











DRAFT BASIC ASSESSMENT REPORT

for

MOLEN CLOSE RIVER REHABILITATION

on

A Portion of Remainder of Farm 464, George

In terms of the

National Environmental Management Act (Act No. 107 of 1998, as amended) & 2014 Environmental Impact Regulations



Prepared for Applicant: George Municipality

Date: 20 October 2022

Author of Report: Ms Louise-Mari van Zyl Author Email: louise@cape-eaprac.co.za Report Reference: MOS752/05 Department Reference: 16/3/3/6/7/1/D2/48/0148/22 Case Officer: Shireen Pullen



Cape Environmental Assessment Practitioners

 Tel: +27 44 874 0365
 PO Box 2070, George 6530

 Fax: +27 44 874 0432
 17 Progress Street, George

www.cape-eaprac.co.za



APPOINTED ENVIRONMENTAL ASSESSMENT PRACTITIONER:

Cape EAPrac Environmental Assessment Practitioners

PO Box 2070 George 6530 Tel: 044-874 0365

Fax: 044-874 0432

Report written & compiled by: Ms Louise-Mari van Zyl (MA Geography & Environmental Science [US]), who has over twenty years' experience as an environmental practitioner.

Registration: Director Louise-Mari van Zyl (MA Geography & Environmental Science [US]; Registered Environmental Assessment Practitioner with the Environmental Assessment Practitioners of South Africa, EAPSA, Registration Number 2019/1444. Ms van Zyl has over twenty years' experience as an environmental practitioner.

PURPOSE OF THIS REPORT: Draft Basic Assessment

APPLICANT:

George Municipality

CAPE EAPRAC REFERENCE NO: GEO752/05

SUBMISSION DATE

20 October 2022

PUBLIC PARTICIPATION

By participating in this environmental process, whether it be through written submissions, telephonic enquiries, registrations or attendance of meetings, you are automatically giving consent for your full contact details and/or any submissions/inputs to be used and published in all matters pertaining to this application i.e. reports/notifications/communication for review or decisionmaking.

DOCUMENT TRACKING

DOCUMENT HISTORY

DOC REF	REVISION	DATE	AUTHOR
GEO752/04	Draft Basic Assessment Report (Version 1)	2022-10-20	Ms Louise-Mari van Zyl

APPROVAL FOR RELEASE

NAME	TITLE	SIGNATURE
Ms Louise-Mari van Zyl	Ms	Than gyl

DISTRIBUTION

DESIGNATION	NAME	EMAIL / FAX
Potential Stakeholders	Stakeholder Register	Preferred communication
George Municipal Office	Lionel Daniels	Electronic submission
DEADP, George	Shireen Pullen	Electronic submission

DRAFT BASIC ASSESSMENT REPORT

in terms of the

National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended & Environmental Impact Regulations 2014

MOLEN CLOSE RIVER REHABILITATION

A Portion of the Remainder of Farm 464, George

Submitted for:

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Tel: 044 874 0365 Fax: 044 874 0432 Web: www.cape-eaprac.co.za PO Box 2070 17 Progress Street George 6530

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1. CONTENT OF BASIC ASSESSMENT REPORTS

Appendix 1 of the 2014 EIA Regulations (as amended) contains the required contents of a Basic Assessment Report. The checklist below serves as a summary of how these requirements were incorporated into this Basic Assessment Report.

Requirement		Details	
(a) Dei (i) (ii) (iii)	tails of - The EAP who prepared the report; and The expertise of the EAP, including, curriculum vitae. Applicant Details	Ms Louise-Mari van Zyl	
(b) The (i) (ii) (iii)	e location of the activity, including – The 21 digit Surveyor General code of each cadastral land parcel; Where available, the physical address and farm name; Where the required information in items (i) and (ii) is not available, the coordinates of the boundary of the property or properties.	C0270002000046400000	
(c) a activitio structu or, if it (i) (ii)	plan which locates the proposed activity or es applied for as well as the associated ires and infrastructure at an appropriate scale, is A linear activity, a description and coordinates of the corridor in which the proposed activity or activities is to be undertaken; or On land where the property has not been defined, the coordinates within which the activity is to be undertaken.	Refer to Appendix A & B for location & site plan.	
(d) a o includi (i) (ii)	description of the scope of the proposed activity, ing - All listed and specified activities triggered and being applied for; and A description of the activities to be undertaken including associated structures and infrastructure.	Refer to main report.	
(e) A (within (i) (ii)	description of the policy and legislative context which the development is proposed, including – 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 the preparation of the report; and How the proposed activity complies with and responds to the legislation and policy context, plans, guidelines, tools frameworks and	Refer to main report.	

Requirement	Details
instruments.	
(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.	Refer to main report.
(g) A motivation for the preferred site, activity and technology alternative.	Refer to main report.
 (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 of the 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 of residual risk; (ix) The outcome of the site selection matrix; (ix) If no alternatives, including alternative locations for the activity were investigated, the motivation for not considering such; and (xi) A concluding statement indicating the preferred alternatives, including preferred location of the activity. 	Refer to main report.
identify, assess and rank the impacts the activity will impose on the preferred location through the life of the activity, including –	Refer to main report.

Requir	rement	Details
	 (ii) A description of all environmental issues and risks that were identified during the environmental impact assessment process; and (iii) 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. 	
(j) An signific	assessment of each identified potentially ant impact and risk, including -	
(i) (ii) (iii) (iv) (v) (vi) (vii)	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.	Refer to main report.
(k) Wh imp spe thes thes incl	ere applicable, a summary of the findings and act management measures identified in any cialist report complying with Appendix 6 to se Regulations and an indication as to how se findings and recommendations have been uded in the final assessment report.	Refer to main report.
(I) An e (i) (ii) (iii)	 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. 	Refer to main report.
(m) Ba im re m m ine	sed on the assessment, and where applicable, npact management measures from specialist ports, the recording of proposed impact anagement objectives, and the impact anagement outcomes for the development for clusion in the EMPr.	Refer to main report and Appendix H for EMPr.
(n) Any of wi au	<i>r</i> aspects which were conditional to the findings the assessment either by the EAP or specialist hich are to be included as conditions of uthorisation.	Refer to main report.
(o) A gap and	description of assumptions, uncertainties and is in knowledge which relate to the assessment I mitigation measures proposed.	Refer to main report.
(p) A i acti	reasoned opinion as to whether the proposed vity should or should not be authorised, and if	Refer to main report.

Requirement	Details
the opinion is that it should be authorised, any conditions that should be made in respect of that authorisation.	
(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.	Refer to main report.
 (r) An undertaking under oath or affirmation by the EAP in relation to: (i) The correctness of the information provided in the reports; (ii) The inclusion of comments and inputs rom stakeholders and I&APs (iii) The inclusion of inputs and recommendations from the specialist reports where relevant; and (iv) 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 main report.
(s) Where applicable, details of any financial provisions for the rehabilitation, closure and ongoing post decommissioning management of negative environmental impacts.	Not applicable to this application.
(t) Any specific information that may be required by the competent authority.	
(u) Any other matters required in terms of section 24(4)(a) and (b) of the Act.	

FORM NO. BAR10/2019



BASIC ASSESSMENT REPORT

THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) AND THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS.

NOVEMBER 2019

(For official use only)			
Pre-application Reference Number (if applicable):			
EIA Application Reference Number:			
NEAS Reference Number:			
Exemption Reference Number (if applicable):			
Date BAR received by Department:			
Date BAR received by Directorate:			
Date BAR received by Case Officer:			

GENERAL PROJECT DESCRIPTION

(This must Include an overview of the project including the Farm name/Portion/Erf number)

The proposed project entails the rehabilitation of a portion of an eroded riverbank of a perennial watercourse on Remainder of Farm 464, Rosemoor suburb in George (Figure 1a & b). Rosemoor drains to two perennial watercourses (to the south-west and south-east, respectively) which eventually discharge into the ocean (via Meul River).

The area in need of rehabilitation is located approximately 175m north of Grens Street (crossing of the Molen River), West of Molen Close Street Residential Node, where at least two properties are currently at risk due to erosion of the eastern embankment. Refer to section 4.4. for a detailed project description.



Figure 1: (a) Figure indicating two perennial watercourses (stippled blue lines) West and East of Rosemoor suburb (b) Zoomed in figure of the yellow rectangle displayed in (a) which provides the approximate locality of the properties along Molen Close Street (properties on the right-hand side of the watercourse) (CapeFarmMapper, 2022).

IMPORTANT INFORMATION TO BE READ PRIOR TO COMPLETING THIS BASIC ASSESSMENT REPORT

- 1. **The purpose** of this template is to provide a format for the Basic Assessment report as set out in Appendix 1 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA"), Environmental Impact Assessment ("EIA") Regulations, 2014 (as amended) in order to ultimately obtain Environmental Authorisation.
- 2. The Environmental Impact Assessment ("EIA") Regulations is defined in terms of Chapter 5 of the National Environmental Management Act, 19998 (Act No. 107 of 1998) ("NEMA") hereinafter referred to as the "NEMA EIA Regulations".
- 3. The required information must be typed within the spaces provided in this Basic Assessment Report ("BAR"). The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided.
- 4. All applicable sections of this BAR must be completed.
- 5. Unless protected by law, all information contained in, and attached to this BAR, will become public information on receipt by the Competent Authority. If information is not submitted with this BAR due to such information being protected by law, the applicant and/or Environmental Assessment Practitioner ("EAP") must declare such non-disclosure and provide the reasons for believing that the information is protected.
- 6. This BAR is current as of **November 2019**. It is the responsibility of the Applicant/ EAP to ascertain whether subsequent versions of the BAR have been released by the Department. Visit this Department's website at http://www.westerncape.gov.za/eadp to check for the latest version of this BAR.
- 7. This BAR is the standard format, which must be used in all instances when preparing a BAR for Basic Assessment applications for an environmental authorisation in terms of the NEMA EIA Regulations when the Western Cape Government Department of Environmental Affairs and Development Planning ("DEA&DP") is the Competent Authority.
- 8. Unless otherwise indicated by the Department, one hard copy and one electronic copy of this BAR must be submitted to the Department at the postal address given below or by delivery thereof to the Registry Office of the Department. Reasonable access to copies of this Report must be provided to the relevant Organs of State for consultation purposes, which may, if so indicated by the Department, include providing a printed copy to a specific Organ of State.
- 9. This BAR must be duly dated and originally signed by the Applicant, EAP (if applicable) and Specialist(s) and must be submitted to the Department at the details provided below.

- 10. The Department's latest Circulars pertaining to the "One Environmental Management System" and the EIA Regulations, any subsequent Circulars, and guidelines must be taken into account when completing this BAR.
- 11. Should a water use licence application be required in terms of the National Water Act, 1998 (Act No. 36 of 1998) ("NWA"), the "One Environmental System" is applicable, specifically in terms of the synchronisation of the consideration of the application in terms of the NEMA and the NWA. Refer to this Department's Circular EADP 0028/2014: One Environmental Management System.
- 12. Where Section 38 of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) ("NHRA") is triggered, a copy of Heritage Western Cape's final comment must be attached to the BAR.
- 13. The Screening Tool developed by the National Department of Environmental Affairs must be used to generate a screening report. Please use the Screening Tool link https://screening.environment.gov.za/screeningtool to generate the Screening Tool Report. The screening tool report must be attached to this BAR.
- 14. Where this Department is also identified as the Licencing Authority to decide on applications under the National Environmental Management: Air Quality Act (Act No. 29 of 2004) ('NEM:AQA''), the submission of the Report must also be made as follows, for-

Waste Management Licence Applications, this report must also (i.e., another hard copy and electronic copy) be submitted for the attention of the Department's Waste Management Directorate (Tel: 021-483-2728/2705 and Fax: 021-483-4425) at the same postal address as the Cape Town Office.

Atmospheric Emissions Licence Applications, this report must also be (i.e., another hard copy and electronic copy) submitted for the attention of the Licensing Authority or this Department's Air Quality Management Directorate (Tel: 021 483 2888 and Fax: 021 483 4368) at the same postal address as the Cape Town Office.

DEPARTMENTAL DETAILS

CAPE TOWN OFFICE: REGION 1 and REGION 2 (Region 1: City of Cape Town, West Coast District) (Region 2: Cape Winelands District & Overberg District)	GEORGE OFFICE: REGION 3 (Central Karoo District & Garden Route District)
BAR must be sent to the following details:	BAR must be sent to the following details:
Western Cape Government	Western Cape Government
Department of Environmental Affairs and Development	Department of Environmental Affairs and Development
Planning	Planning
Attention: Directorate: Development Management	Attention: Directorate: Development Management
(Region 1 or 2)	(Region 3)
Private Bag X 9086	Private Bag X 6509
Cape Iown,	George,
	6550
Registry Office	Registry Office
1 st Floor Utilitas Building	4 th Floor, York Park Building
1 Dorp Street,	93 York Street
Cape Town	George
Queries should be directed to the Directorate:	Queries should be directed to the Directorate:
Development Management (Region 1 and 2) at:	Development Management (Region 3) at:
1 el: (021) 483-5829	Tel: (044) 805-8600
Fax (021) 483-43/2	Fax (044) 805 8650

MAPS

Provide a locatio	n map (see below) as Appendix A1 to this BAR that shows the location of the proposed					
development and	development and associated structures and infrastructure on the property.					
Locality Map:	The scale of the locality map must be at least 1:50 000.					
	For linear activities or development proposals of more than 25 kilometres, a smaller scale e.g.,					
	1:250 000 can be used. The scale must be indicated on the map.					
	The map must indicate the following:					
	 an accurate indication of the project site position as well as the positions of the alternative sites, if any; 					
	 road names or numbers of all the major roads as well as the roads that provide access to 					
	the site(s)					

	 a north arrow; a legend; and a linear scale.
	For ocean based or aquatic activity, the coordinates must be provided within which the activity is to be undertaken and a map at an appropriate scale clearly indicating the area within which the activity is to be undertaken.
	Where comment from the Western Cape Government: Transport and Public Works is required, a map illustrating the properties (owned by the Western Cape Government: Transport and Public Works) that will be affected by the proposed development must be included in the Report.
Dravida a datailad	leite development plan (site man (see below) ze Annondiv D1 te this DAD, and if anniherble, all
alternative proper	i site development plan / site map (see below) as Appendix B1 to this BAR; and it applicable, all lies and locations.
Site Plan:	 Detailed site development plan(s) must be prepared for each alternative site or alternative activity. The site plans must contain or conform to the following: The detailed site plan must preferably be at a scale of 1:500 or at an appropriate scale. The scale must be clearly indicated on the plan, preferably together with a linear scale. The property boundaries and numbers of all the properties within 50m of the site must be indicated on the site plan. On land where the property has not been defined, the co-ordinates of the area in which the proposed activity or development is proposed must be provided. The current land use (not zoning) as well as the land use zoning of each of the adjoining properties must be clearly indicated on the site plan. The position of each component of the proposed activity or development as well as any other structures on the site must be indicated on the site plan. Services, including electricity supply cables (indicate aboveground or underground), water supply pipelines, boreholes, sewage pipelines, storm water infrastructure and access roads that will form part of the proposed development must be indicated on the site plan. Servitudes and an indication of the purpose of each servitude must be indicated on the site plan. Sensitive environmental elements within 100m of the site must be included on the site plan, including (but not limited to): Watercourses / Rivers / Wetlands Flood lines (i.e., 1:100 year, 1:50 year and 1:10 year where applicable); Costal Risk Zones as delineated for the Western Cape by the Department of Environmental Affairs and Development Planning ("DEA&DP"): Ridges; Cultural and historical features/landscapes;
	 Areas with indigenous vegetation (even if degraded or infested with alien species). Whenever the slope of the site exceeds 1:10, a contour map of the site must be submitted. North arrow A map/site plan must also be provided at an appropriate scale, which superimposes the proposed development and its associated structures and infrastructure on the environmental sensitivities of the preferred and alternative sites indicating any areas that should be avoided, including buffer areas.
Site photographs	Colour photographs of the site that shows the overall condition of the site and its surroundings (taken on the site and taken from outside the site) with a description of each photograph. The vantage points from which the photographs were taken must be indicated on the site plan, or locality plan as applicable. If available, please also provide a recent aerial photograph. Photographs must be attached to this BAR as Appendix C . The aerial photograph(s) should be supplemented with additional photographs of relevant features on the site. Date of photographs must be included. Please note that the above requirements must be duplicated for all alternative sites.
Biodiversity Overlay Map:	A map of the relevant biodiversity information and conditions must be provided as an overlay map on the property/site plan. The Map must be attached to this BAR as Appendix D .
Linear activities or development and multiple properties	GPS co-ordinates must be provided in degrees, minutes and seconds using the Hartebeeshoek 94 WGS84 co-ordinate system. Where numerous properties/sites are involved (linear activities) you must attach a list of the Farm Name(s)/Portion(s)/Erf number(s) to this BAR as an Appendix. For linear activities that are longer than 500m, please provide a map with the co-ordinates taken every 100m along the route to this BAR as Appendix A3 .

ACRONYMS

DAFF:	Department of Forestry and Fisheries
DEA:	Department of Environmental Affairs
DEA& DP:	Department of Environmental Affairs and Development Planning
DHS:	Department of Human Settlement
DoA:	Department of Agriculture
DoH:	Department of Health
DWS:	Department of Water and Sanitation
EMPr:	Environmental Management Programme
HWC:	Heritage Western Cape
NFEPA:	National Freshwater Ecosystem Protection Assessment
NSBA:	National Spatial Biodiversity Assessment
TOR:	Terms of Reference
WCBSP:	Western Cape Biodiversity Spatial Plan
WCG:	Western Cape Government

ATTACHMENTS

Note: The Appendices must be attached to the BAR as per the list below. Please use a \checkmark (tick) or a x (cross) to indicate whether the Appendix is attached to the BAR.

The following checklist of attachments must be completed.

APPENDIX			<pre>✓ (Tick) or x (cross)</pre>		
	Maps				
	Appendix A1:	Locality Map	✓		
Appendix A:	Appendix A2:	Coastal Risk Zones as delineated in terms of ICMA for the Western Cape by the Department of Environmental Affairs and Development Planning	x		
	Appendix A3:	Map with the GPS co-ordinates for linear activities	х		
	Appendix B1:	Site development plan(s)	✓		
Appendix B:	Appendix B2	x			
Appendix C:	Photographs	~			
Appendix D:	Biodiversity overlay	✓			
	Permit(s) / license(s) / exemption notice, agreements, comments Department/Organs of state and service letters from the municipality.				
Appendix E:	Appendix E1:	Final comment/ROD from HWC	х		
	Appendix E2:	Copy of comment from Cape Nature	х		

Appendix E3:	Final Comment from the DWS	x
Appendix E4:	Comment from the DEA: Oceans and Coast	х
Appendix E5:	Comment from the DAFF	х
Appendix E6:	Comment from WCG: Transport and Public Works	х
Appendix E7:	Comment from WCG: DoA	х
Appendix E8:	Comment from WCG: DHS	х
Appendix E9:	Comment from WCG: DoH	х
Appendix E10:	Comment from DEA&DP: Pollution Management	х
Appendix E11:	Comment from DEA&DP: Waste Management	х
Appendix E12:	Comment from DEA&DP: Biodiversity	х
Appendix E13:	Comment from DEA&DP: Air Quality	х
Appendix E14:	Comment from DEA&DP: Coastal Management	х
Appendix E15:	Comment from the local authority	х
Appendix E16:	Confirmation of all services (water, electricity, sewage, solid waste management)	х
Appendix E17:	Comment from the District Municipality	x
Appendix E18:	Copy of an exemption notice	х
Appendix E19	Pre-approval for the reclamation of land	x
Appendix E20:	Proof of agreement/TOR of the specialist studies conducted.	x
Appendix E21:	Proof of land use rights	х
Appendix E22:	Proof of public participation agreement for linear activities	x

Appendix F:	Public participation information: including a copy of the register of I&APs, the comments and responses Report, proof of notices, advertisements and any other public participation information as is required.	
Appendix G:	Specialist Report(s)	
Appendix H:	EMPr	✓
Appendix I:	Screening tool report	✓
Appendix J:	The impact and risk assessment for each alternative	х
Appendix K:	Need and desirability for the proposed activity or development in terms of this Department's guideline on Need and Desirability (March 2013)/DEA Integrated Environmental Management Guideline	х
Appendix L:	Any other attachments must be included as subsequent appendices	✓

SECTION A: ADMINISTRATIVE DETAILS

	CAPE TOWN OFFICE:			GEORGE OFFICE:		
Highlight the Departmental Region in which the intended application will fall	REGION 1 {City of Cape Town, West Coast District	REGH (Cape W Distri Overberg	SION 2 Winelands trict & srg District)		REGION 3 (Central Karoo District & Garden Route District)	
Duplicate this section where there is more than one Proponent Name of Applicant/Proponent:	George Municipality					
Name of contact person for Applicant/Proponent (if other):	Lionel Daniels					
Company/ Trading name/State Department/Organ of State:						
Company Registration Number:						
Postal address:	PO Box 19					
	George Postal code			de:	6530	
Telephone:	(044) 801 9278		Cell:			
E-mail:	rldaniels@george.gov.za Fax:					
Company of EAP:	Cape Environmental Assessment Practitioners (Cape EAPrac)					
EAP name:	Ms Louise-Mari van Zyl					
Postal address:	PO Box 2070					
	George		Postal coc	de:	6530	
Telephone:	044 874 0365		Cell:		071 603 4132	
E-mail:	Ms Louise-Mari va	an Zyl	Fax:		044 874 0432	
Qualifications:	MA Geography 8	& Environr	nental Stu	Jdie	s (University Stellenbosch)	
EAPASA registration no:	Director Louise-Mari van Zyl (MA Geography & Environmental Science [US]; Registered Environmental Assessment Practitioner with the Environmental Assessment Practitioners of South Africa, EAPSA, Registration Number 2019/1444. Ms van Zyl has over twenty years' experience as an environmental practitioner.					
Duplicate this section where there is more than one landowner Name of landowner:	George Municipality					
Name of contact person for landowner (if other):	Lionel Daniels					
Postal address:	PO Box 19					

	George	Postal code:	6530	
Telephone: E-mail:	(044) 801 9278	Cell:		
	rldaniels@george.gov.za	Fax:		
Name of Person in control of	George Municipality			
the land: Name of contact person for person in control of the land: Postal address:	Lionel Daniels			
	PO Box 19			
	George	Postal code:	6530	
Telephone:	(044) 801 9278	Cell:		
E-mail:	rldaniels@george.gov.za	Fax:		

Duplicate this section where there is more than one Municipal Jurisdiction Municipality in whose area of jurisdiction the proposed activity will fall:	George Municipality			
Contact person:	Lionel Daniels			
Postal address:	PO Box 19			
	George Postal 6530			
Telephone	(044) 801 9278	Cell:		
E-mail:	rldaniels@george.gov.za	Fax:		

SECTION B: CONFIRMATION OF SPECIFIC PROJECT DETAILS AS INLCUDED IN THE APPLICATION FORM

1.	ls the proposed development (plea tick):	New	~	Expansion	
2.	Is the proposed site(s) a brownfield of greenfield site? Please explain.				

Brownfield. Existing municipal sewage lines run in parallel to the watercourse (indicated with light blue line on map) which is at risk of collapsing due to erosion. Private properties at risk of flood damage due to bank collapse.

Erosion damage to be restored and the riverbank rehabilitated in the immediate study area at approximately 33°58'13.30"S & 22°28'29.04"E (Figure 2).



Figure 2: Figure indicating the approximate sewer lines along the watercourse in blue line (200 &160).

3.	For Linear activities or developments						
3.1.	Provide the Farm(s)/Farm Portion(s)/Erf number(s) for all routes:						
3.2.	Development footprint of the proposed development for all alternatives						
33	Provide a description of the proposed development (e.g. for roads the length, width and width of the road reserve						
0.01	in the case of pipelines indicate the length and diameter) for all alternatives.						
3.4.	- Indicate how access to the proposed routes will be obtained for all alternatives.						
	SG Digit						
3.5.	codes of						
					1 1		

	Earms/Earm						
	Portions/Erf						
	numbers						
	forall						
	alternatives						
3.6.	Starting point co-ordinates fo	or all alternatives					
	Latitude (S)	<u>•</u>	<u>•</u>	<u></u>			
	Longitude (E)	<u>o</u>	<u>•</u>	<u>"</u>			
	Middle-point co-ordinates fo	or all alternatives					
	Latitude (S)	<u>o</u>	<u>+</u>	<u>"</u>			
	Longitude (E)	<u>o</u>	<u>+</u>	<u>"</u>			
	End point co-ordinates for al	l alternatives					
	Latitude (S)	<u>•</u>	<u>+</u>	<u>"</u>			
	Longitude (E)	<u>9</u>	<u>•</u>	<u>"</u>			
Note: For Linear activities or developments longer than 500m, a map indicating the co-ordinates for every 100m along the route must be attached to this BAR as Appendix A3.							
4. Other developments							
4.1.	Property size(s) of all propose	ed site(s):		23 943.0 m ²			
4.2.	Developed footprint of the existing facility and associated infrastructure (if applicable):						
4.3.	Development footprint of the proposed development and associated infrastructure size(s) for all alternatives: Approx. 1872m ²						
4.4.	4.4. Provide a detailed description of the proposed development and its associated infrastructure (This must include details of e.g. buildings, structures, infrastructure, storage facilities, sewage/effluent treatment and holding facilities).						
The (Figu alon	The site is located within the designated urban edge of George and is zoned Open Space I (Figure 3). The area of main concern is the eastern embankment located along Erf 21150 & 21151 along Molen Close Street (Figure 4).						





Figure 4: Locality of main area of concern which is along Erf 21150 & 21151 (red outlined properties).

To stabilize the embankment, the preferred alternative is to place gabions inside the perennial watercourse along Erf 21150 & 21151 (Figure 4). The gabions will be positioned in a curving manner to preserve the flow's characteristics and to prevent further erosion (Figure 5) (Figure 6). The following construction equipment will be used:

- Excavator
- Reno mattrasses (new)
- Gabion baskets (new)
- Stormwater pipe (replace existing)
- Geofabrics (new)
- Rocks for filling the gabions (new)
- Compacting equipment
- Formwork, reinforcing steel, and the necessary tools for assembly
- Equipment for construction of foundations where required
- Equipment for construction of inlet and outlet end walls

During construction the stream will be partially diverted within the streambed to facilitate construction of the gabion boxes along the eastern river bank. Stormwater from the existing stormwater pipe that discharges at this point (partially responsible for the eroded bank) will be diverted by placing sandbags in the proposed area of construction.





Temporary access to the site will be via Grens Street where it crosses the Molen River, along the elevated bank of the Molen River (Figure 7- yellow dashed line).

Figur	The section of the se		s to the	site							kpile	a are	a (in			In s	gree			
4.6.	the proposed site(s) for all alternatives:	С	0 2	7	0	0	0	2		0 0	0	0	4	6	4	0	0	0	0	0
	Coordinates of the pro	pose	d site(s) fo	or all	alter	mativ	ves:													
4.7.	Latitude (S)						339)			58					13	.57"			
	Longitude (E)				22° 28' 29			.49"												

SECTION C: LEGISLATION/POLICIES AND/OR GUIDELINES/PROTOCOLS

1. EXEMPTION APPLIED FOR IN TERMS OF THE NEMA AND THE NEMA EIA REGULATIONS

Has exemption been applied for in terms of the NEMA and the NEMA EIA Regulations. If yes, include a copy of the exemption notice in Appendix E18.

NO

2. IS THE FOLLOWING LEGISLATION APPLICABLE TO THE PROPOSED ACTIVITY OR DEVELOPMENT

The National Environmental Management: Integrated Coastal Management Act, 2008 (Act No. 24 of 2008) ("ICMA"). If yes, attach a copy of the comment from the relevant competent authority as Appendix E4 and the pre-approval for the reclamation of land as Appendix E19.	¥ E\$	NO
The National Heritage Resources Act, 1999 (Act No. 25 of 1999) ("NHRA"). If yes, attach a copy of the comment from Heritage Western Cape as Appendix E1.	¥e\$	NO
The National Water Act, 1998 (Act No. 36 of 1998) ("NWA"). If yes, attach a copy of the comment from the DWS as Appendix E3.	YES	NO
The National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) ("NEM:AQA"). If yes, attach a copy of the comment from the relevant authorities as Appendix E13.	YES	NO
The National Environmental Management Waste Act (Act No. 59 of 2008) ("NEM:WA")	YES	NO
The National Environmental Management Biodiversity Act, 2004 (Act No. 10 of 2004 ("NEMBA").	YES	NO
The National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003) ("NEMPAA").	¥E\$	NO
The Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983). If yes, attach comment from the relevant competent authority as Appendix E5.	YES	NO

3. OTHER LEGISLATION

List any other legislation that is applicable to the proposed activity or development.

There is no other legislation applicable to the proposed activity.

4. POLICIES

Explain which policies were considered and how the proposed activity or development complies and responds to these policies.

4.1. Western Cape Provincial SDF (2014)

The Western Cape Provincial Spatial Development Framework (PSDF) was approved in 2014 by the Western Cape Parliament and serves as a strategic spatial planning tool that "communicates the provinces spatial planning agenda".

The Western Cape PSDF identifies key challenges when it comes to the Western Cape surface water resources. One of them being the protection and rehabilitation of river systems.

The proposed activity complies to <u>Policy R2</u> in the Western Cape PSDF (Safeguard inland and coastal water resources and manage the sustainable use of water) through the protection and rehabilitation of a river system.

4.2. Eden Spatial Development Framework (2017)

The Eden District Spatial Development Framework was approved in 2017 and aims to establish a strong strategic direction and vision, towards increasing levels of detail in the spatial recommendations that are directive rather than prescriptive and providing guidance to local municipalities in the district regarding future spatial planning, strategic decision making and regional integration.

The proposed activity complies with the District's Strategic Objective (SO4): Environmental management and public safety and their associated strategies (supported by **Policy 1.1**.):

- Protect and conserve important terrestrial, aquatic (rivers, wetlands, and estuaries) and marine habitats as identified through Critical Biodiversity Area (CBA) mapping exercise or similar conservation planning process.
- Facilitate the formal protection of priority conservation areas (public and private), as well as the conservation of natural habitats that are not formally proclaimed nature reserves.

4.3. George SDF (2019)

There are three spatial drivers that give form to the George Municipality SDF:

- 1. Protect and manage the natural and rural environment to ensure it can function optimally as a basis for supporting and nourishing prosperous and resilient settlement and economic activity in George.
- 2. The second is the settlements and, within the city of George, the system of corridors and nodes must be reinforced and developed in a managed way to function as a productive and efficient system.
- 3. The third is the regional accessibility network that links the settlements to one another within the Greater George Area, as well as to opportunities further afield.

Several rivers traverse the urban area and provide the community with valuable ecosystem services (such as biodiversity support, connectivity, storm water management, regulating the heat island effect, nutrient and toxicant removal, recreation, and aesthetics) (Figure 8). Wetlands north of the urban edge are large, healthy systems that need to be strictly managed and conserved. Unfortunately, these systems become progressively degraded downstream.

The proposed activity complies with <u>Policy D2</u> (Manage watercourses so that they remain in a natural state or present ecological status is improved or at least does not deteriorate). The proposed activity aims to protect the river embankment from further erosion, and to protect the properties in the immediate area.

4.4. George Integrated Development Plan (2021/2022)

Integrated development planning is a process by which the George Municipality prepares a municipal-wide plan, known as the Integrated Development Plan (IDP).

The proposed project complies with the disaster risk reduction plans and recommendations:

• Protecting water resources and water catchment areas and diversity where possible.

Ensure the ongoing processes to the River Health Programme by using appropriate river management and rehabilitation methods.



Figure 8: Watercourses in the George city Area (George SDF, 2019).

5. GUIDELINES

List the guidelines which have been considered relevant to the proposed activity or development and explain how they have influenced the development proposal.

George SDF: Policy D4 Guidelines

• Watercourses must be correctly classified and delineated with the assistance of specialist expertise based on ground-truthing and not only geo-spatial databases.

Dr James Dubrowski (Aquatic Specialist) provided his professional input at design and planning level, on how the embankment must be rehabilitated to avoid further erosion and to maintain the river's flow characteristics.

• Stormwater outlets must be designed to avoid pollution, reduce runoff, reduce chemical and biological pollution and avoid erosion

Nadeson Consulting Services designed the stormwater outlet.

6. **PROTOCOLS**

Explain how the proposed activity or development complies with the requirements of the protocols referred to in the NOI and/or application form

According to the DEADP series of guidelines for the involvement of specialists in the EIA process (2005), one of the underpinning generic principles is to **eliminate the unnecessary specialist involvement** through proactive project planning and design to avoid or sufficiently reduce negative impacts.

Another is to maximise the use of existing relevant information prior to involving a specialist. This

includes the input from the EAP and specialists, in the form of site photographs and site inspections. These principles apply to the specialist studies that have been identified in the screening tool and motivated as not necessary in this report.

The Screening Tool identified the following studies as potentially begin applicable to the proposed development:

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

Agricultural Theme (Medium sensitivity)

The property zoned Public Zone I and is located inside the Urban Edge of George. Department of Agriculture has confirmed that the property is excempt from Act 70 of 70 and no studies are required.

Animal Species Theme (Medium sensitivity)

Based on a joint site inspection by the EAP and freshwater specialist, it was confirmed that the site where work must be undertaken is transformed and as such not in a natural/near natural condition.

An aquatic Faunal Compliance Statement has been compiled by Dr James Dabrowski.

Aquatic Biodiversity Theme (Very High Sensitivity)

The screening tool identified the aquatic biodiversity as "very high", due to the perennial watercourse traversing the property.

An Aquatic Impact Assessment was compiled by Dr James Dabrowski.

Archaeological and Cultural Heritage Theme (Very High Sensitivity)

The proposed works do not trigger any of the development activities listed in terms of Sections 34(1) and 38(1) of the National Heritage Resources Act, 1999 (Act 25 of 1999) ("NHRA"). The site is transformed through a natural river/watercourse, infrastructure, and erosion.

No further studies are required, and it is not deemed necessary to consult with Heritage Western Cape.

Civil Aviation Theme (High Sensitivity)

The rehabilitation of a river embankment will not exceed any of the Civil Aviation Regulations in terms of height and does not pose a threat to air traffic in terms of any obstruction.

SACAA will be approached for comment as part of the public participation process.

Defence Theme (Low sensitivity)

This theme is not relevant not applicable to the rehabilitation of a river embankment. No study is required.

Plant Species Theme (Low sensitivity)

The vegetation within the watercourse is dominated by alien invasive Kikuyu Grass, ornamental garden species, bug weed, pampas grass, wattle and other localised indigenous riparian vegetation.

An aquatic Flora Compliance Statement has been compiled by Dr James Dabrowski.

Terrestrial Theme Biodiversity (Very High Sensitivity)

The study site is small all although it forms part of a greater watercourse system it is not deemed sensitive. The work area will be restricted to where repairs are necessary.

Given the aquatic environment an aquatic **Terrestrial Biodiversity Compliance Statement** has been compiled by Dr James Dabrowski. **Cape Nature** will be approached for comment as part of the public participation process.

As per agreement with the Competent Authority, the Aquatic Impact Assessment, Fauna Compliance Statement, Flora Compliance Statement and Terrestrial Biodiversity Compliance Statement has been combined into a single report with separate sections detailing the above.

SECTION D: APPLICABLE LISTED ACTIVITIES

List the applicable activities in terms of the NEMA EIA Regulations

Activity No(s):	Provide the relevant Basic Assessment Activity(ies) as set out in Listing Notice 1	Describe the portion of the proposed development to which the applicable listed activity relates.
19	The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse;	Associated with installation of gabion boxes, reno matrasses and stormwater infrastructure to be installed and reinstated within the watercourse.
	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 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 (e) where such development is related to the development of a port or harbour, in which case activity in Listing Notice 2 applies.	
Activity No(s):	Provide the relevant Basic Assessment Activity(ies) as set out in Listing Notice 3	Describe the portion of the proposed development to which the applicable listed activity relates.
12	The clearance of an area of 300m ² or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan.	The workspace is within a watercourse. Garden Route Granite Fynbos does not occur within the river system or work areas. However, this listing is included for removal of vegetation that may be associated with installation of the gabions/reno mattresses, temporary diversion of the river during construction.
Note:		

The listed activities specified above must reconcile with activities applied for in the application form. The onus is on the Applicant to ensure that all applicable listed activities are included in the application. If a specific listed activity is not included in an Environmental Authorisation, a new application for Environmental Authorisation will have to be submitted.
Where additional listed activities have been identified, that have not been included in the application form, and amended

application form must be submitted to the competent authority.

List the applicable waste management listed activities in terms of the NEM:WA

Activity No{s}:	Provide the relevant Basic Assessment Activity(ies) as set out in Category A	Describe the portion of the proposed development to which the applicable listed activity relates.

List the applicable listed activities in terms of the NEM:AQA

Activity No(s):	Provide the relevant Listed Activity(ies)	Describe the portion of the proposed development to which the applicable listed activity relates.

SECTION E: PLANNING CONTEXT AND NEED AND DESIRABILITY

Provide a description of the preferred alternative. 1. To stabilize the embankment, the preferred alternative is to place gabions inside the perennial watercourse along Erf 21150 & 21151 (Figure 4). The gabions will be positioned in a curving manner to preserve the flow's characteristics and to prevent further erosion (Figure 5) (Figure 6). The following construction equipment will be used: Excavator Reno mattrasses Gabion baskets Stormwater pipe Geofabrics Rocks for filling the gabions Compacting equipment Formwork, reinforcing steel, and the necessary tools for assembly Equipment for construction of foundations where required Equipment for construction of inlet and outlet end walls The stream will be partially diverted to facilitate construction of the gabion boxes. The stormwater will be diverted by placing sandbags in the proposed area of construction. After construction, the streambed and embankments will be re-instated. Temporary access will be created along the elevated lawn area along the Molen River. This access will be rehabilitated once construction is complete. 2. Explain how the proposed development is in line with the existing land use rights of the property as you have indicated in the NOI and application form? Include the proof of the existing land use rights granted in Appendix E21. The site is located within Rosemoor suburb. The activity involves the rehabilitation of an embankment. The activity is not against the objective of Open Space Zone 1 since it involves protection of the river bank and rehabilitation. Explain how potential conflict with respect to existing approvals for the proposed site (as indicated in 3. the NOI/and or application form) and the proposed development have been resolved. Existing approvals: not to the knowledge of the EAP. Explain how the proposed development will be in line with the following? 4 4.1 The Provincial Spatial Development Framework. According to the Western Cape SDF, the protection and rehabilitation of river systems are a requirement. The Integrated Development Plan of the local municipality. 4.2 The proposed project complies with the disaster risk reduction plans and recommendations: Protecting water resources and water catchment areas and diversity where possible. Ensure the ongoing processes to the River Health Programme by using appropriate river • management and rehabilitation methods. 4.3. The Spatial Development Framework of the local municipality. George municipality SDF supports the rehabilitation of degraded areas.

4.4. The Environmental Management Framework applicable to the area.
Not ap	plicable.
5	Explain how comments from the relevant authorities and/or specialist(s) with respect to biodiversity
0.	have influenced the proposed development.
BGCM Aquati	A has confirmed that General Authorisation is required based on the outcome of the c Risk Matrix.
Early in alterna	nput from the aquatic specialist to the design engineer and Applicant resulted in a revised ative to focus only on the emergency repair work as presented in this application.
Further will be	comment from authorities will be considered once received in response to the DBAR. These considered and responded to in the Final Bar.
6.	Explain how the Western Cape Biodiversity Spatial Plan (including the guidelines in the handbook) has influenced the proposed development.
Accord fall wit rehabil are imp be rest of the v	ding to the Western Cape Biodiversity Spatial Plan for George, sections of the watercourse thin Aquatic CBA1 and ESA2 areas. The management objective of CBA1 includes the litation of degraded areas. ESA2 areas are not essential for meeting biodiversity targets but portant for supporting the functioning of more important CBA areas. ESAs should therefore ored or managed. In this respect, Alternative 1 is the most desirable as only a small section wetland will be affected by the stabilisation of the embankment (Dabrowski, 2022).
7.	Explain how the proposed development is in line with the intention/purpose of the relevant zones as defined in the ICMA.
Not ap	plicable.
8.	Explain whether the screening report has changed from the one submitted together with the application form. The screening report must be attached as Appendix I.
The sc applice	reening tool has not changed. It is still the same screening tool submitted with the ation form.
9.	Explain how the proposed development will optimise vacant land available within an urban area.
The pro	oposed development prevents any further erosion along Erf 21150 & Erf 21151.
10.	Explain how the proposed development will optimise the use of existing resources and infrastructure.
The pro locatio 21151)	oposed development will prevent further erosion of the river embankment in its current on. This, in turn, will protect the infrastructures of neighbouring properties (Erf 21150 & Erf as well as the Municipal sewer line that runs along this embankment.
11.	Explain whether the necessary services are available and whether the local authority has confirmed sufficient, spare, unallocated service capacity. (Confirmation of all services must be included in Appendix E16).
Not ap	plicable.
12.	In addition to the above, explain the need and desirability of the proposed activity or development in terms of this Department's guideline on Need and Desirability (March 2013) or the DEA's Integrated Environmental Management Guideline on Need and Desirability. This may be attached to this BAR as Appendix K.
"Need the pla	", as defined by DEADP refers to the timing of the proposal and the "Desirability" refers to acing of the proposed development.
The tim along o The Mu 30A Dir	hing is correct for this proposed activity because it is critical to stabilize the embankment erven 21150 and 21151 and along the municipal sewer line to prevent possible damages. unicipality initially request that the project be handled as emergency works under a Section rective however they were advised to follow a Basic Assessment process instead.
The pro	pposed activity is in context of need & desirability:

- It will have a positive impact on the ecological integrity of the area through river bank restoration.
- It is in context with the WCBSP (as described in section E nr. 6).
- The development will not result in the loss of biological diversity since rehabilitation forms part of the application.
- It will not pollute or degrade the biophysical environment on condition that the work be monitored during construction.
- No waste will be generated during its operational phase that will not be removed from the site.

In terms of **desirability** of this project, the location is site specific and dictates where the activity must be implemented. The location of this site with the sewer line and private properties being at risk further motivates in favour of implementing the necessary rehabilitation measures.

SECTION F: PUBLIC PARTICIPATION

The Public Participation Process ("PPP") must fulfil the requirements as outlined in the NEMA EIA Regulations and must be attached as Appendix F. Please note that If the NEM: WA and/or the NEM: AQA is applicable to the proposed development, an advertisement must be placed in at least two newspapers.

1. Exclusively for **linear activities**: Indicate what PPP was agreed to by the competent authority. Include proof of this agreement in Appendix E22.

2. Confirm that the PPP as indicated in the application form has been complied with. All the PPP must be included in Appendix

Refer to Appendix F for copies of advert, site notices, notifications & stakeholder register. Report will be updated with comments received once the comment period on the DBAR ends.

- Neighbouring property owners were identified using CapeFarmMapper,
- Select neighbouring property owners were compiled into a list sent to the George Municipality for confirmation of contact details,
- Key Authorities were identified according to whether or not they have a mandated interest in the area/site;
- Local Councillor was verified with the George Municipality;
- Site Notices were placed on site calling for I&APs to register and review the DBAR;
- Written notifications were sent to all potential I&APs via email/post/hand delivery informing of the availability of the DBAR and the opportunity to register as an I≈
- Advert appears in the George Herald for I&APs to register and submit comment on the DBAR.

Comments received in response to the DBAR or in request to be registered will be added to the Stakeholder Register and their submissions will be incorporated and reflected in the Final Basic Assessment Report.

3. Confirm which of the State Departments and Organs of State indicated in the Notice of Intent/application form were consulted with.

George Municipality

Garden Route District Municipality

BGCMA (Water Affairs)

George Municipality: Parks & Recreation

Cape Nature

SACAA

Department of Health

4. If any of the State Departments and Organs of State were not consulted, indicate which and why.

HWC – Section 38 of the NHRA is not triggered.

Prov Roads – Only Municipal Roads are being affected/used.

SANRAL – No national roads are involved.

- 5. if any of the State Departments and Organs of State did not respond, indicate which.
- 6. Provide a summary of the issues raised by I&APs and an indication of the manner in which the issues were incorporated into the development proposal.

To be supplied once comment has been received in response to the DBAR.

Note:

A register of all the I&AP's notified, including the Organs of State, <u>and</u> all the registered I&APs must be included in Appendix F. The register must be maintained and made available to any person requesting access to the register in writing.

The EAP must notify I&AP's that all information submitted by I&AP's becomes public information.

Your attention is drawn to Regulation 40 (3) of the NEMA EIA Regulations which states that "Potential or registered interested and affected parties, including the competent authority, may be provided with an opportunity to comment on reports and plans contemplated in subregulation (1) prior to submission of an application but **must** be provided with an opportunity to comment on such reports once an application has been submitted to the competent authority."

All the comments received from I&APs on the pre -application BAR (if applicable and the draft BAR must be recorded, responded to and included in the Comments and Responses Report and must be included in Appendix F.

All information obtained during the PPP (the minutes of any meetings held by the EAP with I&APs and other role players wherein the views of the participants are recorded) and must be included in Appendix F.

Please note that proof of the PPP conducted must be included in Appendix F. In terms of the required "proof" the following is required:

- a site map showing where the site notice was displayed, dated photographs showing the notice displayed on site and a copy of the text displayed on the notice;
 - in terms of the written notices given, a copy of the written notice sent, as well as:
 - if registered mail was sent, a list of the registered mail sent (showing the registered mail number, the name of the person the mail was sent to, the address of the person and the date the registered mail was sent);
 - if normal mail was sent, a list of the mail sent (showing the name of the person the mail was sent to, the address
 of the person, the date the mail was sent, and the signature of the post office worker or the post office stamp
 indicating that the letter was sent);
 - if a facsimile was sent, a copy of the facsimile Report;
 - o if an electronic mail was sent, a copy of the electronic mail sent; and
 - if a "mail drop" was done, a signed register of "mail drops" received (showing the name of the person the notice was handed to, the address of the person, the date, and the signature of the person); and
- a copy of the newspaper advertisement ("newspaper clipping") that was placed, indicating the name of the newspaper and date of publication (of such quality that the wording in the advertisement is legible).

SECTION G: DESCRIPTION OF THE RECEIVING ENVIRONMENT

All specialist studies must be attached as Appendix G.

1. GROUNDWATER

1.1.	Was a specialist study conducted?	YES	NO
1.2.	Provide the name and or company who conducted the specialist study.		
1.3.	Indicate above which aquifer your proposed development will be located and e proposed development.	xplain how this ha	s influenced your
Aquife	er type and yield: Intergranular and fractured 0.1 – 0.5 l/s.		
Groun	dwater quality: 150 – 370 mS/m.		
1.4.	Indicate the depth of groundwater and explain how the depth of groundwate influenced your proposed development.	r and type of aqu	uifer (if present) has
Depth	of Groundwater: 20.88 mbgl.		

2. SURFACE WATER

2.1.	Was a specialist study conducted?	YES	NO
2.2.	Provide the name and/or company who conducted the specialist study.		
Dr Jan	nes Dabrowski (Confluent Consulting)		
2.3.	Explain how the presence of watercourse(s) and/or wetlands on the property(ies) development.	has influenced yo	our proposed
The main intention of the proposed activity is to rehabilitate a portion of the eroded Molen River			

The main intention of the proposed activity is to rehabilitate a portion of the eroded Molen River embankment to protect properties located immediately adjacent to the watercourse. This activity is considered a necessity in order to protect municipal infrastructure (sewer line) and private properties.

Input was obtained from an aquatic specialist (for planning and design) and the BGCMA has been consulted to ensure that the design/proposal will not compromise the integrity of the system any further.

3. COASTAL ENVIRONMENT

3.1.	Was a specialist study conducted?	YES	NO
3.2.	Provide the name and/or company who conducted the specialist study.		
3.3.	Explain how the relevant considerations of Section 63 of the ICMA were taken influenced your proposed development.	n into account a	nd explain how this
3.4.	Explain how estuary management plans (if applicable) has influenced the propo	sed development	

35	Explain how the modelled coastal risk zones, the coastal protection zone, I	ittoral active zone and	estuarine functiona
0.0.	zones, have influenced the proposed development.		
4	BIODIVERSITY		
4.1.	Were specialist studies conducted?	YES	NO
4.2.	Provide the name and/or company who conducted the specialist studies.		
Dr Iai	imes Dabrowski (Confluent Consulting) conducted all of the s	necialist studies fo	r fauna botar
Dr Jai	mes Dabrowski (Confluent Consulting) conducted all of the s	pecialist studies fo	r fauna, botar
Dr Jai and b	mes Dabrowski (Confluent Consulting) conducted all of the s piodiversity since the environment is that of an aquatic system.	pecialist studies fo	r fauna, botar
Dr Jai and k 4.3.	Imes Dabrowski (Confluent Consulting) conducted all of the s piodiversity since the environment is that of an aquatic system. Explain which systematic conservation planning and other biodiversity inform NSBA etc. have been used and how has this influenced your proposed devi	pecialist studies for mants such as vegetatic elopment.	r fauna, botar n maps, NFEPA,
Dr Ja and k 4.3.	Imes Dabrowski (Confluent Consulting) conducted all of the s biodiversity since the environment is that of an aquatic system. Explain which systematic conservation planning and other biodiversity inform NSBA etc. have been used and how has this influenced your proposed devi NSBA	pecialist studies for mants such as vegetatic elopment.	n maps, NFEPA,
Dr Ja and k 4.3.	Imes Dabrowski (Confluent Consulting) conducted all of the s biodiversity since the environment is that of an aquatic system. Explain which systematic conservation planning and other biodiversity inform NSBA etc. have been used and how has this influenced your proposed devi NSBA NFEPA	pecialist studies for mants such as vegetatic elopment.	r fauna, botar n maps, NFEPA,
Dr Ja and k 4.3.	Imes Dabrowski (Confluent Consulting) conducted all of the s biodiversity since the environment is that of an aquatic system. Explain which systematic conservation planning and other biodiversity inform NSBA etc. have been used and how has this influenced your proposed devi NSBA NFEPA Cape Farm Mapper	pecialist studies for mants such as vegetatic elopment.	r fauna, botar n maps, NFEPA,
Dr Jai and k 4.3.	Imes Dabrowski (Confluent Consulting) conducted all of the s biodiversity since the environment is that of an aquatic system. Explain which systematic conservation planning and other biodiversity inform NSBA etc. have been used and how has this influenced your proposed devi NSBA NFEPA Cape Farm Mapper SANBI	pecialist studies fo nants such as vegetatic elopment.	n maps, NFEPA,

- Western Cape Biodiversity Programme
- Consideration of rare/endangered species
- Site- and species-specific surveys conducted by the specialist to determine applicability and correctness of the Screening Tool.

Explain how the objectives and management guidelines of the Biodiversity Spatial Plan have been used and how has 4.4. this influenced your proposed development.

According to the Western Cape Biodiversity Spatial Plan for George, sections of the watercourse fall within CBA1 and ESA2 areas (Figure 9). The management objective of CBA1 includes the rehabilitation of degraded areas. ESA2 areas are not essential for meeting biodiversity targets but are important for supporting the functioning of more important CBA areas. ESAs should therefore be restored or managed. In this respect, Alternative 1 is the most desirable as only a small section of the wetland will be affected by the stabilisation of the embankment (Dabrowski, 2022).



Figure 9: Map of the stream bank protection in relation to the WCBSP (Map provided by Dr James Dabrowski, 2022).

Explain what impact the proposed development will have on the site specific features and/or function of the 4.5. Biodiversity Spatial Plan category and how has this influenced the proposed development.

According to the Terrestrial Biodiversity Compliance Statement (dated August 2022), the proposed activity will have **no negative** impact on the Terrestrial Biodiversity of the stie.

The site has been transformed from Garden Route Granite Fynbos to mowed and maintained kikuyu lawns (Figure 10). Therefore, its Terrestrial Biodiversity should be considered as <u>low</u> rather than very high. The activity will not result in any further loss or disturbance of the ecosystem or any other natural terrestrial habitat. Although the gabions are placed within an area designated as Terrestrial CBA2, they are placed along the banks of a wetland and therefore considered to be an aquatic feature.

The proposed activity will have no impact and/or will not modify the following:

- The Terrestrial Biodiversity Area (CBA2)
- The Ecosystem Support Area (ESA2)
- The yield of the catchment area
- The ability of the watercourse to continue supplying water
- The quality of the water further downstream



Т	he proposed activity is n	ot located in a protected	d area.	
4	.7. Explain how the prese development.	ence of fauna on and adjace	nt to the proposed developr	nent has influenced your proposed
	Animal species	Visual survey	Habitat	Sensitivity of this site
	Afrixalus knysnae	Not observed	Highly unlikely to occur	Low
	Chlorotalpa duthieae	Not observed	Highly unlikely to occur	Low
	Sensitive species 8	Not observed	Highly unlikely to occur	Low
	Aneuryphymus montanus	Not observed	Highly unlikely to occur	Low

Dr James Dabrowski stated that the species sensitivity is considered as **Low**.

5. GEOGRAPHICAL ASPECTS

Explain whether any geographical aspects will be affected and how has this influenced the proposed activity or development.

No geographical aspects will be affected.

6. HERITAGE RESOURCES

6.1.	Was a specialist study conducted?	YES	NO
6.2.	Provide the name and/or company who conducted the specialist study.		
6.3.	Explain how areas that contain sensitive heritage resources have influenced the p	proposed develop	oment.

7. HISTORICAL AND CULTURAL ASPECTS

Explain whether there are any culturally or historically significant elements as defined in Section 2 of the NHRA that will be affected and how has this influenced the proposed development.

There are no culturally or historically significant elements.

8. SOCIO/ECONOMIC ASPECTS

8.1. Describe the existing social and economic characteristics of the community in the vicinity of the proposed site.

Rosemoor suburb is considered a Priority Investment Area. According to George SDF (2017), Rosemoor is one of several suburbs that is predominantly residential in nature, underprovided in places of work and social facilities, and poorly integrated with the rest of George. Rosemoor has been identified as a suburb where the Municipality will encourage urban sprawl through mixed-use development with a variety of housing types.

8.2. Explain the socio-economic value/contribution of the proposed development.

Because Rosemoor has been identified for urban sprawl, it is critical to preserve its watercourses and rehabilitate areas of immediate risk.

8.3. Explain what social initiatives will be implemented by applicant to address the needs of the community and to uplift the area.

The Applicant will look to employ labour from the local municipal area.

It is recommended that an environmental awareness programme be initiated by the Municipality to inform residents of the need to protect and buffer aquatic system in a natural manner rather than removing indigenous vegetation and converting the open space areas (intended to protect the riverine system) to recreational / parks type areas. The open space areas along this river has been mowed and residents in Molen Close has effectively extended their gardens into the Municipal Open Space as well as erected structures that compromise the integrity of the open space system and functionality. By continuing with this approach the residents and Municipality (by allowing it) contributes to and increases the risk of continued river bank failure and erosion.

8.4. Explain whether the proposed development will impact on people's health and well-being (e.g. in terms of noise, odours, visual character and sense of place etc) and how has this influenced the proposed development.

The key social issues associated with the proposed activity may include some temporary negative impacts:

(i) Security and safety risk posed by workers.

(ii) Noise associated with the movement of vehicles.

(iii) Improvement and restoration of the river bank reducing risk of flooding and property damage.

SECTION H: ALTERNATIVES, METHODOLOGY AND ASSESSMENT OF ALTERNATIVES

1. DETAILS OF THE ALTERNATIVES IDENTIFIED AND CONSIDERED

1.1. Property and site alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.

Provide a description of the preferred property and site alternative.

A portion of Remainder of Farm 464, Rosemoor, George.

The preferred alternative site is specifically as per the development proposal for the area of concern is located on RE/464 along erven 21150 & 21151.

Provide a description of any other property and site alternatives investigated.

Site alternative was originally all the way from Grens Street (crossing of Molen River) in the south, to the top/northern extent of the preferred alternative.

The aquatic specialist deemed this extent of intervention to be excessive and recommended the preferred alternative. The motivation was submitted that the extent of erosion damage along the rest of the river bank (towards Grens Street) is not excessive and that there is sufficient space between the river bank and private properties/sewer line along this portion of the river to accommodate natural river bank erosion).

Provide a motivation for the preferred property and site alternative including the outcome of the site selection matrix.

The preferred alternative is specifically located along the eastern bank closest to Erven 21150 & 21151, since the sewer line is compromised as well as the two private properties that are at risk of

being damaged should the bank erode any further.

Provide a full description of the process followed to reach the preferred alternative within the site.

Dr James Dabrowski was requested to inspect the site. Upon detailed investigation he confirmed that the extent of erosion damage at the preferred site location is such that immediate intervention is required.

The southern portion of the river bank down to Grens Street is not affected as badly by erosion and the remainder of river bank and open space between the river/sewer line and private properties are such that natural erosion will not necessarily compromise these assets.

The need and desirability of implementing a full intervention all the way down to Grens Street was therefore deemed insufficient.

The area of imminent threat (to the sewer line and private properties) were identified and the preferred alternative designed in accordance.

The design of the preferred alternative was also informed by input from the aquatic specialist to have a curved alignment rather than a straight alignment.

Provide a detailed motivation if no property and site alternatives were considered.

List the positive and negative impacts that the property and site alternatives will have on the environment.

Positive:

Erven 21150 & 21151 will no longer be at risk.

Municipal sewer line will not be at risk.

Negative:

Interventions of this nature could potentially result in indirect impacts such as downstream erosion. However the design (curved rather than linear) is intended to mitigate such unintended impacts.

1.2. Activity alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.

Provide a description of the preferred activity alternative.

The preferred activity is to place gabions inside the perennial watercourse along the eastern bank of the river next to Erf 21150 & 21151 (Figure 4). The gabions will be positioned in a curving manner to preserve the flow's characteristics and to prevent further erosion downstream (Figure 5) (Figure 6).

Provide a description of any other activity alternatives investigated.

The option of re-routing the river in a straight alignment (to effectively cut out the current eroded bend area) was considered, however the aquatic specialist considered historical imagery and found that the river naturally made this curve over time (which the existing stormwater outlet exacerbated erosion over time), therefore changing the natural course of the river (from a bend to a straight) is unwanted. This option was eliminated as an alternative.

Provide a motivation for the preferred activity alternative.

Focussing on the emergency area is cost effective and will provide an increases risk management to the municipal sewer and private properties.

Provide a detailed motivation if no activity alternatives exist.

List the positive and negative impacts that the activity alternatives will have on the environment.

Positive:

- Adjacent properties will no longer be at risk of damage from flood events or structural failure;
- Municipal sewer line will be protected from damage which will result in environmental pollution with raw sewage polluting the water system.

Negative:

• Temporary noise during construction.

1.3.	Design or layout alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise
	positive impacts
Provide c	a description of the preferred design or layout alternative.

Alternative 1 (preferred design)

To stabilize the embankment, the preferred alternative is to place gabions inside the perennial watercourse along Erf 21150 & 21151 (Figure 4).

The gabions will be positioned in a curving manner along the natural bend of the river, to preserve the flow's characteristics and to prevent further erosion (Figure 5) (Figure 6). The following construction equipment will be used:

- Excavator
- Reno mattrasses
- Gabion baskets
- Stormwater pipe
- Geofabrics
- Rocks for filling the gabions
- Compacting equipment
- Formwork, reinforcing steel, and the necessary tools for assembly
- Equipment for construction of foundations where required
- Equipment for construction of inlet and outlet end walls

The stream will be partially diverted within the streambed during construction, to facilitate construction of the gabion boxes.

Stormwater from the existing stormwater outlet in this eroded bend, will be temporarily diverted by placing sandbags in the proposed area of construction. After construction, the streambed and embankments will be re-instated.

Access along Molen River will be within the open space along the eastern bank. This temporary access will be closed and rehabilitated once construction is complete.

Provide a description of any other design or layout alternatives investigated.

<u>Alternative 2</u>

This alternative proposes the placement of gabions along the entire length of the stream from Erf 21151, all the way to Grens Road. Properties along this alternative are however set far back from the channel and are therefore not at imminent risk.

The level of intervention (in the river system) is not deemed appropriate given that this stretch of the river is not badly compromised.

This alternative has been eliminated in favour of the preferred alternative that is cost effective and will achieve the best environmental outcome (being least invasive) whilst achieving structure and property protection.

Provide a motivation for the preferred design or layout alternative.

The preferred design will alleviate the immediate risk to adjacent properties/municipal • sewer line in a cost effective manner. All impacts can be mitigated to a minor or negligible level. The preferred design will result in less disturbance and modification of the riverine system. • Provide a detailed motivation if no design or layout alternatives exist. List the positive and negative impacts that the design alternatives will have on the environment. Alternative 1 (preferred alternative) Positive: Alleviate the immediate risk to adjacent properties/sewer line without unnecessary environmental impacts. Negative: There is always a possibility of indirect negative impacts. These impacts can however be mitigated to a minor or negligible level. Alternative 2 (eliminated) Positive: Alleviate risk to properties along the entire length of the stream from Erf 21151, all the way to Grens Street. This is considered unnecessary as properties along this alternative are set far back from the channel and not at imminent risk. Negative: All impacts cannot be mitigated to a minor or negligible level. Technology alternatives (e.g., to reduce resource demand and increase resource use efficiency) to avoid 1.4. negative impacts, mitigate unavoidable negative impacts and maximise positive impacts Provide a description of the preferred technology alternative: Not applicable (the proposed project does not need technology in its operational phase). Provide a description of any other technology alternatives investigated. Not applicable. Provide a motivation for the preferred technology alternative. Not applicable. Provide a detailed motivation if no alternatives exist. Not applicable. List the positive and negative impacts that the technology alternatives will have on the environment. Not applicable. 1.5. Operational alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts. Provide a description of the preferred operational alternative. Nadeson Consulting Services (2022) stated that gabions should be inspected for differential settlement after a large storm as well as annually to detect damages or abnormalities (building, broken components, corrosion of mesh baskets, vegetation growth or vandalism). It should furthermore be maintained and/or repaired on site. Maintenance of the structure must be undertaken in terms of the Management & Maintenance Plan. Provide a description of any other operational alternatives investigated.

Provide a motivation for the preferred operational alternative.

The preferred operational alternative will prevent the degradation of the gabion structures. The structural integrity of the wall will also be maintained.

Provide a detailed motivation if no alternatives exist.

List the positive and negative impacts that the operational alternatives will have on the environment.

1.6.The option of not implementing the activity (the 'No-Go' Option).Provide an explanation as to why the 'No-Go' Option is not preferred.

The adjacent properties will continue to be at risk and because the erosion takes place on Municipal land, should the Municipality not act the private owners may deem it fit to take legal action against the municipality in the event of damages to their property.

The municipal sewer line running along the eastern embankment could be damaged to the extent that raw sewage will then enter the aquatic habitat and water system with negative damaging impacts.

negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternative exist.	1.7.	Provide and explanation as to whether any other alternatives to avoid negative impacts, mitigate unavoidable
exist.		negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives
		exist.

1.8.	Provide a concluding statement indicating the preferred alternatives, including the preferred location of the
	activity.

The preferred activity is to place gabions inside the perennial watercourse along Erf 21150 & 21151 (Figure 4) on remainder of Farm 464. The gabions will be positioned in a curving manner to preserve the flow's characteristics and to prevent further erosion (Figure 5) (Figure 6).

The following construction equipment will be used:

- Excavator
- Reno mattrasses
- Gabion baskets
- Stormwater pipe
- Geofabrics
- Rocks for filling the gabions
- Compacting equipment
- Formwork, reinforcing steel, and the necessary tools for assembly
- Equipment for construction of foundations where required
- Equipment for construction of inlet and outlet end walls

The stream will be partially diverted to facilitate construction of the gabion boxes. The stormwater will be diverted by placing sandbags in the proposed area of construction. After construction, the streambed and embankments will be re-instated.

The preferred design will alleviate the immediate risk to adjacent properties and will result in less disturbance and modification of the wetland. All impacts can be mitigated to a minor or negligible level.

2. "NO-GO" AREAS

Explain what "no-go" area(s) have been identified during identification of the alternatives and provide the co-ordinates of the "no-go" area(s).

Areas will be demarcated to prevent access to no-go areas along the remainder of the river bank.

3. METHODOLOGY TO DETERMINE THE SIGNIFICANCE RATINGS OF THE POTENTIAL ENVIRONMENTAL IMPACTS AND RISKS ASSOCIATED WITH THE ALTERNATIVES.

Describe the methodology to be used in determining and ranking the nature, significance, consequences, extent, duration of the potential environmental impacts and risks associated with the proposed activity or development and alternatives, the degree to which the impact or risk can be reversed and the degree to which the impact and risk may cause irreplaceable loss of resources.

Criteria for Assessment

These criteria are drawn from the EIA Regulations, published by the Department of Environmental Affairs and Tourism (April 1998) in terms of the Environmental Conservation Act No. 73 of 1989.

These criteria include:

• Nature of the impact

This is the appraisal 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.

• Extent of the impact

Describe whether the impact will be: local extending only as far as the development site area; or limited to the site and its immediate surroundings; or will have an impact on the region, or will have an impact on a national scale or across international borders.

• Duration of the impact

The specialist / EAP should indicate whether the lifespan of the impact would be short term (0-5 years), medium term (5-15 years), long term (16-30 years) or permanent.

Intensity

The specialist / EAP should establish whether the impact is destructive or benign and should be qualified as low, medium or high. The study must attempt to quantify the magnitude of the impacts and outline the rationale used.

• Probability of occurrence

The specialist / EAP should describe the probability of the impact actually occurring and should be described as improbable (low likelihood), probable (distinct possibility), highly probable (most likely) or definite (impact will occur regardless of any prevention measures).

The impacts should also be assessed in terms of the following aspects:

• Legal requirements

The specialist / EAP should identify and list the relevant South African legislation and permit requirements pertaining to the development proposals. He / she should provide reference to the procedures required to obtain permits and describe whether the development proposals

contravene the applicable legislation.

• Status of the impact

The specialist / EAP should determine whether the impacts are negative, positive or neutral ("cost – benefit" analysis). The impacts are to be assessed in terms of their effect on the project and the environment. For example, an impact that is positive for the proposed development may be negative for the environment. It is important that this distinction is made in the analysis.

Accumulative impact

Consideration must be given to the extent of any accumulative impact that may occur due to the proposed development. Such impacts must be evaluated with an assessment of similar developments already in the environment. Such impacts will be either positive or negative, and will be graded as being of negligible, low, medium or high impact.

• Degree of confidence in predictions

The specialist / EAP should state what degree of confidence (low, medium or high) is there in the predictions based on the available information and level of knowledge and expertise.

Based on a synthesis of the information contained in the above-described procedure, you are required to assess the potential impacts in terms of the following significance criteria:

No significance: the impacts do not influence the proposed development and/or environment in any way.

Low significance: the impacts will have a minor influence on the proposed development and/or environment. These impacts require some attention to modification of the project design where possible, or alternative mitigation.

Moderate significance: the impacts will have a moderate influence on the proposed development and/or environment. The impact can be ameliorated by a modification in the project design or implementation of effective mitigation measures.

High significance: the impacts will have a major influence on the proposed development and/or environment and will result in the "no-go" option on the development or portions of the development regardless of any mitigation measures that could be implemented. This level of significance must be well motivated.

4. ASSESSMENT OF EACH IMPACT AND RISK IDENTIFIED FOR EACH ALTERNATIVE

Note: The following table serves as a guide for summarising each alternative. The table should be repeated for each alternative to ensure a comparative assessment. The EAP may decide to include this section as Appendix J to this BAR.

	Aquatic			
Alternative:	Alternative 1	Alternative 2		
PLANNING, DESIGN AND DEVELOPMENT PHASE				
Potential impact and risk:	Increased stream velocity	Increased stream velocity		
Nature of impact:	Increased stream velocity by hardening of the bank	Increased stream velocity by hardening of the bank		
Extent and duration of impact:	Very limited, Permanent	Very limited, Permanent		
Consequence of impact or risk:	Can cause problems further downstream (increase erosive forces)	Can cause problems further downstream (increase erosive forces)		
Probability of occurrence:	Likely	Almost certain		
Degree to which the impact may cause irreplaceable loss of resources:	Low	Low		
Degree to which the impact can be reversed:	High	High		
Indirect impacts:				
Cumulative impact prior to mitigation:	Moderate	Very high		
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Minor	Moderate		
Degree to which the impact can be avoided:				

Degree to which the impact can be managed:		
Degree to which the impact can be mitigated:		
Proposed mitigation:	The profile of the gabions must mimic the curved profile of could enhance the deflection of flow energy. After an extended period of monitoring, provisions should in fact necessary.	of the embankment to avoid creating sharp angles which be made to determine whether additional protection is
Residual impacts:		
Cumulative impact post mitigation:	Low	High
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Minor	Moderate
Potential impact and risk:	Scouring of bed and banks	Scouring of bed and banks
Nature of impact:	Scouring of bed and banks caused by stormwater discharge at Erf 21150	Scouring of bed and banks caused by stormwater discharge at Erf 21150
Nature of impact: Extent and duration of impact:	Scouring of bed and banks caused by stormwater discharge at Erf 21150 Very limited, Permanent	Scouring of bed and banks caused by stormwater discharge at Erf 21150 Very limited, Permanent
Nature of impact: Extent and duration of impact: Consequence of impact or risk:	Scouring of bed and banks caused by stormwater discharge at Erf 21150 Very limited, Permanent Loss of pattern and process	Scouring of bed and banks caused by stormwater discharge at Erf 21150 Very limited, Permanent Loss of pattern and process
Nature of impact: Extent and duration of impact: Consequence of impact or risk: Probability of occurrence:	Scouring of bed and banks caused by stormwater discharge at Erf 21150 Very limited, Permanent Loss of pattern and process Certain	Scouring of bed and banks caused by stormwater discharge at Erf 21150 Very limited, Permanent Loss of pattern and process Certain
Nature of impact: Extent and duration of impact: Consequence of impact or risk: Probability of occurrence: Degree to which the impact may cause irreplaceable loss of resources:	Scouring of bed and banks caused by stormwater discharge at Erf 21150 Very limited, Permanent Loss of pattern and process Certain Low	Scouring of bed and banks caused by stormwater discharge at Erf 21150 Very limited, Permanent Loss of pattern and process Certain Low
Nature of impact: Extent and duration of impact: Consequence of impact or risk: Probability of occurrence: Degree to which the impact may cause irreplaceable loss of resources: Degree to which the impact can be reversed:	Scouring of bed and banks caused by stormwater discharge at Erf 21150 Very limited, Permanent Loss of pattern and process Certain Low High	Scouring of bed and banks caused by stormwater discharge at Erf 21150 Very limited, Permanent Loss of pattern and process Certain Low High
Nature of impact: Extent and duration of impact: Consequence of impact or risk: Probability of occurrence: Degree to which the impact may cause irreplaceable loss of resources: Degree to which the impact can be reversed: Indirect impacts:	Scouring of bed and banks caused by stormwater discharge at Erf 21150 Very limited, Permanent Loss of pattern and process Certain Low High None	Scouring of bed and banks caused by stormwater discharge at Erf 21150 Very limited, Permanent Loss of pattern and process Certain Low High None

Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Moderate	Moderate
Degree to which the impact can be avoided:		
Degree to which the impact can be managed:		
Degree to which the impact can be mitigated:		
Proposed mitigation:	The gabion design must incorporate measures to dissipate outlet.	e the energy of stormwater discharge from the pipe
Residual impacts:	None	None
Cumulative impact post mitigation:	Very Low	Very Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Negligible	Negligible
Potential impact and risk:	Loss of wetland habitat	Loss of wetland habitat
Nature of impact:	Loss of wetland habitat caused by installation of gabions for streambank protection	Loss of wetland habitat caused by installation of gabions for streambank protection
Extent and duration of impact:	Very limited, Permanent	Very limited, Permanent
Consequence of impact or risk:	Loss of pattern and process	Loss of pattern and process
Probability of occurrence:	Certain	Certain
Degree to which the impact may cause irreplaceable loss of resources:	Low	Low
Degree to which the impact can be reversed:	High	High

Indirect impacts:	None	None
Cumulative impact prior to mitigation:	Low	High
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Moderate	Moderate
Degree to which the impact can be avoided:		
Degree to which the impact can be managed:		
Degree to which the impact can be mitigated:		
Proposed mitigation:	Areas where instream construction activities will take pl prevent unnecessary disturbance of instream and ripariar Prevent uncontrolled access of vehicles into the watercou All waste materials must be collected and disposed of at The laydown area and stockpiles materials must be plac as possible) and protect (e.g., through use of sandbags of the watercourse.	ace must be confined to clearly demarcated areas to habitat. Urse. a suitable waste facility. ed outside of the channel of the watercourse (on as flat and/or tarpaulins) to prevent materials being washed into
Residual impacts:	None	None
Cumulative impact post mitigation:	Very Low	Moderate
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Minor	Moderate
Potential impact and risk:	Sedimentation of wetland habitat	Sedimentation of wetland habitat
Nature of impact:	Sedimentation of wetland habitat caused by disturbance of bed and banks during placement of gabions	Sedimentation of wetland habitat caused by disturbance of bed and banks during placement of gabions

Extent and duration of impact:	Very limited, short term	Very limited, short term
Consequence of impact or risk:	Loss of pattern and process	Loss of pattern and process
Probability of occurrence:	Certain	Certain
Degree to which the impact may cause irreplaceable loss of resources:	Low	Low
Degree to which the impact can be reversed:	High	High
Indirect impacts:	None	None
Cumulative impact prior to mitigation:	Low	High
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Minor	Minor
Degree to which the impact can be avoided:		
Degree to which the impact can be managed:		
Degree to which the impact can be mitigated:		
	Construction activities must be timed to coincide with low rainfall probability (dry season) to avoid erosion of exposed banks.	
Proposed mitigation:	A temporary check dam (using sandbags) should be established upstream of the construction site to create dry working conditions. Water from upstream should be transferred through the construction area by an appropriately sized flexible pipe.	
	Temporary straw-bale check dams can be placed across the channel, immediately downstream of the streambank protection as a back-up to trap high levels of sediment in the event of a high rainfall event. These must be removed as soon as construction is complete.	
	A construction schedule must be developed and clearly defined to avoid multiple sites being exposed and unattended to at any moment in time. The completion date for each phase of development must be indicated	

	and all clearing, excavation, and stabilisation operations must be completed before moving onto the next phase.	
	Stockpiles of construction materials must be placed outside of the channel of the watercourse (on as flat an area as possible) and protected (e.g., through use of sandbags and/or tarpaulins) to prevent materials being washed into the watercourse.	
	The area(s) chosen for the stockpiling of imported building materials should be demarcated, and notices put up declaring what must be stockpiled where.	
	Following the installation of gabions, any exposed banks must be stabilised with appropriate geotextiles or vegetated with appropriate indigenous vegetation.	
Residual impacts:	None	None
Cumulative impact post mitigation:	Very Low	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Minor	Moderate
Potential impact and risk:	Disturbance and pollution of wetland habitat	Disturbance and pollution of wetland habitat
Potential impact and risk: Nature of impact:	Disturbance and pollution of wetland habitatDisturbance and pollution of wetland caused by operation of vehicles and machinery near the channel of the wetland	Disturbance and pollution of wetland habitatDisturbance and pollution of wetland caused by operation of vehicles and machinery near the channel of the wetland
Potential impact and risk: Nature of impact: Extent and duration of impact:	Disturbance and pollution of wetland habitatDisturbance and pollution of wetland caused by operation of vehicles and machinery near the channel of the wetlandVery limited, short term	Disturbance and pollution of wetland habitatDisturbance and pollution of wetland caused by operation of vehicles and machinery near the channel of the wetlandVery limited, short term
Potential impact and risk: Nature of impact: Extent and duration of impact: Consequence of impact or risk:	Disturbance and pollution of wetland habitatDisturbance and pollution of wetland caused by operation of vehicles and machinery near the channel of the wetlandVery limited, short termLoss of pattern and process	Disturbance and pollution of wetland habitatDisturbance and pollution of wetland caused by operation of vehicles and machinery near the channel of the wetlandVery limited, short termLoss of pattern and process
Potential impact and risk: Nature of impact: Extent and duration of impact: Consequence of impact or risk: Probability of occurrence:	Disturbance and pollution of wetland habitatDisturbance and pollution of wetland caused by operation of vehicles and machinery near the channel of the wetlandVery limited, short termLoss of pattern and processProbably	Disturbance and pollution of wetland habitatDisturbance and pollution of wetland caused by operation of vehicles and machinery near the channel of the wetlandVery limited, short termLoss of pattern and processProbably
Potential impact and risk: Nature of impact: Extent and duration of impact: Consequence of impact or risk: Probability of occurrence: Degree to which the impact may cause irreplaceable loss of resources:	Disturbance and pollution of wetland habitatDisturbance and pollution of wetland caused by operation of vehicles and machinery near the channel of the wetlandVery limited, short termLoss of pattern and processProbablyLow	Disturbance and pollution of wetland habitatDisturbance and pollution of wetland caused by operation of vehicles and machinery near the channel of the wetlandVery limited, short termLoss of pattern and processProbablyLow
Potential impact and risk: Nature of impact: Extent and duration of impact: Consequence of impact or risk: Probability of occurrence: Degree to which the impact may cause irreplaceable loss of resources: Degree to which the impact can be reversed:	Disturbance and pollution of wetland habitatDisturbance and pollution of wetland caused by operation of vehicles and machinery near the channel of the wetlandVery limited, short termLoss of pattern and processProbablyLowHigh	Disturbance and pollution of wetland habitatDisturbance and pollution of wetland caused by operation of vehicles and machinery near the channel of the wetlandVery limited, short termLoss of pattern and processProbablyLowHigh

Cumulative impact prior to mitigation:	Low	Low
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Negligible	Negligible
Degree to which the impact can be avoided:		
Degree to which the impact can be managed:		
Degree to which the impact can be mitigated:		
	Gabions will be packed by manual labour.	
	No vehicles to operate within 5 m of the edge of the channel. Area must be demarcated to prevent access. Vehicles may only approach within 5 m where gabion materials need to be off-loaded.	
	Excavators and all other machinery and vehicles must be checked for oil and fuel leaks daily. No machinery or vehicles with leaks are permitted to work in the watercourse.	
	No fuel storage, refuelling, vehicle maintenance or vehicle depots to be allowed within the delineated area of the wetlands.	
Proposed mitigation:	Refuelling and fuel storage areas, and areas used for the servicing or parking of vehicles and machinery, must be located on impervious bases and should have bunds around them (sized to contain 110 % of the tank capacity) to contain any possible spills. These areas must not be located within any natural drainage areas or preferential flow paths and must be located more than 20 m away from the delineated area of each wetland.	
	Chemical toilets should be provided on-site at 1 toilet per	10 persons.
	Waste from chemical toilets must be disposed of regularly (at least once a week) in a responsible manner by a registered waste contractor.	
	Cement/concrete used in the construction must not be mixed on bare ground or within the watercourse. An impermeable/bunded area must be established in such a way that cement slurry, runoff and cement water will be contained and will not flow into the surrounding environment, the stream or riparian zone or contaminate the soil.	
	Workers must be properly instructed in the proper care of disturbance of nesting and roosting areas, disposal of hun	the environment, especially with respect to poaching, nan waste, garbage etc.

	All waste generated on-site during construction must be adequately managed; and	
	Separation and recycling of different waste materials should be supported.	
Residual impacts:	None	None
Cumulative impact post mitigation:	Low	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Negligible	Negligible
Potential impact and risk:	Disturbance and pollution of wetland habitat	Disturbance and pollution of wetland habitat
Nature of impact:	Disturbance and pollution of wetland caused by presence of construction personnel within the wetland	Disturbance and pollution of wetland caused by presence of construction personnel within the wetland
Extent and duration of impact:	Very limited, Brief	Very limited, Brief
Consequence of impact or risk:	Loss of pattern and process	Loss of pattern and process
Probability of occurrence:	Probably	Probably
Degree to which the impact may cause irreplaceable loss of resources:	Low	Low
Degree to which the impact can be reversed:	High	High
Indirect impacts:	None	None
Cumulative impact prior to mitigation:	Low	Low
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Negligible	Negligible
Degree to which the impact can be avoided:		

Degree to which the impact can be managed:		
Degree to which the impact can be mitigated:		
	Chemical toilets should be provided on-site at 1 toilet per	10 persons.
	Waste from chemical toilets must be disposed of regularly (at least once a week) in a responsible manner by a registered waste contractor.Cement/concrete used in the construction must not be mixed on bare ground or within the watercourse. An impermeable/bunded area must be established in such a way that cement slurry, runoff and cement water will be contained and will not flow into the surrounding environment, the stream or riparian zone or contaminate the soil.Workers must be properly instructed in the proper care of the environment, especially with respect to poaching, disturbance of nesting and roosting areas, disposal of human waste, garbage etc.	
Proposed mitigation:		
	All waste generated on-site during construction must be c	idequately managed; and
	Separation and recycling of different waste materials should be supported.	
Residual impacts:	None	None
Cumulative impact post mitigation:	Very Low	Very Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Negligible	Negligible
OPERATIONAL PHASE		
Potential impact and risk:	Scouring	Scouring
Nature of impact:	Scouring caused by the presence of gabion structures.	Scouring caused by the presence of gabion structures.
Extent and duration of impact:	Very limited, Ongoing	Very limited, Ongoing
Consequence of impact or risk:	Loss of pattern and process	Loss of pattern and process

Probability of occurrence:	Probably	Probably
Degree to which the impact may cause irreplaceable loss of resources:	Low	Low
Degree to which the impact can be reversed:	High	High
Indirect impacts:	None	None
Cumulative impact prior to mitigation:	Moderate	High
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Negligible	Negligible
Degree to which the impact can be avoided:		
Degree to which the impact can be managed:		
Degree to which the impact can be mitigated:		
	The most upstream and downstream ends of the gabions must align (or be flush) with the existing stream bank to avoid any localised scour points caused by sudden obstructions to the natural flow path.	
Proposed mitigation:	All gabion weirs and instream bank protection structures must be inspected on a routine basis to ensure that the baskets are intact and that rocks have not displaced. Any faults must be immediately repaired.	
	Any scouring or undercutting caused by gabion weirs must be rehabilitated following the inputs of an aquatic ecologist.	
Residual impacts:	None	None
Cumulative impact post mitigation:	Low	Moderate
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Minor	Minor

Potential impact and risk:	De-stabilisation of bank	De-stabilisation of bank
Nature of impact:	De-stabilisation of bank caused by removal of riparian vegetation.	De-stabilisation of bank caused by removal of riparian vegetation.
Extent and duration of impact:	Ongoing, Ongoing	Ongoing, Ongoing
Consequence of impact or risk:	Loss of pattern and process	Loss of pattern and process
Probability of occurrence:	Likely	Likely
Degree to which the impact may cause irreplaceable loss of resources:	Low	Low
Degree to which the impact can be reversed:	High	High
Indirect impacts:	None	None
Cumulative impact prior to mitigation:	Moderate	Moderate
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Negligible	Negligible
Degree to which the impact can be avoided:		
Degree to which the impact can be managed:		
Degree to which the impact can be mitigated:		
Proposed mitigation:	Lawns must be withdrawn from the edge of the stream bank and a 5 m riparian buffer, consisting of appropriate indigenous plants (including deep rooted shrubs and trees) must be re-established along the length of the eastern bank.	
Residual impacts:	None	None

Cumulative impact post mitigation:	Low	Moderate
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Minor	Minor
DECOMMISSIONING AND CLOSU	RE PHASE	
Potential impact and risk:		
Nature of impact:		
Extent and duration of impact:		
Consequence of impact or risk:		
Probability of occurrence:		
Degree to which the impact may cause irreplaceable loss of resources:		
Degree to which the impact can be reversed:		
Indirect impacts:		
Cumulative impact prior to mitigation:		
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium High, High, or Very High)		
Degree to which the impact can be avoided:		
Degree to which the impact can be managed:		
Degree to which the impact can be mitigated:		
Proposed mitigation:		

Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	

SECTION I: FINDINGS, IMPACT MANAGEMENT AND MITIGATION MEASURES

1. Provide a summary of the findings and impact management measures identified by all Specialist and an indication of how these findings and recommendations have influenced the proposed development.

Aquatic Impact Assessment (Dr James Dabrowski, 2022)

<u>Findings</u>

- The wetland system has been highly modified from its natural state
- The installation of gabions will not compromise the PES or EIS of the wetland system
- The installation of gabions will not compromise national or provincial freshwater management and conservation objectives for the wetland
- The wetland system is subjected to high volumes of stormwater runoff (main cause of the erosion)

Impact management measures

- Gabions must mimic the curved profile of the embankment
- After long-term monitoring, determine if additional protection is necessary (opposite side of the bank)
- The stormwater outlet pipe, must be designed adequately to dissipate the energy
- Clearly demarcate areas where construction activities will take place
- Clearly demarcate stockpiles and put-up notices declaring what must be stockpiled where
- Control vehicle access
- Collect all waste and dispose it at a suitable waste facility
- Stockpiles of materials must be placed outside the watercourse and protected
- Construction activities must be timed to coincide with a dry season
- Sandbags should be established upstream of the construction
- A flexible pipe should be used to transfer water from upstream
- Temporary straw-bale check dams can be placed across the channel (downstream of the streambank)
- Development of a construction schedule
- Post-installation, stabilise exposed banks
- Gabions will be packed by manual labour
- No operating vehicles within 5m of the edge of the channel
- Oil and fuel leaks must be checked daily
- No fuel storage, refuelling, vehicle maintenance or vehicle depts to be allowed within the delineated area of the wetland
- Bunds should be placed around refuelling, fuel storage and servicing areas
- Chemical toilets (1 toilet / 10 persons)
- No mixing of cement/concrete on bare ground
- Instruct workers properly of the environment
- All gabions must be inspected on a routine basis
- Rehabilitation scouring or undercutting
- Withdrawn laws from the edge of the stream bank and a 5m riparian buffer, consisting of appropriate indigenous plants must be re-established along the length of the eastern bank

Faunal Compliance Statement

Findings

• None of the flagged animal species were observed and are unlikely to occur on site

Impact management measures

None

Flora Compliance Statement (Dr James Dabrowski, 2022)

<u>Findings</u>

• The length of the embankment that will be stabilised is either bare or covered in *P*. *clandestinum*. The site is confirmed to be low.

Impact management measures

None

Terrestrial Biodiversity Compliance Statement (Dr James Dabrowski, 2022)

<u>Findings</u>

• The entire site has been transformed from Garden Route Granite Fynbos to mowed and maintained kikuyu laws.

Impact management measures

None

2. List the impact management measures that were identified by all Specialist that will be included in the EMPr

All impact management measures that were identified by all specialists and described above (Section I, 1.) will be included in the EMPr.

3. List the specialist investigations and the impact management measures that will **not** be implemented and provide an explanation as to why these measures will not be implemented.

4. Explain how the proposed development will impact the surrounding communities.

The proposed activity is to have an overall positive impact on the surrounding communities by reducing risk to their properties. Some temporary negative impacts are expected during construction but can be adequately managed.

It is strongly recommended that the Municipality engage with the Molen Close community with regards to long-term management of the open space area. Residents are utilising the area for private recreation/usage/gardening and in doing so are compromising the integrity of the natural system and barrier that exists between the river and their houses. The open space area must be restored to a natural system that can better withstand erosion and flood events.

5. Explain how the risk of climate change may influence the proposed activity or development and how has the potential impacts of climate change been considered and addressed.

Climate change can lead to increased stormwater runoff with more severe downpours. Risk management in the form of improved river bank rehabilitation (within the greater open space area between the river and houses) must be implemented to help protect the properties against long term erosion/flooding events.

6. Explain whether there are any conflicting recommendations between the specialists. If so, explain how these have been addressed and resolved.

Not applicable (Only one specialist: Dr James Dabrowski).

7. Explain how the findings and recommendations of the different specialist studies have been integrated to inform the most appropriate mitigation measures that should be implemented to manage the potential impacts of the proposed activity or development.

All findings and recommendations by the specialists have been incorporated into the proposal.

8. Explain how the mitigation hierarchy has been applied to arrive at the best practicable environmental option.

1. Avoid Impacts

Avoidance mitigation will be implemented.

By focussing on the emergency area (instead of the entire river bank down to Grens Street) the potential impact on a greater aquatic habitat has been avoided.

2. Minimise Impacts

By involving an aquatic specialist to advise on planning and design at an early stage, the curved design (compared to the original linear design) has minimised impacts.

Appoint an ECO to oversee construction to further minimise the potential unnecessarily direct or indirect impacts.

Implement dust control during to minimise the impacts on neighbouring property owners.

Implement the Environmental Management Plan under ECO supervision.

Implement resource conservation measures as part of the design, construction and operational phase.

<u>3. Rectify</u>

Design for the preferred alternative will result in rectification of a degraded area of the river bank.

<u>4. Reduce</u>

Impacts associated with potential property damage and municipal infrastructure damage will be reduced with implementation of the preferred alternative compared to the No-Go / Status Quo alternative.

5. Off-set

No off-sets are deemed necessary.

SECTION J: GENERAL

1. ENVIRONMENTAL IMPACT STATEMENT

1.1. Provide a summary of the key findings of the EIA.

- Flagged animal species are not observed on site and are unlikely to occur on site.
- The length of the embankment is either bare or covered in *P.clandestinum* (Kikuyu Grass).
- The entire site has been transformed from Garden Route Granite Fynbos (critically endangered vegetation type) to mowed and maintained kikuyu lawns.
- The proposed activity will not result in any further loss or disturbance to any natural terrestrial habitat.
- The proposed activity will not result in the modifications of any ESA2 habitat.
- The activity will not modify the catchment area of the wetland

The activity will not affect the ability of the watercourse to continue supplying water
The activity will not affect the quality of the water further downstream

1.2. Provide a map that that superimposes the preferred activity and its associated structures and infrastructure on the environmental sensitivities of the preferred site indicating any areas that should be avoided, including buffers. (Attach map to this BAR as Appendix B2)

No noticeable site sensitivities were identified during the investigation.

1.3. Provide a summary of the positive and negative impacts and risks that the proposed activity or development and alternatives will have on the environment and community.

Positive impacts: The embankment will no longer be a risk to adjacent properties/municipal sewer line. The structural integrity of the bank will be maintained.

Negative impacts: Noise and safety impacts associated with construction related activities and the movement of heavy vehicles.

2. RECOMMENDATION OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER ("EAP")

2.1. Provide Impact management outcomes (based on the assessment and where applicable, specialist assessments) for the proposed activity or development for inclusion in the EMPr Appoint an Environmental Control Officer (ECO) to oversee the construction phase. Implement and adhere to an approved Environmental Management & Maintenance Plan. Restrict working times and hours to minimise noise/dust pollution. Restore and rehabilitate the temporary access once construction is complete. Municipality to engage with residents of Molen Close as part of environmental awareness on long-term management and protection of the river by not clearing the river buffer/corridor of indigenous vegetation, not extending landscaping beyond private properties, not extending private structures into the municipal open space. Provide a description of any aspects that were conditional to the findings of the assessment either by the EAP or 2.2. specialist that must be included as conditions of the authorisation. Please refer to section 2.1 and 2.3. 2.3. Provide a reasoned opinion as to whether the proposed activity or development should or should not be authorised, and if the opinion is that it should be authorised, any conditions that should be included in the authorisation The proposed activity should be authorised as it will protect the properties and municipal sewer line from imminent risk. The following conditions must be considered: Development may not proceed until such time as all approvals are obtained. An ECO must be appointed prior construction to oversee site preparation and construction. 2.4 Provide a description of any assumptions, uncertainties and gaps in knowledge that relate to the assessment and mitigation measures proposed. The period for which the EA is required, the date the activity will be concluded and when the post construction 2.5. monitoring requirements should be finalised. 12 months for commencement of the activity. 24 months for completion of the activity.

3. WATER

Since the Western Cape is a water scarce area explain what measures will be implemented to avoid the use of potable water during the development and operational phase and what measures will be implemented to reduce your water demand, save water and measures to reuse or recycle water.

Not applicable.

4. WASTE

Explain what measures have been taken to reduce, reuse or recycle waste.

Waste must be collected and disposed of at a registered waste facility.

No waste material may be left on the site.

5. ENERGY EFFICIENCY

8.1. Explain what design measures have been taken to ensure that the development proposal will be energy efficient.

The curved design of the gabion/reno mattress structure (instead of a linear structure) will ensure that water velocity and energy is dissipated.

SECTION K: DECLARATIONS

TO BE SIGNED FOR FINAL BASIC ASSESSMENT REPORT

1. DECLARATION OF THE APPLICANT

Note: Duplicate this section where there is more than one Applicant.

- I am fully aware of my responsibilities in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA"), the Environmental Impact Assessment ("EIA") Regulations, and any relevant Specific Environmental Management Act and that failure to comply with these requirements may constitute an offence in terms of relevant environmental legislation;
- I am aware of my general duty of care in terms of Section 28 of the NEMA;
- I am aware that it is an offence in terms of Section 24F of the NEMA should I commence with a listed activity prior to obtaining an Environmental Authorisation;
- I appointed the Environmental Assessment Practitioner ("EAP") (if not exempted from this requirement) which:
- o meets all the requirements in terms of Regulation 13 of the NEMA EIA Regulations; or
- meets all the requirements other than the requirement to be independent in terms of Regulation 13 of the NEMA EIA Regulations, but a review EAP has been appointed who does meet all the requirements of Regulation 13 of the NEMA EIA Regulations;
- I will provide the EAP and any specialist, where applicable, and the Competent Authority with access to all information at my disposal that is relevant to the application;
- I will be responsible for the costs incurred in complying with the NEMA EIA Regulations and other environmental legislation including but not limited to
 - costs incurred for the appointment of the EAP or any legitimately person contracted by the EAP;
 - costs in respect of any fee prescribed by the Minister or MEC in respect of the NEMA EIA Regulations;
 - Legitimate costs in respect of specialist(s) reviews; and
 - the provision of security to ensure compliance with applicable management and mitigation measures;
- I am responsible for complying with conditions that may be attached to any decision(s) issued by the Competent Authority, hereby indemnify, the government of the Republic, the Competent Authority and all its officers, agents and employees, from any liability arising out of the content of any report, any procedure or any action for which I or the EAP is responsible in terms of the NEMA EIA Regulations and any Specific Environmental Management Act.

Note: If acting in a representative capacity, a certified copy of the resolution or power of attorney must be attached.

2022/10/10

Signature of the Applicant:

Date:

George Municipality

Name of company (if applicable):

2. DECLARATION OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER ("EAP")

- Information provided in this BAR and any other documents/reports submitted in support of this BAR;
- 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, and that:
- In terms of the general requirement to be independent:
 - other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the activity or application and that there are no circumstances that may compromise my objectivity; or
 - am not independent, but another EAP that meets the general requirements set out in Regulation 13 of NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review EAP must be submitted);
- In terms of the remainder of the general requirements for an EAP, am fully aware of and meet all of the requirements and that failure to comply with any the requirements may result in disqualification;
- I have disclosed, to the Applicant, the specialist (if any), the Competent Authority and registered interested and affected parties, all material information that have or may have the potential to influence the decision of the Competent Authority or the objectivity of any report, plan or document prepared or to be prepared as part of this application;
- I have ensured that information containing all relevant facts in respect of the application was distributed or was made available to registered interested and affected parties and that participation will be facilitated in such a manner that all interested and affected parties were provided with a reasonable opportunity to participate and to provide comments;
- I have ensured that the comments of all interested and affected parties were considered, recorded, responded to and submitted to the Competent Authority in respect of this application;
- I have ensured the inclusion of inputs and recommendations from the specialist reports in respect of the application, where relevant;
- I have kept a register of all interested and affected parties that participated in the public participation process; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the NEMA EIA Regulations;

Signature of the

2022/10/20

Date:

Cape Environmental Assessment Practitioners (Cape EAPrac)

Name of company (if applicable):

3. DECLARATION OF THE REVIEW EAP

A sthe appointed Review EAP hereby declare/affirm that:

- I have reviewed all the work produced by the EAP;
- I have reviewed the correctness of the information provided as part of this Report;
- I meet all of the general requirements of EAPs as set out in Regulation 13 of the NEMA EIA Regulations;
- I have disclosed to the applicant, the EAP, the specialist (if any), the review specialist (if any), the Department and I&APs, all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the NEMA EIA Regulations.

2022/10/10

Date:

Signature of the EAP:

Name of company (if applicable):

4. DECLARATION OF THE SPECIALIST

to be signed for final basic assessment report

Note: Duplicate this section where there is more than one specialist.

I, as the appointed Specialist hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that:

- In terms of the general requirement to be independent:
 - other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the development proposal or application and that there are no circumstances that may compromise my objectivity; or
 - am not independent, but another specialist (the "Review Specialist") that meets the general requirements set out in Regulation 13 of the NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review specialist must be submitted);
- In terms of the remainder of the general requirements for a specialist, have throughout this EIA process met all of the requirements;
- I have disclosed to the applicant, the EAP, the Review EAP (if applicable), the Department and I&APs all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared or to be prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations.

2022/10/10

Signature of the EAP:

Name of company (if applicable):

Date:
5. DECLARATION OF THE REVIEW SPECIALIST

A contract of the appointed Review Specialist hereby declare/affirm that:

- I have reviewed all the work produced by the Specialist(s):
- I have reviewed the correctness of the specialist information provided as part of this Report;
- I meet all of the general requirements of specialists as set out in Regulation 13 of the NEMA EIA Regulations;
- I have disclosed to the applicant, the EAP, the review EAP (if applicable), the Specialist(s), the Department and I&APs, all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the NEMA EIA Regulations.

2022/10/10

Date:

Signature of the EAP:

Name of company (if applicable):