

APPLICATION FORM

NOTIFICATION FOR INTENT TO DEVELOP (NID)

Section 38(1) and Section 38(8)

Completion of this form is required by Heritage Western Cape for the initiation of all impact assessment processes under Section 38 (1) & (8) of the National Heritage Resources Act (NHRA).

As per Section 38(1)(e) of the NHRA, submission of the NID must be initiated at the earliest stage of development. Should the development trigger any other legislation, practitioners may submit the NID without formal submission to other statutory bodies in order to comply with the NHRA.

This form is to be read in conjunction with the HWC Notification of Intent to Develop, Heritage Impact Assessment, (Pre-Application), Basic Assessment Reports, Scoping Reports and Environmental Impact Assessments.

All sections of the form must be completed in order to deem the application to be complete.

Making an incorrect statement or providing incorrect information may result in all or part of the application having to be reconsidered by HWC in the future, or submission of a new application.

HERITAGE WESTERN CAPE REFERENCE NO	AS PROVIDED	DURING SCRUTINY

HWC24100804

	SECTION A
APPLIC	CATION MADE IN TERMS OF:
1	Section 38(1) of the NHRA (This development will not require a NEMA application)
H	Section 38(8) of the NHRA (This development requires an application with another authority)
	Amendment of approved Site Development Plan (SDP) for endorsement. Endorsements are only reviewed upon submission of an assessment by the heritage practitioner confirming heritage design indicators as approved are not compromised by the revision
	Advice in terms of Section 38(1)
	Erfenis Wes-Kaap
APPLIC	CABILITY OF OTHER LEGISLATION:
i.e. De	y the authorised department that makes the final decision in terms of NEMA (National Environmental Act.), partment of Mineral Resources, Department of Environmental Affairs and Development Planning Western Department of Forestry, Fisheries and Environment etc.: N/A
Refere	nce number of authority / government department: N/A
Presen	t phase at which the process with that authority stands: N/A



PREVIOUS HWC APPLICATIONS APPLICABLE TO THE SITE AND OR DEVELOPMENT

Provide details of any previous applications submitted to HWC on the site.

HWC2210190 7AM1019 HWC2210190 7AM1019 HERITAGE IMPACT ASSESSMENT: PROPOSED GROUP HOUSING DEVELOPMENT ON PORTION 38 OF FARM GANSE VALLEI 444, PLETTENBERG BAY. Please note that this Heritage Impact Assessment (HWC22101907AM1019) was completed for proposed development on Portion 38 of Farm Ganse Vallei 444. This Section 38(1) NID (HWC24100804) is for the link services required to connect the proposed development on Portion 38 of Farm 444 to the Bitou Municipal System.	HWC Reference No.	NHRA Section	Summary of Proposal	Application Status (Approved, Not Approved, Pending)	Permit / Record of Decision Date
		National Heritage Resources Act (Act 25 of 1999) and the Western Cape Provincial Gazette 6061, Notice 298 of	PROPOSED GROUP HOUSING DEVELOPMENT ON PORTION 38 OF FARM GANSE VALLEI 444, PLETTENBERG BAY. Please note that this Heritage Impact Assessment (HWC22101907AM1019) was completed for proposed development on Portion 38 of Farm Ganse Vallei 444. This Section 38(1) NID (HWC24100804) is for the link services required to connect the proposed development on Portion 38 of Farm 444 to the Bitou Municipal	Approved	-

c			NI	D
3	EC1	IIU	IN	D

DETAILS OF SITE, PROPERTY OR PLACE

Current land Use:

Physical address or Location (e.g., of the R44): <u>Linear study area (~1.03km in length)</u>. <u>Road reserve of the R2 national road</u>. <u>Road reserve of the Rietylei Road provincial road in Plettenberg Bay, Knysna District.</u>

Erf or Farm Name and No. (including the name of the site): <u>Portion 125 of Farm 444 (N2 road reserve)</u>, <u>Portion 126 of Farm 444 (N2 road reserve)</u>, <u>Portion 127 of Farm 444 (N2 road reserve)</u>, <u>Portion 128 of Farm 444 (N2 road reserve)</u> and <u>Portion 4 of Remainder of Farm 444 (Rietylei Road road reserve)</u> In <u>Plettenberg Bay</u>, <u>Knysna District</u>

Coordinates for	logical center point (WGS84):	34° 01' 20.99" S	23° 22' 54.	29" E
Town:	Plettenberg Bay	District / Mu	unicipality:	Bitou Municipality
	Portion 125 of Farm 444 is ~ 0.42h n 128 of Farm 444 is ~ 1.69ha. Po			

Road reserve of the N2 national road and road reserve of the Rietvlei Road provincial road.



Current zoning: <u>Portion 125 of Farm 444, Portion 126 of Farm 444, Portion 127 of Farm 444 and Portion 128 of Farm 444 are zoned Transport Zone II.</u> Portion 4 of Remainder of Farm 444 is zoned Agriculture Zone I.

Predominant land uses of surrounding properties: Residential and Golf Estates, Nature area
SECTION C
APPLICANT / AUTHORISED AGENT – Details of person to receive Record of Decision
Name: Ms Louise-Mari van Zyl
Company: Cape Environmental Assessment Practitioners
Address and postal code: 17 Progress Street, George, 6530
Cellular phone number: 071 603 4132 / 044 874 0365
E-mail: louise@cape-eaprac.co.za
Signature:
REGISTERED OWNER OF PROPERTY
Name: Mr Nils Brink van Zyl on behalf of Intergreen (Pty) Ltd
Identity number of applicant: 520523 5096 088
Address and postal code: PO Box 55265, Northlands, 2116
Cellular phone number: 6095
Declaration: I, Nils Brink van Zyl am fully aware of this application and accept its contents and declare that I intend to undertake the actions as proposed in this application. Signature: Date: 23 10 2024
SECTION D

DETAIL OF PROPOSED DEVELOPMENT

Provide a full description of the nature and extent of the proposed development.

New sewer rising main pipeline (75mm diameter, approximately 470m long) in the Rietvlei Road road reserve. New outfall sewer pipeline (160mm diameter, approximately 120m long) in the Rietvlei Road road reserve and N2 road reserve. New outfall sewer pipeline (250mm diameter, approximately 445m long) in the N2 road reserve where it will connect to the existing Goose Valley main pump station. The existing 75mm diameter pipe in



Rietvlei Road road reserve needs to be upgraded to a 110mm diameter pipe (extending approximately 220m long) in the Rietvlei Road reserve.

DEVELOPMENT DETAILS – Indicate which sections of the NHRA, or other legislation which requires a NID

PLEA	SE TICK THE APPROPRIATE BOX
✓	Section 38(1)(a) Construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier over 300m in length.
	Section 38(1)(b) Construction of a bridge or similar structure exceeding 50m in length.
	Section 38(1)(c) Any development or activity that will change the character of a site:
	(i) exceeding 5 000m² in extent.
	(ii) involving three or more existing erven or subdivisions thereof.
	(iii) involving three or more erven or divisions thereof which have been consolidated within the past five years. *If (i), (ii) and/or (iii) are marked above, describe how the development will change the character of the site
	Section 38(1)(d) Rezoning of a site exceeding 10 000m² in extent.
	Other triggers e.g., in terms of other legislation (NEMA, etc.) – Describe the details:

ESTIMATED CONSTRUCTION COST AND/ OR VALUE OF DEVELOPMENT UPON COMPLETION: R Unknown at this stage

SECTION E

PROVIDE A SHORT HISTORY OF THE SITE, PROPERTY OR PLACE - Include sources where applicable

The proposed pipeline routes are located within the Rietvlei road and N2 road reserves which are existing disturbed road reserves bordered by the Goose Valley Golf Estate. The road reserves are maintained by the Provincial Roads and National Roads Authorities respectively. Both road reserves contain existing services (water and sewerage pipeline infrastructure) and are subject to continuous vegetation maintenance. The N2 road reserve also contains an existing concrete sidewalk for pedestrians as well as a concrete swale for



stormwater management. Please also refer to the Background Information Document for a comprehensive description.

ANTICIPATED IMPACTS ON HERITAGE RESOURCES

Section 3 of the NHRA sets out the following categories of heritage resource as forming part of the national estate. Please indicate the known presence of any of these by checking the box alongside and then providing a description of each occurrence, including nature, location, size, type

Failure to provide sufficient detail or to anticipate the likely presence of heritage resources on the site may lead to a request for more detailed specialist information.

IDENTIFICATION OF ALL HERITAGE RESOURCES ON THE SITE, PROPERTY OR PLACE AND ITS ENVIRONMENTS

Please indicate where applicable:

	Places, buildings, structures, and equipment of cultural significance:
	Description of Heritage Resource: None
	Descriptions of the Share have all No.
	Descriptions of Heritage Impact: No impact
+	Places to which oral traditions are attached or which are associated with living heritage:
	Description of Heritage Resource: None known
	Bossilpherr of Heimege Researce. Heim
	Descriptions of Heritage Impact: No impact
4	
	Places to which oral traditions are attached or which are associated with living heritage:
	Description of Heritage Resource: None known
	Descriptions of He <mark>ritage Imp</mark> act: No impact
	Beschpheris et riellinge impact. No impact
Ī	Historical settlements and townscapes:
	Description of Heritage Resource: None
	Descriptions of Heritage Impact: No impact
4	Landscapes and natural features of cultural significance:
	Description of Heritage Resource: None
	Descriptions of Heritage Impact: No impact
	Geological resources of scientific or cultural significance:
	Description of Heritage Resource: None
	Descriptions of Heritage Impact: No impact
	beschphors of Hemage impact. No impact
1	Archaeological resources – Incl. archaeological sites and material, rock art, battlefields, and wrecks etc
	Description of Heritage Resource: None
	Descriptions of Heritage Impact: No impact
1	Palaeontological resources – i.e., fossils, geological formations etc.:
1	Description of Heritage Resource: None



Descriptions of Heritage Impact: No impact
Graves and burial grounds - e.g.: ancestral graves, graves of victims of conflict, historical graves, cemeteries etc.:
Description of Heritage Resource: None
Descriptions of Heritage Impact: No impact
Sites of significance relating to the history of slavery in South Africa:
Description of Heritage Resource: None
Descriptions of Heritage Impact: No impact
Other heritage resources:
Description of Heritage Resource: None
Descriptions of Heritage Impact: No impact

PROVIDE A SUMMARY OF THE ANTICIPATED IMPACTS ON HERITAGE RESOURCES

The proposed sewer and water pipeline routes are located within the N2 and Rietvlei Road road reserves already containing various services infrastructure (sewerage and water). The road reserves are subject to continuous vegetation maintenance by the road authorities. It is therefore highly unlikely that any heritage resources are still present on the proposed pipeline routes.

		_	
	SECTION F		

RECOMMENDATION

In your opinion, do you believe that a Heritage Impact Assessment (HIA) is required?

Yes



No

Specialist studies to be provided as part of the HIA:

Architectural (i.e., fabric analysis, historical analysis, material analysis etc.)
Archaeological Impact Assessment
Paleontological Impact Assessment
Townscape Assessment
Cultural Assessment
Social Historical Study
Visual Impact Assessment
Other:



Recommendations made by: Ms Louise-Mari van Zyl

Capacity: Environmental Assessment Practitioner

PLEASE NOTE

Any further studies which HWC requires should be submitted in the form of a single, consolidated report with a single set of recommendations. Specialist studies must be incorporated in full, either as chapters of the report, or as annexures thereto.

Please refer to the Guidelines for Heritage Impact Assessments required in terms of Section 38 of the National Heritage Resources Act (25 of 1999).

Applications are considered to be public documents and are open to public scrutiny. Should you wish for your application to be kept confidential, please motivate your request on a separate sheet attached to your application form.

For applications that are granted confidentiality, this confidentiality will be limited to one year (12 months). applications that are granted confidentiality, this confidentiality will be limited to one year (12 months).





Cape \mathcal{EAP} rac

Cape Environmental Assessment Practitioners (Pty) Ltd

Reg. No. 2008/004627/07 VAT No 4720248386

Telephone: (044) 874 0365 Web: www.cape-<u>eaprac.co.za</u> 17 Progress Street, George PO Box 2070, George 6530

24 October 2024 Our Ref: BIT729/11 HWC Ref: HWC24100804

BACKGROUND INFORMATION DOCUMENT (BID) TO NOTICE OF INTENT TO DEVELOP (NID) IN TERMS OF SECTION 38(8) OF THE NATIONAL HERITAGE RESOURCES ACT, 1999 (ACT 25 OF 1999)

PROPOSED DEVELOPMENT OF WATER AND SEWERAGE PIPELINE INFRASTRUCTURE WITHIN THE ROAD RESERVE OF PORTION 125/444, PORTION 126/444, PORTION 127/444, PORTION 128/444 AND PORTION 4 OF REMAINDER OF FARM 444 (PLETTENBERG BAY) KNYSNA DISTRICT AND BITOU MUNICIPALITY



Prepared for Applicant: Intergreen (Pty) Ltd

Date: 24 October 2024

Table of Contents

1. INTRODUCTION......2

2. BRIEF DESCRIPTION OF STUDY AREA
3. PROPOSED DEVELOPMENT5
4. SPATIAL PLANNING CONTEXT9
4.1. BITOU SPATIAL DEVELOPMENT FRAMEWORK9
5. BRIEF HISTORIC BACKGROUND11
6. HERITAGE RESOUCES AND ISSUES12
6.1. VISUAL
6.2. ARCHAEOLOGICAL
6.3. PALAEONTOLOGY
7. RECOMMENDATION15
8. REFERENCES
Table of Figures
Figure 1: Locality map of proposed water and sewerage pipeline infrastructure (yellow line)
(CapeFarmMapper, 2024)4
Figure 2: Proposed water and sewerage pipeline infrastructure route (yellow line)
(CapeFarmMapper, 2024)5
Figure 3: Minimum items required to accommodate the proposed development in the existing
Plettenberg Bay sewer system. The GLS report worked on the original 17 unit proposal which
has since been reduced following the outcome of the environmental process (GLS Consulting
2022)
within the road reserve
Figure 5: Rietvlei Road road reserve. Required sewage and water pipeline infrastructure to be
installed within the road reserve
Figure 6: Minimum required upgrade to the existing 75mm diameter pipeline within the Rietvle
Road road reserve to comply with the fire flow criteria. Note that the original 17 unit proposa
considered by GLS has since been reduced to 12 units (GLS Consulting, 2022)
Figure 7: Proposed resurfacing of existing asphalt portions as well as placement of new asphalt
on gravel section of Rietvlei Road (Vita Consulting Engineers, 2023)
Figure 8: Extract from Bitou Spatial Development Framework (2022). Proposed sewerage and
water pipeline infrastructure routes encircled in RED
Road and N2 road reserves are required to connect to the Bitou Municipal system (George
Museum Archives, as edited) (Image extracted from Background Information Document
completed for Portion 38 of Farm 444 by Perception Planning, 2022)
Figure 10: 1942 Aerial imagery for the Ganse Vallei area (Flight Survey 6, Flight Strip 038, Image
11526, NGSI as edited) (Image extracted from Integrated Heritage Impact Assessment for
Portion 38 of Farm 444 by Perception Planning, 2022)12
Figure 11: Palaeontological (fossil) sensitivity map in relation to study site
(www.sahirs.org.za/map/palaeo, 2024).
Figure 12: Geology of the Plettenberg Bay area in relation to the study site (Rust and Reddering,
1985)

Annexures

- 1. Power of Attorney
- 2. Title Deeds
- 3. SG Diagrams
- 4. Site Photographs
- 5. Site Development Plans
- 6. Locality Maps

1. INTRODUCTION

Cape Environmental Assessment Practitioners was appointed by Nils Brink van Zyl on behalf of Intergreen (Pty) Ltd to submit to Heritage Western Cape (HWC) a Notice of Intent to Develop (NID) in terms on Section 38(8) of the National Resourses Act, 1999 (Act 25 of 1999) with relation to the proposed development of water and sewerage pipeline infrastructure within the road reserve of Portion 125/444, Portion 126/444, Portion 127/444, Portion 128/444 and Portion 4 of the Remainder of Farm 444 in Plettenberg Bay (Knysna District and Bitou Municipality). The proposed pipeline infrastructure is required to connect Portion 38 of Farm 444 to the Bitou Municipality sewer and water reticulation system. Portion 38 of Farm 444 is currently in the process of applying for Environmental Authorisation to develop twelve residential units on the property.

Portion 38 of Farm 444 was already subject to a Heritage Impact Assessment (HWC Reference # HWC22101907AM1019) which was approved by HWC on 06 April 2023. The proposed **link water and sewerage pipeline infrastructure** is therefore seen as a separate application due to the pipeline routes being located outside the boundaries of Portion 38 of Farm 444 and longer than 300m in length. The proposed link water and sewerage pipeline infrastructure does not trigger any Listed Activities in terms of the National Environmenal Management Act, 1998 (Act No. 107 of 1998) and therefore does not require prior environmental authorisation.

The cadastral land units subject to this application for link services include:

- Portion 125 of Farm 444 Ganse Vallei (~0.42ha in size);
- Portion 126 of Farm 444 Ganse Vallei (~0.38ha in size);
- Portion 127 of Farm 444 Ganse Vallei (~0.38hain size);
- Portion 128 of Farm 444 Ganse Vallei (~1.69ha in size);
- Portion 4 of the Remainder of Farm 444 Ganse Vallei (~1.32ha in size).

2. BRIEF DESCRIPTION OF STUDY AREA

The subject properties where the installation of water and sewerage pipeline infrastructure is proposed, are situated ~3.7km north of the Plettenberg Bay town centre (Figure 1). The proposed pipeline route is located in the Rietvlei Road and N2 road reserves, bordering the Goose Valley Golf Estate on Portion 75 of Farm 444 as well as the residential property on Portion 38 of Farm 444. Properties north of the Rietvlei Road are characterised by large residential and retirement developments.

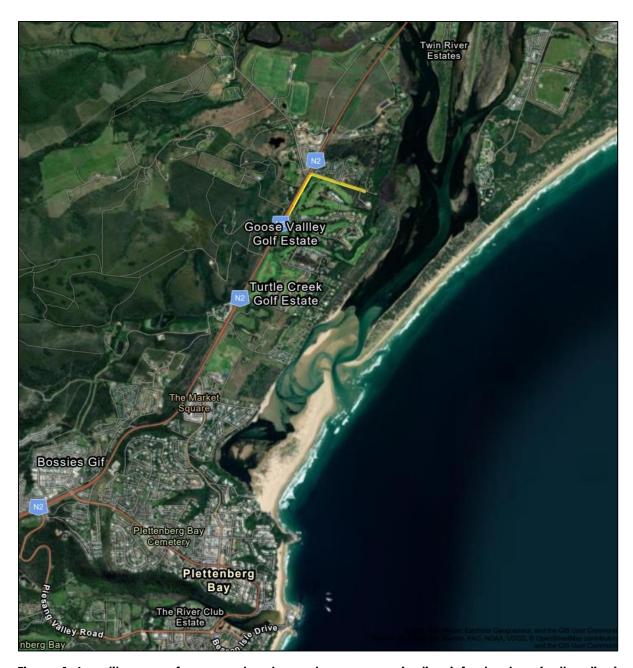


Figure 1: Locality map of proposed water and sewerage pipeline infrastructure (yellow line) (CapeFarmMapper, 2024).

There are no known cultural significant structures/sites located in direct proximity to the proposed water and sewerage pipeline infrastructure route. The proposed pipeline routes are highly disturbed within an urban landscape, within the urban edge of Bitou Municipal district (Figure 2). The road reserves of Rietvlei Road and the N2 already contain existing municipal services such as water, sewerage and internet cables. The N2 road reserves contains a concrete walkway and swale between the road edge and the fencing of the Goose Valley Golf Estate.



Figure 2: Proposed water and sewerage pipeline infrastructure route (yellow line) (CapeFarmMapper, 2024).

3. PROPOSED DEVELOPMENT

<u>Sewage Network:</u> The proposed development on Portion 38 of Farm 444 will be accommodated within the existing Goose Valley Main pumping station drainage area. According to the appointed Engineer, the existing Goose Valley Main pumping station with an accompanying 200mm diameter rising main will have sufficient capacity to accommodate the proposed development on Portion 38 of Farm Ganse Vallei 444.

Based on the outcome of the GLS (municipal) services evaluation for this application on Portion 38 of Farm 444, the following **additional infrastructure** will be required **to connect** the proposed development to the existing municipal sewer system (Figure 3):

- New sewer rising main pipeline (75mm diameter, approximately 470m long) in the Rietvlei Road road reserve (Item 5 in Figure 3).
- New outfall sewer pipeline (160mm diameter, approximately 120m long) in the Rietvlei Road road reserve and N2 road reserve (Item 6 in Figure 3).
- New outfall sewer pipeline (250mm diameter, approximately 445m long) in the N2 road reserve (Item 7 in Figure 3) where it will connect to the existing Goose Valley main pump station.

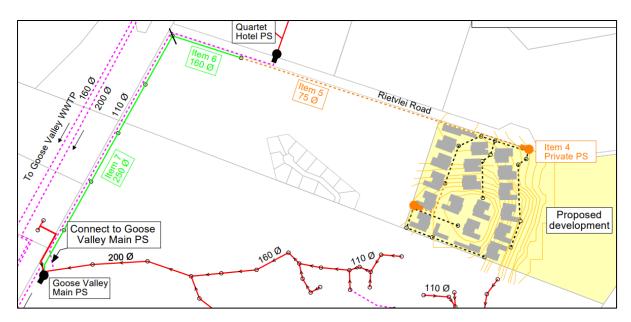


Figure 3: Minimum items required to accommodate the proposed development in the existing Plettenberg Bay sewer system. The GLS report worked on the original 17 unit proposal which has since been reduced following the outcome of the environmental process (GLS Consulting, 2022).



Figure 4: N2 road reserve. Required sewage and water pipeline infrastructure to be installed within the road reserve



Figure 5: Rietvlei Road road reserve. Required sewage and water pipeline infrastructure to be installed within the road reserve.

The Ganse Vallei Wastewater Treatment Works (WWTW) has an effluent discharge capacity of 6Ml per day and is currently at an average daily discharge volume of 5.8Ml (confirmed by Bitou Municipality). According to Bitou Municipality the remaining 0.2Ml is reserved for approved low-income housing developments. Upgrades to the Ganse Vallei WWTW is therefore required to accommodate most new developments. However, due to the small scale of the proposed development, **Bitou Municipality** confirmed, on 15 August 2024 that they **can accommodate this proposed low residential development** on Pt 38/444 within the **available spare capacity** of the Ganse Vallei Wastewater Treatment Works without compromising the allocation for low cost housing projects.

<u>Water Network:</u> The proposed development on Portion 38 of Farm 444 will be accommodated in the Goose Valley reservoir zone. Water reticulation will be connected to an existing 75mm diameter pipe located north-west of the property in Rietvlei Road road reserve.

According to the GLS (municipal) services investigation, the existing **75mm** diameter pipe in Rietvlei Road road reserve needs to be upgraded to a **110mm**

diameter pipe (extending approximately **220m** long) in the Rietvlei Road reserve in order to comply with the **fire flow criteria** (Item 1 in Figure 6).

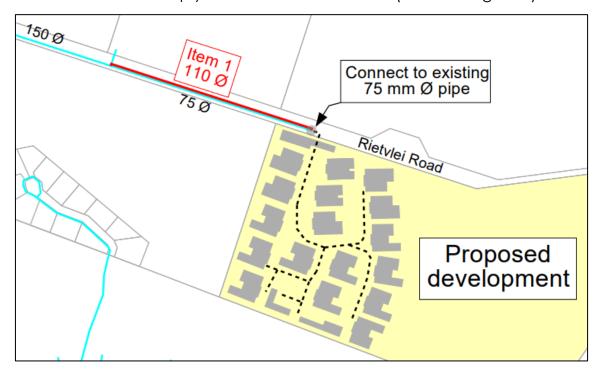


Figure 6: Minimum required upgrade to the existing 75mm diameter pipeline within the Rietvlei Road road reserve to comply with the fire flow criteria. Note that the original 17 unit proposal considered by GLS has since been reduced to 12 units (GLS Consulting, 2022).

It is proposed for **the gravel parts** of **Rietvlei Road** be **hard surfaced** within the constraints of the existing road. Asphalt portions of Rietvlei Road to be resurfaced should the Municipality require such as part of the services agreement details.



Figure 7: Proposed resurfacing of existing asphalt portions as well as placement of new asphalt on gravel section of Rietvlei Road (Vita Consulting Engineers, 2023).

4. SPATIAL PLANNING CONTEXT

4.1. BITOU SPATIAL DEVELOPMENT FRAMEWORK

The proposed water and sewerage infrastructure routes are located inside the Urban Edge of Bitou Municipality as depicted in the Bitou Spatial Development Framework of 2022 (Figure 8). It is noted that the proposed pipeline routes are surrounded by properties earmarked for Urban, Sports and Recreational use.

Due to the proposed pipeline routes being located inside the demarcated Urban Edge, the proposal is regarded as being consistent with the Bitou Spatial Development Framework.

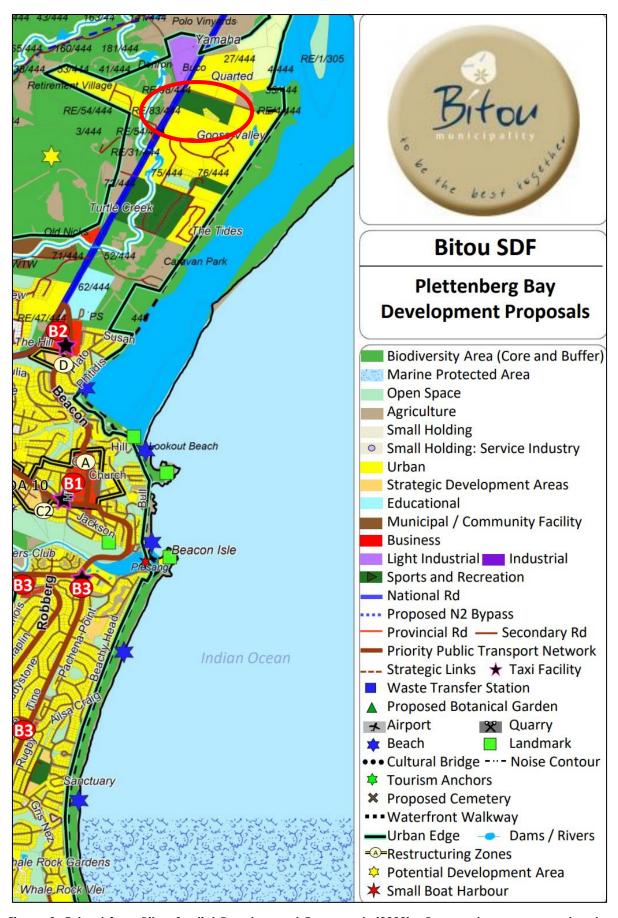


Figure 8: Extract from Bitou Spatial Development Framework (2022). Proposed sewerage and water pipeline infrastructure routes encircled in RED.

5. BRIEF HISTORIC BACKGROUND

This information summary is referenced from the NID for the greater development on the property (housing development) as Perception Planning (2023). The village of Plettenberg Bay (formerly known as "Formosa") was named after Governor van Plettenberg who undertook an inspection of the bay in 1778. It was decided in 1786 to use the bay as a harbour to ship timber.

Ganse Vallei 38/444 forms part of the original loan farm "Ganze Valley" that was granted to Rynier van Rooyen which comprised of an area of ~721.34ha which was surveyed during 1818. The 1818 diagram denotes historic land use north of the current N2 National Road as "grazing purposes". The diagram indicates a single structure, set back from the coast and a long distance from the current Pt 38/444.

SG mapping done between 1880 and 1900 shows the loan farm in relation to the village of Forma (Plettenberg Bay), bordered by the Bitou River to the north and the Keurbooms River to the east (Figure 9).

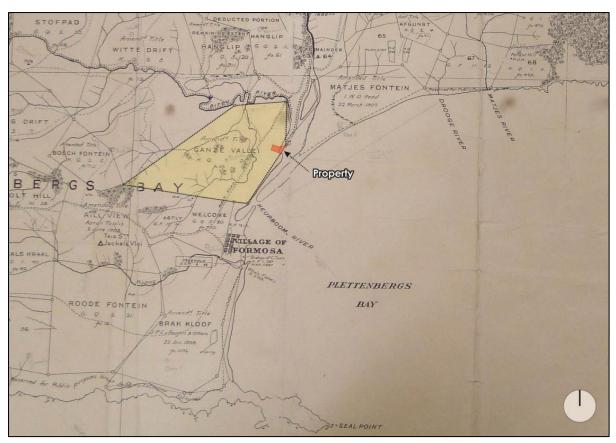


Figure 9: Location of Portion 38 of Farm 444 for which the pipeline infrastructure in the Rietvlei Road and N2 road reserves are required to connect to the Bitou Municipal system (George Museum Archives, as edited) (Image extracted from Background Information Document completed for Portion 38 of Farm 444 by Perception Planning, 2022).

6. HERITAGE RESOUCES AND ISSUES

6.1. Visual

This information summary is referenced from the NID for the greater development on the property (housing development) as Perception Planning (2023). The aerial imagery (1942) of the Ganse Vallei area indicates the old coastal road (prior to construction of the N2 national road) located west of Portion 38/444. The old coastal road has the same alignment as the current N2 national road.

The aerial image does not show any indication of cultivation/agricultural activities, buildings/structures, roads or tracks to the east of the old coastal road towards Pt 38/444.

Due to the proposed water and sewerage pipeline infrastructure being installed underground, it is our considered opinion that the proposal will not transform the character of the N2 national road and Rietvlei Road within an urban environment. The pipeline routes are transformed and located within the Urban Edge of Bitou Municipality and earmarked for urban expansion as stipulated in the Bitou Municipal Spatial Development Framework.

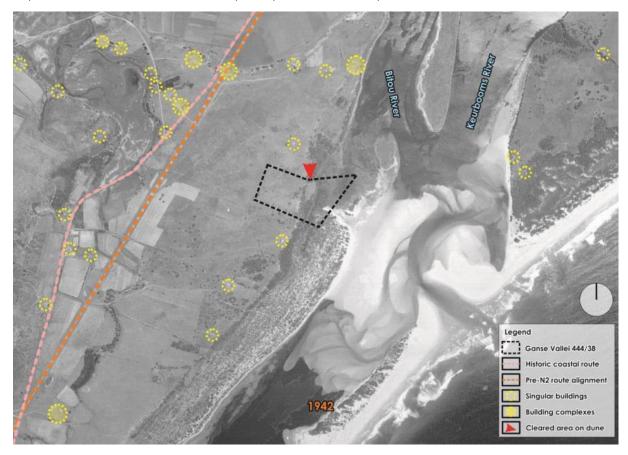


Figure 10: 1942 Aerial imagery for the Ganse Vallei area (Flight Survey 6, Flight Strip 038, Image 11526, NGSI as edited) (Image extracted from Integrated Heritage Impact Assessment for Portion 38 of Farm 444 by Perception Planning, 2022).

6.2. Archaeological

The proposed water and sewerage infrastructure is located within the road reserves of the N2 national road and the Rietvlei provincial road.

The road reserves for both theses roads are highly transformed due to the installation of water/sewerage services, internet cabling, concrete walkways and concrete swale structures for stormwater management.

Both road reserves are subject to continuous vegetation maintenance done by the respective road authorities. Should any heritage related resources have occurred in the formerly disturbed sediments, their context and significance are irreparably compromised.

6.3. Paleontology

According to the South African Heritage Resources Authority (SAHRA) paleontological (fossil) sensitivity map, the paleontology sensitivity for the study area of the proposed water and sewerage pipeline infrastructure is Unknown (Figure 11). As such, a minimum of a desktop study is required.



Figure 11: Paleontological (fossil) sensitivity map in relation to study site (www.sahirs.org.za/map/palaeo, 2024).

Table 1: Paleontological sensitivities applicable to the paleontological (fossil) sensitivity map in Figure 9 (www.sahirs.org.za/map/palaeo, 2024).

Colour	Sensitivity	Required Action
Red	Very High	Field assessment and protocol for finds is required
Orange/Yellow	High	Desktop study is required and based on the outcome

		of the desktop study, a field
		assessment is likely
Green	Moderate	Desktop study is required
		No paleontological studies
Blue	Low	are required however a
		protocol for finds is required
Grey	Insignificant/Zero	No paleontological studies
		are required
White/Clear	Unknown	These areas will require a
		minimum of a desktop
		study.

The study area where water and sewerage pipeline infrastructure are proposed is located on the western bank of the Keurbooms Estuary. The proposed pipeline infrastructure routes are located approximately between 10-15m above sea level. The underlying geological layers form part of the Table Mountain Group consisting mainly of quartzites of early Ordovician age (490-470 Ma). Prior to extensive metamorphism, the sedimentary rocks of the Table Mountain Group were deposited as part of a tidal-influenced marine shelf. Due to the faulting during the breakup of Gondwana, various basins were formed, collecting debris which resulted in the formation of the Enon Formation consisting of coarse boulders, pebbles/cobbles (conglomerates) (Shone, 2006). Fossils are rarely found in the Enon Formation as preservation potential is very low as a result of extreme stresses and deformation (Thamm & Johnson, 2006).

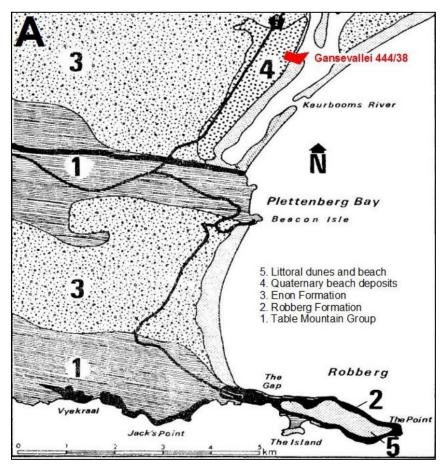


Figure 12: Geology of the Plettenberg Bay area in relation to the study site (Rust and Reddering, 1985).

It is noted that the Enon Formation is overlain by quaternary beach deposits as well as littoral dunes and beach sands. In 2009, Mr John Pether undertook a desktop Paleontological Impact Assessment for Portion 38 of the Farm Ganse Vallei 444 in which it was noted that fossil shells and bones can be expected in the uppermost windblown sands that will likely be in an archaeological context (i.e. the presence of such shells and bones will be as a result of human activities rather than a paleontological context) (Pethner, 2009).

It is therefore recommended that the HWC Chance Fossil Finds Protocol be implemented and included in the Environmental Management Programme for the proposed development on Portion 38 of Farm 444 who will be responsible for the installation of the proposed water and sewerage pipeline infrastructure in the N2 and Rietvlei Road road reserves.

7. RECOMMENDATION

The proposed link water and sewerage pipeline infrastructure will follow the alignment of existing roads through a highly transformed urban landscape. The pipelines will be installed underground and will therefore not physically alter the visual character of the areas although excavation of trenches is a requirement.

Having considered all the above-mentioned information stipulated in this BID, as well as the disturbed nature of the road reserves in which the water and sewerage pipeline infrastructure is proposed, it is our considered opinion that the proposal would not have an impact on any heritage resources of cultural significance and that no further heritage related assessments would be required.

8. REFERENCES

- Bitou Spatial Development Framework, 2022.
- Cape Town Deeds Office.
- De Kock, S., Webley, L. 2023. Integrated Heritage Impact Assessment in Terms of Section 38 of the National Heritage Resources Act, 1999 (Act 25 of 1999): Proposed Residential Development on a Portion of Ganse Vallei 444/38 (Plettenberg Bay) Knysna District and Bitou Municipality. Perception Planning, George, Western Cape.
- Nilssen, P. 2009. Archaeological Impact Assessment: Proposed Construction of a Hotel on Gansevallei 444/38 (Plettenberg Bay), District Knysna, Western Cape Province.

- Pether, J. 2009. Palaeontological Impact Assessment (Desktop Scoping Study): Proposed Construction of a Hotel on Ganse Vallei 444/38, Plettenberg Bay, District Knysna, Western Cape.
- Rust, I.C. and Reddering, J.S.V. 1985. Sedimentology of the Keurbooms estuary and Robberg Formation. In: Guidebook for SEDPLETT 85, a field seminar held at Plettenberg Bay in May, 1985. Department of Geology, University of Port Elizabeth, Port Elizabeth: 83 pp.
- Shone, R.W. 2006. Onshore post-Karoo Mesozoic deposits. In: Johnson, M.R., Anhaeusser, C.R. and Thomas, R.J. (Eds), The Geology of South Africa. Geological Society of South Africa, Johannesburg/Council for Geoscience, Pretoria, 541-552.
- Thamm, A.G. and Johnson, M.R. 2006. The Cape Supergroup. In: Johnson, M.R., Anhaeusser, C.R. and Thomas, R.J. (Eds), *The Geology of South Africa*. Geological Society of South Africa, Johannesburg/Council for Geoscience, Pretoria, 443-460.