the region's leading exporters of high-value manufactured goods, producing luxury catamarans for the global market. The development will enable the production of larger vessels (up to 90 feet), increasing the facility's competitiveness and creating approximately 65 new permanent jobs, in addition to short-term employment during construction. From a social perspective, the project includes the refurbishment of the South African Sea Cadet facility, a long-standing community organisation focused on youth training, maritime education, and social development. The proposed upgrades will enhance the Sea Cadets' operational capacity, improve safety and accessibility, and visually integrate the building with the upgraded lagoon-front precinct.

This combination of industrial growth and community upliftment ensures that the project delivers both economic and social value, consistent with Section 2(3) of NEMA, which requires that development meet present and future human needs equitably.

7.3. Alignment with Strategic Planning Frameworks

- Western Cape Provincial Spatial Development Framework (WCPSPDF, 2019)

The WCPSPDF promotes compact urban form, infill development, and optimisation of existing infrastructure within the urban edge. It discourages urban sprawl and prioritises investment in existing economic nodes.

The proposed development aligns strongly with these principles by:

- Reusing municipal land that lies within the Knysna urban edge;
- Enhancing the marine manufacturing industry, which is recognised as a provincial niche economic sector; and
- Supporting the WCPSPDF's goals of employment creation, economic diversification, and industrial revitalisation in secondary coastal towns.

- Knysna Municipal Spatial Development Framework (KSDF, 2020)

The KSDF identifies the Lower Industrial Precinct as a strategic redevelopment zone for light industrial and marine-related activities. The proposal aligns with Policy F6.VI, which encourages light industrial infill development to strengthen Knysna's competitive advantage in boat-building and related sectors. Additionally, the KSDF calls for the enhancement of public open space linkages along the lagoon edge, precisely what the proposed public park and Sea Cadet refurbishment aim to achieve.

- Knysna Integrated Development Plan (IDP, 2023–2027)

The IDP's strategic objectives include:

- Promoting local economic development through private sector investment;
- Facilitating employment and skills development;
- Improving infrastructure efficiency and public space management; and
- Enhancing urban resilience and environmental sustainability.

The proposed project directly supports all these objectives by transforming derelict municipal land into a productive industrial and community hub.

- Environmental Management Framework (EMF, Garden Route District, 2017)

According to the EMF, the site is located within a developed urban zone with low environmental sensitivity, where redevelopment and consolidation are considered desirable. The EMF promotes development that improves environmental performance of existing urban areas, particularly through energy efficiency, water conservation, and pollution control, all of which are embedded in the proposed project design.

7.4. Optimisation of Urban Land and Existing Resources

The development exemplifies urban infill and brownfield redevelopment, utilising land that is already equipped with full municipal service infrastructure (water, sewer, stormwater, and electricity). No extension of services or new bulk infrastructure will be required, and all existing

underground services will be protected within formalised servitudes. By integrating the new factory with the existing Kinetic Catamarans facility, the project achieves maximum functional efficiency and reduced spatial footprint, supporting the SPLUMA principles of spatial efficiency and sustainability. Moreover, by refurbishing the Sea Cadet facility rather than relocating it, the development retains a valuable social use within the precinct, further optimising the utilisation of urban space.

7.5. Public Interest and Local Benefits

The project serves the public interest by:

- Stimulating economic growth and job creation in a coastal town that relies heavily on seasonal tourism;
- Diversifying the local economy through sustainable manufacturing;
- Revitalising the urban waterfront in a manner that is visually and socially beneficial; and
- Enhancing community facilities through the upgrade of the Sea Cadet building and improved public access along the lagoon edge.

These outcomes are consistent with Section 24O(1)(b)(iv) of NEMA, which requires that development decisions promote the public interest and the well-being of current and future generations.

SECTION F – APPLICABLE LISTED ACTIVITIES

In accordance with the National Environmental Management Act (Act 107 of 1998) (NEMA) and its amendments any proposal that triggers listed activities under Listing Notices 1 and 3 (R 327 & R 324) requires an Environmental Impact Assessment (EIA) process to secure Environmental Authorisation (EA).

Table 7: Relevant listed activities that require environmental authorisation

Listing Notice 1 of 2014, published under Government Notice No. 983 (as amended 2017)				
Activity	Description	Development applicability	Supporting Evidence	Spatial Location of Trigger
10	The development and related operation of infrastructure exceeding 1 000 metres in length for the bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes – (i) with an internal diameter of 0,36 metres or more; or (ii) with a peak throughput of 120 litres per second or more; excluding where— (a) such infrastructure is for the bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes inside a road reserve or railway line reserve; or (b) where such development will occur within an urban area.	Considered – Not Applicable Reason: The project involves short-run sewer connections and retention of existing mains, not new bulk transportation infrastructure exceeding 1,000 m. The urban location further excludes it under clause (b).	Not applicable	Not applicable
12	The development of— (i) dams or weirs, where the dam or weir, including	Applicable	High-water mark survey (Eden Geomatics, Feb 2025); SDP Rev A	Slipway footprint on Erf 1316 (Sea Cadets)

	infrastructure and water surface area, exceeds 100 square metres; or (ii) infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs— (a) within a watercourse; (b) in front of a development setback; or (c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse; — excluding— (aa) the development of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour; (bb) where such development activities are related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies; (cc) activities listed in activity 14 in Listing Notice 2 of 2014 or activity 14 in Listing Notice 3 of 2014, in which case that activity applies; (dd) where such development occurs within an urban area; (ee) where such development occurs within existing roads,	Activity 12 is applicable only to the slipway component of the project. The yacht factory and cadet building are excluded because they are landward of the high-water mark and within the urban area. The slipway triggers the listed activity because it is within the estuary margin and exceeds 100 m².		
--	---	--	--	--

	road reserves or railway line reserves; or (ff) the development of temporary infrastructure or structures where such infrastructure or structures will be removed within 6 weeks of the commencement of development and where indigenous vegetation will not be cleared.			
14	The development and related operation of facilities or infrastructure, for the storage, or for the storage and handling, of a dangerous good, where such storage occurs in containers with a combined capacity of 80 cubic metres or more but not exceeding 500 cubic metres.	Applicable Reason: The project involves storage and handling of dangerous goods (resins, solvents, flammable liquids) in containers that may exceed the 80 m³ threshold. It does not exceed 500 m³, so it falls squarely within the range defined by Activity 14. Therefore, authorisation is required under Listing Notice 1 for this activity.	EMPr Annexure B (SPCC Plan) inventory; SDS register	Bunded chemical store, Portion A (Erf 1339)
17	Development— (i) in the sea; (ii) in an estuary; (iii) within the littoral active zone; (iv) in front of a development setback; or (v) if no development setback exists, within a distance of 100 metres inland of the high-water mark of the sea or an estuary , whichever is the greater;	Applicable Slipway: Yes, exceeds 50 m², located within the estuary margin. This is why SANParks required it to be included in the application scope, with a condition that a method statement be submitted and approved before any upgrade works. Factory & Cadet Building: No, although both exceed 50 m², they are	HWM survey; SDP Rev A	Slipway only; factory/cadet building excluded

	in respect of— (a) fixed or floating jetties and slipways; (b) tidal pools; (c) embankments; (d) rock revetments or stabilising structures including stabilising walls; or (e) infrastructure or structures with a development footprint of 50 square metres or more — but excluding— (aa) the development of infrastructure and structures within existing ports or harbours that will not increase the development footprint of the port or harbour; (bb) where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies; (cc) the development of temporary infrastructure or structures where such structures will be removed within 6 weeks of the commencement of development and where coral or indigenous vegetation will not be cleared; or (dd) where such development occurs within an urban area.	outside the estuary high-water mark and within the urban edge, so they do not trigger this activity. Public Park: No, landscaping is lagoon-front but not within the estuary or littoral active zone.		
--	--	---	--	--

19A	The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from— (i) the seashore; (ii) the littoral active zone, an estuary or a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever distance is the greater; or (iii) the sea; — but excluding where such infilling, depositing, dredging, excavation, removal or moving— (a) will occur behind a development setback; (b) is for maintenance purposes undertaken in accordance with a maintenance management plan; (c) falls within the ambit of activity 21 in this Notice, in which case that activity applies; (d) occurs within existing ports or harbours that will not increase the development footprint of the port or harbour; or i. where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies.	Applicable Factory (Portion A): Yes, applicable. Excavation and fill for foundations and services will exceed 5 m³, and the site is within 100 m of the estuary HWM. Sea Cadets Building (Portion B): Likely No for current refurbishment, but if future redevelopment involves excavation >5 m³ within 100 m of HWM, then it would trigger. Slipway: Yes, applicable if upgrade works involve excavation or infilling >5 m³ within the estuary margin.	SDP Rev A; geotechnical extent	Portion A (factory); slipway
-----	--	--	--------------------------------	------------------------------

Listing Notice 3 of 2014, published under Government Notice No. 985 (as amended 2017)

Activity	Description	Development applicability	Supporting Evidence	Spatial Location of Trigger
4	The development of a road wider than 4 metres with a reserve less than 13.5 metres. a. Western Cape i. Areas zoned for use as public open space or equivalent zoning; ii. Areas outside urban areas; (aa) Areas containing indigenous vegetation; (bb) Areas on the estuary side of the development setback line or in an estuarine functional zone where no such setback line has been determined; or iii. Inside urban areas: (aa) Areas zoned for conservation use; or Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority.	Considered – Not Applicable Reason: The project does not involve the construction of a new road wider than 4 m with a reserve <13.5 m. Internal paved areas and walkways are site infrastructure, not “roads” as defined under LN3. The existing access road is retained, not newly developed.	Not applicable	Not Applicable

SECTION G – ADDITIONAL POLICIES AND LEGISLATIVE CONTEXT

The proposed development must comply not only with the provisions of the National Environmental Management Act (NEMA, Act 107 of 1998) and its EIA Regulations (2014, as amended), but also with several other pieces of environmental and sectoral legislation that have relevance to the proposed activity. These are summarised in Table 8 below.

Table 8: Legislative and Policy Framework Applicable to the Proposed Development

LEGISLATION	ADMINISTERING AUTHORITY	TYPE Permit / License / Authorization / Comment / Relevant consideration	DEVELOPMENT APPLICABILITY
National Environmental Management Act (Act 107 of 1998) and the 2014 EIA Regulations (as amended in 2017)	Department of Forestry, Fisheries and the Environment (DFFE)	Environmental Authorisation	A Basic Assessment process is required in terms of Listing Notice 1, Activity 19A, as the development is located within 100 m of the Knysna Estuary's high-water mark. An application for Environmental Authorisation will be submitted to DFFE.
Regulations for the Proper Administration of the Knysna Protected Environment (GN 1175 of 2009) (under the NEM: Protected Areas Act, 2003)	SANParks (Management Authority of the Knysna Estuary and Garden Route National Park)	Relevant consideration / Comment	These Regulations provide for the cooperative administration of activities within and adjacent to the Knysna Estuary. In accordance with Regulation 11 and 12, SANParks will be consulted for comment to ensure that the proposed development does not compromise the ecological integrity or management objectives of the protected environment. The proposed factory and

			Sea Cadet refurbishment occur on land outside but adjacent to the protected area, within the urban industrial zone, and will adhere to SANParks' estuary management guidelines.
National Environmental Management: Integrated Coastal Management Act (Act 24 of 2008)	DFFE (Coastal Management Division)	Comment / Relevant consideration	The Knysna Estuary forms part of South Africa's coastal public property and is managed in accordance with the ICM Act. The Coastal Department will be notified and invited to comment during the Public Participation Process. The development remains landward of the surveyed high-water mark and therefore does not encroach into the coastal public property.
National Environmental Management: Biodiversity Act (Act 10 of 2004)	DFFE	Relevant consideration	The site is fully transformed and supports no indigenous vegetation. Nevertheless, the applicant will be required to manage any Alien Invasive Species (Category 1b or 2) that may occur on site in compliance with the Alien and Invasive Species Regulations, 2016.
National Environmental Management: Waste Act (Act 59 of 2008)	DFFE	Relevant consideration	All waste generated during construction and operation will be managed according

			to the waste hierarchy (avoid, reduce, reuse, recycle, dispose). A private waste contractor will be appointed to collect and dispose of solid waste at an authorised facility.
National Forests Act (Act 84 of 1998)	DFFE (Forestry Branch)	Permit (if applicable)	No protected trees are currently known to occur within the development footprint. Should any be identified during site preparation, a permit in terms of Section 15 of the Act will be obtained before disturbance.
National Heritage Resources Act (Act 25 of 1999)	Heritage Western Cape	Notification / Comment	Heritage Western Cape was formally consulted on this proposal. HWC has provided written confirmation (attached as Appendix I) that no structures older than 60 years are present on the property and that the provisions of Section 34(1) of the National Heritage Resources Act are accordingly not applicable. A Notification of Intent to Develop (NID) was subsequently submitted to Heritage Western Cape in terms of Section 38(8) of the NHRA. Following consideration at the Heritage Officers' Meeting held on 6

			August 2026, HWC confirmed (Case No. 29084RB0625; attached as Appendix I1) that the proposed development does not trigger Section 38(1) of the National Heritage Resources Act and is therefore not applicable in terms of impacts to heritage resources. A heritage chance-finds protocol is included as a binding requirement of the EMPr
Environmental Conservation Act (Act 73 of 1989): Outeniqua Sensitive Coastal Area Extension Regulations (OSCAE)	Knysna Municipality	Permit (where applicable)	While the site is located within the proclaimed Outeniqua Sensitive Coastal Area, the NEMA process takes precedence. The project will be assessed under NEMA; however, OSCAE considerations have been integrated into the environmental assessment to ensure alignment with local coastal management objectives.
National Health Act (Act 61 of 2003)	Western Cape Department of Health and Wellness	Compliance / Relevant consideration	During construction, occupational health and safety standards must be maintained. A site Health and Safety Officer will be appointed, and all construction workers will receive induction on safe work practices.
Municipal By-Laws: Knysna Zoning	Knysna Municipality	Land Use Approval	A concurrent land-use application process

Scheme and Land Use Planning By-Law (2016)			has been initiated, including subdivision, consolidation, rezoning, and height departure. The development complies with the zoning scheme provisions for "Industrial Zone I" and "Business Zone I."
National Water Act (Act 36 of 1998)	Department of Water and Sanitation (DWS)	Relevant consideration	The development will not involve water abstraction or discharge that triggers a Water Use Licence. Stormwater will be contained and treated on-site before entering the municipal system. The DWS will be informed during the consultation process for record purposes.
Western Cape Provincial Spatial Development Framework (WCPSPDF, 2023)	Department of Environmental Affairs and Development Planning (DEA&DP)	Policy alignment	The WCPSPDF promotes infill development, efficient land use, and protection of coastal biodiversity. The proposed development is consistent with these objectives, being an industrial infill project on already transformed land adjacent to existing infrastructure.
Regulations for the Proper Administration of the Knysna Protected Environment (GN 1175 of 2009)	South African National Parks (SANParks)	Authorisation (Development Control Area)	The site falls within the 50m Development Control Area of the Knysna Protected Environment. Development within this area requires SANParks

			authorisation under Sections 8 to 10 of the KPE Regulations. This is a separate statutory process to this NEMA Basic Assessment, running in parallel with it; SANParks has reviewed the Draft Basic Assessment Report, and the associated engineering designs and Stormwater Management Plan will be further considered as part of the KPE Authorisation.
--	--	--	---

SECTION H – IMPACT ASSESSMENT

1. METHODOLOGY FOR ASSESSMENT OF IMPACTS

To assess the impact of the development on the receiving environment, the environmental considerations of the area were identified. This was followed by a detailed review of the project scope, an evaluation of its need and desirability within the Knysna region. The implications of the National Environmental Management Act (Act 107 of 1998) were accounted for, which necessitated environmental authorisation based on the triggered listed activities.

Together with the with specialist input presented, the impact will be assessed with the mentioned considerations in mind, and according to the following criteria -

Each potential environmental impact and risk identified was assessed according to specific criteria. These included the nature, extent, duration, consequence, probability and frequency of identified impacts, including the degree to which these impacts can be reversed, may cause irreplaceable loss of resources, and can be avoided, managed or mitigated. The criteria are based on the EIA Regulations, published by the Department of Forestry, Fisheries and the Environment (April 1998) in terms of the Environmental Conservation Act No. 73 of 1989. These criteria include:

Nature of the impact

This is an estimation of the type of effect the construction, operation and maintenance of a development would have on the affected environment. This description should include what is to be affected and how.

Mitigation Measures

Ways in which an impact can be avoided, minimised, or managed to reduce its environmental significance.

Extent of the impact - the scale of the impact	
Rating	Definition of Rating
Very Limited	Extending only as far as the development site area
Limited	Limited to the site and its immediate surroundings
Local	Extending across the site and to nearby settlements
Regional	The region, which may be defined in various ways, e.g. cadastral, catchment, topographic.
National	National scale or across international borders

Duration of the impact - the lifespan or length of time the impact will last	
Rating	Definition of Rating
Brief	Impact will not last longer than 1 year
Short term	Impact will last between 1 and 2 years
Medium Term	Impact will last between 2 and 15 years
Long Term	Impact will last more than 15 years
Permanent	Impact may be permanent, or in excess of 20 years
Very High	Natural and/ or social functions and/ or processes are severely altered

Intensity - the severity of the impact	
Rating	Definition of Rating
Negligible	Natural and/ or social functions and/ or processes are negligibly altered
Low	Natural and/or social functions and/or processes are slightly altered
Medium	Natural and/or social functions and/or processes are notably altered
High	Natural and/ or social functions and/ or processes are significantly altered
Very High	Natural and/ or social functions and/ or processes are severely altered

Probability of occurrence - the probability of the impact occurring	
Rating	Definition of Rating
Improbable	Conceivable, but only in extreme circumstances, and/or might occur for this project although this has rarely been known to result elsewhere
Possible	Has occurred here or elsewhere and could therefore occur
Probable	It is most likely that the impact will occur
Definite	There are sound scientific reasons to expect that the impact will occur

Potential for mitigation - the likelihood for the existence of mitigation measures	
Rating	Definition of Rating
Low	Mitigation measures are unlikely to be effective or necessary, with minimal chance of significantly reducing the impact.
Medium	There is a moderate probability that mitigation measures can be effectively implemented to reduce or manage the identified impact.
High	Mitigation measures are highly probable to be effective and can significantly reduce or eliminate the identified impact.

Reversibility - the ability of the impacted environment to return to its pre-impacted state	
Rating	Definition of Rating
Completely reversible	the impact can be reversed with the implementation of minor mitigation measures.
Partly reversible	the impact is reversible, but more intense mitigation measures are required
Barely reversible	the impact is unlikely to be reversed even with intense mitigation measures
Irreversible	the impact is irreversible, and no mitigation measures exist

Irreplaceable loss of resources - the degree to which resources will be irreplaceably lost	
Rating	Definition of Rating
Negligible	No loss of resources
Low	Marginal loss, the resource is not damaged irreparably or is not scarce
Medium	the resource is damaged irreparably but is represented elsewhere
High	Irreparable damage and is not represented elsewhere

Cumulative effect - An effect which in itself may not be significant but may become significant if added to other existing or potential impacts that may result from activities associated with the proposed development.	
Rating	Definition of Rating
Negligible	the impact would result in negligible to no cumulative effect
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

Confidence - the level of confidence in the assessment rating

Low	Judgement is based on intuition
Medium	Determination is based on common sense and general knowledge
High	Substantive supportive data exists to verify the assessment

Significance - Significance of impacts are determined through a synthesis of the assessment criteria

Rating	Definition of Rating
 Very high negative (-)	The impact will have highly significant effects and are unlikely to be able to be mitigated adequately
 High negative (-)	The impact will have significant effects and will require significant mitigation measures to achieve an accepted level of impact
 Medium negative (-)	The impact will have moderate negative effects and will require moderate mitigation
 Low negative (-)	The impact will have minimal effects and would require little mitigation
 Negligible	The impact will have negligible effects and would require little or no mitigation
 Low positive (+)	The impact will have minor positive effects
 Medium positive (+)	The impact will have moderate positive effects
 High positive (+)	The impact will have significant positive effects
 Very High positive (+)	The impact will have highly significant positive effects.

2. (ALTERNATIVE A – PREFERRED) IMPACTS ASSOCIATED WITH THE CONSTRUCTION PHASE

The following impacts may result from the construction phase for Alternative A (preferred). A brief description of potential impact, significance rating of impacts, proposed mitigation, and significance rating of impacts after mitigation will be provided.

Project Phase	Construction			
Impact	Sediment mobilisation and dirty stormwater runoff to Knysna Estuary (specialist)			
Description of impact	Minor trimming, trenching and rain events may wash fines to stormwater system.			
Potential for mitigation	High	Mitigation measures are highly probable to be effective and can significantly reduce or eliminate the identified impact.		
Potential mitigation	• Install silt fencing, gravel filter bags and berms at all outfalls. • Cover and perimeter-bund construction stockpiles. • Stabilise disturbed areas within 7 days. • Prohibit dewatering without settlement • Environmental Control Officer to inspect after rain.			
Assessment	Without mitigation		With mitigation	
Nature	Direct – negative (low)		Direct – negative (very - low)	
Duration	Short-term	Impact will last between 1 and 2 years	Short-term	Impact will last between 1 and 2 years
Extent	Local	Extending across the site and to nearby settlements	Very limited	Extending only as far as the development site area
Intensity	Low	Natural and/or social functions and/or	Negligible	Natural and/ or social functions and/ or

		processes are slightly altered		processes are negligibly altered
Probability	Probable	It is most likely that the impact will occur	Possible	Has occurred here or elsewhere and could therefore occur
Confidence	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
Reversibility	Partly reversible	the impact is reversible, but more intense mitigation measures are required	Completely reversible	the impact can be reversed with the implementation of minor mitigation measures.
Resource irreplaceability	Negligible	No loss of resource	None	-
Significance	Medium – negative (-)		Low – negative (-)	
Comment on significance	The impact will have minimal effects and would require little mitigation.			
Cumulative impacts	Very low - the impact would result in negligible to no cumulative effect			

Project Phase	Construction			
Impact	Hazardous spills			
Description of impact	Potential contamination of soil, water, and / or humans caused by chemical compounds e.g. fuel.			
Potential for mitigation	High	Mitigation measures are highly probable to be effective and can significantly reduce or eliminate the identified impact.		
Potential mitigation	• Bund fuel and chemical storage on impermeable slabs. • Drip trays must be used where applicable. • Assign a dedicated refuelling bay with a spill kit.			
Assessment	Without mitigation		With mitigation	
Nature	Direct – negative (medium)		Direct – negative (low)	
Duration	Short-term	Impact will last between 1 and 2 years	Short-term	Impact will last between 1 and 2 years
Extent	Very limited	Extending only as far as the development site area	Very limited	Extending only as far as the development site area
Intensity	Medium	Natural and/ or social functions and/ or processes are notably altered.	Low	Natural and/or social functions and/or processes are slightly altered
Probability	Possible	Has occurred here or elsewhere and could therefore occur	Improbable	Conceivable, but only in extreme circumstances, and/or might occur for this project
Confidence	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
Reversibility	Partly reversible	the impact is reversible, but more intense mitigation measures are required	Completely reversible	the impact can be reversed with the implementation of minor mitigation measures.
Resource irreplaceability	Low	Marginal loss - the resource is not	Negligible	No loss of resources

		damaged irreparably or is not scarce		
Significance	Medium – negative (-)		Low – negative (-)	
Comment on significance	The impact will have minimal effects and would require little mitigation			
Cumulative impacts	Negligible - the impact would result in negligible to no cumulative effect			

Project Phase	Construction			
Impact	Construction and general waste			
Description of impact	Pollution of soil, water, and / or humans caused by packaging, cement and residues.			
Potential for mitigation	High	Mitigation measures are highly probable to be effective and can significantly reduce or eliminate the identified impact.		
Potential mitigation	• Appoint a licensed contractor that has experience with waste management. • Designate a fenced / covered skip area. • Implement daily housekeeping, • On-site burning of material is prohibited • Implement a sustainable waste management approach.			
Assessment	Without mitigation		With mitigation	
Nature	Direct – negative (low)		Direct – negative (very low)	
Duration	Short-term	Impact will last between 1 and 2 years	Short-term	Impact will last between 1 and 2 years
Extent	Very limited	Extending only as far as the development site area	Very limited	Extending only as far as the development site area
Intensity	Low	Natural and/or social functions and/or processes are slightly altered	Negligible	Natural and/ or social functions and/ or processes are negligibly altered
Probability	Possible	Has occurred here or elsewhere and could therefore occur	Improbable	Conceivable, but only in extreme circumstances, and/or might occur for this project
Confidence	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
Reversibility	Completely reversible	the impact can be reversed with the implementation of minor mitigation measures.	Completely reversible	the impact can be reversed with the implementation of minor mitigation measures.
Resource irreplaceability	Low	Marginal loss - the resource is not damaged irreparably or is not scarce	Negligible	No loss of resources
Significance	Low- negative (-)		Negligible – negative (-)	
Comment on significance	The impact will have negligible effects and would require little or no mitigation			

Cumulative impacts	Very low - the impact would result in negligible to no cumulative effect
---------------------------	--

Project Phase	Construction			
Impact	Dust generation and nuisance			
Description of impact	Effect on air-quality to nearby receptors.			
Potential for mitigation	High	Mitigation measures are highly probable to be effective and can significantly reduce or eliminate the identified impact.		
Potential mitigation	• Wet suppression on exposed surfaces. • Cover loose loads. • Enforce on site speed limit. • Schedule cutting / grinding away from strong onshore winds. • Maintain non-compliance list and corrective action log.			
Assessment	Without mitigation		With mitigation	
Nature	Direct – negative (low)		Direct – negative (very low)	
Duration	Short term	Impact will last between 1 and 2 years	Short term	Impact will last between 1 and 2 years
Extent	Local	Extending across the site and to nearby settlements	Limited	Limited to the site and its immediate surroundings
Intensity	Low	Natural and/or social functions and/or processes are slightly altered	Negligible	Natural and/ or social functions and/ or processes are negligibly altered
Probability	Probable	It is most likely that the impact will occur	Possible	It is most likely that the impact will occur
Confidence	Medium	Determination is based on common sense and general knowledge	Medium	Determination is based on common sense and general knowledge
Reversibility	Completely reversible	the impact can be reversed with the implementation of minor mitigation measures.	Completely reversible	the impact can be reversed with the implementation of minor mitigation measures.
Resource irreplaceability	Low	Marginal loss - the resource is not damaged irreparably or is not scarce	Negligible	No loss of resources
Significance	Low- negative (-)		Negligible – negative (-)	
Comment on significance	The impact will have negligible effects and would require little or no mitigation			
Cumulative impacts	Negligible - the impact would result in negligible to no cumulative effect			

Project Phase	Construction			
Impact	Construction noise and vibration			
Description of impact	Noise caused by machinery and staff			

Potential for mitigation	High	Mitigation measures are highly probable to be effective and can significantly reduce or eliminate the identified impact.		
Potential mitigation	• Working hours 07:00–18:00 only. • Maintain mufflers/silencers. • Use broadband reverse alarms. • Notify Sea Cadets of noisy works. • Schedule high-noise tasks outside training/peak public hours.			
Assessment	Without mitigation		With mitigation	
Nature	Direct – negative (low)		Direct – negative (very low)	
Duration	Short term	Impact will last between 1 and 2 years	Short term	Impact will last between 1 and 2 years
Extent	Local	Extending across the site and to nearby settlements	Limited	Limited to the site and its immediate surroundings
Intensity	Low	Natural and/or social functions and/or processes are slightly altered	Low	Natural and/or social functions and/or processes are slightly altered
Probability	Probable	It is most likely that the impact will occur	Probable	It is most likely that the impact will occur
Confidence	Medium	Determination is based on common sense and general knowledge	Medium	Determination is based on common sense and general knowledge
Reversibility	Completely reversible	the impact can be reversed with the implementation of minor mitigation measures.	Completely reversible	the impact can be reversed with the implementation of minor mitigation measures.
Resource irreplaceability	Low	Marginal loss - the resource is not damaged irreparably or is not scarce	Low	Marginal loss - the resource is not damaged irreparably or is not scarce
Significance	Low- negative (-)		Negligible – negative (-)	
Comment on significance	The impact will have negligible effects and would require little or no mitigation			
Cumulative impacts	Negligible - the impact would result in negligible to no cumulative effect			

Project Phase	Construction	
Impact	Traffic & access safety (Union/New Street interface)	
Description of impact	Direct, short-term safety risk from increased heavy-vehicle movements near public access routes and Sea Cadets area.	
Potential for mitigation	High	Mitigation measures are highly probable to be effective and can significantly reduce or eliminate the identified impact.
Potential mitigation	• Implement traffic management plan (TMP). • Deploy flagmen for deliveries. • Delineate pedestrian routes. • Coordinate deliveries with Sea Cadets activities. • Enforce speed restrictions.	
Assessment	Without mitigation	With mitigation

Nature	Direct – negative (low)		Direct – negative (low)	
Duration	Short term	Impact will last between 1 and 2 years	Short term	Impact will last between 1 and 2 years
Extent	Local	Extending across the site and to nearby settlements	Local	Extending across the site and to nearby settlements
Intensity	Low	Natural and/or social functions and/or processes are slightly altered	Low	Natural and/or social functions and/or processes are slightly altered
Probability	Possible	It is most likely that the impact will occur	Improbable	Conceivable, but only in extreme circumstances, and/or might occur for this project although this has rarely been known to result elsewhere
Confidence	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
Reversibility	Completely reversible	the impact can be reversed with the implementation of minor mitigation measures.	Completely reversible	the impact can be reversed with the implementation of minor mitigation measures.
Resource irreplaceability	Low	Marginal loss - the resource is not damaged irreparably or is not scarce	Low	Marginal loss - the resource is not damaged irreparably or is not scarce
Significance	Low – negative (-)		Low – negative (-)	
Comment on significance	The impact will have minimal effects and would require little mitigation			
Cumulative impacts	Low - the impact would result in insignificant cumulative effects			

Project Phase	Construction			
Impact	Temporary stormwater capacity/flooding (before final tie-ins)			
Description of impact	Direct, short-term negative risk of temporary ponding or overtopping during heavy rainfall.			
Potential for mitigation	High	Mitigation measures are highly probable to be effective and can significantly reduce or eliminate the identified impact.		
Potential mitigation	• Provide temporary diversion drains. • Keep inlets clear. • Connect stormwater sequentially • Install emergency pump-out plan. • Maintain clean discharge routes.			
Assessment	Without mitigation		With mitigation	
Nature	Direct – negative (low)		Direct – negative (very low)	
Duration	Short term	Impact will last between 1 and 2 years	Brief	Impact will not last longer than 1 year

Extent	Limited	Limited to the site and its immediate surroundings	Limited	Limited to the site and its immediate surroundings
Intensity	Low	Natural and/or social functions and/or processes are slightly altered	Negligible	Natural and/ or social functions and/ or processes are negligibly altered
Probability	Possible	It is most likely that the impact will occur	Improbable	Conceivable, but only in extreme circumstances, and/or might occur for this project although this has rarely been known to result elsewhere
Confidence	Medium	Determination is based on common sense and general knowledge	Medium	Determination is based on common sense and general knowledge
Reversibility	Completely reversible	the impact can be reversed with the implementation of minor mitigation measures.	Completely reversible	the impact can be reversed with the implementation of minor mitigation measures.
Resource irreplaceability	Low	Marginal loss - the resource is not damaged irreparably or is not scarce	Low	Marginal loss - the resource is not damaged irreparably or is not scarce
Significance	Low – negative (-)		Negligible – negative (-)	
Comment on significance	The impact will have negligible effects and would require little or no mitigation			
Cumulative impacts	Negligible - the impact would result in negligible to no cumulative effect			

Project Phase	Construction			
Impact	Temporary visual/amenity (camp, stockpiles, lighting)			
Description of impact	Short-term, localised visual and amenity disturbance from temporary site camp, stockpiles and lighting.			
Potential for mitigation	High	Mitigation measures are highly probable to be effective and can significantly reduce or eliminate the identified impact.		
Potential mitigation	• Screen fencing. • Organise laydown areas • Down-shield LED lighting • Remove redundant materials weekly • Restrict lighting to working hours.			
Assessment	Without mitigation		With mitigation	
Nature	Direct – negative (low)		Direct – negative (very low)	
Duration	Short term	Impact will last between 1 and 2 years	Short term	Impact will last between 1 and 2 years
Extent	Limited	Limited to the site and its immediate surroundings	Limited	Limited to the site and its immediate surroundings
Intensity	Low	Natural and/or social functions	Negligible	Natural and/ or social functions and/ or

		and/or processes are slightly altered		processes are negligibly altered
Probability	Possible	It is most likely that the impact will occur	Improbable	Conceivable, but only in extreme circumstances, and/or might occur for this project although this has rarely been known to result elsewhere
Confidence	Medium	Determination is based on common sense and general knowledge	Medium	Determination is based on common sense and general knowledge
Reversibility	Completely reversible	the impact can be reversed with the implementation of minor mitigation measures.	Completely reversible	the impact can be reversed with the implementation of minor mitigation measures.
Resource irreplaceability	Low	Marginal loss - the resource is not damaged irreparably or is not scarce	Low	Marginal loss - the resource is not damaged irreparably or is not scarce
Significance	Low – negative (-)		Negligible – negative (-)	
Comment on significance	The impact will have negligible effects and would require little or no mitigation			
Cumulative impacts	Negligible - the impact would result in negligible to no cumulative effect			

Project Phase	Construction			
Impact	Disturbance / Loss of Aquatic Habitat (specialist)			
Description of impact	Direct, negative disturbance to estuarine habitat due to proximity to the high-water mark.			
Potential for mitigation	High	Mitigation measures are highly probable to be effective and can significantly reduce or eliminate the identified impact.		
Potential mitigation	• Maintain buffer and no-go area at HWM. • Implement erosion control at edges. • ECO supervision. • Immediate rehabilitation if disturbance occurs.			
Assessment	Without mitigation		With mitigation	
Nature	Direct – negative (low)		Direct – negative (low)	
Duration	Long Term	Impact will last more than 15 years	Short term	Impact will last between 1 and 2 years
Extent	Local	Extending across the site and to nearby settlements	Limited	Limited to the site and its immediate surroundings
Intensity	Low	Natural and/or social functions and/or processes are slightly altered	Low	Natural and/or social functions and/or processes are slightly altered
Probability	Definite	There are sound scientific reasons to expect that the impact will occur	Possible	Has occurred here or elsewhere and could therefore occur

Confidence	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
Reversibility	Partly reversible	the impact is reversible, but more intense mitigation measures are required	Completely reversible	the impact can be reversed with the implementation of minor mitigation measures.
Resource irreplaceability	High	Irreparable damage and is not represented elsewhere	Negligible	No loss of resources
Significance	Medium– negative (-)		Low – negative (-)	
Comment on significance	The impact will have minimal effects and would require little mitigation			
Cumulative impacts	Negligible - the impact would result in negligible to no cumulative effect			

Project Phase	Construction			
Impact	Avifauna disturbance and habitat displacement			
Description of impact	Possible disturbance to estuarine birds (saltmarsh and mudflat foragers) from noise, lighting and human activity during construction.			
Potential for mitigation	High	Mitigation measures are highly probable to be effective and can significantly reduce or eliminate the identified impact.		
Potential mitigation	• No high-noise activities during peak breeding/foraging windows where avoidable; • no encroachment into saltmarsh; • shielded lighting; • ECO observation log.			
Assessment	Without mitigation		With mitigation	
Nature	Direct – negative (low)		Direct – negative (low)	
Duration	Long Term	Impact will last more than 15 years	Short term	Impact will last between 1 and 2 years
Extent	Local	Extending across the site and to nearby settlements	Limited	Limited to the site and its immediate surroundings
Intensity	Low	Natural and/or social functions and/or processes are slightly altered	Low	Natural and/or social functions and/or processes are slightly altered
Probability	Definite	There are sound scientific reasons to expect that the impact will occur	Possible	Has occurred here or elsewhere and could therefore occur
Confidence	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
Reversibility	Partly reversible	the impact is reversible, but more intense mitigation measures are required	Completely reversible	the impact can be reversed with the implementation of minor mitigation measures.

Resource irreplaceability	High	Irreparable damage and is not represented elsewhere	Negligible	No loss of resources
Significance	Low – negative (-)		Negligible – negative (-)	
Comment on significance	The impact will have minimal effects and would require little mitigation			
Cumulative impacts	Negligible - the impact would result in negligible to no cumulative effect			

Project Phase	Construction			
Impact	Modified Hydrodynamics (specialist)			
Description of impact	Indirect, negative change to surface runoff or flow regime near the estuary edge.			
Potential for mitigation	High	Mitigation measures are highly probable to be effective and can significantly reduce or eliminate the identified impact.		
Potential mitigation	• Maintain natural drainage. • No cross-fall to estuary • Kerb drains to municipal system • Avoid compaction near watercourse.			
Assessment	Without mitigation		With mitigation	
Nature	Direct – negative (low)		Direct – Negligible (low)	
Duration	Short term	Impact will last between 1 and 2 years	Brief	Impact will not last longer than 1 year
Extent	Local	Extending across the site and to nearby settlements	Limited	Limited to the site and its immediate surroundings
Intensity	Low	Natural and/or social functions and/or processes are slightly altered	Negligible	Natural and/ or social functions and/ or processes are negligibly altered
Probability	Probable	It is most likely that the impact will occur	Possible	Has occurred here or elsewhere and could therefore occur
Confidence	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
Reversibility	Partly reversible	the impact is reversible, but more intense mitigation measures are required	Completely reversible	the impact can be reversed with the implementation of minor mitigation measures.
Resource irreplaceability	Negligible	No loss of resources	Negligible	No loss of resources
Significance	Low – negative (-)		Low – negative (-)	
Comment on significance	The impact will have minimal effects and would require little mitigation			
Cumulative impacts	Negligible - the impact would result in negligible to no cumulative effect			

3. (ALTERNATIVE A - PREFERRED) IMPACTS ASSOCIATED WITH THE OPERATIONAL PHASE

Project Phase	Operational			
Impact	Operational Stormwater quality and discharge to estuary			
Description of impact	Indirect, long-term risk of hydrocarbon or resin-laden runoff entering the stormwater network discharging near the estuary.			
Potential for mitigation	High	Mitigation measures are highly probable to be effective and can significantly reduce or eliminate the identified impact.		
Potential mitigation	• Maintain brick-paved yard. • Sweep-only cleaning. • Restrict wash-down to contained bays. • Quarterly stormwater inspection.			
Assessment	Without mitigation		With mitigation	
Nature	Indirect – negative (low)		Indirect – negative (very low)	
Duration	Long Term	Impact will last more than 15 years	Long Term	Impact will last more than 15 years
Extent	Local	Extending across the site and to nearby settlements	Limited	Limited to the site and its immediate surroundings
Intensity	Low	Natural and/or social functions and/or processes are slightly altered	Negligible	Natural and/ or social functions and/ or processes are negligibly altered
Probability	Probable	It is most likely that the impact will occur	Improbable	Conceivable, but only in extreme circumstances, and/or might occur for this project although this has rarely been known to result elsewhere
Confidence	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
Reversibility	Completely reversible	the impact can be reversed with the implementation of minor mitigation measures.	Completely reversible	the impact can be reversed with the implementation of minor mitigation measures.
Resource irreplaceability	Low	Marginal loss - the resource is not damaged irreparably or is not scarce	Negligible	No loss of resources
Significance	Low – negative (-)		Negligible – negative (-)	
Comment on significance	The impact will have minimal effects and would require little mitigation			
Cumulative impacts	Negligible - the impact would result in negligible to no cumulative effect			

Project Phase	Operational	
Impact	Hazardous materials handling and storage	
Description of impact	Direct, negative risk of spillages and chemical contamination from poor handling or storage.	
Potential for mitigation	High	Mitigation measures are highly probable to be effective and can significantly reduce or eliminate the identified impact.

Potential mitigation	• Maintain bunded stores. • Keep up-to-date SDS register • Ventilated chemical storage • Regular spill drills • Sealed concrete floors • Trained staff.			
Assessment	Without mitigation		With mitigation	
Nature	Direct – negative (medium)		Direct – negative (low)	
Duration	Long Term	Impact will last more than 15 years	Long Term	Impact will last more than 15 years
Extent	Limited	Limited to the site and its immediate surroundings	Limited	Limited to the site and its immediate surroundings
Intensity	Medium	Natural and/or social functions and/or processes are notably altered	Low	Natural and/or social functions and/or processes are slightly altered
Probability	Possible	Has occurred here or elsewhere and could therefore occur	Improbable	Conceivable, but only in extreme circumstances, and/or might occur for this project although this has rarely been known to result elsewhere
Confidence	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
Reversibility	Partly reversible	the impact is reversible, but more intense mitigation measures are required	Completely reversible	the impact can be reversed with the implementation of minor mitigation measures.
Resource irreplaceability	Low	Marginal loss - the resource is not damaged irreparably or is not scarce	Negligible	No loss of resources
Significance	Medium– negative (-)		Low – negative (-)	
Comment on significance	The impact will have minimal effects and would require little mitigation			
Cumulative impacts	Low - the impact would result in insignificant cumulative effects			

Project Phase	Operational	
Impact	Aquatic – Disturbance / Loss of Habitat (specialist)	
Description of impact	Direct, long-term disturbance of estuarine edge habitat from hardened surfaces and altered shading.	
Potential for mitigation	High	Mitigation measures are highly probable to be effective and can significantly reduce or eliminate the identified impact.
Potential mitigation	• Maintain buffer at surveyed HWM. • Prevent encroachment beyond existing footprint. • Stabilise lagoon-edge surfaces with vegetation. • Monitor compliance quarterly.	
Assessment	Without mitigation	
Nature	Direct – Negative (medium)	Direct – Negative (low)

Duration	Permanent	Impact may be permanent, or in excess of 20 years	Long Term	Impact will last more than 15 years
Extent	Regional	The region, which may be defined in various ways, e.g. cadastral, catchment, topographic.	Local	Extending across the site and to nearby settlements
Intensity	Medium	Natural and/or social functions and/or processes are notably altered	Low	Natural and/or social functions and/or processes are slightly altered
Probability	Probable	It is most likely that the impact will occur	Improbable	Conceivable, but only in extreme circumstances, and/or might occur for this project although this has rarely been known to result elsewhere
Confidence	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
Reversibility	Barely reversible	the impact is unlikely to be reversed even with intense mitigation measures	Partly reversible	the impact is reversible, but more intense mitigation measures are required
Resource irreplaceability	High	Irreparable damage and is not represented elsewhere	Negligible	No loss of resources
Significance	Medium – negative (-)		Low – negative (-)	
Comment on significance	The impact will have minimal effects and would require little mitigation			
Cumulative impacts	Negligible - the impact would result in negligible to no cumulative effect			

Project Phase	Operation			
Impact	Aquatic – Erosion & Sedimentation (specialist)			
Description of impact	Direct, long-term risk of erosion at outlets and sedimentation of nearby estuarine margin.			
Potential for mitigation	High	Mitigation measures are highly probable to be effective and can significantly reduce or eliminate the identified impact.		
Potential mitigation	• Stabilise stormwater outlets. • Vegetate verges. • Inspect and repair within 48 h of storm events. • Enforce maintenance log.			
Assessment	Without mitigation		With mitigation	
Nature	Direct – negative (low)		Direct – negative (negligible)	
Duration	Long Term	Impact will last more than 15 years	Short term	Impact will last between 1 and 2 years
Extent	Local	Extending across the site and to nearby settlements	Limited	Limited to the site and its immediate surroundings
Intensity	Medium	Natural and/or social functions and/or processes are notably altered	Negligible	Natural and/ or social functions and/ or processes are negligibly altered

Probability	Probable	It is most likely that the impact will occur	Possible	Has occurred here or elsewhere and could therefore occur
Confidence	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
Reversibility	Barely reversible	the impact is unlikely to be reversed even with intense mitigation measures	Partly reversible	the impact is reversible, but more intense mitigation measures are required
Resource irreplaceability	Low	Marginal loss, the resource is not damaged irreparably or is not scarce	Negligible	No loss of resources
Significance	Low – negative (-)		Negligible – negative (-)	
Comment on significance	The impact will have negligible effects and would require little or no mitigation			
Cumulative impacts	Negligible - the impact would result in negligible to no cumulative effect			

Project Phase	Operation			
Impact	Visual character and night-time lighting along lagoon			
Description of impact	Indirect, long-term visual effect from building scale and lighting spill toward the lagoon.			
Potential for mitigation	High	Mitigation measures are highly probable to be effective and can significantly reduce or eliminate the identified impact.		
Potential mitigation	• Use subdued facade colours. • Down-shielded luminaires. • Landscape lagoon edge. • Limit night lighting to security levels.			
Assessment	Without mitigation		With mitigation	
Nature	Direct – negative (low)		Direct – negative (negligible)	
Duration	Long Term	Impact will last more than 15 years	Long Term	Impact will last more than 15 years
Extent	Local	Extending across the site and to nearby settlements	Limited	Limited to the site and its immediate surroundings
Intensity	Medium	Natural and/or social functions and/or processes are notably altered	Negligible	Natural and/ or social functions and/ or processes are negligibly altered
Probability	Probable	It is most likely that the impact will occur	Possible	Has occurred here or elsewhere and could therefore occur
Confidence	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
Reversibility	Partly reversible	the impact is reversible, but more intense mitigation measures are required	Partly reversible	the impact is reversible, but more intense mitigation measures are required

Resource irreplaceability	Low	Marginal loss, the resource is not damaged irreparably or is not scarce	Negligible	No loss of resources
Significance	Low – negative (-)		Negligible – negative (-)	
Comment on significance	The impact will have negligible effects and would require little or no mitigation			
Cumulative impacts	Negligible - the impact would result in negligible to no cumulative effect			

Project Phase	Operational			
Impact	Aquatic – Modified Hydrodynamics (specialist)			
Description of impact	Indirect, long-term alteration of local flow regime due to changed drainage and surface runoff patterns.			
Potential for mitigation	High	Mitigation measures are highly probable to be effective and can significantly reduce or eliminate the identified impact.		
Potential mitigation	• Preserve existing drainage patterns. • Ensure roof and yard runoff connects to municipal system. • Avoid direct discharge to estuary.			
Assessment	Without mitigation		With mitigation	
Nature	Indirect - negative (medium)		Indirect - negative (low)	
Duration	Permanent	Impact may be permanent, or in excess of 20 years	Permanent	Impact may be permanent, or in excess of 20 years
Extent	Local	Extending across the site and to nearby settlements	Limited	Limited to the site and its immediate surroundings
Intensity	Medium	Natural and/or social functions and/or processes are notably altered	Low	Natural and/or social functions and/or processes are slightly altered
Probability	Probable	It is most likely that the impact will occur	Improbable	Conceivable, but only in extreme circumstances, and/or might occur for this project although this has rarely been known to result elsewhere
Confidence	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
Reversibility	Barely reversible	the impact is unlikely to be reversed even with intense mitigation measures	Partly reversible	the impact is reversible, but more intense mitigation measures are required
Resource irreplaceability	Negligible	No loss of resources	Negligible	No loss of resources
Significance	Medium - negative (-)		Negligible – negative (-)	
Comment on significance	The impact will have minimal effects and would require little mitigation			

Cumulative impacts	Negligible - the impact would result in negligible to no cumulative effect
---------------------------	--

Project Phase	Operation			
Impact	Aquatic – Erosion & Sedimentation (specialist)			
Description of impact	Direct, long-term risk of erosion at outlets and sedimentation of nearby estuarine margin.			
Potential for mitigation	High	Mitigation measures are highly probable to be effective and can significantly reduce or eliminate the identified impact.		
Potential mitigation	• Stabilise stormwater outlets. • Vegetate verges. • Inspect and repair within 48 h of storm events. • Enforce maintenance log.			
Assessment	Without mitigation		With mitigation	
Nature	Direct – negative (low)		Direct – negative (negligible)	
Duration	Long Term	Impact will last more than 15 years	Short term	Impact will last between 1 and 2 years
Extent	Local	Extending across the site and to nearby settlements	Limited	Limited to the site and its immediate surroundings
Intensity	Medium	Natural and/or social functions and/or processes are notably altered	Negligible	Natural and/ or social functions and/ or processes are negligibly altered
Probability	Probable	It is most likely that the impact will occur	Possible	Has occurred here or elsewhere and could therefore occur
Confidence	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
Reversibility	Barely reversible	the impact is unlikely to be reversed even with intense mitigation measures	Partly reversible	the impact is reversible, but more intense mitigation measures are required
Resource irreplaceability	Low	Marginal loss, the resource is not damaged irreparably or is not scarce	Negligible	No loss of resources
Significance	Low – negative (-)		Negligible – negative (-)	
Comment on significance	The impact will have negligible effects and would require little or no mitigation			
Cumulative impacts	Negligible - the impact would result in negligible to no cumulative effect			

Project Phase	Operation	
Impact	Socio-economic (positive)	
Description of impact	Positive, long-term contribution through sustained employment, skills development and local procurement.	
Potential for mitigation	High	Mitigation exists and will considerably reduce significance of impacts
Potential mitigation	- Maintain employment levels. - Promote on-the-job training.	

	• Prioritise local procurement. • Supplier-development initiatives.			
Assessment	Without mitigation		With mitigation	
Nature	Direct – positive (medium)		Direct – positive (high)	
Duration	Long Term	Impact will last more than 15 years	Long Term	Impact will last more than 15 years
Extent	Regional	The region, which may be defined in various ways, e.g. cadastral, catchment, topographic.	Regional	The region, which may be defined in various ways, e.g. cadastral, catchment, topographic.
Intensity	Medium	Natural and/or social functions and/or processes are notably altered	High	Natural and/ or social functions and/ or processes are significantly altered
Probability	Definite	There are sound scientific reasons to expect that the impact will occur	Definite	There are sound scientific reasons to expect that the impact will occur
Confidence	High	Substantive supportive data exists to verify the assessment	High	Substantive supportive data exists to verify the assessment
Significance	medium – positive (+)		high– positive (+)	
Comment on significance	The impact will have significant positive effects			
Cumulative impacts	Low - the impact would result in insignificant cumulative effects			

4. NO GO' OR NO DEVELOPMENT SCENARIO

The No-Go alternative represents the scenario in which the proposed yacht manufacturing facility and the associated upgrade of the South African Sea Cadets premises do not proceed. Under this scenario, the existing conditions on Erven 1339 and 1316 would remain unchanged, and no new construction or land-use change would occur.

4.1. Environmental Implication

The site currently consists of a fully transformed, hard-surfaced area previously utilised as a vehicle training ground. The surface is predominantly paved or compacted, with minimal ruderal vegetation and no remaining natural terrestrial habitat. Aquatic assessments indicate that while the site lies in proximity to the Knysna Estuary, the development footprint itself is outside the high-water mark and within an already disturbed urban-industrial context. Therefore, under the No-Go scenario, the environmental condition of the site would remain largely static, offering no improvement or degradation to existing biodiversity or hydrological functioning.

While the No-Go alternative would avoid the limited construction-related disturbances and potential short-term environmental impacts, it would also forego opportunities for environmental enhancement and management associated with the project, such as improved stormwater infrastructure, implementation of erosion and spill controls, and formalisation of site drainage that

collectively reduce diffuse pollution to the estuary. The No-Go option thus represents a maintenance of the current degraded baseline rather than an ecological gain.

4.2. Socio-economic implications

Socio-economically, the No-Go alternative would prevent job creation, skills development, and local economic upliftment associated with the expansion of Kinetic Catamarans' operations. The proposed factory forms part of a municipally supported industrial revitalisation initiative aimed at strengthening Knysna's established boatbuilding sector, a key contributor to the regional economy. Failure to proceed would therefore limit industrial growth, constrain employment opportunities (both construction-phase and long-term operational positions), and result in lost economic and social benefit to the local community.

Furthermore, the planned upgrade of the Sea Cadets facility, which forms a public, educational, and youth-development asset, would not occur. This would forgo improvements to the safety, functionality, and accessibility of the facility and its surrounding environment.

5. Mitigation measures as proposed by the aquatic specialist (Upstream Consulting, 2025)

The mitigation of negative impacts on biodiversity and ecosystem goods and services is a legal requirement for authorisation purposes and must take on different forms depending on the significance of the impact and the specific area being affected. Mitigation requires the adoption of the precautionary principle and proactive planning that is enabled through a mitigation hierarchy. Its application is intended to strive to first avoid disturbance of ecosystems and loss of biodiversity, and where this cannot be avoided altogether, to minimise, rehabilitate, and then finally offset any remaining significant residual negative impacts on biodiversity (DEA 2013). The mitigation measures detailed within this report must be taken into consideration during financial planning of the construction phase of the structures. This is to ensure that sufficient funds are available to implement all the measures required to maintain the current PES score of the estuary impacted upon.

Any potential risks must be managed and mitigated to ensure that no deterioration to the water resource takes place. Standard management measures should be implemented to ensure that any on-going activities do not result in a decline in water resource quality. Mitigation measures related to the impacts associated with the construction activities are intended to augment standard/generic mitigation measures included in the project-specific Environmental Management Programme (EMPr).

The monitoring of the development activities is essential to ensure the mitigation measures are implemented. Therefore, compliance with the mitigation recommendations must be audited by a suitably qualified independent Environmental Control Officer with an appropriately timed audit report. In the case where there is extensive damage to any aquatic system, where rehabilitation is required, a suitably qualified aquatic specialist must audit the site. Monitoring for non-compliance must be done on a daily basis by the contractors. Photographic records of all incidents and non-compliances must be retained. This is to ensure that the impacts on the aquatic habitat are adequately managed and

mitigated against and the successful rehabilitation of any disturbed areas within any system occurs. Monitoring should especially focus on preventing water pollution, avoiding disturbance of aquatic habitat, and preventing unnecessary soil disturbance or infilling.

The following mitigation measures must be adhered to during all project phases:

- The implementation of SUDS (Sustainable Urban Drainage Systems) is critical for the paving and parking areas.
 - SUDS is green infrastructure solutions for managing rainwater in urban areas by mimicking natural drainage processes, such as infiltration and filtration, rather than conventional piping systems. SUDS includes features like green roofs, permeable pavements, rain gardens, and vegetated areas to reduce flood risk, improve water quality, enhance biodiversity, and add amenity value to the urban environment. SUDS are a key strategy for increasing urban resilience against climate change and for creating more sustainable and liveable cities.
- The facility needs to implement rainwater harvesting to reduce the volume of runoff entering the estuary.
- Any green strips of permeable pavement like the *Carpobrotis edulis* planted should be retained.
- A “Grow Don’t Mow” policy should be adopted for any of the open green spaces within 5m of any saltmarsh to allow for the adjacent vegetation to grow robust like Plate 4. Such vegetation structure slows down surface water flow and increases infiltration. It also provides additional habitat for saltmarsh fauna.
- Damage to saltmarsh must be minimised and to the *Zostera* beds must be avoided during the construction and operational phase. The jetty and slipway may not be expanded beyond their existing footprint.
- No infillings, excavations or retaining walls should be allowed.
- The jetty is currently a floating jetty and must be constructed of unpainted hardwood and/or building standard treated pine. Recycled plastic ‘timber’ may also be used. No metal frames or structures should be allowed that can rust and degrade rapidly over time.
- No roofs, rooms or other structures may be attached to or built onto the jetty. Railings may be considered if in keeping with the purpose of the structure.
- Gangways are not to be wider than the current structure. Consider the use of removable planks at intervals along the gangway which can be removed when the jetty is not in use, to increase sunlight upon the saltmarsh below.
- Pontoons must be made from corrosion-proof material and should be constructed in such a way that if ruptured they remain afloat.
- All pontoons must be clean of any foreign materials such as oil residue or chemicals and must be inspected prior to installation.
- The structures must cause the minimum disturbance to the normal current flow of the river and may not cause stagnant water areas.

- The structures may not cause an obstruction or change to natural sand movement or cause accelerated erosion of the riverbank. There must be no drains, channels or culverts dug in the estuary.
- Artificial stabilisation and infilling below the high water mark should not be allowed, outside of the current design.
- During construction and operation, trampling of tidal habitat like salt marshes should be prevented. The primary motivation for allowing these structures is to protect indiscriminate trampling. The creation of pathways must be prevented. Measures such as the placement of wooden boards/ planks on top of the saltmarsh surface, to be used as temporary walkways and removed after construction, are acceptable.
- The working corridor must be kept to a minimum and be identified and demarcated clearly before any construction commences to minimise the impact. This must be approved by the ECO prior to commencement. Site supervisors must ensure that impacts are confined to the construction zone. Staff environmental induction must take place prior to construction commencing and any subcontractors utilised must be inducted before starting work onsite.
- Construction of the slipway must only be undertaken under dry conditions with no rainfall predicted during significant construction within it. Additionally, it is advisable that the work is planned with consideration to the low and high tides of the estuary.
- The excavations within aquatic habitat should be, as far as possible, manually hand-dug rather than dug using machinery. Machinery within the estuarine habitat must be avoided as far as possible. Excavation of any soils in the aquatic habitat must be done to allow the storage of soil in sequence. Topsoil must be removed and stored very carefully for rehabilitation.
- Any material excavated from the estuary must not be dumped onto any vegetated areas. Any fauna (crabs, etc.) that are found within the construction area must be moved to the closest point of similar habitat type outside of the areas to be impacted.
- Affected surface vegetation must be removed, appropriately stored then reinstated, immediately post-construction, as close to their original position as possible, to reduce the possibility of longer-term change to the vegetation community.
- Dewater in a manner that does not cause erosion and does not result in water with a high silt content flowing into the channel. Remove the dewatering structures as soon as possible after the completion of dewatering activities.
- Removal of vegetation must only be when essential for the continuation of the project. Do not allow any disturbance to the adjoining natural vegetation cover or soils.
- It is the landowner and contractor's responsibility to continuously monitor the area for newly established alien species during the contract and establishment period, which if present must be removed. Removal of these species shall be undertaken in a way which prevents any damage to the remaining indigenous species and inhibits the re-infestation of the cleaned areas. Any use of herbicides in removing alien plant species is required to be investigated by the ECO before use, for the necessity, type proposed to be used, effectiveness and impacts of the product on aquatic biota.

- A monitoring programme shall be in place, not only to ensure compliance with the EMPr throughout the construction phase, but also to monitor any post-construction environmental issues and impacts such as erosion. The monitoring should be regular and daily visits are encouraged.
- The property owners are encouraged to share their jetty and slipway with their neighbours, as far as possible. It should be noted that as per the EMPr the Ashmead channel is zoned as a no motorised zone. This can substantially reduce the need for more privately-owned structures that would collectively have a greater impact on the environment.
- The applicants must maintain the jetty in a serviceable condition according to the instructions set by SANParks. Should such a structure no longer be required or used, the lessee must remove the structure and rehabilitate the riverbank. Regular inspections of these structures must take place.
- Maintenance operations of the jetty and slipway must ensure a minimal footprint. No additional excavations or vegetation clearance should be involved, only necessary maintenance such as debris removal. This maintenance should be undertaken with manual labour unless otherwise approved by an environmental authority.
- No construction camp or activities may be established on any current grassed or green areas, outside of the current design footprint.
- During the operational phase of the new yacht building facility the following mitigation measures are required:
 - **Waste and Material Storage:** All materials, especially hazardous ones like paints, solvents, and lubricants, should be stored indoors in secure, designated areas. These should be kept in properly labelled, sealed containers and placed within a secondary containment system, such as a spill tray or a containment berm, to capture any leaks or spills.
 - **Spill Prevention and Response:** A comprehensive Spill Prevention, Control, and Countermeasure (SPCC) plan is crucial. This plan should include procedures for material handling, a detailed inventory of all chemicals and their locations, and regular inspections of storage containers and equipment for leaks.
 - **Employee Training:** All employees should be trained on the proper handling of hazardous materials, spill response procedures, and the location and use of spill kits. This is a critical step to ensure that any spills are contained and cleaned up promptly, minimizing the risk of contamination.
 - **Floor Drains and Sewer Connections:** It is essential to ensure that no floor drains inside the facility are connected to the stormwater sewer system. All wash water, which may contain paint particles, dust, and other pollutants, should be collected and disposed of properly, not discharged into a public drain.
 - **Recycling and Waste Disposal:** Implementing a plan for recycling and proper disposal of all waste products, including spent solvents, abrasives, and waste oil, is also vital. This includes using a licensed hazardous waste contractor for materials that cannot be recycled.
- The establishment of the gravel parade ground and parking bays on that area are not supported.

- The Knysna Estuary Forum must be made aware of the proposed works (once approval has been received). The applicant is encouraged to join the Estuary Forum.
- The ECO must ensure that the contractors have fully complied (partial compliance is unacceptable) with all the recommendations within this report, as well as the EMPr, before leaving site, and the local municipal environmental officer, SANParks, Cape Nature, DFFE Oceans and Coasts, landowners and Estuary Forum should undertake ongoing monitoring.
- Construction must be immediately followed by suitable rehabilitation.
- Soil replacement must be conducted in same sequence as excavated and excess soil removed from the estuary.
- The solid domestic waste must be removed and disposed of offsite. All post-construction building material and waste must be cleared in accordance with the EMPr.
- In the case where there is extensive damage to any aquatic system, where rehabilitation is required, a suitably qualified aquatic specialist must audit the site.

SECTION I – CONSIDERATIONS REGARDING OFFSETS

In accordance with the National Biodiversity Offset Guideline (Department of Forestry, Fisheries and the Environment, Government Gazette No. 48841 of 23 June 2023), biodiversity offsets are considered only after the full application of the mitigation hierarchy, namely Avoid, Minimise, Rehabilitate/Restore, and, only where residual impacts remain, Offset.

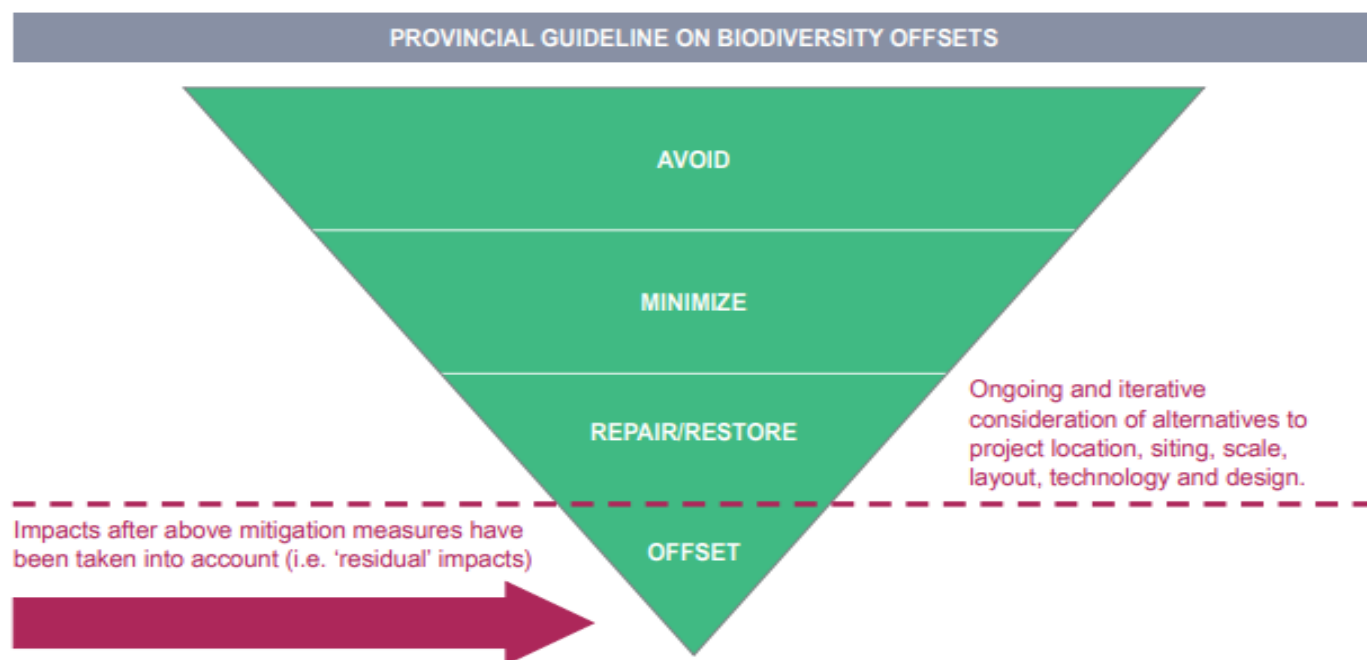


Figure 14: Mitigation hierarchy according to the Western Cape Biodiversity Spatial Plan (WCBS, 2023)

This hierarchy ensures that development first seeks to prevent and then reduce negative effects on biodiversity before any compensatory measures are contemplated. The Guideline specifies that offsets are applicable only where, after all reasonable avoidance and mitigation measures have been implemented, a residual negative impact of medium to high significance remains on biodiversity features of conservation concern, and where such losses are not fully reversible or restorable on site. Conversely, where post-mitigation impacts are of low or very low significance, or occur entirely within a previously transformed footprint, offsets are not warranted.

1. APPLICATION TO THE PROPOSED DEVELOPMENT

The proposed development by Kinetic Catamarans SA (Pty) Ltd entails the construction of a new yacht manufacturing facility and associated upgrades to the South African Sea Cadets area on Erven 1339 and 1316, Knysna. The site is located within an established industrial precinct and has been historically transformed, functioning as a paved vehicle training ground. Only limited ruderal vegetation remains, and no natural terrestrial habitat persists within the development footprint.

An aquatic specialist assessment confirmed that potential estuarine-edge impacts (disturbance/loss of habitat, modified hydrodynamics, erosion and sedimentation, and pollution) are all of low to very low significance after mitigation, with no irreversible loss of aquatic habitat and all impacts rated as reversible or recoverable. The broader environmental impact assessment similarly found that terrestrial, socio-economic, and operational impacts are negligible to low after mitigation, with no residual high-significance or irreplaceable biodiversity loss.

Given that:

- the receiving environment is already fully transformed;
- the mitigation hierarchy has been comprehensively applied through avoidance, design layout, and best-practice controls; and
- all residual impacts after mitigation are of low or very low significance and fully reversible,

it is concluded that the threshold for triggering a biodiversity offset under the 2023 National Guideline is not met.

SECTION J – DETAILS OF THE PUBLIC PARTICIPATION PROCESS

The public participation process (PPP) for the proposed development of the Kinetic Catamarans yacht manufacturing facility and the upgrade of the South African Sea Cadets area has been designed to meet the requirements of Chapter 6 of the Environmental Impact Assessment Regulations, 2014 (as amended), promulgated in terms of the National Environmental Management Act (Act No. 107 of 1998). Public participation aims to ensure that interested and affected parties (I&APs) are informed about the proposed activity, provided with an opportunity to raise issues of concern, and allowed to contribute local knowledge to the decision-making process. The process also enables the applicant and the environmental assessment practitioner (EAP) to address reasonable concerns through the assessment and mitigation measures.

Process Overview

For this Basic Assessment process, the PPP comprises the following key components:

1. Notification of the Process

A site notice was placed at conspicuous locations at and near the project site, along Union Street and within the Sea Cadet area, in compliance with the size and format requirements of the EIA Regulations. Emails were sent to adjoining landowners, municipal departments, and identified I&APs. An advertisement was placed in the Knysna-Plett Herald, a local free newspaper, to notify the broader public of the opportunity to register as I&APs and to comment on the proposed development. A provincial or national newspaper advertisement was not required, as the potential impacts of the proposed activity do not extend beyond the boundaries of the Garden Route District Municipality.

The following organs of state were directly notified and registered as I&APs:

- Department of Forestry, Fisheries and the Environment (DFFE) — including Directorates: Biodiversity Conservation, Oceans and Coast, Forestry Management, and Protected Areas Management Planning
- Knysna Municipality (Environmental Management, Town Planning, and Infrastructure Services)
- SANParks (Knysna Estuary Management — Dr Vanessa Weyer)
- Department of Water and Sanitation
- CapeNature
- Heritage Western Cape
- Breede-Olifants Catchment Management Agency (BOCMA)
- Garden Route District Municipality
- Southern Cape Fire Protection Agency
- SA National Roads Agency (SANRAL)
- South African Civil Aviation Authority
- Coastal Management Unit, DEA&DP
- Ward 10 Councillor, Knysna Municipality

Adjacent landowners and surrounding property owners were also notified in writing in accordance with the requirements of Regulation 41 of the EIA Regulations.

2. Availability of the Pre-Application Basic Assessment Report (Pre-AppBAR)

The Pre-AppBAR, prepared in terms of Government Notice R327 (Listing Notice 1), Listed Activity 19A, was made available for public review for a 30-day period from 06 November 2025 to 06 December 2025. Copies of the report (digital and/or printed) were made accessible to all registered I&APs and to members of the public upon request.

3. Commenting Process

I&APs were invited to submit written comments via email, post, or comment forms during the 30-day review period. All comments received were acknowledged in writing.

4. Comments Received and Responses

Comments were received from the following registered I&APs during the pre-application PPP:

- DFFE: Directorate Oceans and Coast (Sibusiso Mbethe, 08 December 2025)
- DFFE: Directorate Biodiversity Conservation (Seoka Lekota, 12 December 2025)
- DFFE: Directorate Forestry Management (Ms TF Gwala, 08 December 2025)
- Breede-Olifants Catchment Management Agency (SI Ndlovu, 08 December 2025)
- Garden Route District Municipality (Dr NS Viljoen)

SANParks formally advised that their substantive comments would be submitted at the Draft Basic Assessment stage. SANParks' formal written comments were subsequently received from Dr Vanessa Weyer (Principal Planner, Garden Route National Park) on 2 April 2026 and have been fully incorporated into this Basic Assessment Report and the associated Environmental Management Programme.

All comments received were recorded, considered, and responded to. No outright objections to the proposed development were received. The substantive issues raised across the pre-application PPP related to the following themes: estuary protection and stormwater management; sewer infrastructure capacity and municipal engagement; specialist studies scope and justification; visual impact; heritage resources; listed activities; public access to Coastal Public Property; and Protected Area governance requirements. All of these issues have been addressed within this Basic Assessment Report and the associated EMPr.

A full record of all comments received and responses provided, across both the pre-application and application phases of public participation, is contained in the Comments and Response Report (Eco Route Environmental Consultancy, August 2026, Document Reference: 2026.26.15), which accompanies this BAR as a supporting document and should be read in conjunction with this section for full context of the consultation process.

5. Recording and Response to Comments

All submissions have been compiled into a Comments and Response Table included in the Comments and Response Report referenced above. The table summarises each issue raised and the manner in which it has been addressed within the assessment or the Environmental Management Programme (EMPr).

6. Application Phase Public Participation

A further 30-day round of public participation was undertaken during the application phase of this Basic Assessment process, from 28 May 2026 to 29 June 2026. All registered I&APs, Organs of State, and the competent authority were notified by email on 28 May 2026 of the availability of the Draft Basic Assessment Report, with the Department of Forestry, Fisheries and the Environment acknowledging receipt of the Basic Assessment Application under NEAS Number DEA/EIA/0003393/2026. All comments received during this phase, including further written comment from SANParks, have been considered and incorporated into this Final Basic Assessment Report and the Final Environmental Management Programme.

SECTION K – CONCLUSION AND RECOMMENDATIONS

The proposed development site, located on Erven 1339 and 1316, Knysna, lies within the established lower industrial precinct adjacent to the Knysna Estuary. The property is fully transformed, consisting of a paved vehicle training ground and associated yard infrastructure, with no remaining natural terrestrial vegetation.

The broader receiving environment is characterised by urban and industrial land uses, with nearby land parcels containing a mix of warehousing, light industry, and municipal facilities. The Knysna Estuary, approximately 50 m to the south, forms the most sensitive environmental feature in the area. An aquatic specialist assessment confirmed that while the site falls near the estuarine functional zone, the actual development footprint is outside the high-water mark, within a disturbed, low-sensitivity area. Overall, the receiving environment is of low ecological value but of high socio-economic and spatial value as part of Knysna's industrial node.

1. SUMMARY OF PROJECT SCOPE

The proposed development entails the establishment of a yacht manufacturing facility for Kinetic Catamarans SA (Pty) Ltd and the upgrade of the South African Sea Cadets facility, both located within the same precinct.

Key components include:

- Construction of new factory buildings and associated infrastructure.
- Paved yard areas for access, material handling, and loading.
- On-site stormwater attenuation and drainage improvements.
- Connection to existing municipal services (water, sewer, electricity, stormwater, and solid waste); and
- Refurbishment of the Sea Cadets training area, including structural and landscaping enhancements.

The development represents a municipally supported industrial infill project on an already disturbed footprint, aimed at consolidating Knysna's marine manufacturing sector and revitalising underutilised land

2. SUMMARY OF ENVIRONMENTAL IMPACT

All construction-phase impacts were found to be of low to very low significance after mitigation, with no irreversible or long-term effects. The implementation of the Environmental Management Programme (EMPr) will ensure effective mitigation through standard best practices such as erosion control, bunding, spill containment, and stormwater management.

Table 9: Summary of impacts of proposed development associated with alternative A – Construction Phase

Impact	Without Mitigation	With Mitigation
	Significance of Impact	Significance of Impact
Sediment mobilisation and dirty stormwater runoff to Knysna Estuary (specialist)	Medium – negative (-)	Low – negative (-)

Hazardous spills	Medium – negative (-)	Low – negative (-)
Construction and general waste	Low – negative (-)	Negligible – negative (-)
Dust generation and nuisance	Low – negative (-)	Negligible – negative (-)
Construction noise and vibration	Low- negative	Negligible – negative (-)
Traffic & access safety (Union/New Street interface)	Low- negative (-)	Low- negative (-)
Temporary stormwater capacity/flooding (before final tie-ins)	Low- negative (-)	Negligible – negative (-)
Temporary visual/amenity (camp, stockpiles, lighting)	Low – negative (-)	Negligible – negative (-)
Disturbance / Loss of Aquatic Habitat (specialist)	Medium – negative (-)	Low – negative (-)
Modified Hydrodynamics (specialist)	Low- negative (-)	Low- negative (-)

The operational impacts were all rated as low or negligible after mitigation, with no loss of ecological function or irreplaceable biodiversity. The development also introduces positive socio-economic impacts, including long-term employment, local procurement, and skills development within Knysna's marine economy.

Table 10: Summary of impacts of proposed development associated with alternative A – Operational Phase

Impact	Without Mitigation	With Mitigation
	Significance of Impact	Significance of Impact
Operational Stormwater quality and discharge to estuary	Low – negative (-)	Negligible – negative (-)
Hazardous materials handling and storage	Medium – negative (-)	Low – negative (-)
Aquatic – Disturbance / Loss of Habitat (specialist)	Medium – negative (-)	Low – negative (-)
Aquatic – Erosion & Sedimentation (specialist)	Low – negative (-)	Negligible – negative (-)
Visual character and night-time lighting along lagoon	Low- negative	Negligible – negative (-)
Aquatic – Modified Hydrodynamics (specialist)	Medium – negative (-)	Negligible – negative (-)
Aquatic – Erosion & Sedimentation (specialist)	Low- negative (-)	Negligible – negative (-)
Socio-economic (positive)	Medium – positive (+)	High – positive (+)

3. RECOMMENDATIONS FROM THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

The Basic Assessment has demonstrated that the proposed Kinetic Catamarans yacht manufacturing facility and Sea Cadet upgrade can be implemented without causing significant or irreversible environmental harm. All identified environmental impacts can be effectively mitigated,

and the project will contribute positively to local economic development, job creation, and the revitalisation of Knysna's marine industry. The EAP therefore recommends that Environmental Authorisation be granted for the proposed development, subject to the implementation of the mitigation and monitoring measures detailed in the EMPr.

Based on the findings of this Basic Assessment process, the following recommendations are made:

- The proposed development is environmentally acceptable, provided that the mitigation measures contained in the EMPr are fully implemented.
- All stormwater and waste management controls must be installed prior to operational commencement to prevent any potential contamination of the Knysna Estuary.
- The appointed Environmental Control Officer (ECO) must conduct compliance monitoring throughout construction and ensure that all non-conformances are recorded and rectified.
- Hazardous material management protocols must be strictly applied, and all staff must be trained in spill prevention and emergency response.
- Regular communication should be maintained with SANParks (as estuary manager) to ensure alignment with estuarine management requirements.
- The Applicant / Facility Manager will initiate a three-way engagement between Kinetic Catamarans, Knysna Municipality and SANParks regarding the future management of the public open space corridor within three months of commencement of operation, with the outcome to be recorded as an amendment to the Operational EMPr, consistent with the commitment recorded in the Comments and Response Report.
- The EAP recommends that DFFE apply a standard commencement-validity period to the Environmental Authorisation, in terms of Regulation 9 of the Environmental Impact Assessment Regulations, 2014 (as amended), as appropriate to the scale and nature of the proposed development.