FINAL BASIC ASSESSMENT REPORT

THE PROPOSED DEVELOPMENT OF AN APARTMENT BLOCK IN CLIFTON, ON ERVEN 46 AND 47 (TO BE CONSOLIDATED INTO ERF 580), CITY OF CAPE TOWN, WESTERN CAPE.

DATE: AUGUST 2024

Compiled by:

Chand Consultants

P.O Box 238, Plumstead, 7801

T: 021 762 3050

www.chand.co.za

Western Cape Government
Environmental Affairs and Development Planning

FORM NO. BAR10/2019

BASIC ASSESSMENT REPORT

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

BAR template date: NOVEMBER 2019

[Report date: August 2024]

(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 DEVELOPMENT OF AN APARTMENT BLOCK IN CLIFTON, ON ERVEN 46 AND 47 (TO BE CONSOLIDATED INTO ERF 580), CITY OF CAPE TOWN, WESTERN PROVINCE

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: Western Cape Government Department of Environmental Affairs and Development Planning Attention: Directorate: Development Management (Region 1 or 2) Private Bag X 9086 Cape Town, 8000 Registry Office 1st Floor Utilitas Building 1 Dorp Street, Cape Town Queries should be directed to the Directorate: Development Management (Region 1 and 2) at: Tel: (021) 483-5829 Fax (021) 483-4372	BAR must be sent to the following details: Western Cape Government Department of Environmental Affairs and Development Planning Attention: Directorate: Development Management (Region 3) Private Bag X 6509 George, 6530 Registry Office 4th Floor, York Park Building 93 York Street George Queries should be directed to the Directorate: Development Management (Region 3) at: Tel: (044) 805-8600 Fax (044) 805 8650

MAPS

Provide a location map (see below) as Appendix A1 to this BAR that shows the location of the proposed 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.
Provide a detailed site development plan / site map (see below) as Appendix B1 to this BAR; and if applicable, all alternative properties 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 clearly 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): o Watercourses / Rivers / Wetlands o Flood lines (*i.e.,* 1:100 year, 1:50 year and 1:10 year where applicable); o Coastal Risk Zones as delineated for the Western Cape by the Department of Environmental Affairs and Development Planning ("DEA&DP"): o Ridges; o Cultural and historical features/landscapes; o 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

CEMP:	Construction Phase Environmental Management Plan
COTO:	Committee of Transport Officials
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
DMS:	Development Management Scheme
DoA:	Department of Agriculture
DoH:	Department of Health
DWS:	Department of Water and Sanitation
EIS:	Ecological Importance and Sensitivity
EMPr:	Environmental Management Programme
HWC:	Heritage Western Cape
IHI:	Index of Habitat Integrity
LUPA:	Land Use Planning Act, No 3 of 2014
MPA:	Marine Protected Area
MPBL:	Municipal Planning By-law, 2015
MSDF:	Municipal Spatial Development Framework
NFEPA:	National Freshwater Ecosystem Protection Assessment
NSBA:	National Spatial Biodiversity Assessment
OEMP:	operational environmental management plan
ONA:	Other Natural Areas
PSDF:	Provincial Spatial Development Framework
SPLUMA:	Spatial Planning and Land Use Management Act, No 16 of 2013
SSVS:	Site Sensitivity Verification Statement
STA:	Spatial Transformation Areas
STR:	Screening Tool Report
TAP:	Transport-accessible Precinct
TMP:	Traffic Management Plan
TOR:	Terms of Reference
TRH:	Technical Recommendations for Highways
VIS:	Visual Impact Statement
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 ✓ **(**tick) or a **x** (cross) to indicate whether the Appendix is attached to the BAR.

The following checklist of attachments must be completed.

APPENDIX			**✓ (Tick) or x (cross)**
Appendix A:	**Maps**		
	Appendix A1:	**Locality Map**	✓
	Appendix A2:	**Coastal Risk Zones as delineated in terms of ICMA for the Western Cape by the Department of Environmental Affairs and Development Planning**	✓
	Appendix A3:	**Map with the GPS co-ordinates for linear activities Not applicable**	**x**
Appendix B:	**Appendix B1:**	**Site development plan(s)**	✓
	Appendix B2	**A map of appropriate scale, which superimposes the proposed development and its associated structures and infrastructure on the environmental sensitivities of the preferred site, indicating any areas that should be avoided, including buffer areas;**	✓
Appendix C:	**Photographs**		✓
Appendix D:	**Biodiversity overlay map**		✓
Appendix E:	**Permit(s) / license(s) / exemption notice, agreements, comments from State Department/Organs of state and service letters from the municipality.**		
	Appendix E1:	**Final comment/ROD from HWC**	✓
	Appendix E2:	**Copy of comment from Cape Nature**	None received
	Appendix E3:	**Final Comment from the DWS**	✓
	Appendix E4:	**Comment from the DEA: Oceans and Coast**	N/A
	Appendix E5:	**Comment from the DAFF**	N/A
	Appendix E6:	**Comment from WCG: Transport and Public Works**	None received
	Appendix E7:	**Comment from WCG: DoA**	✓
	Appendix E8:	**Comment from WCG: DHS**	N/A
	Appendix E9:	**Comment from WCG: DoH**	N/A

	Appendix E10:	**Comment from DEA&DP: Pollution Management**	None received
	Appendix E11:	**Comment from DEA&DP: Waste Management**	None received
	Appendix E12:	**Comment from DEA&DP: Biodiversity**	None received
	Appendix E13:	**Comment from DEA&DP: Air Quality**	N/A
	Appendix E14:	**Comment from DEA&DP: Coastal Management**	✓
	Appendix E15:	**Comment from the local authority** **(i) Comment re stormwater management** **(ii) Collated comment on DBAR**	(i) ✓ (ii) ✓
	Appendix E16:	**Confirmation of all services (water, electricity, sewage, solid waste management)**	✓
	Appendix E17:	**Comment from the District Municipality**	N/A
	Appendix E18:	**Copy of an exemption notice**	N/A
	Appendix E19	**Pre-approval for the reclamation of land**	N/A
	Appendix E20:	**Proof of agreement/TOR of the specialist studies conducted.**	✓
	Appendix E21:	**Proof of land use rights**	See Appendix M
	Appendix E22:	**Proof of public participation agreement for linear activities**	N/A
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 & other technical reports** **G1: Visual Impact Statement** **G2: Groundwater Impact Assessment** **G3: Aquatic Specialist Assessment** **G4: Terrestrial Biodiversity Compliance Statement** **G5: NID and Heritage Screener** **G6: Traffic Impact Assessment** **G7: Geotechnical Report** **G8: Civil Services Report** **G9: Electrical Report**		✓
Appendix H:	**EMPr**		✓
Appendix I:	**Screening Tool Report** **I1 Screening tool report (March 2024)** **I2 Site Sensitivity Verification Report (2024)**		✓
Appendix J:	**The impact and risk assessment for each alternative**		Included in the body of the report

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**	Included in the body of the report
Appendix L:	**Landscaping Plan**	✓
Appendix M:	**Town Planning Report and LUMS Application**	✓
Appendix N:	**Demolition permits**	✓
Appendix O:	**Structural engineering drawing**	✓
Appendix P:	**Declarations:** **P(i): Applicant** **P(ii): EAP** **P(iii): Specialists (freshwater, groundwater, terrestrial biodiversity, visual).**	✓
Appendix Q:	**Engagement with CoCT and DWS: watercourse matter**	✓
Appendix R:	**Methodology to determine impact significance**	✓
Appendix S:	**Comparison between preferred Alternative and previous (discarded) development scheme**	✓
Appendix T:	**Application form (as submitted in May 2024) (without appendices as these are included in this list)**	✓
Appendix U:	**Realignment of stormwater channel – drawing**	✓

LIST OF FIGURES:

LIST OF TABLES:

SECTION A: ADMINISTRATIVE DETAILS

Highlight the Departmental Region in which the intended application will fall	**CAPE TOWN OFFICE:**		GEORGE OFFICE:
	REGION 1 **(City of Cape Town, West Coast District).**	REGION 2 (Cape Winelands District & Overberg District)	REGION 3 (Central Karoo District & Garden Route District)
Duplicate this section where there is more than one Proponent Name of Applicant/Proponent:	Mr. A. H. Darvesh		
Name of contact person for Applicant/Proponent (if other):	N/A		
Company/ Trading name/State Department/Organ of State:	Arteche Investments (Pty) Ltd		
Company Registration Number:	N/A		
Postal address:	P.O. Box 2515		
	Pinetown	Postal code: 3600	
Telephone:	087 470 0514	Cell: N/A	
E-mail:	president@artecheholdings.com	Fax: N/A	
Company of EAP:	Chand Environmental Consultants cc		
	Ingrid Eggert		
EAP name:	Note: Marielle Penwarden and Claudette Muller were the initial EAPs on the project whilst employed at Chand Environmental Consultants. Portions of this Draft Basic Assessment Report are based on the versions compiled by the previous EAPs, but the balance was amended to respond to the latest development proposal and the 2024 Application for Environmental Authorisation.		
Postal address:	1.2A Richmond Centre, Main Road		
	Plumstead	Postal code: 7800	
Telephone:	021 762 3050	Cell: 0784396501	
E-mail:	info@chand.co.za	Fax: N/A	
Qualifications:	Ingrid Eggert: BA Environmental Management (UNISA)		
EAPASA registration no:	Ingrid Eggert: 2019/805 **Previous contributors:** Marielle Penwarden: 2019/1988 Claudette Muller: Pending		
Name of Person in control of the land:	City of Cape Town		
Name of contact person for person in control of the land:	Girshwin Fouldien		
Postal address:	11th Floor		
	44 Wale Street	Postal code: 8000	
Telephone:	(021) 487 2208	Cell: N/A	
E-mail:	girshwin.fouldien@capetown.gov.za	Fax: (021) 487 2208	
NOTE:	**The stormwater channel realignment will take place on Erf 48 and a remainder of street parcel RE/145 – which is City owned land. These actions do not constitute listed activities.**		

Duplicate this section where there is more than one Municipal Jurisdiction Municipality in whose area of jurisdiction the proposed activity will fall:	City of Cape Town

Contact person:	Maurietta Steward	
Postal address:	Floor 8, 44 Wale Street (c/o Wale and Long Streets) Cape Town	
		Postal code: 8000
Telephone	021-400 6529	Cell: -
E-mail:	Maurietta.Steward@capetown.gov.za	Fax: -

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

1.	Is the proposed development (please tick):	New	✓	Expansion	
2.	Is the proposed site(s) a brownfield of greenfield site? Please explain.				
Erf 46 is a brownfields site as it is already developed. Erf 47 is greenfields as it has not been subject to formal development. The existing structure on Erf 46 was demolished in accordance with the required permits (**Appendix N**). The proposed development will occupy Erven 46 and 47, which will be consolidated into Erf 580. Erf 48 and remainder street parcel RE/145 are greenfield sites and will continue to be used for the transportation of stormwater.					
3.	**For Linear activities or developments –** The Proposed Development is not a Linear Development.				
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.				m²
3.3.	Provide a description of the proposed development (e.g. for roads the length, width and width of the road reserve 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.				
3.5.	SG Digit codes of the Farms/Farm Portions/Erf numbers for all alternatives				
3.6.	**Starting point co-ordinates for all alternatives**				
	Latitude (S)	°	‘	“	
	Longitude (E)	°	‘	“	
	Middle point co-ordinates for all alternatives				
	Latitude (S)	°	‘	“	
	Longitude (E)	°	‘	“	
	End point co-ordinates for all alternatives				
	Latitude (S)	°	‘	“	
	Longitude (E)	°	‘	“	
4.	**Other developments –** The Proposed Development is an Apartment Block.				
4.1.	Property size(s) of all proposed site(s): Erf 46: 756 m² Erf 47: 723 m² The proposed consolidation of the two erven will yield a site of 1,479 m² in extent.				1,479 m²
4.2.	Developed footprint of the existing facility and associated infrastructure (if applicable):				Approximately 562 m²
4.3.	Development footprint of the proposed development and associated infrastructure size(s) for all alternatives:				1127 m²
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).				
It is the intention of the Applicant to consolidate, rezone and redevelop Erf 46 and Erf 47 with a signature lifestyle apartment building known as Azalea Signature Residences. The to-be consolidated erf constitutes “the site” as referred to in this document, but excludes 59m² along Victoria Road, which is zoned Transport Zoning 2 and will remain undeveloped to accommodate the possible future widening of Victoria Road.					

The site is located on the mountain side of Victoria Road in the coastal suburb of Clifton, approximately 90 m from the beachfront (**Figure 1**).

Figure 1: Locality Plan (Nieuw architects, June 2023)

Site Context

Erf 46 housed a residential dwelling which, since withdrawal of the previous application, has been demolished in accordance with permits from HWC (dated June 2023) and CCT (dated August 2023). Erf 47 is a vacant stand which is densely vegetated and slopes steeply upwards from Victoria Road towards Kloof Road.

Except for the footprint of the now demolished structure, the site is densely covered with vegetation and slopes steeply upwards from Victoria Road towards Kloof Road. It is bounded by a passage and drainage passage to the north and south respectively, Victoria Road to the west and undeveloped 'Public Open Space' erven to the east, immediately upslope of the site towards Kloof Road. Refer to aerial overlay shown in **Figure 2**. The neighbouring area in the vicinity of the site comprises a number of apartment blocks (flats) and a few remaining single residential dwellings.

Over the past decade, a stormwater channel on the upslope Open Space eroded and changed course to the point where it entered Erf 47. This was never rectified by the City. To unlock development on Erf 47 and to protect private property downstream of Kloof Road, it is now necessary for the Applicant to realign this stormwater conduit to its original course. It is important to note that in itself, this action does not trigger any listed activities and is necessary as a matter of course.

Figure 2: Aerial Image showing Erven 46 and 47, Victoria Road, Clifton (Brummer, 2023)

Development Proposal

The development footprint of the building would be approximately 1127 m².

The proposal comprises a signature apartment building (flats) with up to ten terraced levels, providing for up to ten apartments (flats) as follows:

Storey	Description
Basement Storey 3	At Victoria Road street-level, this basement would comprise of entry security and drive-through port cochere, two vehicle parking lifts; a pedestrian shuttle lift and 2 private internal lifts (1 of which is a fireman's lift).
Basement Storeys 2 & 1	Contain parking areas of 18 bays and service/plant rooms.
Ground Floor – 1st Storey	This level comprises the main pedestrian entry lobby as well as a common swimming pool area with gardens, storage and back of house facilities. The secure residents lift lobby point is accessed by non-residents on this level.
Second Storey	would hold 2 x apartments with terraces.
Third Storey	would hold 2 x apartments with terraces.
Fourth Storey	would hold 2 x apartments with terraces.
Fifth Storey	would hold 2 x apartments with terraces.
Sixth and Seventh Storeys	would hold 2 x duplex penthouse apartments with terraces, swimming pools and garden areas.

Figure 3 shows the 'Built Upon Plan' (footprint) of the proposed development on the site, and a sectional view which shows the terraced nature of the proposed development in **Figure 4.**

Figure 3: Proposed 'built upon plan' (Nieuw, June 2023)

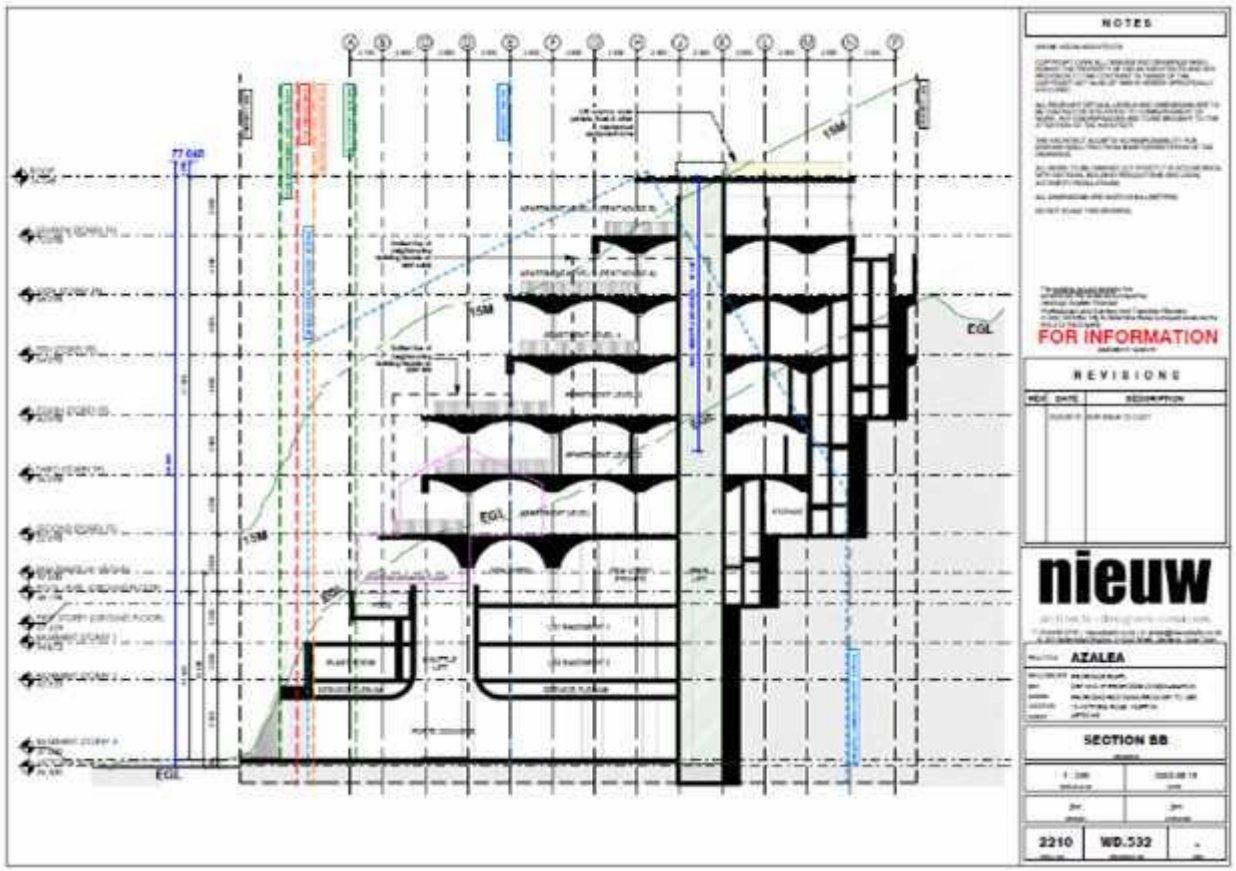


Figure 4: Sectional View Showing Terraced Nature of the Proposed Development (Nieuw, June 2023)

The full set of Site Development Plans are included as **Appendix B1**. The SDP may be subject to further amendments as a result of design requirements. Provided that the amendments are materially similar to the June 2023 version of the plans included in the BAR, these updates to the SDP should not attract an Amendment Application (should Approval be granted).

Note: Specialist inputs for this application are based on the April 2023 set of plans while this BAR includes the more recent June 2023 plans (as submitted to the CCT for town planning approval). Changes reflected in the June 2023 plans are however immaterial to the specialist studies as these relate only to annotation changes and not design changes. The only structural change was moving the entrance feature structure to be behind the Transport 2 zoning line and below the Existing Ground Level.

The development would require significant excavation, particularly to construct the lower levels. The design is such that lateral support is only required in the Open Space areas to the back of the site. No lateral supports are required into the drainage passages or any residential properties beyond (see structural engineering drawing in **Appendix O**).

As indicated, the realignment of a highly eroded stormwater drainage feature that eroded into Erf 47 will be required. The proposal is to reroute the channel to its original course on Erf 48 and remainder street parcel RE/145. After consultation with City of Cape Town catchment management, it was concluded that a gabion-lined channel is to be constructed to intercept the runoff from Kloof Road, divert it around Erf 47, and continue through the public open space over erf 48 to discharge into the drainage passage (**Figure 5**). The realigned portion of the stormwater channel will be approximately 20 m long and comprise three stormwater stilling chambers connected by an open gabion channel constructed with gabion baskets and reno mattress placed on Bidim. Each chamber will feature a deep recess and a headwall. Stormwater will exit the chambers through a wide opening into the gabion channel. The final stilling chamber will discharge to the existing watercourse southeast of the site. Refer to Table 1 for the coordinates of the chambers. An engineering drawing is included in **Appendix U**.

Table 1: Approximate co-ordinates for realignment of stormwater channel

	Latitude	Longitude
Start	33° 55' 58.6776" S	18° 22' 42.528" E
Middle	33° 55' 58.962" S	18° 22' 42.87" E
End	33° 55' 59.3256" S	18° 22' 42.8124" E

Refer to the information box overleaf for clarification of 'watercourses' on site.

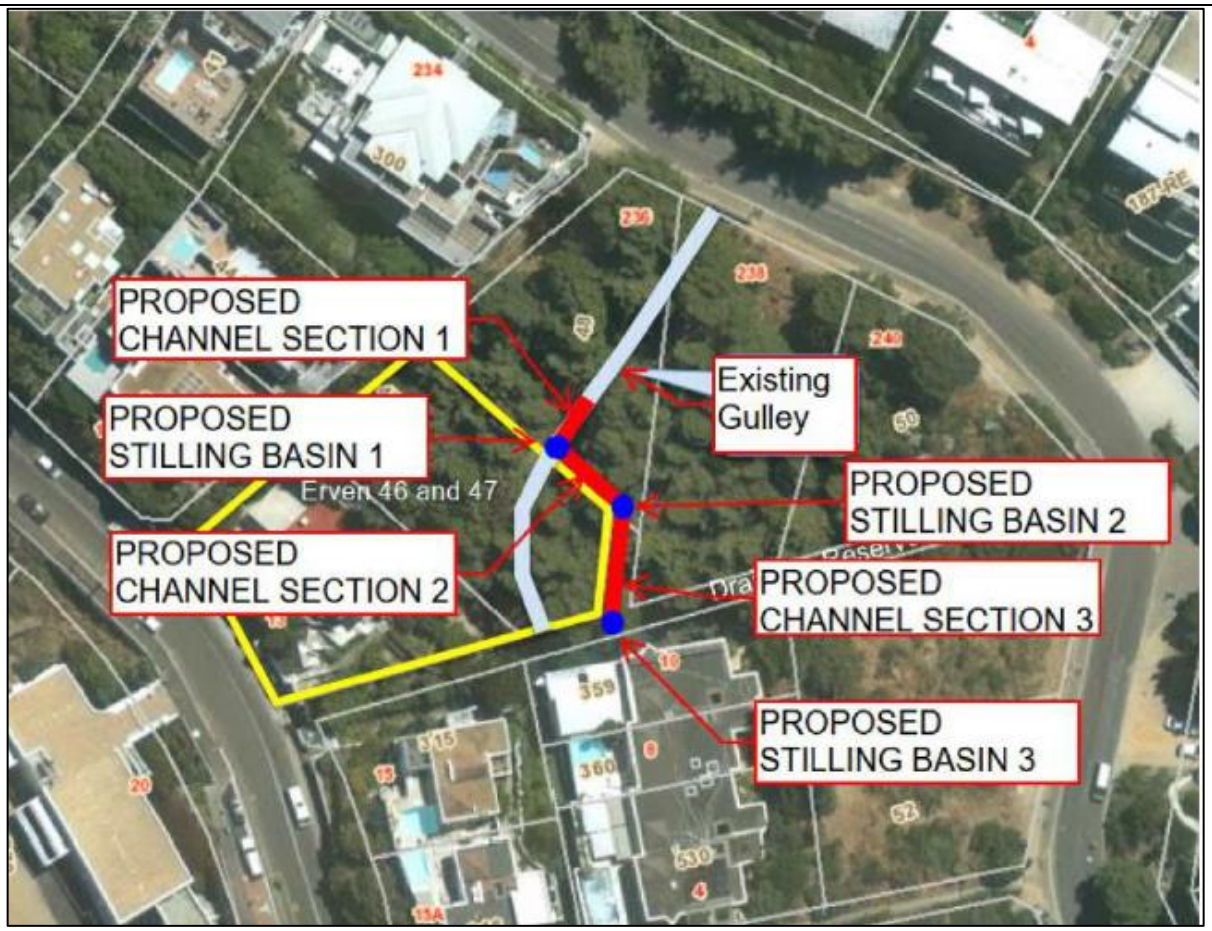


Figure 5: Proposed realignment of the drainage channel (Sutherland, 2024)

Services

The development demands the following services:

- Potable water (approximately 5 kl/day), to be supplied from the 100mm diameter municipal bulk main in Kloof Street. Two existing 50mm polycop pipes connect the site to the bulk supply in Kloof Street, however only one of these will be utilised for the consolidation erf and the other will be blanked off. The CCT confirmed capacity in the Kloof Nek distribution zone to service the development (**Appendix E16**) but noted low pressure in the Kloof Street bulk main line. On-site booster pumps may be necessary (dependent on on-site pressure tests at detailed design phase).
- Reticulation and treatment of domestic sewage. The existing 150mm diameter sewer pipe which connects the site to the 150mm sewer main in Victoria Road will be utilised. The CCT confirmed capacity in the bulk pipelines and at the Wastewater Treatment Works to accommodate the proposed development (**Appendix E16**).
- Solid waste removal and disposal, which will be undertaken by the CCT, who confirmed capacity in this regard (**Appendix E16**).
- Electricity supply of 350A at 400V. The CCT confirmed that the Clifton Terraces substation has spare capacity to service the development (now included in **Appendix E16**). A solar system is also proposed to reduce development's grid reliance.

Stormwater flows are such that onsite attenuation is not required in terms of the CCT's 2009 Management of Urban Stormwater and Impact Policy. Stormwater management on site will include collection from roofs and balconies for use in landscaping on the ground floor and terraces. Runoff from the landscaped areas will be piped, routed through silt traps and discharged to the kerb face into the existing road channel along Victoria Road. This stormwater management proposal was supported by the CoCT (**Appendix E15(i)**). Groundwater (subsoil drainage) will also

be collected and pumped to a tank to be utilised for landscape irrigation and for non-potable uses within the development.

Full details of all services, required interventions, including the stormwater management proposal are included in the Civil Services Report (**Appendix G8**) and the stormwater management plan. A plan showing the gulley diversion and proposed services interventions on site is included in the SDP set **Appendix B1**.

The concept and intention of landscaping on the ground floor, terraces and roof are shown in the Landscaping Plan (**Appendix L** and Figure 6).

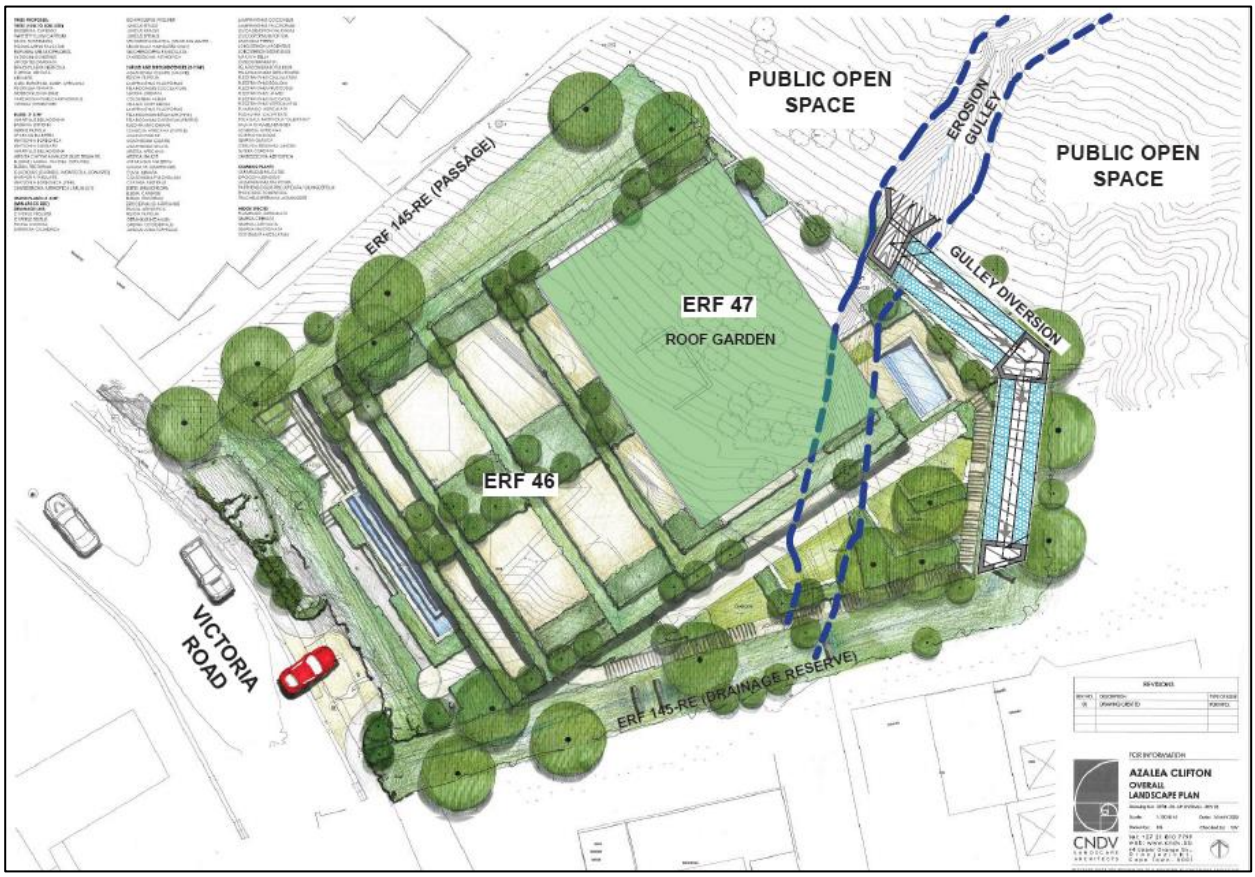
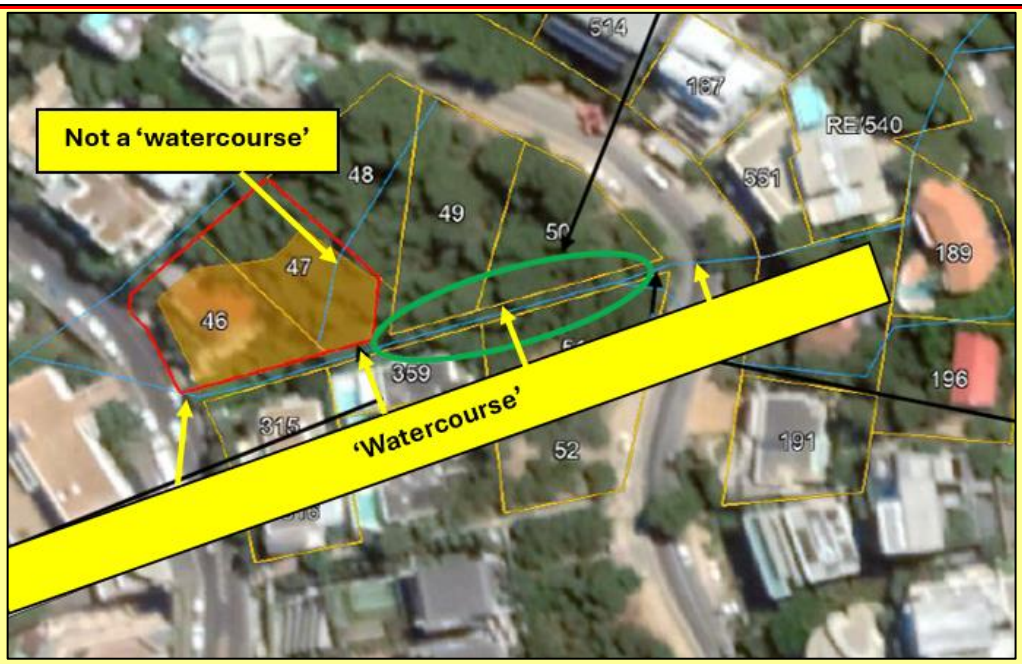


Figure 6: Landscaping concept (CNDV, 2024)

CLARIFICATION OF 'WATERCOURSES' IN RELATION TO THE PROPOSAL:

It is necessary to clarify which of the aquatic features on site constitute a 'watercourse' as defined in the EIA Regulations (under NEMA) as well as the National Water Act. The freshwater ecologist determined that the drainage feature passing through Erf 47 is not a watercourse. The formal stormwater channel (and related servitude) to the south of the site is considered a watercourse despite its altered and degraded state. See image below. The specialist's determination in this regard was confirmed by the City of Cape Town and DWS. Furthermore, DWS confirmed that no water use application is required.



The proposed realignment of the stormwater feature crossing erf 47 therefore does not constitute infilling of a watercourse.

4.5.	Indicate how access to the proposed site(s) will be obtained for all alternatives.

From Victoria Road entry, a pedestrian shuttle lift will accommodate movement between basement port cochere and Ground floor.

The ground floor constitutes a communal entry point and statement lobby to the building as well as a resident's pool terrace with attached amenities and gardens, and which will be designed to interact and integrate with the natural landscape surrounds and rock face on Victoria Road.

The single port cochere access point on Victoria Road will allow for the flow and ease of vehicular and/or pedestrian traffic whilst also provisioning for drop-off and 'holding' areas. Two car lifts would transport vehicles to and from the parking levels. The site would also be exited via the car lifts which would enable all vehicles parked on the site to exit the property in forward gear.

	SG Digit code(s) of the proposed site(s) for all alternatives:																					
4.6.	**Development component:**																					
	ERF 46	C01600100000004600000																				
	ERF 47	C01600100000004700000																				
	Stormwater realignment component: C01600100000004800000 & C01600100000014500000																					

4.7.	Coordinates of the proposed site(s) for all alternatives:			
	ERF 46			
	Latitude (S)	33º	55'	59.17"
	Longitude (E)	18º	22'	41.28"
	ERF 47			
	Latitude (S)	33º	55'	58.80"
	Longitude (E)	18º	22'	41.77"

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. Not that this EAP or Applicant is aware of.		**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. The site is located within 100m of the high-water mark and thus in the coastal protection zone. The site is, however, on the landward side of Victoria Road and surrounded by development. The site also falls within the Coastal Management Line adopted by the DEA&DP in terms of the NEM: ICMA. The development would thus not disrupt the coastal processes of the coastline or marine resources. While the NEM: ICMA was considered in this regard, no applications are applicable. This Draft Basic Assessment Report will be shared with DEA: Oceans and Coast for comment.	**YES**	
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. Section 38(8) of the Act has been considered and comment in this regard has been solicited from Heritage Western Cape who has confirmed that no heritage resources are likely to be affected by the proposed development and so no further assessment in this regard is necessary. Application has been made to SAHRA for demolition permit in terms of Section 34 of the NHRA. This permit has been granted and the building subsequently demolished. Refer to **Appendix E1** for the HWC (updated May 2024) comment and permit **Appendix N**.	**YES**	
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. Given the presence of an unnamed stream near the site, the provisions of the NWA were considered, and a risk assessment completed by a freshwater ecologist (refer to Appendix G3). The DWS were also engaged through the submission of a pre-application enquiry via the Department's online e-wulaas system and a subsequent interaction which resulted in DWS confirmation that water use authorisation in terms of the NWA is not required to allow for the proposed development (refer to **Appendix E3**).		**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.		**NO**
The National Environmental Management Waste Act (Act No. 59 of 2008) ("NEM:WA")		**NO**
The National Environmental Management Biodiversity Act, 2004 (Act No. 10 of 2004 ("NEMBA"). The NEMBA does not apply to the proposed development in terms of triggering the need for permits under Section 87 of the NEMBA.		**NO**
The National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003) ("NEMPAA").		**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.		**NO**

3. Other legislation

List any other legislation that is applicable to the proposed activity or development.
The proposal requires land use approvals in terms of Section 42 of the City of Cape Town Municipal Planning By-law, 2015 (MPBL) and the provisions of the Development Management Scheme (DMS). Refer to **Appendix M** for a copy of the town planning application and related motivation report.

4. Policies

Explain which policies were considered and how the proposed activity or development complies and responds to these policies.
The following policies were taken into account in the town planning application and are addressed in the Town Planning Motivation Report (**Appendix M**): • City of Cape Town Densification Policy (2012) • Scenic Drive Network Management Plan (2003) • Urban Design Policy The Stormwater Management Plan has been informed by: • The City of Cape Town's Floodplain and River Corridor Management Policy (2009); and • Management of Urban Stormwater Impacts Policy (2009)

5. Guidelines / Frameworks

List the guidelines which have been considered relevant to the proposed activity or development and explain how they have influenced the development proposal.
The following frameworks were considered: • Western Cape Provincial Spatial Development Framework (PSDF) (2014): Consulted to inform the development of the site. • City of Cape Town Municipal Spatial Development Framework (2012): Consulted to inform the development of the site. • City of Cape Town Revised Municipal Spatial Development Framework (MSDF) (2023): Consulted to inform the development of the site. • Table Bay District Plan(2023): Consulted to inform development of the site. Alignment of the proposal with these frameworks is detailed in the need and desirability section of this report. The below EIA related guidelines informed relevant aspects of the Basic Assessment process: • Department of Environmental Affairs (DEA) Guidelines on Public Participation (2017) • DEA: Guidelines on Need and Desirability (2017) • DEA: Guidelines on EIA Regulations (2012) • DEA&DP Guidelines on Alternatives (2013) • DEA&DP: Guidelines on Need and Desirability (2013) The below documents guided the visual impact specialist assessment: • Guideline for involving Heritage Specialists in the EIA process (Bauman, N & Winter, S, 2005) prepared for DEA&DP • Guideline for involving Visual and Aesthetic Specialists in the EIA process (Oberholzer, B 2005) prepared for DEA&DP • Heritage and Scenic Resources: Inventory and Policy Framework for the Western Cape (Winter, S & Oberholzer, B 2013) The traffic impact assessment took account of the following Manuals: • TMH 16 Vol 1 & 2 South African Traffic Impact and Site Traffic Assessment Manual, August 2012, compiled by the Committee of Transport Officials (COTO) • South African Trip Generation Rates, Second Edition, Department of Transport – June 1995 • Institute of Transport Engineers Trip Generation Manual 8th Edition

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
As prescribed by the Protocol (GNR320 and GNR3717), a DFFE Screening Tool Report (STR) and Site Sensitivity Verification Statement was prepared for the site and the proposed development and is included in (**Appendix I1** and **I2**). A summary is provided below. • Based on the findings of the terrestrial ecologist, the STR's medium sensitivity rating for the Animal Species theme and low sensitivity rating for the plant species theme are disputed. The site has no sensitivity in this regard. • The specialist also found the site entirely transformed, so while it historically would have had very high sensitivity as found by the STR, this is no longer the case today. The site has no terrestrial biodiversity sensitivity. • The low sensitivity in the aquatic biodiversity theme is confirmed given the presence of a highly degraded and transformed watercourse immediately southeast of the site. • The STR rates the site as having very high sensitivity in the Archaeological and Cultural Heritage owing to its proximity to Grade I and II heritage resources. The proposal will however not impact on any of these resources, as confirmed by HWC and a heritage practitioner. • The medium sensitivity ascribed in the STR for the civil aviation and defense themes are disputed, as the development proposal on the site will not compromise any defense actions / sites and neither will it impact on the safety or operations of an aerodrome or have any effect on the airspace or aviation radar. The development therefore holds no sensitivity in this regard. The terrestrial (plant and animal) biodiversity and aquatic biodiversity specialist investigations and reporting were subject to the requirements of the protocol. None of the other specialist input obtained has relevance to any Protocol requirements.

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.
19a	*The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from-* *(i) The seashore* *(ii) The littoral active zone, an estuary or a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever distance is greater; or* *(iii) The sea* *But excluding where such infilling, depositing, dredging, excavation, removal or moving-* *(a) Will occur behind a development setback.*	*The majority of the site is located within 100m of the high-water mark of the sea and significant excavation would be required to accommodate portions of the building proposed below current ground level. The threshold considered in this listed activity will be exceeded.*

	(b) Is for maintenance purposes undertaken in accordance with a maintenance management plan; *(c) Falls within the ambit of activity 21 in this Notice, in which case that activity applies;* *(d) Occurs within existing ports or harbours that will not increase the development footprint of the port or harbour; or* *Where such development is related to the development of a port or harbour, in which case activity 26 of Listing Notice 2 of 2014 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.
Not applicable		
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.
Not applicable		

Note on other listed activities:

Activity 12 of Listing Notice 3 (relating to the clearance of 300 m or more of indigenous vegetation) was considered, however is not relevant to the proposal as there is no evidence on site of the historically present Endangered Peninsula Granite Fynbos (as confirmed by the specialist).

Activity 19 of Listing Notice 1 was also thoroughly considered based on several engagements with the freshwater specialist, the DEA&DP, the DWS and the CCT. As the stormwater drainage feature on Erf 47, **Erf 48 and remainder street parcel RE/145** is not a watercourse, its realignment does not trigger this listed activity. Furthermore, it was concluded that the extent of works within the watercourse south of the site is such that it will not exceed the 10m^3 threshold of this listed activity. As such, Activity 19 of LN1 is not relevant to the proposal.

In addition to the above, the realignment of the stormwater channel on open space land will not constitute any other listed activities, given that:

- **It will not transform the open space to another land use as it is (and historically was) used for conveying stormwater to the servitude south of the site. In any event, it will not meet the 1000 m^2 threshold of Activity 15 of Listing Notice 3.**
- **The open space properties are located within the urban area as it falls within the interim urban edge of the CCT as of March 2012.**
- **The infrastructure is shorter than 1000 m in length.**
- **It is not within 100 m of the high-water mark of the sea.**
- **Vegetation does not constitute indigenous vegetation. In any event, the realigned portion will only occupy approximately 90 m^2 – well below the 300 m^2 threshold considered in Activity 12 of Listing Notice 3.**

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.
Not applicable		

SECTION E: PLANNING CONTEXT AND NEED AND DESIRABILITY

1.	Provide a description of the preferred alternative.

The preferred Alternative is detailed in Section B1 of this report. A summary of the development is provided below, and the preferred site development plan is included in **Appendix B1**.

The preferred alternative comprises a 10-level apartment block with a development footprint of approximately 1127 m² on the to be consolidated erven 46 and 47, Clifton. The building will offer 10 terraced apartments, basement parking, vehicular and pedestrian lifts and common areas.

The development would require significant excavation, particularly to construct the lower levels, however the design is such that lateral anchor supports into neighboring properties on the northern and southern boundaries is not required. Such anchors will be necessary into the POS east of the site. The development will also necessitate the realignment of a stormwater drainage feature currently crossing Erf 47.

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.

Erf 47 is zoned Single Residential (SR1). Erf 46 has a split zoning. The majority of the property has a SR1 zoning, but a 59m² portion along Victoria Road is zoned Transport Zoning (TR2) to accommodate the possible future widening of Victoria Road. As such, the TR2 portion is excluded from the development proposal.

Apartments (flats) are not permitted in terms of SR1 zoning. Application for rezoning to General Residential (GR5) has been made in terms of the City of Cape Town's Municipal Planning By-law (2015).

While the proposal would require rezoning to allow for the proposed land-use, the proposal is aligned with the overarching planning intentions of the area in terms of the relevant spatial planning documents (refer to section E4 below).

3.	Explain how potential conflict with respect to existing approvals for the proposed site (as indicated in the NOI/and or application form) and the proposed development have been resolved.

Such conflicts are all addressed in the town planning applications which seeks to consolidate and rezone the properties, depart from building line and height provisions of the Development Management Scheme, and remove some conditions from the Title Deeds.

It should be noted that the type of land-use would remain the same i.e., residential, but an enhancement of rights is pursued. Furthermore, the proposal is aligned with the overarching spatial planning and development vision of the area (refer to section E4 below).

4.	Explain how the proposed development will be in line with the following?
4.1	The Provincial Spatial Development Framework.

The Western Cape Spatial Development Framework (PSDF) does not extend to project specifics. The residential nature of the development is however aligned with the residential fabric of the area and as such, is in support of the PSDF intent to densify residential nodes.

4.2	The Integrated Development Plan of the local municipality.

The Integrated Development Plan is not related to private development of this nature.

4.3.	The Spatial Development Framework of the local municipality.

The City of Cape Town's Municipal Spatial Development Framework (MSDF) (2023) provides five Spatial Transformation Areas (STAs) on which growth management is based.

Clifton forms part of an *Incremental Growth & Consolidation Area* which promotes diversification and densification of land uses where bulk engineering infrastructure allows. This means diversification of mono-use residential patterns, incremental intensification (density and diversity) via subdivisions, second and third dwellings and rezoning is generally favoured. The property falls within an existing Transport-accessible Precinct (TAP) and the MyCiTi bus route along Victoria Road. A restructured urban form and functionality for Cape Town is premised on transit-oriented development and land use intensification.

The above demonstrates that the proposal is directly alignment with the forward planning for the area, as considered in the MSDF.

4.4.	The Environmental Management Framework applicable to the area.

The site is located beyond any sensitive areas as indicated in the City's Biodiversity Network (refer to **Figure 7** below). An 'Other Natural Area' is however located along the eastern boundary of the site (upslope of Erf 47).

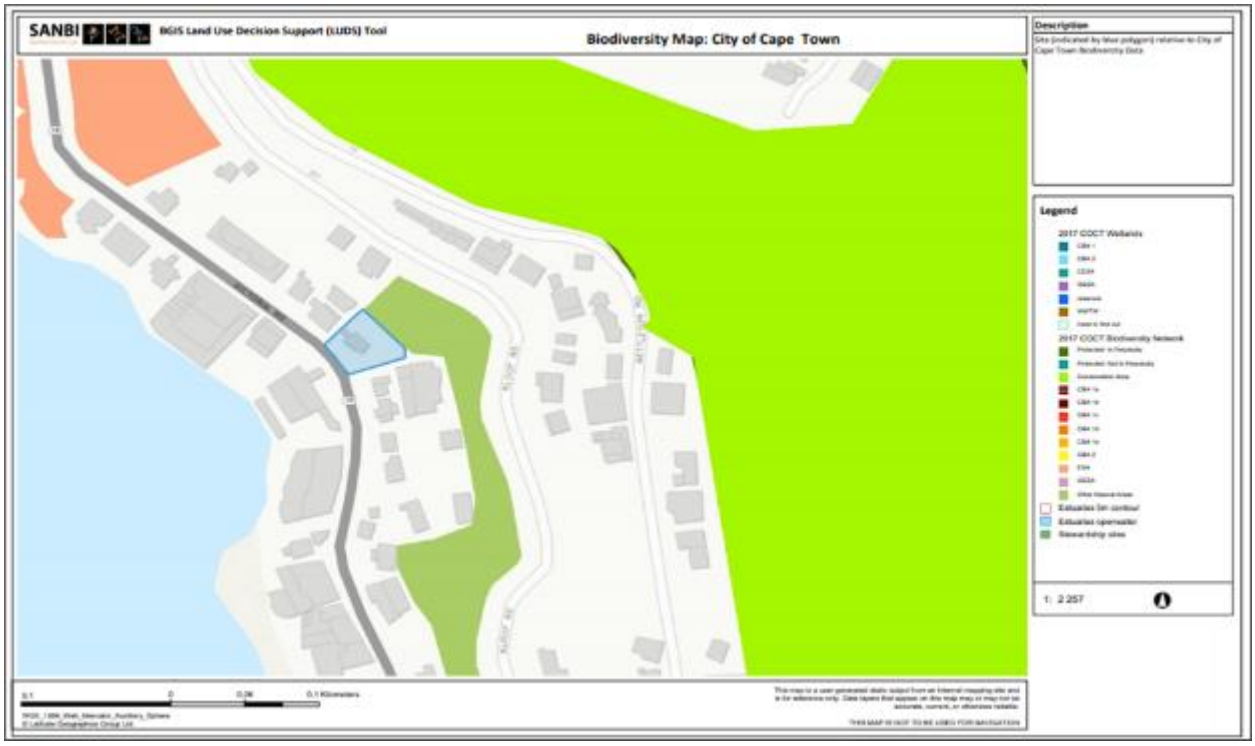


Figure 7:Biodiversity Map: City of Cape Town BioNet (created using SANBI GIS, April 2020)

In contradiction to the BioNet data, the City's Table Bay District Plan and related EMF shows that the Other Natural area (Buffer 1) extends onto Erf 47, in the south-eastern corner (refer to **Figure 8**) While the resolution on this image is low, the Buffer 1 area was confirmed by the City of Cape Town (pers. comms, Ms. T. Kieswetter) and corresponds with a matrix of properties zoned as Public Open Space. This clarification is important when considering **Figure 9** and any related discussions in the Aquatic Biodiversity Impact Assessment prepared by Ms Toni Belcher (**Appendix G3**).

Figure 8: Extract from the Biodiversity Network for the Table Bay District (source: Table Bay District Plan, 2023)

In addition to the information provided above, a terrestrial biodiversity site survey undertaken by a specialist has confirmed that the site does not contain any sensitive terrestrial biodiversity worthy of conservation (refer to Altern, 2022, **Appendix G4**).

5.	Explain how comments from the relevant authorities and/or specialist(s) with respect to biodiversity have influenced the proposed development.

Comment on biodiversity was sought from:

- Engagement with Ms. T. Kieswetter from the CoCT to clarify the Buffer 1 status extending into Erf 47;
- DEA&DP: Biodiversity: Coastal Management confirmed that the site is located on the landward side of the City of Cape Town's Coastal Urban Edge and that the proposed development will not impact coastal processes or public access to coastal public property.
- Engagement with the CoCT (**Appendix Q**) and DWS to find consensus on the 'watercourse' matter (as clarified elsewhere in this report).

The following authorities, who are considered custodians of biodiversity, were again notified of the availability of the Draft BAR:

- CapeNature
- City of Cape Town Environment & Heritage Branch
- City of Cape Town Biodiversity Management Branch
- DEA&DP: Biodiversity: Coastal Management

No comment was received from CapeNature. No new issues in relation to biodiversity were raised by the other authorities that submitted comment on the DBAR.

6.	Explain how the Western Cape Biodiversity Spatial Plan (including the guidelines in the handbook) has influenced the proposed development.

Biodiversity maps of high-level spatial data were compiled to understand whether the site may contain any ecologically sensitive areas as defined by the WCBSP.

In terms of the WCBSP, the Other Natural Area (ONA) corresponding to the POS belt east of the site extends slightly into Erf 47 (**Figure 9**), however this is contradicted in the City of Cape Town's Biodiversity spatial data. Regardless, of this conflict in the mapping, the site does not house any terrestrial or aquatic features of significance as confirmed by the relevant specialists. The WCBSP acknowledges the presence of the watercourse along the southeastern border of the site.

Within the greater site context, a Marine Protected Area (MPA) is located to the west of the site, which abuts the shoreline, a Protected Area (Table Mountain National Park) lies about 100m to the north-east of the site and Ecological Support Areas to the north-west of the site.

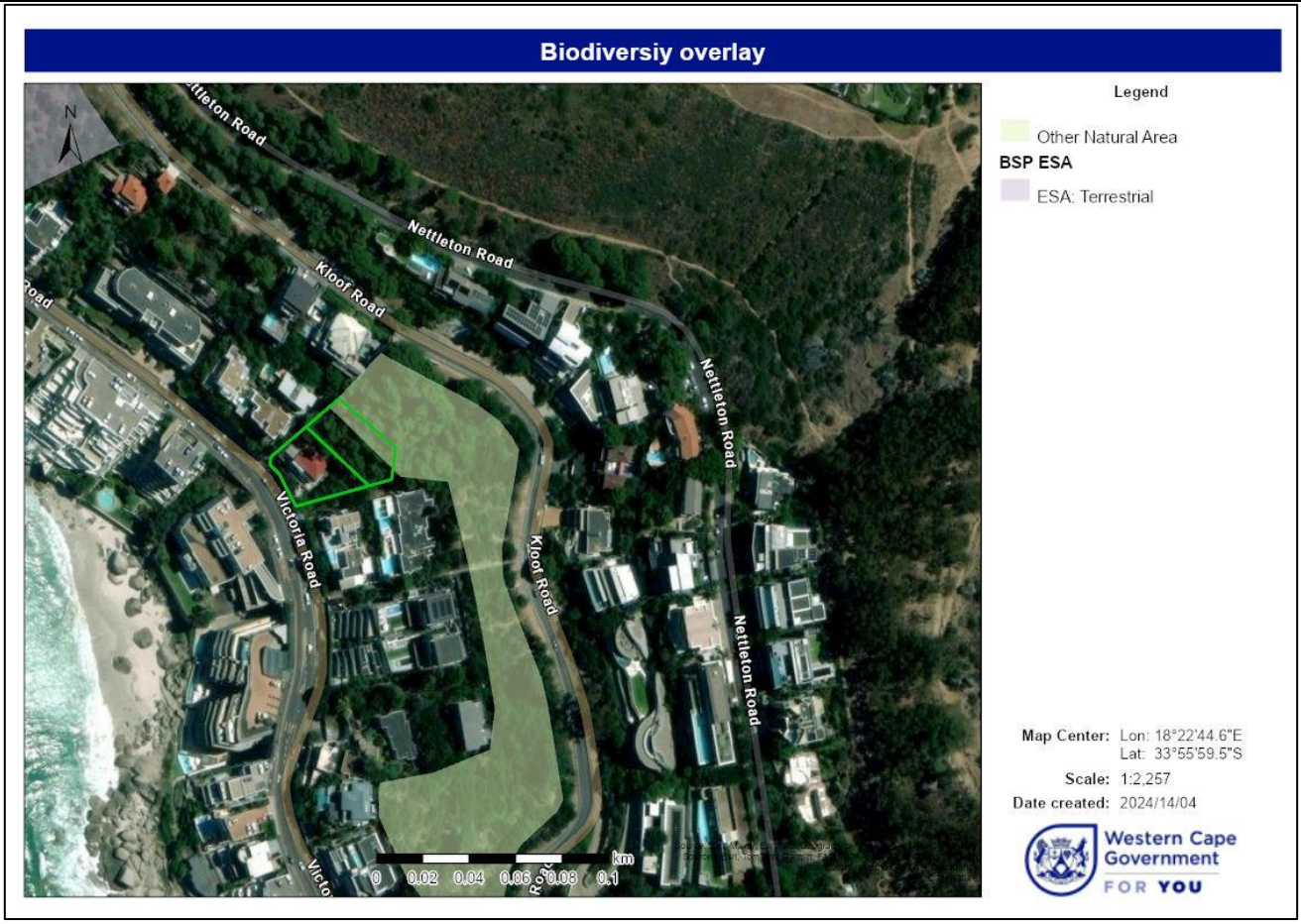


Figure 9:Site Biodiversity Map (created using Cape Farm Mapper, 2024)

7.	Explain how the proposed development is in line with the intention/purpose of the relevant zones as defined in the ICMA.

The site is located within the NEM: ICMA defined 'coastal protection zone' which consists of a continuous strip of land, starting from the high-water mark and extending 100 metres inland in developed urban areas zoned as residential, commercial, or public open space. The coastal protection zone has been established "to manage, regulate and restrict the use of land that is adjacent to coastal public property, or that plays a significant role in the coastal ecosystem."

Considering the above, it is highlighted that the site is located on the landward side of Victoria Road within a section of coastline which is entirely transformed by residential development. The development within the cadastral boundaries would not disrupt physical and dynamic coastal processes (such as wave, current and wind action, erosion etc.) or impact on any socio-economic activity related to the nearby coastline. Importantly, Victoria Road and other properties are situated between the sea and the site thus the development would not hamper public access to the coast or have a direct impact on coastal public property.

Contribution of the proposed development to the stormwater runoff discharged on the beach has been thoroughly considered by the groundwater specialists and the design engineers to ensure impacts on the coastal environments are limited.

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 original STR was generated in 2021, an SSV and all specialists' studies were based off this STR. A more recent STR, generated in April 2024 has been attached as **Appendix I1** and the SSVS was updated accordingly (**Appendix I2**). The findings of the 2024 STR and SSVS are reflected in the new Application form.

9.	Explain how the proposed development will optimise vacant land available within an urban area.

The proposal constitutes the densification of a partially vacant site which is supported by the intention of the City of Cape Town's MSDF to have infill and densified development within urban areas in order to combat urban sprawl.

The proposed development would occur within an area that has existing service connections. Existing service infrastructure is available to the site and sufficient capacity has been confirmed with the local municipality.

10.	Explain how the proposed development will optimise the use of existing resources and infrastructure.

The site is located within a residential area that already receives water and sanitation, electrical, and refuse removal services from the City of Cape Town, therefore these services would be utilised and optimised for the proposed development. The site is also located within an existing road network, which would be used to access the site. Municipal capacity confirmation letters can be found under **Appendix E16**.

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).

Given that the site is occupied and within a serviced suburb, the required service infrastructure is in place.

Sufficient capacity for electricity, water and sanitation and solid waste has been confirmed by the City of Cape Town (refer to **Appendix E16**).

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.

Further to the aspects in Points 1 – 11 above, the most important points in relation to need and desirability of the proposed residential development are:

- The residential project is aptly proposed within the urban area of Clifton.
- CT is a sought-after destination for local and internal investors and prospective residents. Such investment is associated with great socio-economic benefits on a local, provincial and national scale.
- The proposal is fully congruent with the present development context and extent of the surrounding area. Victoria Road has been subject to large-scale residential development for the last two decades. The development will therefore be in keeping with the sense of place of the greater Clifton area.
- While the re-development of the site may not be a direct social priority for the established Clifton community, it will increase the municipal value of the site which in turn will add to the City's rates base.
- The proposal is furthermore congruent with the surrounding cultural landscape and would not compromise the experience of the scenic drive (Gibbs, 2023). It would also not prevent access to, and use of, the coastline.
- The site does not house special biodiversity aspects that will be impacted on by the proposal. The site is therefore suitable for development from a terrestrial and aquatic biodiversity perspective.
- Development of the site will not impact on any special biodiversity designations as per the WCBSP.
- No new bulk infrastructure requirements are needed to realise this development. The new structure will simply be linked to the existing services.
- The proposal will not impact on any significant heritage resources. The relevant permit was granted for the demolition of the old structure.
- Measures are proposed to avoid pollution of stormwater, soil and groundwater in construction and operational phases of the development components.
- Waste management specifications that take account of the 'prevent, reduce, reuse, recycle, dispose' priority hierarchy are included in the EMPr.
- Typical impacts associated with residential developments of this nature are generally known and easily managed. The consideration of these standard impacts is therefore less predictive and is based on the existing knowledge base on this subject. This assessment served to contextualise these impacts to the site specifics.
- There were no apparent gaps in knowledge. Therefore, the impact identification and assessment were based on a risk averse/cautious approach.
- Impacts associated with the development have been fully assessed, and these can either be avoided altogether, are of acceptable levels or can be managed and mitigated to acceptable levels.

- All positive and negative direct, indirect and cumulative impacts on the biophysical and social environment have been clearly documented in Section H of this report.
- The proposed development is not associated with significant opportunity cost.
- Retaining the site as partially developed, with single residential use is not deemed to be the best practicable environmental option given the lost opportunity cost associated with the development.
- There will be no impact that would affect the health and/or wellbeing of the surrounding community in a significant way.
- The process is subjected to public participation to inform decision-making. The DBAR served to notify organs of state and I&APs of all changes and additional information, which removes any uncertainty by I&APs.
- According to Brummer (2023), the proposal is consistent with the development principles contained in Section 7 of the Spatial Planning and Land Use Management Act, No 16 of 2013 (SPLUMA) and Section 59 of the Land Use Planning Act, No 3 of 2014 (LUPA):
  - The proposal is spatially just as it provides land uses within an urban area on a connector road which is easily accessible.
  - The proposal is spatially sustainable as it is within an existing urban area and will therefore contribute to the containment of urban sprawl.
  - The proposal is efficient as it will optimise the viability of bulk infrastructure and will make better use of land which is a scarce resource.
- Overall, the proposal embodies a design and plan which responds to the existing natural and built environment and while negative impacts cannot be avoided, the overall impact of development can be managed and mitigated to such a degree that they would be of low significance.

The above points and content of this report clearly demonstrate that the proposal is needed at this point in time and is desirable in this location. Furthermore, the congruence with the general objectives of Integrated Environmental Management as set out in Section 23 of the NEMA and the principles of environmental management as set out in Section 2 of the NEMA have been outlined.

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.

Not applicable as the proposed development is not a linear activity.

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

Public participation was undertaken as part of the previous application for Environmental Authorisation (now withdrawn). Comments received on the previous application have been considered in this application, and are included in **Appendix F**, as pre-application public participation.

The following post-application public participation was undertaken for this Draft BAR:

- Notification of the availability of a Draft BAR (for a 30-day commenting period) through the distribution of a notification letter to the existing I&AP database, which includes parties that registered in terms of the previous application (now withdrawn);
- In the interest of completeness, an additional letter drop exercise was undertaken to the directly surrounding residents.
- The public participation notification actions (placement of a notice board on the site, advertisement in the Cape Argus on the 20 September 2023) remains relevant to the new application given that it was done within the last 24 months.
- Placement of the Draft BAR on Chand's website for download to support the public review and comment process.

Comments received on the Draft BAR were added to the Comments and Response Report and the Final BAR for submission to the DEA&DP.

After a decision is taken by the DEA&DP, the I&AP database will be notified of the decision. The decision will also be uploaded onto Chand's website for download.

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

- City of Cape Town: Asset Management and Maintenance Department: Transport and Urban Development Authority: Director
- City of Cape Town: Roads and Stormwater
- City of Cape Town: Environmental & Heritage Management
- DEA Oceans and Coasts: Deputy Director General
- City of Cape Town: Property Management
- City of Cape Town Municipality Representative
- CapeNature
- Heritage Western Cape
- Department of Water & Sanitation
- Department of Environmental Affairs and Development Planning
- Head: Coastal Policy Development and Management Programmes
- Department of Environmental Affairs & Development Planning: Biodiversity: Coastal Management

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

The following departments will not be consulted for the reasons stipulated:

- Department of Defence & Military Veterans, as the development will not impact on this Department's ability to provide their services.

- SA Civil Aviation Authority (SACAA) - Regional Manager, as the residential development in this urban context will not impact on any civil aviation aspects.
- Western Cape Government: Department of Human Settlements – the proposed development is not a human settlements project and so comment in this regard is not required.
- Western Cape Government: Department of Health- the proposed development has no implications for public health.
- Regional Land Claims Commission: The project does not involve a land claim and the site does not involve a land claim.

No other organs of state are deemed to have relevance or jurisdiction in respect of the proposal.

5. if any of the State Departments and Organs of State did not respond, indicate which.

The availability of the Draft BAR was circulated to the state departments listed in point 3 above for comment. Comments and responses have been recorded in the Final Basic Assessment Report.

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.

Key issues raised to date in the previous application are listed below, together with a response.

- The relaxation of the PMR 103 building line previously approved is no longer valid. The reapplication formed part of the town planning application.
- Notice of incomplete documentation provided and related requests for additional public review opportunity. This BAR is complete and provided a new opportunity for commenting.
- A claim that written notification was not received by an adjacent property owner. An additional knock and drop exercise will be undertaken for the current application. Proof of public participation is included in the final BAR.
- Clarification required on the applicability of Listed Activity 19 of Listing Notice 1 as it relates to the proposal and the "watercourse"/stormwater channel that traverses the site. This clarification was included.
- Additional detail to be added to the project description as it relates to proposed stormwater infrastructure and the proposed realignment of the existing watercourse/stormwater channel traversing Erf 47. This was included in the BAR.
- Details to be provided on connections to bulk infrastructure. This was included in the DBAR.
- Updated and correct Screening Tool Report must be included in the DBAR. This was included in **Appendix I1**.
- The DBAR must indicate how the proposed development will align with the City of Cape Town's water use strategy with respect to the discharge of stormwater/dewatered groundwater (based on the Groundwater Impact Assessment compiled by GEOSS 22 December 2022). The CCT Roads and Stormwater branch supported the stormwater management plan distributed to them as part of the town planning process. It stands to reason that the proposal is aligned with the City of Cape Town's water use strategy.
- A description of the previous alternative and reasons as to why the previous alternative was deemed unfeasible must be included in the DBAR. See **Appendix S** for comparative diagrams and related narrative on the improvements associated with the preferred Alternative as compared to the previous development scheme.
- Misconception that the landscape area has reduced. The total area of landscaping has in fact increased when compared to the previous scheme as is evident in **Appendix S.**
- Provide an indication as to how the drainage water will effectively / appropriately be used during wetter periods - the management of surplus drainage water must be reported on in the BAR. Groundwater (subsoil drainage) will be collected and pumped to an irrigation tank to be utilised for landscape irrigation and for non-potable uses within the development.
- The potential geotechnical impacts must be included in the DBAR. This was included in the DBAR.

- Confirmation of capacity of municipal services must be provided. This was included in the DBAR.
- The SDP must be updated to include the proposed realignment of the watercourse/stormwater channel on Erf 47 and the proposed stormwater and groundwater management infrastructure. Updated SDP included in the DBAR.
- A comment from the City of Cape Town must be included in the BAR. Comment from the City of Cape Town will be included upon receipt. Key issues raised by the City on the town planning application were addressed in the DBAR.
- Minutes of the meeting between the Environmental Assessment Practitioner, the Department of Water and Sanitation and officials of this Directorate held on 10 August 2023 must be included in the DBAR. The minutes were included in **Appendix Q**.
- A comment from the Department of Water and Sanitation on the need for a WULA must be included in the DBAR. The DWS's most recent confirmation (dated 20 March 2024) that no WULA is required is included in **Appendix E3**.
- Finalised comments and response report and proof of the public participation process must be included in BAR for decision-making. Noted and so included in this final BAR.
- Updated demolition permit in terms of Section 34 of the NHRA must be included in the DBAR. See **Appendix N** for the valid permit. An additional demolition permit for removal of the remaining foundations and floor slabs on erf 46 will be applied for at bulk earthworks stage.

In addition:

- Some authorities offered no objection to the application.
- Reminders of the general duty of care and the remediation of environmental damage, in terms of Section 28(1) of NEMA, and Section 58 of the NEM: ICMA.

Key issues raised subsequent to circulation of the May 2024 DBAR are listed below, together with a response:

- A detailed description of the proposed stormwater channel realignment and the property details associated with this component must be provided. The detailed description and property details were included in the Final BAR. The channel realignment will take place on Erf 48 and a remainder of street parcel RE/145 (part of the stormwater servitude of the drainage passage south of the site).
- A request for the applicability of the EIA Regulations, 2014 (as amended) with respect to the proposed realignment of the stormwater channel to be reported on in the BAR. The May 2024 DBAR included an extensive explanation of the stormwater channel and its applicability to the EIA Regulations, specifically Activity 19. This explanatory box was expanded in the final BAR to confirm that works on Open Space land does not constitute a listed activity.
- Details to be reported on the potential impacts of the proposed realignment of the stormwater channel on the site (i.e. erven zoned public open space). The land use (public open space) is not altered / changed in any way and the realignment of the channel will not diminish the current open space use on this property, therefore there are no impacts to report on in this regard. This was reflected and motivated in the FBAR impact assessment section.
- Written confirmation needs to be obtained that sufficient, spare and unallocated electricity supply is available to service the proposed development. This was added to the FBAR.
- A request for direct responses to DEA&DP's previous comments raised in the 2023 application (now withdrawn). The previously provided comments were expanded upon and directly responded to.
- A request for an updated comment from HWC. New comment was received from Heritage Western Cape (HWC). HWC confirmed their previous comment still stands (refer to comment in this C&R table).
- A request for a comment from the City of Cape Town on the proposed stormwater channel and associated stormwater impacts. The City of Cape Town's stormwater officials did not initially comment on the May 2024 BAR despite the Environmental branch confirming that the report was internally distributed for their comment. Subsequent follow-

up with this stormwater officials elicited a comment from Mr Ben de Wet (included in the C&R table).

- Request for a comment from the City of Cape Town's Directorate Environment and Heritage Resource Management must be included in the BAR. Comment was received from the City of Cape Town's Directorate Environment and Heritage Resource Management and included in the C&R table.
- A request was made for an updated comment from the geotechnical specialist who undertook the Geotechnical and Engineering Geological Report (dated 06 February 2017) to be obtained and submitted with the BAR. The geotechnical engineer indicated that no changes have taken place since the 2017 study that would affect the conclusions. This note was appended to the Geotechnical report. Furthermore, the structural engineers (Sutherland) independently confirmed that there is no reason not to use the 2017 geotechnical report.
- Additional elements need to be included in the EMPr, these include: recommendations from the specialists and organs of state; updated activity description of the proposed development; frequency of the ECO monitoring during the construction phase of the proposed development; traffic management plan; waterless dust suppression methods; findings and recommendations made by the groundwater specialist. Where not already included, these aspects were included in the EMPr.
- A concern was raised that the visual impact tables in the Draft BAR are incorrect as it is believed that a regional extent would be more accurate than a local extent of the visual impacts. The Visual impact tables are a summary of the impacts considered holistically. The visual impact assessor disagrees with the statement that 'regional' extent could be more accurate for the impact assessment. This is supported in the location maps for scope of regional/local etc., as per the VIS. The detailed response by the visual specialists provides rationale for this opinion.
- A concern that the construction of a ten-storey apartment building will have significant negative impacts on the visual aesthetics of the area and would greatly disrupt the quality of life for the neighbouring residents as well as disturb the sense of place and nature. It is argued that the previous structure on the site was entirely misplaced in the context of the urban fabric of this area. In the opinion of the visual specialist, the proposal is actually a better fit in this environment. The specialist further emphasises that the design elements of the building will further improve the existing typology of the buildings.
- A concern was raised about the lack of consideration of alternative layouts and the lack of engagement with the community regarding these layouts. The design went through several iterations in order to reduce visual impact and to align with the character of the neighbourhood. Furthermore, the evolution of this design is clearly documented in the DBAR.
- The Visual Impact Assessment mitigation measures recommended for the detailed Landscape Plans, are to be included in the Operational EMP as well as a condition of Environmental Authorisation approval. This requested condition is included in the recommended EA conditions as contained in the FBAR and EMPr.
- The recommendations regarding the lighting design must be present in the final building plan submission and must be adhered to according to the recommendations of the Visual Impact Assessment. This is included in the FBAR and EMPr.
- Reuse of groundwater for irrigation and other non-potable uses in the development is preferred. Monitoring mechanisms for ground water flows should be installed as per the Geohydrological engineers recommendations. Such reuse of groundwater is reflected in the BAR. The specialist recommended groundwater monitoring measures are proposed as a condition of approval.
- A request was made to update the EMPr to include: Conditions and specifications imposed by DEA&DP if environmental authorisation is granted; the final approved Stormwater Management System for the site; the final Landscape Plan; that the ECO site inspection reports / monthly monitoring reports are also copied to the Table Bay District Environment & Heritage Management Branch. Provision was made in the EMPr for such changes to occur.
- To ensure that the band of landscaping and soil substrate between Victoria Road and the first residential floor of the development is maintained / reinstated. This is included as part of the landscaping.

- Further clarity is required as to how this vegetated interface of the granite embankment will be achieved. Fairbrothers Geotechnical Engineers and Sutherland Engineering will use Deltax G80/2 Drape Mesh and MacMat Erosion Control Blanket for slope stabilization, secured with TB500 rockbolts. The professional team is in consultation with relevant city officials to discuss stabilization and design integration as requested by the City.
- Request to ensure there is an accompanying Power of Attorney letter from the City granting permission for the proposed 20m long ground anchors into City land zoned POS. Permission for anchors is only considered and granted once building plans have been submitted and have been reviewed by the Building Officers. It cannot be provided at EIA stage.
- Concern that the viewshed lines from Kloof Road and Victoria Road have not been adequately assessed. The scenic amenity of Kloof scenic drive and Victoria Road has in fact been considered in the Visual Impact Statement. The visual specialist provides a full response in the C&R table.
- A request for a cross-section through the proposed staircase abutting the watercourse should be provided to ensure that the embankment is not excavated for the staircase. Impacts of the proposed staircase must be assessed in the BAR or specialist studies. The staircase was considered by the specialists and formed an inherent part of their assessments. The staircase as it stands is modelled at grade.
- Storage and re-use of groundwater must be indicated on the Site Development Plan, this must be a condition of the EA. The detailed placement of these structures within the building footprint will be determined at detailed design phase.
- Request for the recommended traffic management plan to be submitted to the CCT Roads Infrastructure and Management branch for comment prior to building plan approval. Submission of the Traffic Management Plan to the Roads Infrastructure and Management branch for comment prior to building plan approval was included in the EMPr.
- The applicant was reminded of their general duty of care of environmental obligations.
- Request should any heritage resources, including evidence of graves and human burials, archaeological material and paleontological material be discovered during the execution of the activities above, all works must be stopped immediately, and Heritage Western Cape must be notified without delay. This is included in the EMPr.
- Request for a Stormwater Management & Maintenance Plan addressing the watercourse challenges, overland flood flows and Water Quality treatment. The need for a Stormwater Management & Maintenance Plan prior to commencement is included in the BAR and EMPr.
- Concern for groundwater and how to deal with it. It is proposed that the groundwater seepage will be utilised for landscaping irrigation and for non-potable uses within the development.

Note:

A register of all the I&AP's notified, including the Organs of State, and 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;
- 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	
1.2.	Provide the name and or company who conducted the specialist study.		

Mr. Charl Muller & Mr. Dale Barrow of GEOSS (Pty) Ltd) conducted a Groundwater Impact Assessment to inform this study. The specialist study has been included as **Appendix G2** and is referenced in this report as Barrow & Muller (2021). The specialists conducted their study in 2021 based off the previous design. The specialists reconsidered the new design and concluded (in an email dated 10 April 2024 (appended to the groundwater report) that the findings of the initial study had not changed.

1.3.	Indicate above which aquifer your proposed development will be located and explain how this has influenced your proposed development.

The underlying aquifer at the site is classified by the Department of Water Affairs and Forestry (DWAF, 2002) as an intergranular and fractured aquifer with an average yield potential of 0.0 – 0.1 L/s.

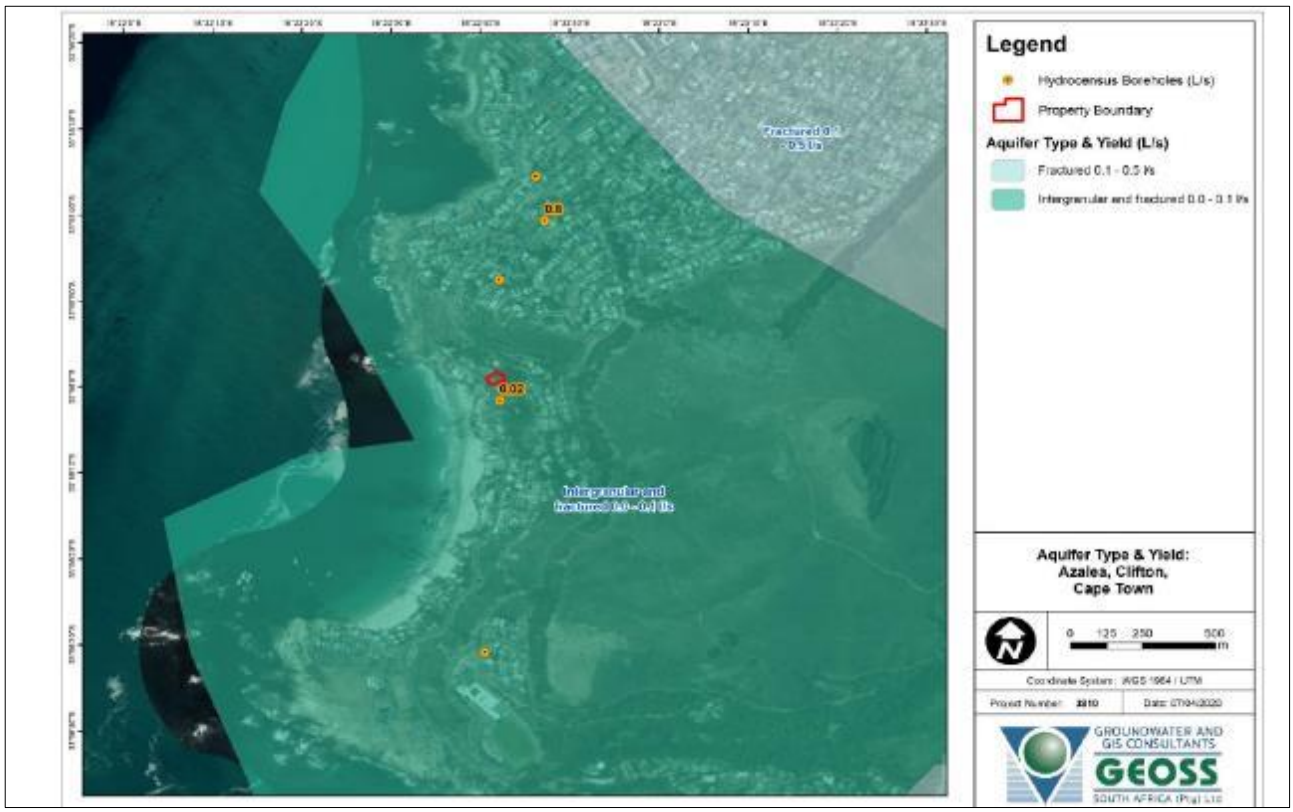


Figure 10:Regional aquifer and aquifer yield (Barrow & Muller, 2021).

1.4.	Indicate the depth of groundwater and explain how the depth of groundwater and type of aquifer (if present) has influenced your proposed development.

The depth to groundwater in the area is recorded as 7.52 below mean ground level (DWS, 2005). The construction of the block of flats would entail excavating into solid granite at the base of Lion's Head Mountain. Barrow and Muller (2021) note that the excavation activity would likely intersect natural joints and fractures within the granite that potentially allows groundwater to flow/seep downgradient towards the ocean. The effect of building into the granite would effectively block the natural flow of the sub-surface groundwater causing it to dam up against the side of any retaining structure/walls (Barrow & Muller, 2021).

Sub-surface groundwater flow should thus be expected on site during the construction phase. During the operational phase, there would be subsurface flow that would need to be concentrated and removed (especially during times of good rainfall) to retain foundation integrity (Barrow & Muller, 2021). Barrow and Muller (2021) further caution against the option of discharging the water to stormwater or the drainage channel as this may result in coastal erosion and saturation of beach sand (commonly termed as "wet beach"), which can negatively affect beach goers. Considering

the above, measures to manage groundwater flow, particularly the installation of a subsurface drain and sump, have been recommended and incorporated into the EMPr for the proposed development.

No impacts related to the recharge of the aquifer have been identified (see information box below).

Note from the groundwater specialist:
Excavating into the mountain will most likely intersect natural joints and fractures within the granite that potentially allows groundwater to flow/seep downgradient towards the ocean. The effect of building into the granite will effectively block the natural flow of the sub-surface groundwater causing it to dam up against the side of any retaining structure/walls. As groundwater recharge is anticipated to occur higher up in the mountains, excavation for and construction of the development is less likely to affect the natural groundwater recharge mechanisms in the immediate area, but would have more of an effect on the storage capacity. Based on the nature of the aquifer system as well as the number of surrounding groundwater users identified, the effect on quantities available to surrounding groundwater users should be limited. The biggest factor to mitigate remains the damming of water against the structures, the seepage needs to be appropriately managed (as proposed by GEOSS).

The study has informed the proposal in the following ways:

1) Input into the management of subsurface groundwater and inclusion of appropriate design measures into stormwater management; and
2) Identification of appropriate monitoring measures for subsurface groundwater flow during the operational phase.

Groundwater impacts as assessed by the specialists are presented in detailed impact tables in Section H4 of this Draft BAR.

2. Surface water

2.1.	Was a specialist study conducted?	**YES**	
2.2.	Provide the name and/or company who conducted the specialist study.		

The Freshwater Impact Assessment was undertaken by Antonia Belcher of BlueScience (Pty) Ltd.

The specialist study has been included as **Appendix G3** and is referenced in this report as Belcher (2023). The further specialist opinion on the nature of the stream crossing Erf 47 was included as a cover letter to the freshwater report.

2.3.	Explain how the presence of watercourse(s) and/or wetlands on the property(ies) has influenced your proposed development.

An Aquatic Biodiversity Impact Assessment was undertaken to understand the baseline conditions and any associated aquatic ecosystem constraints to the proposal.

The key findings of this study are:

- The only aquatic feature of significance identified on site consists of a small unnamed stream that drains off the Leeukop and flows along the southern extent of the site, largely within a defined drainage corridor (**Error! Reference source not found.**).
- The unnamed stream (a watercourse) is approximately 475 m in length and drops from about 240 m to 50 m with an average slope of 38%. The proposed site is in the lowest 60 m where the stream drops from about 80 m to 50 m. Upstream of the site, the stream is dominated by woodland riparian vegetation but has been significantly disturbed and modified in its lower reaches as a result of the residential development in the area. Stormwater corridors have been allowed for between the residences to accommodate the watercourse.
- The stream appears to be fed mostly from surface water runoff from the hillslope via a few smaller, also highly modified, watercourses. Similarly, at the site, the watercourse is also highly modified due to the existing residence which has long been in existence.
- A small drainage channel (not a watercourse) which starts near Kloof Road, crosses the upslope Public Open Space, and then becomes deeply eroded immediately upslope of the site. It has been found that the drainage channel previously flowed adjacent to the site

(within the existing stormwater corridor), but now flows through Erf 47, most likely due to the installation of a stormwater culvert under Kloof Road by the City of Cape Town (MDA, 2015).

Figure 11: Aerial image of site (delineated in red) showing the affected watercourse and elevations (Google Earth by Belcher 2023).

Figure 12: View of watercourse above the site, taken from Kloof Road (Belcher, 2023).

Figure 13: View of the watercourse where the stream enters the site (Belcher, 2023).

- An evaluation of Index of Habitat Integrity (IHI), two conflicting ecological integrity conditions exist, namely:
    - The riparian and instream habitat of the unnamed stream within its undeveloped reaches is considered to be in a largely natural (Category B) to moderately modified (Category C) ecological condition, primarily as a result of the disturbance of the natural vegetation and channel of the watercourse from the adjacent residential areas.
    - Within its developed reaches (residential areas), the watercourse is in a seriously to critically modified condition (Category E – F), retaining very little aquatic ecosystem function or habitat and merely servicing the purpose of conveyance of water and a green corridor within the residential area.

- An Ecological Importance and Sensitivity (EIS) assessment conducted of the stream showed it to be of 'Low' ecological importance and sensitivity. While the watercourse does still offer some refuge and habitat within the landscape as well as a corridor for the movement of water and biota, most of the sensitive elements have been lost due to modifications to the stream.

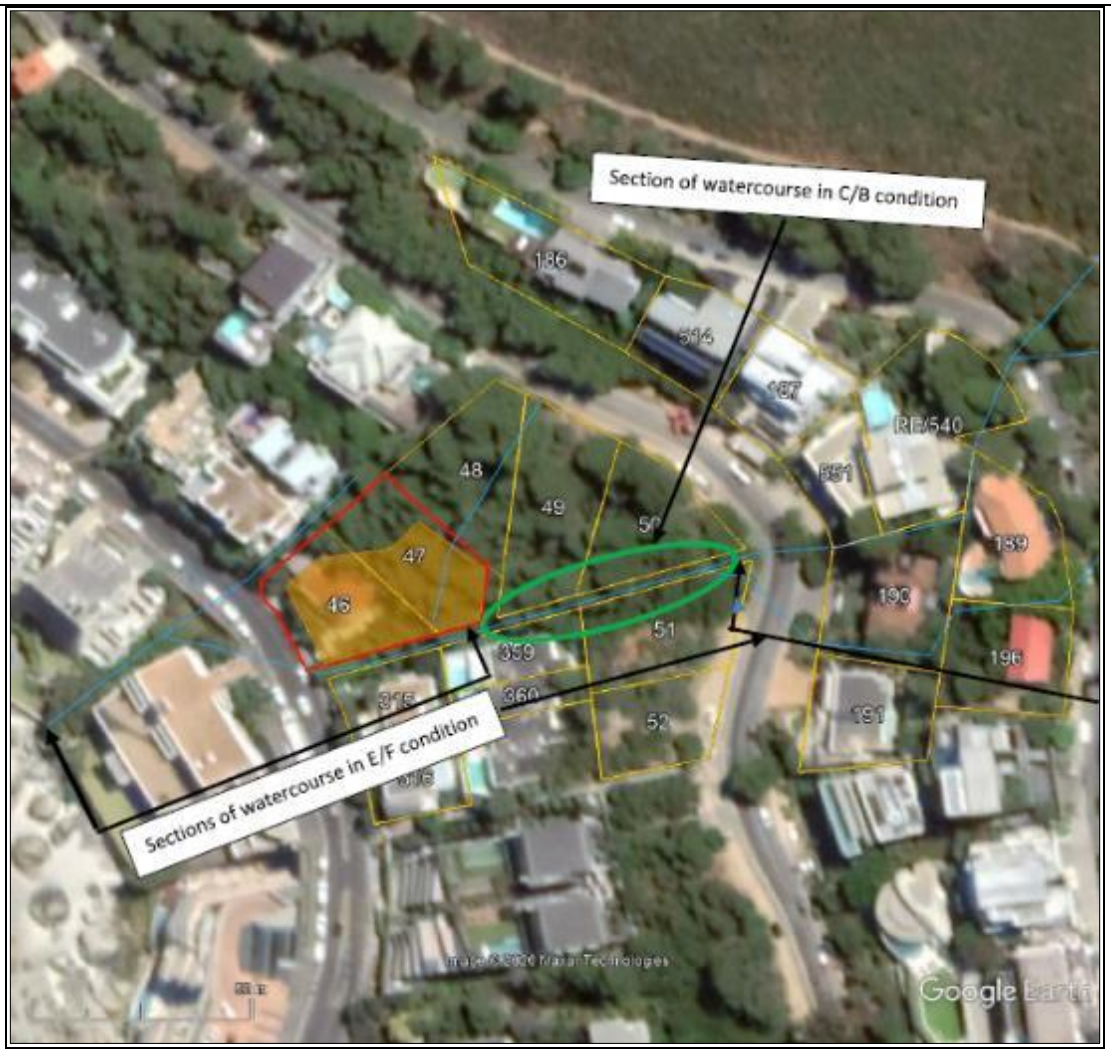


Figure 14:Aerial image showing the location of the aquatic feature on site and its IHI scores, in relation to mapped watercourses and drainage features. The site is delineated in red and the proposed development footprint shaded in orange (Belcher, 2023)

3. Coastal Environment

3.1.	Was a specialist study conducted?		**NO**
3.2.	Provide the name and/or company who conducted the specialist study.		
Not Applicable.			
3.3.	Explain how the relevant considerations of Section 63 of the ICMA were taken into account and explain how this influenced your proposed development.		
Refer to Section E7 of this report.			
3.4.	Explain how estuary management plans (if applicable) has influenced the proposed development.		
Not applicable as the proposed development site is not located in proximity to an estuary.			
3.5.	Explain how the modelled coastal risk zones, the coastal protection zone, littoral active zone and estuarine functional zones, have influenced the proposed development.		

The site and proposed activity are located beyond the littoral active zone and not in proximity to an estuarine functional zone.

While located within the coastal protection zone, the proposal is unlikely to have an impact on the coastal processes of the affected coastline given the developed context (see Section E7).

With regards to the coastal risk zone, the site is located beyond modelled flood risk zones (see below).

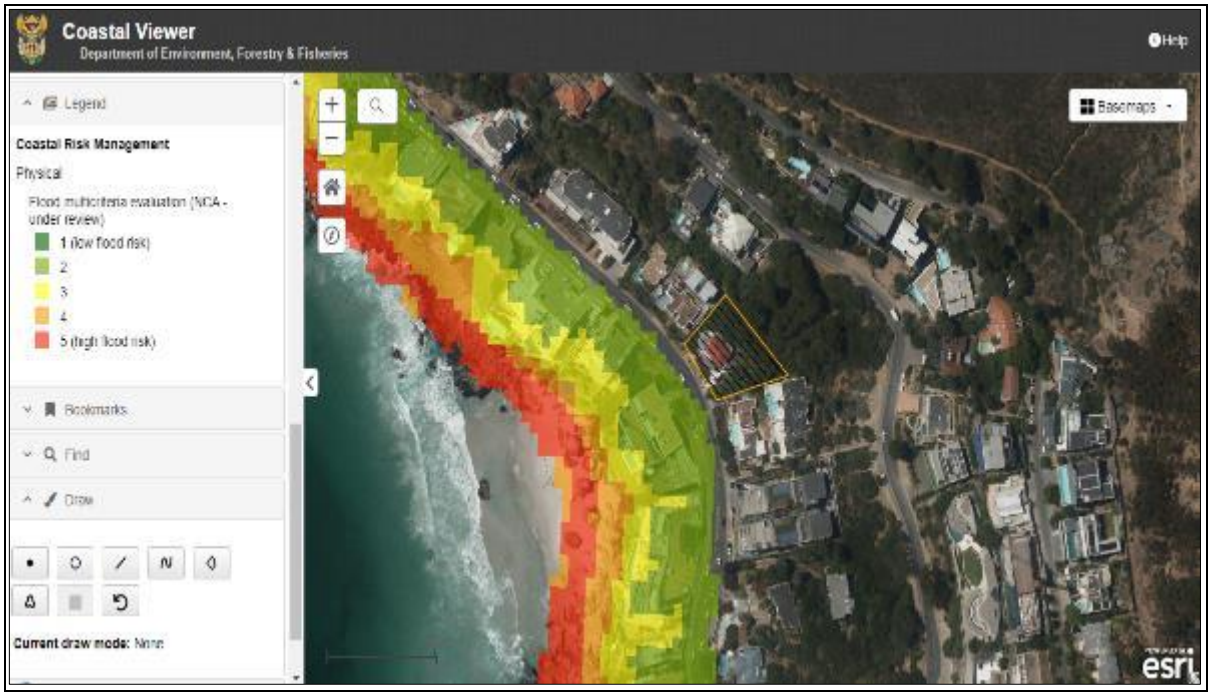


Figure 15: Coastal flood risk zones as seen from the DEFF's Coastal Viewer (created using NCA data, 2020).

In congruence with the above defined risk zones, the City of Cape Town Coastal Management branch has indicated that given that the two erven are above Victoria Road, there is no risk from a sea-level rise/storm surge perspective (pers. comms, Mr. D, Colenbrander, 22 April 2020). See also City of Cape Town Coastal Risk Zone Map below (
Figure *16*).

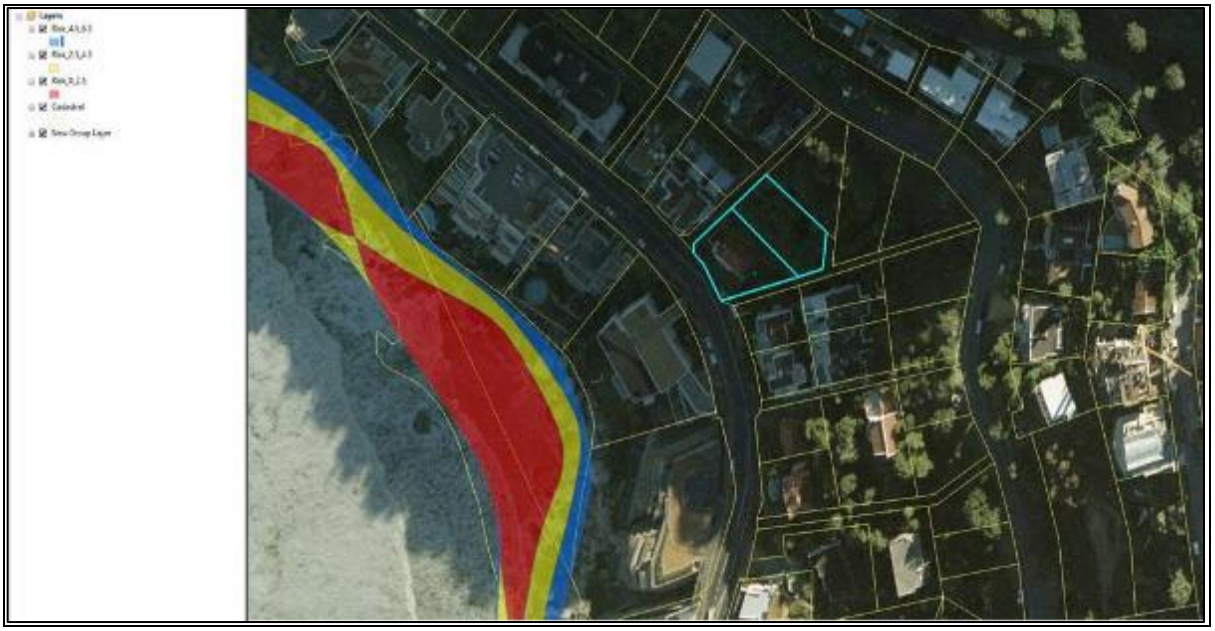


Figure 16:Coastal Flood Risk Zone Map provided by City of Cape Town (source: D Colenbrander, 2020).

4. Terrestrial Biodiversity

Refer to Section 2 above for aquatic biodiversity aspects.

4.1.	Were specialist studies conducted?	YES	
4.2.	Provide the name and/or company who conducted the specialist studies.		
A Terrestrial Biodiversity Compliance Statement was undertaken by Mr. Sean Altern (NCC Environmental Services).			
4.3.	Explain which systematic conservation planning and other biodiversity informants such as vegetation maps, NFEPA, NSBA etc. have been used and how has this influenced your proposed development.		
Section E 4.4 & 6 of this report explains that a variety of spatial data sources were consulted for development on site and figures of maps are provided in this regard. The spatial data has informed the proposed development through consideration of aquatic and terrestrial biodiversity resources which have been confirmed to not present any constraints to the proposal following ground-truthing by specialists. According to consulted spatial data, there are no terrestrial ecologically sensitive areas on the site that presents constraints to development. In terms of freshwater resources, there are no watercourses mapped on, or near the site (according to SANBI data and NFEPA data), however, the contrary has been identified south of the site and assessed by the freshwater ecologist. The findings informed the development proposal in the proposed realignment of the stream and stormwater management measures on site.			
4.4.	Explain how the objectives and management guidelines of the Biodiversity Spatial Plan have been used and how has this influenced your proposed development.		
The Western Cape BSP is the relevant Biodiversity Spatial Plan for the area in which the site is located. The details of how the objective and management guidelines have been applied in the proposed development are included in Section E6 of this report. In short, the WCBSP marks no terrestrial or aquatic biodiversity areas of conservation concern on, or directly adjacent to the site which would require consideration by the proposal (refer to section E6). In alignment with the WCBSP, the terrestrial biodiversity specialist (Altern, 2022) found no terrestrial areas of any conservation value on site. While not mapped by the WCBSP, the freshwater ecologist (Belcher, 2023) confirmed the presence of a highly modified watercourse of some ecological value (albeit low) which flows along the southern boundary of the site. This watercourse has been considered by the proposal especially in terms of surface/storm water management and as such its biodiversity value would not be lost. The drainage feature that crosses Erf 47 has no aquatic biodiversity sensitivity and the specialist recommended its realignment. Given that there are no WCBSP map categories on the site, the proposed land-use does not conflict with the biodiversity planning/spatial priorities of the area. The habitat of the Other Natural Area located along the eastern boundary of the site would not be lost through the development on Erf 46 & Erf 47, thus maintaining its management objective. Overall, due to the site's transformed nature the proposal would not result in ecosystem loss or fragmentation which is one of the main objectives of the WCBSP.			
4.5.	Explain what impact the proposed development will have on the site-specific features and/or function of the Biodiversity Spatial Plan category and how has this influenced the proposed development.		
The proposal will not impact on the biodiversity spatial plan category (to be read with 4.4 above). Impacts on biodiversity associated with the development are detailed in Section H of this report. The site-specific aquatic features and related aquatic biodiversity as identified by Belcher (2023) are described in subsection 2.2 above. In terms of terrestrial biodiversity, NCC Environmental Services (Altern, 2022) conducted a survey of indigenous vegetation on site (**Appendix G4**) and confirmed that while the site would have historically contained the Critically Endangered fynbos type Peninsula Granite Fynbos which would in a pristine state contain high plant diversity and associated high insect, bird, reptile and small mammal population, the site is overall of 'Low' sensitivity.			

Altern (2022) notes that the site has been completely transformed and the once indigenous vegetation replaced by common opportunistic transformer plants and weeds. The site is also unnaturally shaded for being located on an exposed west facing slope as a result of *Pinus radiata* trees and associated litter of pine needles (refer to **Figure 17**). Terrestrial biodiversity is maintained through adequate habitat with essential and often specific provisions. Even though opportunistic and adaptable species can survive for periods, this is not indefinite. As such, the quality of the habitat directly correlates to the terrestrial biodiversity value which in this case is 'Low.'

Figure 17: Totally transformed and unnaturally shaded vegetation of the site (Altern, July 2022).

Altern (2022) further notes that the site has interrupted connectivity (at least two tarred roads and one row of houses) to access formally conserved or otherwise open or natural space. Free movement of terrestrial ground dwelling species (apart from avifaunal species) between the site and natural areas is thus possible but unlikely. Furthermore, the site is too small (1479m² in extent) and inadequate in terms of habitat suitability for isolated remnants of indigenous mammal species such as small antelope to survive. During a site survey, faunal species noted included only a domestic cat (*Felis catus*), which are seen as a negative impact on biodiversity due to predation, and the invasive species *Sciuris carolinensis* (Grey Squirrel), *Numida meleagris* (helmeted guineafowl) and *Theba pisana* (an invasive snail).

The consideration of the WCBSP is discussed in the previous Section G (4.4).

4.6.	If your proposed development is located in a protected area, explain how the proposed development is in line with the protected area management plan.

Not Applicable, the site is not located in a Protected Area.

4.7.	Explain how the presence of fauna on and adjacent to the proposed development has influenced your proposed development.

See 4.5 above. The proposed development site is an urban context characterised by residential development. Given this context (i.e., fenced/walled-off properties adjacent to one-another separated by roads, broken by scattered open spaces), the movement of fauna through the landscape has been limited and altered.

In terms of avifauna, the site is not located within an Important Bird Area (Altern, 2022). Furthermore, birds that may utilise the large exotic trees on site for perching would relocate unharmed should the development be implemented (Altern, 2022).

Figure 18: Important Bird Areas relative to the development site (source: SANBI, 2020).

In terms of aquatic fauna, Belcher (2023) found that while the stream which runs adjacent the site offers some refuge and habitat within the landscape as a corridor for the movement of biota, most of the sensitive elements have been lost due to modifications to the stream and as such the watercourse holds 'Low' ecological importance and sensitivity.

Overall, there are no faunal constraints related to the proposal which would need to be taken into account by the proponent apart from general management specifications during the construction phase which have been included in the EMPr. Furthermore, the planting of trees and other indigenous vegetation as part of landscaping would provide some habitat for fauna present in the urban environment.

5. Geographical Aspects

Explain whether any geographical aspects will be affected and how has this influenced the proposed activity or development.
A Geotechnical and Engineering Geological investigation of the site was undertaken in 2017 by van Wieringen and Associates and has informed the planning and design of the proposed apartment block (refer to **Appendix G7**). This information was taken into account in the structural design inputs (**Appendix O**). Furthermore, Mr van Wieringen confirmed that he is not aware of any changes that have taken place since the 2017 study that would affect the conclusions, so they ought to remain the same. This note was appended to the Geotechnical report. Furthermore, the structural engineers (Sutherland) independently confirmed that there is no reason not to use the 2017 geotechnical report. This study found that: • The site slopes steeply towards the south-west at an average slope of 30° with a near-vertical, approximately 11 m high, road cutting at its bottom down to Victoria Road. Most of Erf 46 above the road cutting has been cut to two level platforms which accommodate a house and a garden. • In terms of general geology, it was found that in its undisturbed state on the inland side of the site, the granite is typically weathered at surface to the consistency of a clayey sandy silt that

generally grades rapidly downwards through soft rock to hard rock. The residual material is overlain by gravelly sandy colluvium of predominantly granitic origin and typically between 0,5 and 2,0 m in thickness, where not removed by excavation. Towards Victoria Road however, the excavations for the house and the road have removed the transported and most weathered materials to expose soft rock becoming moderately hard rock in places.

- Excavation within the fill and colluvial materials can be expected to be soft and easily achievable using a digger or excavator while highly and moderately weathered rock will require the addition of a hydraulic hammer in places as well as some blasting or other forms of rock splitting.
- Blasting vibrations may be felt by neighbouring structures as they are founded nearby on the same, relatively unjointed rock mass. As a result, a specified blasting methodology and excavation techniques have been included in the EMPr (refer to **Appendix H**) to keep vibrations, air blasts and noise within tolerable levels. A Method Statement for blasting and excavation activities would also need to be prepared by the Contractors and the requirement has been included in the EMPr.
- Stepped or sloping sides to the excavation along with anchors into public land (the Public Open Space above Erf 47), are likely to be required to achieve a meaningful excavation volume whilst ensuring that movements consequent upon the excavation will be of acceptable magnitude in terms of not damaging neighbouring property. Note that Power of Attorney for installations of such anchors are only received after submission of final plans.
- The topographical, geological and geotechnical information gathered by the investigation has informed the detailed design of excavations, lateral support and foundations. Overall, no significant constraints have been identified and excavation and lateral support for the development is indicated as feasible, subject to careful planning and design, as well as possibly gaining permission for permanent anchors into public land. These considerations have been incorporated into the EMPr.
- A burst water pipe caused extensive corrosion of the embankment on Victoria Road some years ago. This caused the slope to be perilously dangerous. Whilst the City have reportedly taken ownership of the problem, and took responsibility for remedial works, these are understood not to be permanent solutions (*pers. comms.* J Grimbeek, MDA, April 2021). It is believed that the development of the site will be a permanent solution to this issue and, importantly, make the slope safer to road users & pedestrians.

The only other significant physical geographical aspects of the site are centred on the surface water and groundwater on the site both of which have been assessed and considered by the proposal. Groundwater levels/flow and surface water flow have specifically influenced careful stormwater management. A Stormwater Management Plan has been prepared in this regard. These aspects have been explained in Section G1 & 2 of this report.

6. Heritage Resources

6.1.	Was a specialist study conducted?	**YES**	
6.2.	Provide the name and/or company who conducted the specialist study.		

Ms. Jenna Lavin (CTS Heritage Specialists) completed a **Heritage Screener** and NID submission to Heritage Western Cape (HWC). The study is referenced as Lavin (2020) in this Draft BAR and has been appended as **Appendix G5**.

The existing building on site is older than 60 years. An application for a SAHRA Section 34 Permit for demolition of this structure was approved and can be found under **Appendix G5**.

Mr. David Gibbs conducted a **Visual Impact Statement** of the proposed development. The study is referenced as Gibbs (2023) in this Draft BAR and has been appended as **Appendix G1**.

6.3.	Explain how areas that contain sensitive heritage resources have influenced the proposed development.

Cultural, Palaeontological and Archaeological Resources

(Lavin 2020) notes that there are no heritage resources of significance on or adjacent to the site (refer to map in **Figure 19**). According to an SG Diagram from 1922, no structures are marked in the location of the erf under assessment which would require additional heritage considerations.

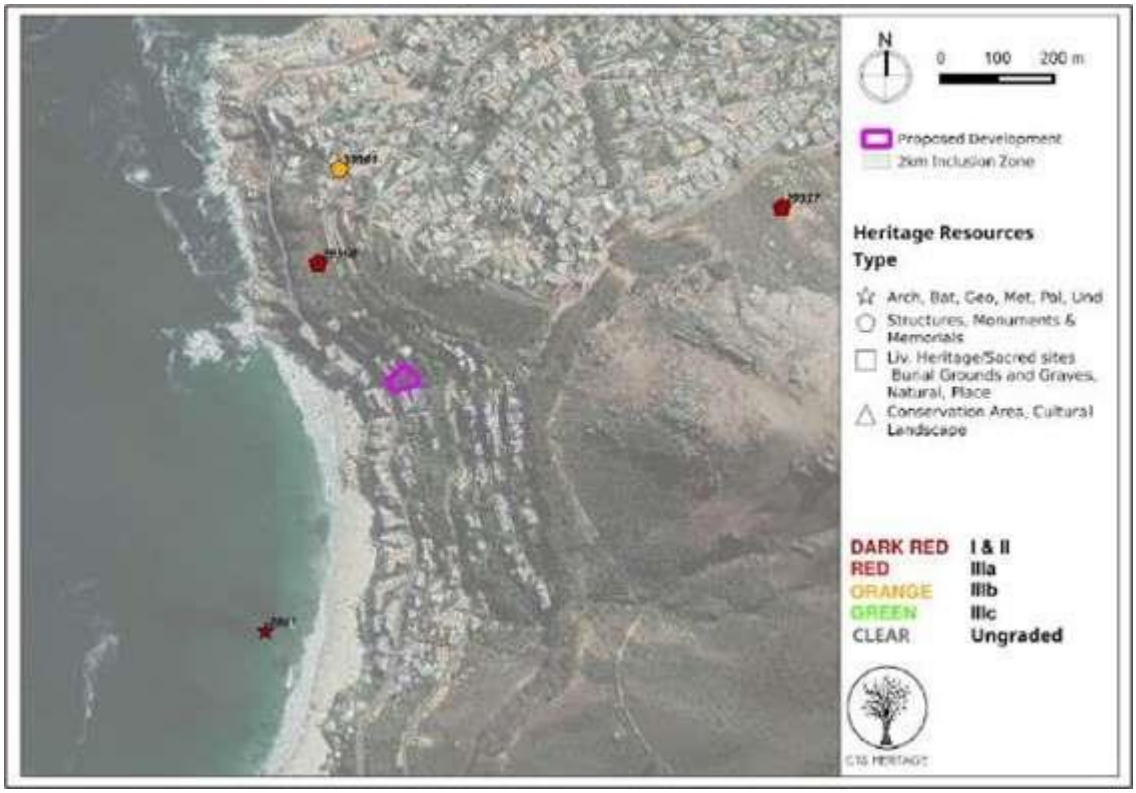


Figure 19: Heritage resources near to proposed development site (Lanvin, 2020).

In terms of palaeontological resources, the development is underlain by sediments that have zero palaeontological sensitivity (refer to map in **Figure 20**). The erven proposed for development is underlain by geology consisting of granites from the Cape Peninsula Pluton which has no sensitivity for impacts to palaeontology. As such, it is very unlikely that the proposed development would impact on significant palaeontological heritage (Lanvin, 2020). Furthermore, due to the shallow soils and steep incline of the property, it is very unlikely that the proposed development will impact on significant archaeological heritage (Lanvin, 2020).

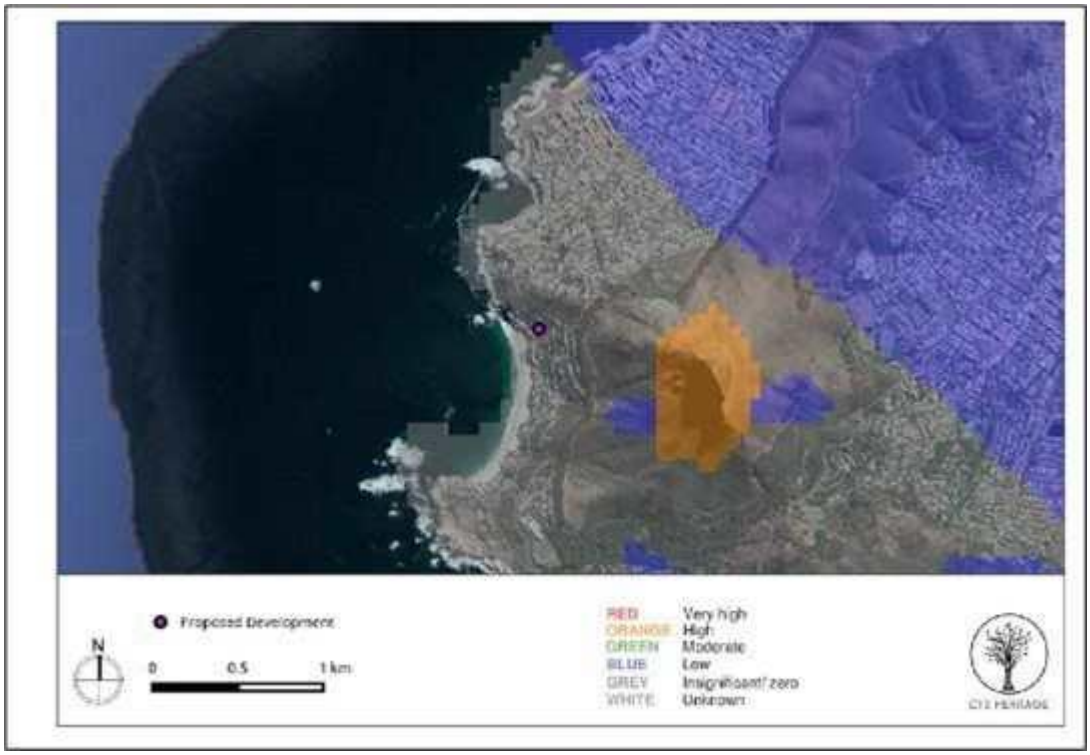


Figure 20:Palaeo-sensitivity Map indicating insignificant/zero sensitivity underlying the study area (Lanvin, 2020).

Landscape, Setting and Visual Character

Gibbs (2023) notes that the site is located along a rocky cliff-face at the edge of the Atlantic seaboard along Victoria Road, which is a scenic route. The Atlantic seaboard is considered the 'cultural landscape' which constitutes a meaningful visual (spatial, scenic and aesthetic) resource to communities of people (Gibbs, 2023). The Atlantic seaboard is characterized by the sharp juxtaposition of highly 'urbanized' townscape foreground against a dramatic coastal mountain 'wilderness' background (Gibbs, 2023). On the visual nature of the site Gibbs (2023) notes that although its open, unbuilt and vegetated nature provides a moment of 'green relief' within the street scape, it is not of significant scale to constitute a major feature.

Nevertheless, given the scenic drives of Victoria Road as well as Kloof Road, and the special character of Clifton within the urban cultural landscape of the Atlantic seaboard, the immediate environment of the site is considered to be of medium scenic, cultural and historical significance, i.e. having valued characteristics, reasonably tolerant of some changes of the type proposed (Gibbs, 2023).

The potential change to the landscape (Victoria Road) has been simulated in the Visual Impact Assessment which can be found under **Appendix G1.**

The proposal is aligned with the scale and massing of the surrounding built environment. The height of the building has furthermore been informed by the established character of Clifton and limited so as to not prevent experience of scenic views of the landscape.

According to Gibbs (2023), the site is relatively small in extent, the previous dwellings (not demolished) had no visual amenity. The site is surrounded by developed properties; therefore, development of the site will form part of the continuum of urban form giving the continuation of the established streetscape.

From the information supplied by the planners and architects, the proposed development has been designed to maximize the visual absorption capacity of the site as far as possible and to fit seamlessly into the existing rock face. The design has evolved to mitigate potential visual intrusion upon sightlines

from Kloof road, and to reduce excavation to a minimum. According to Gibbs, 2023, the development proposal is well-within the thresholds of visual congruence.

Additionally, to support visual congruence, a landscape plan has been developed and is attached as **Appendix L**.

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.
Refer to Section 6 above.

8. Socio/Economic Aspects

8.1.	Describe the existing social and economic characteristics of the community in the vicinity of the proposed site.
The demographics of the area has no relevance to the development application. Of relevance, is the fact that Clifton is an affluent community, and the nature of the proposed development is in keeping with the existing social fabric of the area.	
8.2.	Explain the socio-economic value/contribution of the proposed development.

The primary goal of the Applicant for proposed development is to "upgrade" the property from a single dwelling to an up-market apartment block, following the general trend along Victoria Road. Through this capital investment, an increase in the municipal value of the site would be realized. Furthermore, the increased rates and taxes payable as a result of the improvement of the property would increase the local tax base for the municipality.

Given that Clifton is a highly sought after area, this proposal provides the opportunity for more households to experience the benefit of Clifton living.

With regard to the greater contribution of the proposed development to the economy and general work opportunities which may be created through the realisation thereof, the project would provide a short-term injection of funds into the construction industry during the construction phase, with such a contribution also occurring during the operational phase but to a lesser degree. **Table 2** summarises the socio-economic contributions of the proposed development, noting that indicated figures are estimations provided by the Applicant based on similar developments in the area.

Table 2: Summary of Proposed Development as it relates to Socio-Economic Contribution to the area (provided by Arteche Investments– the Applicant, 2020).

What is the expected yearly income or contribution to the economy that will be generated by or as a result of the project?	± R 150 million
How many new employment opportunities will be created during the development phase?	± 450
What is the expected value of the employment opportunities during the development phase?	± R 180 million
What percentage of this will accrue to previously disadvantaged individuals?	± 25 %
How many permanent new employment opportunities will be created during the operational phase of the project?	± 52
What is the expected value of the employment opportunities during the first 10 years?	± R 36 million
What percentage of this will accrue to previously disadvantaged individuals?	± 65 %

The above figures take account of direct, indirect and induced contributions.

There is a specification contained within the EMPr which requires that the Contractor favours labour from previously disadvantaged communities, as far as possible.

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

Given the affluent nature of this area, the socio-economic upliftment anticipated is different to that of other typical residential developments in less affluent areas.

In this context, the upliftment is related to the maintenance or upgrading of property values in the area and the slight improvement in stormwater management in the immediate surrounds as a result of the diversion of the stormwater channel.

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.

It is not anticipated that any significant adverse impacts on the health and well-being of the surrounding community will be realised given the nature of the proposal. Other aspects relating to the health and wellbeing of the community are detailed below.

Traffic impacts on the surrounding road network have been assessed in detail by Fautley (2023) who concluded that traffic impacts during the construction phase could be managed to an acceptable level via the implementation of a Traffic Management Plan (TMP). Additional traffic movement during the operational phase would furthermore not result in a significant impact as the required capacity exists on the surrounding traffic network. Traffic impacts are detailed and discussed elsewhere in the BAR and the full TIA is appended as **Appendix G6**.

From a visual perspective Gibbs, (2023) concluded that the development is in congruence with the visual character of the landscape and would not result in a "visual intrusion" and impact on the "sense of place" of Clifton. Scenic views from Victoria Road and Kloof Road will furthermore not be obstructed by the development. impacts are detailed and discussed elsewhere in the BAR and the full Visual Impact Statement (VIS) is appended as **Appendix G1**.

Other operational impacts such as visual, noise and odours are not considered to be significant given that the proposal is for residential use, which is the same use as the surrounding context. The activities and conduct of residents who would occupy the proposed apartments would be bound by the same by-laws as the current residents of Clifton.

Noise and dust will be generated during the construction phase but would be minimised through the implementation of mitigation and management measures which have been written into the EMPr for strict implementation by the Contractors. Such typical construction related nuisances may be exacerbated should blasting be required. Potential blasting and earth moving impacts can however be kept within legal limits and would be strictly controlled and managed through the EMPr. Any potential security impacts would furthermore be controlled by the EMPr.

SECTION H: ALTERNATIVES, METHODOLOGY AND ASSESSMENT OF ALTERNATIVES

Note on alternatives:
This application is based on the June 2023 SDP developed by NIEUW architects. This site and prior applications have been subject to a previous design from another team. It needs to be clear that this application focusses on the impacts of the NIEUW design with the previous design only serving as a reference to demonstrate that the current proposal is the only reasonable and feasible alternative.

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.

No site/property alternatives are available to the Applicant. The site described throughout this report is thus the preferred site alternative (i.e. to-be consolidated Erven 46 and 47, Clifton).

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

No other property or site alternatives are considered.

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

The site has been identified as suitable for the proposed development because:

- The site is owned by the Applicant who aims to redevelop the privately owned property in response to the surrounding development context and associated property market;
- The site is already partially transformed by an existing dwelling;
- Limited environmental sensitivities exist on the preferred site and so limited environmental impacts would occur (as outlined and discussed throughout this report);
- The proposed land-use would remain residential, just at a greater density – which is aligned with densification policies;
- The proposal is aligned with the built fabric surrounding the site - which is medium-high density along the Victoria Road strip;
- The local municipality has capacity to service the proposed site from an electricity, and water & sanitation perspective without any alterations to bulk infrastructure; and
- The development optimises the use of land within the urban edge.

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

Only one site was considered as this is the only site available to the Proponent. Refer to the motivation above and below.

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

No property alternatives were considered/ formally assessed because of the nature of the proposed development which is a private development on land owned by the applicant.

The "preferred" site is the site that is owned by the applicant and is already partially developed.

The owner/applicant is responding to the general developmental trend of the surrounding area (i.e., Victoria Road) and responding property market.

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

No other site alternatives were considered or formally assessed.

As no site alternatives exist, the impacts of the preferred site are assessed as the preferred development alternative in **Table 5** and **Appendix J**.

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 considered for the site is the re-development of the site for higher density residential use.

Provide a description of any other activity alternatives investigated.

No other activity alternatives were considered.

Provide a motivation for the preferred activity alternative.

The preferred activity is directly aligned with the existing built environment in the area, which is medium to high density residential development characterised by apartment buildings and large dwellings. It is also aligned with overarching spatial planning goals relevant to the area such as densification and infill development within urban areas. While the activity will require enhanced rights to permit the higher density, it is aligned with the residential intention of the site's current zoning.

The activity would furthermore not hold a significant impact on the natural environment, as assessed by specialists and presented in this report. The proposed development would also not adversely affect the coastal environment nearby and would not prevent public access or use of the coastline at all. Potential adverse impacts would also be appropriately mitigated and controlled through the specifications contained within the EMPr (refer to **Appendix H**) as well as additional measures recommended for inclusion of conditions of authorisation indicated in this report.

Provide a detailed motivation if no activity alternatives exist.

No reasonable or feasible activity alternatives exist for this site. The proposal is aligned with the residential nature of the site and area.

A different land-use (e.g. commercial, business, industrial, etc.) would not be appropriate given the site context and road infrastructure along this section of Victoria Road.

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

No activity alternatives have been formally assessed. Therefore, the impacts are equivalent to the preferred "development alternative" as listed in subsection in **Table 5** and **Appendix J.**

1.3.	Design or layout alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts

Provide a description of the preferred design or layout alternative.

The preferred design and layout alternative is detailed in Section B1 of this report. A summary of the development is provided below.

The preferred alternative comprises a 10-level apartment block with a development footprint of approximately 1127 m² on the to be consolidated erven 46 and 47, Clifton. The building will offer 10 terraced apartments (flats), basement parking, vehicular and pedestrian lifts and common areas.

The development would require significant excavation, particularly to construct the lower levels, however the design is such that lateral anchor supports into neighboring properties on the northern and southern boundaries is not required. Such anchors will be necessary into the POS east of the site (Power of Attorney for anchors are only received after submission of final plans). The development will also necessitate the realignment of a stormwater drainage feature currently crossing Erf 47.

Stormwater/ run-off would be managed in terms of a Stormwater Management Plan which will take into account recommendations by specialists, including:

- Stormwater management must be accommodated on site as far as possible, using measures such as permeable surfaces, re-use of runoff from built areas such as roofs as well as the use of measures such as swales.
- Installation of a properly designed drainage system and sump and the re-use of the sump water for irrigation/domestic purposes.
- Where necessary pre-treatment areas such as oil, sediment and litter traps should be included in the stormwater management design before discharge into the watercourse.
- The realignment of the drainage channel on Erf 47 so as to prevent erosion of the channel in the future.

The Landscaping Plan takes into consideration the below specialist recommendations:

- The removal of overshadowing pine trees and re-introduction of indigenous riparian vegetation as still exists in the remaining more natural stream within the immediate upslope Open Space; and
- Invasive alien grasses such as *Pennisetum clandestinum* should not be planted in or adjacent to the watercourse and drainage feature.

Water and sanitation services, and electrical services, would be provided by the CCT through connections to existing infrastructure. The CCT has confirmed available capacity.

A full set of drawings of the proposed layout alternative is provided in **Appendix B**, Site Development Plan Set.

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

While different designs / layouts were considered in the previous applications, the current design is deemed to more feasible and hence the only reasonable alternative. The rationale for this statement includes:

- The current proposal offers a higher density of residential units on a similar footprint (10 units as opposed to 5).
- The parallel orientation of the proposal to the street positions the building central to the site. As such, the orientation is more spatially balanced to both neighbours.
- This orientation allows more natural landscaping around the building connecting to the POS and passages.
- The orientation provides better view corridors by maintaining the visual green belt on both lateral boundaries with the building pulling away from the southern boundary allowing for an enlarged visual green belt to run from the Kloof Road public open space down to Victoria Road below.
- Landscaping has been designed to integrate with stormwater runoff and natural flow patters through the use of landscaped garden terraces that steps down to the natural ground level.
- The design on the lower floors along Victoria Road is specifically intended to retain or reinstate as much of the existing granite rockface into the overall building design. Integrating the granite

rockface into the design reduces the undesirable concrete corridor effect along Victoria Road which would have been exacerbated by the previous design.
- Maintaining the natural rockface also allows for a seamless integration with the landscaped areas, the passages and the POS.
- The 'drive and stack' transport solution is far superior to the previously proposed singular drop-off allowing vehicles to stack inside the building without impacting on Victoria Road. This includes parking and stacking for delivery vehicles.

Based on the above, it is evident that the current design is a much-improved development proposal that responds to certain issues raised in the pre-application public participation process. The previous design is therefore no longer considered reasonable or feasible, and as such, will not be assessed or detailed as an alternative. The above rationale serves to explain the evolution of the design.

Provide a motivation for the preferred design or layout alternative.

In addition to the above motivation for the preferred design, the following is also relevant:

- The development footprint has been placed such that it does not encroach on the existing drainage channel/watercourse along the southern boundary of the site.
- The height of the apartment building has been restricted so as not to obstruct views from Kloof Road or Victoria Road and to not result in a "visual intrusion" when considering the existing development context.
- The stormwater infrastructure on site and the management of run-off will respond to the recommendations made by the freshwater and groundwater specialists.
- The preferred design/layout alternative will result in Low to Very Low (-) impacts with the implementation of mitigation measures in terms of biophysical considerations i.e. freshwater, groundwater, terrestrial biodiversity and natural resource use.
- The preferred design/layout alternative will result in Neutral to Low (-) impacts with the implementation of mitigation measures in terms of social and cultural considerations i.e. heritage, visual, traffic, dust and noise.
- A Low (+) visual impact can be achieved through careful design considerations which responds to development patterns and will add a contemporary layer to the cultural landscape.
- The significance of impacts therefore did not warrant the conceiving of further alternatives in terms of design / layout.
- The design and layout maximises the reasonable development potential of the site within the urban area.

Provide a detailed motivation if no design or layout alternatives exist.

Layout alternatives have not been considered as the layout has made optimal use of the developable area of the site while taking into account the surrounding built environment. More importantly the layout assessed does not present any unjust / inappropriate environmental, social or cultural impacts as assessed by specialists (refer to motivation provided in above section).

Impacts of the proposed development, with mitigation, would be acceptable, and none of the mitigation measures indicated by specialists relate to the scale/layout of the proposed development. Detailed design recommendations in terms landscaping and stormwater management will be taken into account by the respective plans.

Given the above, layout alternatives requiring comparative assessment to the preferred alternative are not deemed necessary. It is reiterated that a previous design was considered for this application, which is not assessed as an alternative, however, the applicant has deemed that design unfeasible and not a valid option as a reasonable alternative.

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

As the preferred design / layout is the only option assessed, the impacts are equivalent to those rated in Section H of this report.

1.4.	Technology alternatives (e.g., to reduce resource demand and increase resource use efficiency) to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.

Provide a description of the preferred technology alternative:

No technology alternatives were formally assessed given the type of proposal and development context. However, best practice measures in terms of resource use and efficiency would be employed during the planning, construction, and operation of the proposed development.

This would be controlled by the relevant specifications contained in the EMPr (refer to **Appendix H**) as well as any conditions of authorisation stemming from this Basic Assessment process and town planning process.

Provide a description of any other technology alternatives investigated.

No technology alternatives considered.

Provide a motivation for the preferred technology alternative.

The nature of residential development is such that it allows for little flexibility in technologies.

Provide a detailed motivation if no alternatives exist.

Specifications have been included in the EMPr (refer to **Appendix H**) to provide for the most efficient use of resources.

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

Not applicable given that no formal technology alternatives have been assessed, however the best practice measures included in the EMPr would serve to mitigate adverse impacts.

1.5.	Operational alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.

Provide a description of the preferred operational alternative.

There are no operational alternatives associated with a small residential development of this nature.

Provide a description of any other operational alternatives investigated.

Not applicable. No operational alternatives exist.

Provide a motivation for the preferred operational alternative.

There are no operational alternatives associated with a small residential development of this nature.

Provide a detailed motivation if no alternatives exist.

There are no operational alternatives associated with a small residential development of this nature.

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

Not applicable.

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.

Single residential zoning on the site is not desirable for the landowner, however, if SR1 is to remain under the No-Go it could result in implementation of the **existing rights**. The SR1 zoning of the erven currently permits three dwelling units per erf. The **No-Go alternative** therefore equates to **6 single residences on the site** (3 dwellings on Erf46 + 3 dwellings on Erf 47).

While some identified negative impacts would not be realised under the No-Go, conversely, positive impacts would be foregone, namely greater intensified land use, densification within the urban area allowing for more sought-after residential opportunities in Clifton and contribution to the greater economy of Cape Town during the construction and operational phases.

From an aquatic perspective, it is highlighted that the proposed development would not result in any more significant impact than the No-Go alternative in the operational phase due to the fact that the watercourse at the site has already been modified by the existing residence on Erf 46. A Very Low (-) impact on the flow and water quality of the watercourse will be realised with or without development in the operational phase.

From a traffic perspective, vehicles exiting the site currently do so in reverse gear which is posing a risk to vehicle crashes. This impact has been rated as holding Medium (-) significance. The same impact is anticipated to be Low (-) should the development be implemented given modifications to the ingress/egress, resulting in a positive result with development.

When considering the above, the No-Go is not preferred for the following reasons:

- The development alternative would not result in any unacceptable environmental, socio-economic or cultural/heritage impacts as they can be mitigated to acceptable levels.
- The proposed (and preferred) development would result in positive socio-economic impacts, which would be lost should the proposal not go ahead.
- The site, as it exists now, is resulting in a negative impact on the flow and water quality of the watercourse at the site which would require mitigation under the No-Go Alternative.
- A traffic impact of lower significance would be achieved through the proposed (and preferred) development.

- The no-go/existing rights alternative would not provide the most economically effective use of the property for the Applicant.
- The property, which presents scarce developable land within the urban area, will not be developed to its full potential. This is inefficient use of scarce resources.
- Densification, which is a priority in urban areas, will not be achieved.

Development of the No-Go alternative would require the Applicant to adhere to the "duty of care" requirements in the NEMA, however there would be no specific requirements in terms of design and construction, operational management and mitigation (as are indicated in the EMPr for the proposed development included in **Appendix H**) to limit impacts associated with the No-Go alternative.

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

No further alternatives have been considered. This was not warranted, given the nature of the site and the development proposal.

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

In summary, no location, activity, operational and technology alternatives are assessed for the reasons detailed above.

The evolution of design on the site is detailed above.

The preferred alternative comprises a 10-level apartment block with a development footprint of approximately 1127 m² on the to be consolidated erven 46 and 47, Clifton. The building will offer 10 terraced apartments (flats), basement parking, vehicular and pedestrian lifts and common areas.

The development would require significant excavation, particularly to construct the lower levels, however the design is such that lateral anchor supports into neighboring properties on the northern and southern boundaries is not required. Such anchors will be necessary into the POS east of the site. The development will also necessitate the realignment of a stormwater drainage feature currently crossing Erf 47.

Stormwater/ run-off would be managed in terms of a Stormwater Management Plan which will take into account recommendations by specialists, including:

- Stormwater management must be accommodated on site as far as possible, using measures such as permeable surfaces, re-use of runoff from built areas such as roofs as well as the use of measures such as swales.
- Installation of a properly designed drainage system and sump and the re-use of the sump water for irrigation/domestic purposes.
- Where necessary pre-treatment areas such as oil, sediment and litter traps should be included in the stormwater management design before discharge into the watercourse.
- The realignment of the drainage channel on Erf 47 so as to prevent erosion of the channel in the future.

The Landscaping Plan takes into consideration the below specialist recommendations:

- The removal of overshadowing pine trees and re-introduction of indigenous riparian vegetation as still exists in the remaining more natural stream within the immediate upslope Open Space; and
- Invasive alien grasses such as *Pennisetum clandestinum* should not be planted in or adjacent to the watercourse and drainage feature.

Water and sanitation services, and electrical services, would be provided by the CCT through connections to existing infrastructure. The CCT has confirmed available capacity.

A full set of drawings of the proposed layout alternative is provided in **Appendix B**, Site Development Plan Set.

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).

No-go areas in relation to the project are limited to:

- Areas beyond the site boundaries.
- The stormwater channel on the southern boundary except to allow for construction of the stilling basin and infrastructure to integrate the realigned stormwater channel.

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.
This has been attached as **Appendix R**.

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.

Notes:

It is not the intention of the applicant to decommission the development. Thus, decommissioning impacts have not been assessed (although it is noted that the traffic engineer considered this).

The study revealed that there will be no impacts on:

- The underlying aquifer;
- Fauna;
- Flora; and
- The open space zoning and context of Erf 48 (through the realignment of the stormwater channel). This Open Space zoned erf already houses a portion of the highly eroded channel. Realignment of this feature will therefore not diminish, alter or change the current open space zoning and use of this property. As such, there are no impacts to report in this regard. It is noteworthy that Erf 48 is very steep, and effectively inaccessible. It is therefore not generally used for recreation or other activities typically associated with Public Open Space.

Furthermore, given that the design sensitively acknowledged the surrounding natural and social landscapes, and is in keeping with the residential land use of the area, it is the opinion of the EAP that there will be no negative impact on property value in the area.

With respect to geotechnical aspects, the geotechnical report served to inform the structural engineers on the founding conditions of the site and the required design interventions. Geotechnical impacts considered for this proposal include:

- Impact on groundwater levels. This was considered by the groundwater specialists.
- Impact associated with blasting and excavation, which includes nuisance aspects (noise and dust- as assessed in the tables below) and vibration / subsidence, which could cause damage to surrounding structures. The geotechnical engineer found that it is not possible to excavate the entire site with vertical sides down to the level of Victoria Road. Instead, the engineer recommends stepped / sloping sides along with anchors into the public land, which has already been included in the design.

Table 3: Impact and risk assessment for each alternative

FRESHWATER IMPACTS (as assessed by Belcher May 2023 read with clarification letter dated August 2023)		
ALTERNATIVES:	**PROPOSED DEVELOPMENT**	**NO-GO ALTERNATIVE**
Planning, design and development phase		
Potential impact and risk:	Aquatic habitat modification and potential for some flow and water quality modification	No impact
Nature of impact:	Negative	-
Extent and duration of impact:	Low Medium - Low	-
Consequence of impact or risk:	Low	-
Probability of occurrence:	Medium - Low	-
Degree to which the impact may cause irreplaceable loss of resources:	Marginal loss	-
Degree to which the impact can be reversed:	Partially reversible	-
Indirect impacts:	None	-
Cumulative impact prior to mitigation:	Low	-
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium to Low (-)	-
Degree to which the impact can be avoided:	Moderate	-
Degree to which the impact can be managed:	Moderate	-
Degree to which the impact can be mitigated:	Moderate - High	-

Proposed mitigation:	• Construction adjacent to the watercourse to be undertaken during drier months of the year. • Removal of overshadowing pine trees and reintroduction of indigenous riparian vegetation. • Pre-treatment areas such as oil, sediment and litter traps should be included in the stormwater management design before discharge into the watercourse. • No planting of invasive grasses such as P. clandestinum in or adjacent to the watercourse/drainage feature.	-
Residual impacts:	Very limited modification to aquatic habitat	-
Cumulative impact post mitigation:	Low	-
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)	-
Operational phase		
Potential impact and risk:	Flow and water quality modification	Flow and water quality modification
Nature of impact:	Negative	Negative
Extent and duration of impact:	Low Low	Low Low
Consequence of impact or risk:	Low	Low
Probability of occurrence:	Low	Low
Degree to which the impact may cause irreplaceable loss of resources:	No loss	No loss
Degree to which the impact can be reversed:	Partially reversible	Partially reversible
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)	Low (-)	Low (-)
Degree to which the impact can be avoided:	Moderate- High	Moderate- High
Degree to which the impact can be managed:	Moderate- High	Moderate- High

Degree to which the impact can be mitigated:	High	Moderate
Proposed mitigation:	• Consideration of water quality impacts in the Construction EMPr and monitoring by an ECO. • The re-alignment of the drainage line to the existing channel in a way that prevents potential future erosion. • The stormwater management plan for the site should give consideration to how the watercourse and drainage line immediately upslope of the site are addressed to reduce the erosion and sedimentation risks to the site and adjacent properties. • There should not be concentrated discharge of stormwater into the modified watercourse corridor/channel but rather adequate measures such as use of permeable surfaces, re-use of runoff from built areas such as roofs, the use of measures such as swales, implemented to address stormwater run-off.	
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)	Very Low (-)	Very Low (-)
Decommissioning and closure phase		
Potential impact and risk:	Not Applicable	
NOTES ON IMPACT The proposed development would not result in any more significant impact than the No-Go Alternative since the watercourse southeast of site has already been modified by the existing residence on Erf 46. Furthermore, the extension of the development footprint into Erf 47 is not likely to alter the extent of the modified watercourse. In terms of cumulative impacts, the proposed development, if mitigated as recommended, is unlikely to result in any further degradation of aquatic habitat within the site and surrounding area.		

GROUNDWATER IMPACTS (as assessed by Barrow & Muller, 2021 read with clarification letter December 2022 and email of April 2024)		
ALTERNATIVES:	**PROPOSED DEVELOPMENT**	**NO-GO ALTERNATIVE**
Planning, design and development phase		
Potential impact and risk:	Change in groundwater flows paths and impact to neighbouring properties.	No impact
Nature of impact:	Negative (-)	Not applicable
Extent and duration of impact:	Local Long-term	Not applicable
Consequence of impact or risk:	Change in groundwater flows and increased subsurface flows to neighbouring properties	Not applicable
Probability of occurrence:	Medium	Not applicable

Degree to which the impact may cause irreplaceable loss of resources:	Marginal loss of resource	Not applicable
Degree to which the impact can be reversed:	Reversible	Not applicable
Indirect impacts:	-	Not applicable
Cumulative impact prior to mitigation:	Medium	Not applicable
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium (-)	Not applicable
Degree to which the impact can be avoided:	-	Not applicable
Degree to which the impact can be managed:	Possible	Not applicable
Degree to which the impact can be mitigated:	Possible	Not applicable
Proposed mitigation:	Installation of subsurface drain which will allow subsurface flow to be channelled towards a collection point away from neighbouring properties. The system must be designed by an appropriate specialist	Not applicable
Residual impacts:	-	Not applicable
Cumulative impact post mitigation:	Low	Not applicable
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)	Not applicable
Potential impact and risk:	Increased stormwater discharge resulting in coastal erosion and wetting of beaches	No impact
Nature of impact:	Negative (-)	Not applicable
Extent and duration of impact:	Local Long-term	Not applicable
Consequence of impact or risk:	Coastal erosion and wetting of beaches	Not applicable
Probability of occurrence:	Medium	Not applicable

Degree to which the impact may cause irreplaceable loss of resources:	Marginal loss of resource	Not applicable
Degree to which the impact can be reversed:	Reversible	Not applicable
Indirect impacts:	-	Not applicable
Cumulative impact prior to mitigation:	Medium	Not applicable
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium (-)	Not applicable
Degree to which the impact can be avoided:	-	Not applicable
Degree to which the impact can be managed:	Can be mitigated	Not applicable
Degree to which the impact can be mitigated:	Can be mitigated	Not applicable
Proposed mitigation:	Installation of subsurface drain and sump where water is used for irrigation and/or domestic purposes resulting in minimal stormwater discharge. The system must be designed by an appropriate specialist	Not applicable
Residual impacts:	-	Not applicable
Cumulative impact post mitigation:	Low	Not applicable
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)	Not applicable
Operational phase		
Note: While the specialist recorded these impacts in the design, construction and operational phases, it is noted that the impact occurs in the operational phase while mitigation must be considered in the design phase. The impact is therefore not repeated in the design phase in this table to avoid double counting.		
Decommissioning and closure phase		
Potential impact and risk:	Not Applicable	

NUISANCE IMPACTS: Noise and Dust (as assessed by EAP)		
ALTERNATIVES:	**PROPOSED DEVELOPMENT**	**NO-GO ALTERNATIVE**
Planning, design and development phase		

Potential impact and risk:	Construction activities will result in the generation of dust and noise which may be a nuisance to surrounding land users whilst construction is ongoing. It is also noted that the felling of trees may result in generation of particulate matter that could temporarily irritate respiratory functions to residents in the adjoining households.	No impact as no construction would take place
Nature of impact:	Negative (-)	Not Applicable
Extent and duration of impact:	Medium (within site and in the local area) Short-term	Not Applicable
Consequence of impact or risk:	Short-term disturbance and discomfort to adjacent landowners, and possibly beyond	Not Applicable
Probability of occurrence:	Likely	Not Applicable
Degree to which the impact may cause irreplaceable loss of resources:	None	Not Applicable
Degree to which the impact can be reversed:	Irreversible during construction, but impact is gone when construction activities are not underway	Not Applicable
Indirect impacts:	Potential irritation to local community members as well as health implications.	Not Applicable
Cumulative impact prior to mitigation:	Very Low (-)	Not Applicable
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium- High, High, or Very-High)	Medium (-)	Not Applicable
Degree to which the impact can be avoided:	Low	Not Applicable
Degree to which the impact can be managed:	High	Not Applicable
Degree to which the impact can be mitigated:	High	Not Applicable
Proposed mitigation:	Implementation of noise and dust control measures as included in the EMPr (refer to **Appendix H**).	Not Applicable
Residual impacts:	Minor, localised, and short-term disruptions to local community	Not Applicable
Cumulative impact post mitigation:	Very Low (-) to negligible	Not Applicable

Significance rating of impact after mitigation (e.g. Low, Medium, Medium- High, High, or Very-High)	Very Low (-)	Not Applicable
Operational phase		
Potential impact and risk:	No impacts in the operational phase as the nature of the land use will be similar to its surrounds.	
Decommissioning and closure phase		
Potential impact and risk:	Not Applicable	

TERRESTRIAL BIODIVERSITY IMPACTS (as assessed by Altern in Nov 2022, read with clarification letter dated June 2023)		
ALTERNATIVES:	**PROPOSED DEVELOPMENT**	**NO-GO ALTERNATIVE**
Planning, design and development phase		
Potential impact and risk:	Displacement of faunal community due to habitat loss, disturbance (noise, dust and vibration) and/or direct mortalities.	None
Nature of impact:	Negative (-)	-
Extent and duration of impact:	Specific Permanent	-
Consequence of impact or risk:	Low	-
Probability of occurrence:	Likely	-
Degree to which the impact may cause irreplaceable loss of resources:	Not assessed	-
Degree to which the impact can be reversed:	Not assessed	-
Indirect impacts:	Not assessed	-
Cumulative impact prior to mitigation:	Not assessed	-
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)	-
Degree to which the impact can be avoided:	Not assessed	-

Degree to which the impact can be managed:	Not assessed	-
Degree to which the impact can be mitigated:	Not assessed	-
Proposed mitigation:	Fauna species such as frogs and reptiles that have not moved away should be carefully and safely removed to a suitable location beyond the extent of the development footprint by a suitably qualified ECO/ Conservation Technician trained in the handling and relocation of animals. No trapping, killing or poisoning of any wildlife to be allowed on site, including snakes, birds, lizards, frogs, insects or mammals. No construction rubble should be dropped into any sensitive areas. Have action plans onsite, and training for contactors and employees in the event of spills, leaks and other impacts to the surrounding environment. It is preferable that construction takes place during the dry season (as much as possible) to reduce the erosion potential of the exposed surfaces. All dustbins or waste should be covered to minimise vermin and pests from being established at the site	-
Residual impacts:	None identified	-
Cumulative impact post mitigation:	Not assessed	-
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)	-
Operational phase		
Potential impact and risk:	Continued displacement and fragmentation of the faunal community due to ongoing anthropogenic disturbances (noise, traffic, dust and vibrations) and habitat degradation (litter, road mortalities and/or dumping of rubble).	Not assessed as not required by GN No. 648 for a Terrestrial Biodiversity Compliance Statement
Nature of impact:	Negative (-)	-
Extent and duration of impact:	Development Specific Permanent	-
Consequence of impact or risk:	Not assessed	-
Probability of occurrence:	Likely	-
Degree to which the impact may cause irreplaceable loss of resources:	Not assessed	-
Degree to which the impact can be reversed:	Not assessed	-

Indirect impacts:	Not assessed	-
Cumulative impact prior to mitigation:	Not assessed	-
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High or Very-High)	Low (-)	-
Degree to which the impact can be avoided:	Not assessed	-
Degree to which the impact can be managed:	Not assessed	-
Degree to which the impact can be mitigated:	Not assessed	-
Proposed mitigation:	Compilation and implementation of an alien invasive plant management plan needs to be compiled and implemented post construction to control current invaded areas and prevent the growth of invasive species on cleared areas.	-
Residual impacts:	None identified	-
Cumulative impact post mitigation:	Not assessed	-
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)	-
Decommissioning and closure phase		
Potential impact and risk:	Not applicable	-
NOTES ON IMPACT Given that the site is of Low Terrestrial biodiversity sensitivity, the proposed development is likely to have 'no significant impact' on locally indigenous terrestrial biodiversity due to the habitat having already undergone complete transformation and thus being unsuitable for and playing host to locally indigenous terrestrial biodiversity of any importance. Bird species that may utilise the large exotic trees for perching would relocate unharmed during any construction process		

TRAFFIC IMPACTS (as assessed by Fautley, April 2024)		
ALTERNATIVES:	**PROPOSED DEVELOPMENT**	**NO-GO ALTERNATIVE**
Planning, design and development phase (Construction)		
Potential impact and risk:	Traffic entering and exiting the access poses risk of vehicle crashes.	Traffic entering and exiting the access poses risk of vehicle crashes.

Nature of impact:	Negative (-) Vehicle Crashes and disruption to traffic flow due to driveway access on Victoria Road.	Negative (-) Vehicle Crashes and disruption to traffic flow due to driveway access on Victoria Road.
Extent and duration of impact:	Low Low	Low Low
Consequence of impact or risk:	Medium – Low traffic volumes but vehicles using driveway access on Victoria Road have potential to cause possible vehicle crashes and associated traffic congestion.	Medium – Low traffic volumes but vehicles using driveway access and more particularly vehicles reversing into Victoria Road have potential to cause possible vehicle crashes and associated traffic congestion.
Probability of occurrence:	Low	Low
Degree to which the impact may cause irreplaceable loss of resources:	High – Injury, disability, or loss of life to motorists or public in the event of a vehicle crash.	High – Injury, disability, or loss of life to motorists or public in the event of a vehicle crash.
Degree to which the impact can be reversed:	High - The impact of construction phase traffic will remain for the construction phase	Low - The impact will remain for the duration of the home occupancy
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)	Medium (-)	Medium (-)
Degree to which the impact can be avoided:	Low - It is not feasible to avoid impacting on traffic in the vicinity of the site due to the mountainside terrain and site topography with no alternative for access for the proposed development.	Low - It is not feasible to avoid impacting on traffic in the vicinity of the site due to the mountainside terrain and site topography with existing dwelling with access / within approved development rights.
Degree to which the impact can be managed:	Medium	Low
Degree to which the impact can be mitigated:	Medium	Low
Proposed mitigation:	Prepare a Traffic Management Plan, to be implemented for the Construction Phase. The Traffic Management Plan should be a condition of Building Plan Approval and would be required prior to building works commencing on site.	The owner could of his own volition place video cameras and monitors on site to enable motorists reversing out of the driveway to gain a better view of the roadway and approaching vehicles either side of the access.

Residual impacts:	Possible disability injury	Possible disability injury
Cumulative impact post mitigation:	Low (-)	Low (-)
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)	Low (-)
Potential impact and risk:	Traffic Congestion/ Disruptions to Traffic flow during Construction Phase - Demolition Stage	No impact
EAP's note: It should be noted that this impact was assessed by the specialist prior to demolition taking place. However, demolition permits have been issued and thus this action has been undertaken.		
Potential impact and risk:	Restricted pedestrian passage alongside site boundary during demolition and excavation exposes pedestrians to risk of being struck be a vehicle during Construction Phase - Demolition Stage	No impact
Nature of impact:	Negative (-) Temporary closure of the section of southbound carriageway will necessitate pedestrians on the southbound carriageway sidewalk crossing Victoria Road to access the sidewalk on the northbound carriageway.	Not Applicable- Status Quo remains
Extent and duration of impact:	Low Low	Not Applicable
Consequence of impact or risk:	High - Vehicle crash with pedestrians could result in serious injury, disability or death.	Not Applicable
Probability of occurrence:	Low – There are low numbers of pedestrians walking along the southbound carriageway sidewalk.	Not Applicable
Degree to which the impact may cause irreplaceable loss of resources:	High - Vehicle crash with pedestrians could result in serious injury, disability or death.	Not Applicable
Degree to which the impact can be reversed:	High - The impact will be reversed when the demolition ends	Not Applicable
Indirect impacts:	Possible legal action against negligent actions by developer/approving authority	Not Applicable
Cumulative impact prior to mitigation:	Low (-)	Not Applicable

Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium (-)	Not Applicable
Degree to which the impact can be avoided:	Low	Not Applicable
Degree to which the impact can be managed:	High	Not Applicable
Degree to which the impact can be mitigated:	High	Not Applicable
Proposed mitigation:	Include pedestrian accommodation in the Traffic Management Plan for the Demolition Stage. The Traffic Management Plan should be a condition of Building Plan Approval, and would be required prior to building works commencing on site.	Not Applicable
Residual impacts:	None	Not Applicable
Cumulative impact post mitigation:	Low (+)	Not Applicable
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)	Not Applicable
Potential impact and risk:	Obstruction or loose materials in the roadway creating risk of crashes during Construction Phase – Demolition Stage.	No impact
Nature of impact:	Negative (-)	Not Applicable – Status Quo Remains
Extent and duration of impact:	Low Low	Not Applicable
Consequence of impact or risk:	Possible vehicle crashes.	Not Applicable
Probability of occurrence:	Medium	Not Applicable
Degree to which the impact may cause irreplaceable loss of resources:	Medium – vehicle damage, person injury, disability or possible loss of life in the event of a vehicle crash.	Not Applicable
Degree to which the impact can be reversed:	High - The impact will be reversed when the demolition ends	Not Applicable
Indirect impacts:	Materials falling off trucks into the roadway could cause damage to other vehicles, increase deterioration in paint marking visibility, block stormwater drains, etc. Possible legal action against negligent actions by truck driver/company	Not Applicable

Cumulative impact prior to mitigation:	Low (-)	Not Applicable
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium (-)	Not Applicable
Degree to which the impact can be avoided:	Medium	Not Applicable
Degree to which the impact can be managed:	High	Not Applicable
Degree to which the impact can be mitigated:	High	Not Applicable
Proposed mitigation:	This can be mitigated by ensuring the vehicles are not overloaded, tarpaulin covers are used to prevent light materials from blowing out of tipper trucks during transport, vehicle tailgates are properly closed and are not damaged, vehicle bumpers are swept clear of loose materials before leaving site. This should form part of the Traffic Management Plan. The Traffic Management Plan should be a condition of Building Plan Approval, and would be required prior to building works commencing on site.	Not Applicable
Residual impacts:	None	Not Applicable
Cumulative impact post mitigation:	Low (-)	Not Applicable
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)	Not Applicable
Potential impact and risk:	Traffic Congestion/ Disruptions to traffic flow during Construction Phase	Traffic Congestion/ Disruptions to traffic flow during Construction Phase – Demolition and Build Stages
Nature of impact:	Negative (-) Particular machinery required on-site will need to be transported to site on lowbed vehicles.	Status Quo Remains – Not Applicable
Extent and duration of impact:	Low Low	Not Applicable
Consequence of impact or risk:	Medium – Congestion and traffic safety	Not Applicable
Probability of occurrence:	Medium	Not Applicable
Degree to which the impact may cause irreplaceable loss of resources:	Medium – disruption to traffic or damage to road infrastructure where heavy machinery is incorrectly transported on public roads.	Not Applicable

Degree to which the impact can be reversed:	High - The impact will be reversed when the Construction Phase ends	Not Applicable
Indirect impacts:	None	Not Applicable
Cumulative impact prior to mitigation:	Low (-)	Not Applicable
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium (-)	Not Applicable
Degree to which the impact can be avoided:	High	Not Applicable
Degree to which the impact can be managed:	High	Not Applicable
Degree to which the impact can be mitigated:	High	Not Applicable
Proposed mitigation:	Apply for Abnormal Load Permits from Western Cape Government prior to transport of abnormal loads.	Not Applicable
Residual impacts:	None	Not Applicable
Cumulative impact post mitigation:	Low (-)	Not Applicable
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)	Not Applicable
Potential impact and risk:	Workers using public transport / taxis arriving at / or leaving the site will cross Victoria Road, and will be exposed to risk of being struck by a motor vehicle. During Construction Phase – Demolition and Build Stages	No impact
Nature of impact:	Negative (-) Crash involving vehicle and pedestrian	Status Quo Remains - Not Applicable
Extent and duration of impact:	Low Low	Not Applicable
Consequence of impact or risk:	Injury, disability or even death.	Not Applicable
Probability of occurrence:	Medium	Not Applicable
Degree to which the impact may cause irreplaceable loss of resources:	High – loss of life or permanent injury to motorists or public in event of a vehicle crash.	Not Applicable
Degree to which the impact can be reversed:	High - The impact will be reversed when the development Construction Phase ends	Not Applicable
Indirect impacts:	None	Not Applicable

Cumulative impact prior to mitigation:	Low (-)	Not Applicable
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium (-)	Not Applicable
Degree to which the impact can be avoided:	Low	Not Applicable
Degree to which the impact can be managed:	Low	Not Applicable
Degree to which the impact can be mitigated:	High	Not Applicable
Proposed mitigation:	Prepare a Traffic Management Plan to be implemented for the Construction Phase, accommodating public transport/taxis on the southbound carriageway or on-site to avoid workers crossing Victoria Road. The Traffic Management Plan should be a condition of Building Plan Approval, and would be required prior to building works commencing on site.	Not Applicable
Residual impacts:	None	Not Applicable
Cumulative impact post mitigation:	Low (+)	Not Applicable
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)	Not Applicable
Potential impact and risk:	Site access difficult for heavy vehicles leading to possible crashes during Construction Phase - Build Stage	No impact
Nature of impact:	Negative (-) Motorists leaving the site could find access to Victoria Road difficult due to traffic	Status Quo Remains – Not Applicable
	flow. Truck drivers in particular taking inappropriate gaps in traffic streams increase possibility of causing a vehicle crash	
Extent and duration of impact:	Low and Low	Not Applicable
Consequence of impact or risk:	Disruption to free traffic flow. Possible vehicle crashes.	Not Applicable
Probability of occurrence:	Medium	Not Applicable
Degree to which the impact may cause irreplaceable loss of resources:	Medium – loss of life or permanent injury to motorists or public in event of a vehicle crash.	Not Applicable

Degree to which the impact can be reversed:	High - The impact will be reversed when the development Construction Phase ends	Not Applicable
Indirect impacts:	NA	Not Applicable
Cumulative impact prior to mitigation:	Low (-)	Not Applicable
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium (-)	Not Applicable
Degree to which the impact can be avoided:	Low	Not Applicable
Degree to which the impact can be managed:	High	Not Applicable
Degree to which the impact can be mitigated:	High	Not Applicable
Proposed mitigation:	Prepare a Traffic Management Plan to be implemented for the Build Stage, to enable trucks in particular to access Victoria Road in a safe manner. The Traffic Management Plan should be a condition of Building Plan Approval, and would be required prior to building works commencing on site.	Not Applicable
Residual impacts:	Possible disability	Not Applicable
Cumulative impact post mitigation:	Low (-)	Not Applicable
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)	Not Applicable
Operational phase		
Potential impact and risk:	Traffic entering and exiting the development poses risk of vehicle crashes.	Traffic entering and exiting the current house poses risk of vehicle crashes.
Nature of impact:	Negative (-) Vehicle crashes and disruption to traffic flow due to driveway access on Victoria Road.	Negative (-) Vehicle Crashes and disruption to traffic flow due to driveway access on Victoria Road.
Extent and duration of impact:	Low Low	Low Low

Consequence of impact or risk:	Medium – Low traffic volumes entering and exiting driveway access on Victoria Road has potential to cause minor traffic congestion and possible vehicle crashes.	Medium – Low traffic volumes entering and exiting driveway access on Victoria Road but vehicles reversing into Victoria Road has potential to cause minor traffic congestion and possible vehicle crashes.
Probability of occurrence:	Low	Low
Degree to which the impact may cause irreplaceable loss of resources:	High – Injury, disability or loss of life to motorists or public in the event of a vehicle crash.	High – Injury, disability or loss of life to motorists or public in the event of a vehicle crash.
Degree to which the impact can be reversed:	Low - The impact will remain for the duration of the development occupancy	Low - The impact will remain for the duration of the home occupancy
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)	Medium (-)	Medium (-)
Degree to which the impact can be avoided:	Low - It is not feasible to avoid impacting on traffic in the vicinity of the site due to the mountainside terrain and site topography with no alternative for access for the proposed development.	Low - It is not possible to avoid impacting on traffic in the vicinity of the site due to the mountainside terrain and site topography with existing dwelling with access / within approved development rights.
Degree to which the impact can be managed:	Medium	Low
Degree to which the impact can be mitigated:	Medium	Low
Proposed mitigation:	By design ensure that vehicles are able to exit the site in a forward gear.	None
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)	Low (-)	Medium (-)

Potential impact and risk:	Traffic Congestion/ Disruptions to Traffic flow where vehicles park in the roadway - during Operations	No impact
Nature of impact:	Negative (-) Potential disruptions to traffic flow on Victoria Road in the event where vehicle lifts are out of order and vehicles cannot access the structured parking.	Status Quo Remains
Extent and duration of impact:	Low and Low	Not Applicable
Consequence of impact or risk:	Medium	Not Applicable
Probability of occurrence:	Low	Not Applicable
Degree to which the impact may cause irreplaceable loss of resources:	Low	Not Applicable
Degree to which the impact can be reversed:	Low - The impact will remain for the project Operations Phase	Not Applicable
Indirect impacts:	Momentary disruption to traffic flow where development residents are unable to park in the building resulting in them parking in Victoria Road	Not Applicable
Cumulative impact prior to mitigation:	Low (-)	Not Applicable
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)	Not Applicable
Degree to which the impact can be avoided:	Low	Not Applicable
Degree to which the impact can be managed:	Medium	Not Applicable
Degree to which the impact can be mitigated:	Medium	Not Applicable
Proposed mitigation:	Prepare a Traffic Management Plan to deal with access and parking in the event of vehicle lifts being out of order. The Traffic Management Plan should be a condition of Building Plan Approval and would be required prior to building works commencing on site.	Not Applicable
Residual impacts:	None	Not Applicable
Cumulative impact post mitigation:	Low (+)	Not Applicable
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)	Not Applicable

Decommissioning and closure phase		
Potential impact and risk:	No impact (see note below)	No impact
NOTES ON IMPACT SIGNIFICANCE There is no intention to decommission the proposed apartment block. If it is replaced, the decommissioning would be dealt with as part of the re-development/new development. While the specialist assessed the decommissioning, this is not repeated in the BAR.		

USE OF NATURAL RESOURCES (As assessed by EAP)		
ALTERNATIVES:	**PROPOSED DEVELOPMENT**	**NO-GO ALTERNATIVE**
Planning, design, and development phase		
Potential impact and risk:	Construction of the development will result in the use of natural resources, such as water, resources for the generation of energy, construction materials etc.	No impact as no construction would take place.
Nature of impact:	Negative (-)	Not Applicable
Extent and duration of impact:	Regional (beyond site boundary) Long-term	Not Applicable
Consequence of impact or risk:	Reduction in natural resources, less for others to use	Not Applicable
Probability of occurrence:	Definite	Not Applicable
Degree to which the impact may cause irreplaceable loss of resources:	Low	Not Applicable
Degree to which the impact can be reversed:	Irreversible, once used	Not Applicable
Indirect impacts:	More competition for natural resources and pressure on human and natural systems	Not Applicable
Cumulative impact prior to mitigation:	Very Low (-)	Not Applicable
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)	Not Applicable
Degree to which the impact can be avoided:	Low	Not Applicable
Degree to which the impact can be managed:	Medium	Not Applicable
Degree to which the impact can be mitigated:	Medium	Not Applicable

Proposed mitigation:	Implementation of specifications related to use of natural resources, construction materials, energy, and water in the EMPr (**Appendix H**).	Not Applicable
Residual impacts:	Controlled, responsible use of natural resources	Not Applicable
Cumulative impact post mitigation:	Very Low (-)	Not Applicable
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very Low (-)	Not Applicable
Operational phase		
Potential impact and risk:	Operation of apartment block will result in the use of natural resources, such as water, resources for the generation of energy etc. The contribution of this development to these greater identified impacts are immeasurably small, and hence, these impacts are negligible and not assessed.	Under the No-Go Alternative, the single residential zoning will remain and the erven could be developed with up to 3 dwellings each. The use of natural resources will still take place but to a lesser degree given that only the needs of 3 households per erf would need to be met. The contribution of this development to these greater identified impacts are immeasurably small, and hence, these impacts are negligible and not assessed.
NOTES ON IMPACT SIGNIFICANCE The CCT has confirmed available capacity for provision of electricity, solid waste and water & sanitation. Refer to **Appendix E16** for evidence thereof.		
Decommissioning and closure phase		
Potential impact and risk:	Not Applicable	

VISUAL IMPACTS (as assessed by Gibbs, 2023)		
ALTERNATIVES:	**PROPOSED DEVELOPMENT**	**NO-GO ALTERNATIVE**
Planning, design and development phase		
Potential impact and risk:	The potential impacts include construction site establishment and clearance: i.e., removal of existing vegetation and trimming of trees; earthworks, excavations, and installation of bulk infrastructure. Risks include change in character of sites and context, as well as the potential fragmentation of the green matrix, and change in the local sense of place.	Potential impacts include limited construction complete with site establishment and clearance: i.e., removal of portions of existing vegetation and trimming of trees; earthworks, excavations, and installation of bulk infrastructure. Risks

		include change in character of sites and context, as well as the potential fragmentation of the green matrix, and change in the local sense of place.
Nature of impact:	Negative (-)	Negative
Extent and duration of impact:	Local Short term	Local Short term
Consequence of impact or risk:	Visual disturbance to status quo, foreground construction activity	Pattern of development at variance to adjacent properties
Probability of occurrence:	Definite	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Low	Low
Degree to which the impact can be reversed:	Low	Low
Indirect impacts:	-	-
Cumulative impact prior to mitigation:	Adds to existing development within the immediate context	Adds to existing development within the immediate context
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium- High, High, or Very-High)	Low (-)	Negligible (0)
Degree to which the impact can be avoided:	Unavoidable	Medium
Degree to which the impact can be managed:	Medium	High
Degree to which the impact can be mitigated:	Medium	High
Proposed mitigation:	- Limiting construction to within hoarding areas - Preservation of landscape features where possible - Site rehabilitation and management, erosion control	- Limiting construction to within hoarding areas - Preservation of landscape features where possible - Site rehabilitation and management, erosion control
Residual impacts:	Controlled adverse visual impacts for a short duration	Controlled adverse visual impacts for a short duration
Cumulative impact post mitigation:	Neutral	Unavoidable

Significance rating of impact after mitigation (e.g. Low, Medium, Medium- High, High, or Very-High)	Neutral (0)	Very Low (+)
Operational Phase		
Potential impact and risk:	The potential impacts include the foreground development of a multi-level contemporary building inserted into the urban cultural landscape. Risks include change in character of site and reduction of the green matrix.	Potential impacts include the foreground insertion of smaller buildings into the urban cultural landscape. Risks include change in character of site and reduction of the green matrix, as well as a pattern of development at variance to the established streetscape.
Nature of impact:	Neutral (as development is congruent with existing landscape)	Neutral
Extent and duration of impact:	Local Medium term	Local Medium-term
Consequence of impact or risk:	Contemporary layer added to the cultural landscape	Different pattern of development when compared to neighbourhood properties
Probability of occurrence:	Definite	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Low (if properly executed)	Low
Degree to which the impact can be reversed:	Low	Low
Indirect impacts:	-	-
Cumulative impact prior to mitigation:	Adds to existing development within the context	Adds to existing development within the context
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium- High, High, or Very-High)	Low (Neutral)	Neutral
Degree to which the impact can be avoided:	Medium	Medium
Degree to which the impact can be managed:	Medium	High
Degree to which the impact can be mitigated:	Medium/high	High

Proposed mitigation:	Planning of development to respond to visual considerations Architectural measures (form/scale/massing/materials/textures) Landscape measures (screen planting/view corridors)	Planning of development to respond to visual considerations Architectural measures (form/scale/massing/materials/textures) Landscape measures (screen planting/view corridors)
Residual impacts:	Development which partially fits with the local landscape	N/A
Cumulative impact post mitigation:	Neutral	Neutral
Significance rating of impact after mitigation (e.g. Low, Medium, Medium- High, High, or Very-High)	Low (+)	Very Low(+)
Decommissioning and Closure Phase		
Potential impact and risk:	Not Applicable	
NOTES ON IMPACT SIGNIFICANCE Overall, the development is assessed to have a visual impact of low significance, with mitigation in the form of landscaping and architectural controls.		

SOCIO-ECONOMIC IMPACTS (as assessed by the EAP)		
ALTERNATIVES	**PROPOSED DEVELOPMENT**	**NO-GO ALTERNATIVE**
PLANNING, DESIGN AND DEVELOPMENT PHASE		
Nature of the potential impact and risk:	The predominant socio-economic impacts in the implementation phase would be the creation of job opportunities and the impact on the economy. This will be achieved through spending on goods and services required for the development. These impacts will be amplified through the multiplier effects created through increased production of goods, or increased business sales.	The status quo will remain with no construction related socio-economic impact.
Extent and duration of impact:	Regional and Short Term	N/a
Consequence of impact or risk:	Increase in production and GDP due to project capital expenditure. Income for those employed (directly and indirectly) as a result of the development.	N/a
Probability of occurrence:	Definite	N/a
Degree to which the impact may cause irreplaceable loss of resources:	N/a	N/a
Degree to which the impact can be reversed:	Irreversible – positive impact, not desirable to be reversed	N/a
Indirect impacts:	Contribution to economic growth; improved standard of living for those direct and indirectly employed by the development.	N/a
Cumulative impact prior to mitigation:	Low positive	N/a

Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium positive	N/a
Degree to which the impact can be avoided:	Unavoidable – positive impact, avoidance not desirable	N/a
Degree to which the impact can be managed:	Partly	N/a
Degree to which the impact can be mitigated:	Partly	N/a
Proposed mitigation:	• The Applicant must, where possible, procure materials, goods and products from suppliers in the Cape Town area to increase the positive impact in the local economy as far as possible. • The Applicant must, where possible, use Cape Town based labour to increase the positive impact in the local community as far as possible.	N/a
Residual impacts:	Local and regional contribution to economic growth. Improved standard of living.	N/a
Cumulative impact post mitigation:	Low positive	N/a
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium positive	N/a
OPERATIONAL PHASE		
Nature of the potential impact and risk:	The predominant socio-economic impacts associated with the operational phase would be the creation of job opportunities and the impact on the economy. This will be achieved through spending on goods and services required for the operation (e.g. security, cleaning, landscaping etc.). These impacts will be amplified through the multiplier effects created through increased Gross Domestic Production (GDP) and increased business sales/ expenses.	The status quo will remain with socio-economic benefits of the single residential home continuing as normal.
Extent and duration of impact:	Regional and Long Term	Local and Long Term
Consequence of impact or risk:	Improved economic and welfare conditions	No increase in economic conditions or welfare of the City of Cape Town residents.
Probability of occurrence:	Definite	Definite
Degree to which the impact may cause irreplaceable loss of resources:	N/a	N/a
Degree to which the impact can be reversed:	Irreversible – not desirable for positive impact to be reversed.	N/a
Indirect impacts:	Economic growth; improved standard of living for those directly and indirectly affected by the solar development	N/a
Cumulative impact prior to mitigation:	Low positive	N/a
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low positive	Low positive

Degree to which the impact can be avoided:	Unavoidable – positive impact, avoidance not desirable	N/a
Degree to which the impact can be managed:	Partly	N/a
Degree to which the impact can be mitigated:	Partly	N/a
Proposed mitigation:	No feasible mitigation for the operational phase.	N/a
Residual impacts:	Growth in the local and regional economy. Improved standard of living for City of Cape Town residents.	Status quo will remain
Cumulative impact post mitigation:	Low Positive	N/a
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low positive	Low positive
DECOMMISSIONING AND CLOSURE PHASE		
Potential impact and risk:	N/a (no plans for decommissioning of the facility once installed)	N/a

GEOTECHNICAL IMPACTS		
ALTERNATIVES:	**PROPOSED DEVELOPMENT**	**NO-GO ALTERNATIVE**
Planning, design and development phase		
Potential impact and risk:	The geotechnical report served to inform the structural engineers on the founding conditions of the site and the required design interventions. Geotechnical impacts associated with this proposal include: • Impact on groundwater levels. This was considered by the groundwater specialists. • Impact associated with blasting and excavation, which includes nuisance aspects (noise and dust- as assessed in the related impact table) and vibration / subsidence, which could cause damage to surrounding structures. The geotechnical engineer found that it is not possible to excavate the entire site with vertical sides down to the level of Victoria Road. Instead, the engineer recommends stepped / sloping sides along with anchors into the public land, which has already been included in the design. As such, this impact is not assessed in detail.	Development of up to 3 dwelling units per Erf could also result in changes to sub-surface flows.

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.

GENERAL NOTE ON SPECIALIST REPORTS / INPUTS:

Specialists initially considered and reported on the old development scheme as part of the previous application for Environmental Authorisation (now withdrawn). Specialists were however asked to reconsider their findings, recommendations and conclusions based on the April 2023 NIEUW. Where reasonable, specialists amended their reports in its entirety, however in some instances, specialists submitted addendums / cover letters to comment on the relevance of their previous studies to the April 2023 development proposal. As such, some specialist reports may refer to previous development schemes, but must be read with said addendums / cover letters to understand implications for this new application. Note also that only 1 development alternative is put forward for consideration. Past layouts / schemes are merely mentioned in this BAR to demonstrate the evolution of the development proposal on the site.

As previously indicted, the nature of changes to the June 2023 SDP does not warrant a further update / iteration to the specialist reports.

FRESHWATER:

Key Findings:

The only aquatic feature of significance identified is an unnamed stream that passes the site to the south-east.

The unnamed stream is already aligned within the approximate 3.8 m wide drainage passage / stormwater corridor adjacent to the site. In addition, the sections of the stream that are already in a seriously to critically modified ecological condition should not be considered as an aquatic constraint to the development or as a no-go area. The only remaining section of watercourse that still provides some aquatic habitat and functionality exists within the public open space upslope of Erf 47 which is outside of the proposed development area.

A minor drainage feature joins the stream within Erf 47 and would need to be realigned to place it within the existing drainage passage. This drainage feature already contains significant erosion within Erf 47, thus the realignment of the channel would need to give attention to the erosion potential of the channel to ensure that head cut erosion does not take place from Erf 47, back up the slope towards Kloof Road. Associated with the potential for the channel to erosion would be high sediment loads that would be deposited in the lower section of the channel.

The key aspect of concern relating to surface water is thus the need to appropriately manage the surface water runoff/ stormwater entering the site along with addressing the associated erosion and conveyance of sediment by the watercourse. This could be achieved through a Stormwater Management Plan that meets the requirements of the City of Cape Town for urban stormwater design. The plan should consider the watercourse and drainage feature immediately upslope of the site and how to reduce the erosion and sedimentation risks to the site and adjacent properties. There should not be any concentrated discharge of stormwater into the stormwater corridor, but rather adequate mitigation measures implemented in site to address stormwater runoff.

The potential negative impacts to the aquatic ecosystems associated with the development were identified to be:

- Short- and longer-term disturbance and loss of aquatic habitat;
- Modified storm water surface water runoff from the developed site; and
- Potential for localised impairment of water quality during the construction and operational phases of the development.

Belcher (2023) concluded that the proposed development would not result in any more significant impact than the No-Go Alternative due to the fact that the stream at the site has already been modified by the existing residence on Erf 46. The extension of the development footprint into Erf 47 is not likely to alter the extent of the modified watercourse. **If the recommended mitigation measures are**

implemented (particularly those related to stormwater management), there would be an impact of 'Very Low' significance on aquatic ecosystems and therefore, there is no reason why the proposed development could not be approved from an aquatic perspective.

Impact Management Measures:

To address the identified impacts, the following mitigation/management measures must be implemented:

- Construction within or immediately adjacent to the watercourse should preferably take place during the drier months of the year;
- The water quality impacts during the construction phase should be addressed through a Construction Environmental Management Plan for the project, and implemented by an on-site Environmental Officer;
- The stormwater management plan for the site should ensure that any impacts of stormwater from the site are mitigated as far as possible within the site (measures such as use of permeable surfaces, re-use of runoff from built areas such as roofs as well as the use of measures such as swales) to minimise the stormwater impacts on the watercourse;
- Where necessary pre-treatment areas such as oil, sediment and litter traps should be included in the stormwater management design before discharge into the watercourse;
- The realignment of the drainage channel upslope of the site, to realign it with the original channel and where the drainage servitude is in place adjacent to the erven, must be done is such a way so as to prevent erosion of the channel in the future. This is likely to require some engineered stabilisation measures but should where possible also include removal of overshadowing pine trees and re-introduction of indigenous riparian vegetation as still exists in the remaining more natural stream within the immediate upslope public open space and is listed in this report; and
- Invasive alien grasses such as *Pennisetum clandestinum* should not be planted in or adjacent to the watercourse and drainage feature.

Influence on Proposal:

The study has informed the proposal in the following ways:

- The suitability of the site development plan layout in relation to the identified aquatic features.
- The realignment of the drainage feature located to the north of the site to the existing drainage passage to the southern extent of the site.
- Critical input into stormwater management measures and inclusion of design measures into the scope of the Stormwater Management Plan, particularly in terms of stormwater run-off management and consideration of erosion and sedimentation risks.
- Identification of appropriate mitigation measures for stormwater management which have been included in the specifications of the EMPr.
- Consideration of risks to the stream and associated authorisation requirements in terms of the National Water Act (No. 36 of 1998) (noting that DWS has confirmed that the proposed development and associated works would not trigger the requirements of the NWA - refer to **Appendix E3**).
- Appropriate landscaping adjacent to the watercourse and drainage feature.
- Establishment of appropriate timing for construction and mitigation measures for construction-related activities which have been included as specifications the EMPr.

TERRESTRIAL BIODIVERSITY:

Key Findings:

From a terrestrial biodiversity perspective, the specialist found the site to be of 'Low' sensitivity being small, fragmented and completed transformed by consistent negative impacts and removal of positive vegetation and eco-system drivers. The site plays no current or future role in conservation and does not provide vital broader support services for any terrestrial biodiversity on site or at a local scale. Avifaunal species that may utilise the large exotic trees for perching would relocate unharmed during any construction process.

The development of the site is thus acceptable having no significant terrestrial biodiversity impact on any important locally indigenous biodiversity.

Impact Management Measures:

Given that no significant impact would be realised, only general management measures have been recommended, and include the following:

- Faunal species such as frogs and reptiles that have not moved away should be carefully and safely removed to a suitable location beyond the extent of the development footprint by a suitably qualified ECO/ Conservation Technician trained in the handling and relocation of animals;
- No trapping, killing or poisoning of any wildlife is to be allowed on site, including snakes, birds, lizards, frogs, insects or mammals;
- No construction rubble should be dropped into any sensitive areas;
- Have action plans onsite, and training for contactors and employees in the event of spills, leaks and other impacts to the surrounding environment;
- It is preferable that construction takes place during the dry season (as much as possible) to reduce the erosion potential of the exposed surfaces;
- All dustbins or waste should be covered to minimise vermin and pests from being established at the site; and
- An alien invasive plant management plan needs to be compiled and implemented post construction to control current invaded areas and prevent the growth of invasive species on cleared areas.

Influence on Proposal:

The study has informed the proposal in the following ways:

- Confirmation of no biodiversity constraints to development of the site;
- Identification of appropriate mitigation measures during construction to limit potential impacts on animal species which have been included in the management specifications of the EMPr;
- Establishment of appropriate timing for construction; and
- Identification of the need for an alien invasive plant management plant for the operational phase.

GROUNDWATER:

Key Findings:

The groundwater study found that the redevelopment of the site would most likely result in subsurface water build-up along the structures/wall in contact with the granite. The granite is jointed, with fractures and weathered zones that could result in significant amount of groundwater flow downgradient towards the ocean. It is expected that especially during times of good rainfall there will be subsurface flow that will need to be concentrated and removed to retain foundation integrity.

It was therefore proposed that a subsurface drain be installed where water is directed to a collection point/sump. From there it can be used for irrigation and/or domestic purposes. This would also limit the risk of coastal erosion and wetting of beach scenario caused by increased stormwater discharge (Barrow & Muller, 2022).

The study concluded that with the implementation of proposed mitigation and monitoring measures, the potential impacts associated with change in groundwater flow could be mitigated to a "Low (-)" significance.

Impact Management Measures:

The following recommendations are made:

- Installation of a properly designed drainage system and sump by a relevant and competent specialist and the re-use of the sump water for irrigation/domestic purposes.
- Monitoring of the use of subsurface groundwater/seepage including the measuring flow volumes and sump water levels.

Influence on Proposal:

The study has informed the proposal in the following ways:

- Input into the management of subsurface groundwater and inclusion of appropriate design measures into stormwater management; and

- Identification of appropriate monitoring measures for subsurface groundwater flow during the operational phase.

TRAFFIC:

Key Findings:

Fautley (2024) assessed the potential traffic impact of the proposed development in terms of road capacity through looking at Victoria Road's level of service (LOS). LOS is characterised from A-E, with LOS A (good) being characterized by free flow traffic conditions and LOS E (poor) typically by congested traffic conditions with slow travel speeds and lack of overtaking opportunities (such is the case on Victoria Road).

With predicted volumes, the weekday AM peak period along Victoria Road Northbound carriageway will operate at LOS E in 2025 and the Southbound carriageway PM peak period will operate at LOS E.

The low LOS along the route is a consequence of slow travel speed, traffic directional flow and limited passing opportunities along this twisty section of Victoria Road. With Volume-to-Capacity (v/c) ratios of less than 0.5 for all peak periods, it is considered that Victoria Road has spare capacity available to absorb additional traffic.

Looking at the duration of the construction phase programme and considering the different phases of construction and the vehicle and trips associated with each phase, Fautley (2024) calculated that an average of 20 trips to the site per day (20 in/20 out) and an average of just over 2 trips to site per hour (2 in/2 out), comprising less than 0.5% of Victoria Road background traffic, it was concluded that construction phase trip generation and average hourly trips to site would be insignificant.

From a cumulative impact perspective, Fautley (2024) notes that, as far as could be established, the only recently approved development along this section of Victoria Road that could potentially have bearing on the subject development is located at Number 6 Victoria Road where construction is already underway. Assuming similar time frames, it is possible that that there might be an overlap of building activity. This could result in added development related trips doubling. However, as indicated previously, Victoria Road has sufficient capacity to absorb this minor increase in traffic and thus cumulative traffic would be insignificant and have a low overall impact.

During the operational phase, the development is expected to generate some 26 light vehicle trips (13 in/13 out) per day, and peak hour trips are estimated at some 6 trips per hour (4 in / 2 out). This would also hold an insignificant impact.

The following traffic impacts were identified and assessed by the specialist for each development phase:

Construction Phase:

- Traffic entering and exiting the access poses risk of vehicle crashes.
- Traffic Congestion/ Disruptions to Traffic flow.
- Restricted pedestrian passage alongside site boundary during building demolition and excavation exposes pedestrians to risk of being struck by a vehicle.
- Obstruction or loose materials in the roadway creating risk of crashes.
- Abnormal Load Transport (which can lead to road damage, congestion and possible vehicle crashes).
- Worker Traffic Safety (workers using public transport / taxis arriving at / or leaving the site crossing Victoria Road, and will be exposed to risk of being struck by a motor vehicle).
- Site access difficult for heavy vehicles leading to possible crashes.

Operational Phase

- Traffic entering and exiting the access poses risk of vehicle crashes.
- Traffic Congestion/ Disruptions to Traffic flow where vehicles park in the roadway.

The specialist assessed the decommissioning phase, however the development is not envisaged for decommissioning.

Impact Management Measures:

- Abnormal loads need to be transported in accordance with COTO (Committee of Transport Officials) TRH (Technical Recommendations for Highways) 11 - Dimensional and Mass Limitations and Other Requirements for Abnormal Load Vehicles.
- Abnormal Load Permit applications need to be made to the Western Cape Government, Transport Department.
- Temporary closure of Victoria Road should be during business days (excluding weekends and public holidays), should be during daytime and preferably during the off-peak period when background traffic flow is low.
- Depending on other construction safety requirements, the road should be re-opened to normal traffic outside of business hours / when there is no demolition activity on site.
- Construction vehicles should not be overloaded, tarpaulin covers must be used to prevent light materials from blowing out of the tipper truck during transport, vehicle tailgates must be properly closed and are not damaged, vehicle bumpers should be swept clear of loose materials before leaving site.
- Accommodating public transport (taxis) on the southbound carriageway (or on-site during the Build Stage) to avoid workers crossing Victoria Road.
- Where possible, space should be provided to enable vehicles to manoeuvre on-site in order to leave the site in a forward gear.
- For heavy vehicles exiting the site, the access should be controlled, i.e. flagmen to stop traffic in one or both directions as required to enable vehicles to safely exit the site / enter Victoria Road.
- Implementation of a Traffic Management Plan (TMP) during the construction phase. The plan must consider how traffic flow would be managed during any temporary road closures (e.g. fragment and stop-go's), worker safety (how public transport will be accommodated etc.) and how safe access to and from site particularly for heavy vehicles will be ensured. The TMP should be a condition of Building Plan Approval and would be required prior to building works commencing on site.
- Parking and loading space should be clearly designated in the TMP work schedule linked to a parking strategy should also be developed to ensure parking demand does not exceed capacity, particularly where various trades will be working on-site simultaneously.
- In view of limited kerbside parking opportunities, the TMP must also deal with vehicle access and parking accommodation in the event of any of the vehicle lifts being out of order during the operational phase, i.e. system failure and repair, maintenance, power outages.

Influence on Proposal:

The study has informed the proposal in the following way:

- Identification of important traffic management measures to be incorporated into a Traffic Management Plan for the construction and operational phase.

VISUAL:

Findings:

The immediate environment of the site is of medium scenic, cultural and historical significance i.e., having valued characteristics, reasonably tolerant of some changes of the type proposed. This is due to the scenic drives of Victoria Road and Kloof Road, and the special character of Clifton within the urban cultural landscape of the Atlantic seaboard (Gibbs, 2023).

Although the site is associated with areas of visual / scenic amenity, the landscape character of the *regional setting* is considered to have low sensitivity to the visual impact associated with the development proposal, given the small scale of the site. The landscape character of the *local context* is considered moderately sensitive, as the residential properties immediately adjacent to the site will be exposed to the most direct visual impacts of construction and operational phases of the development (Gibbs, 2023).

Further on the visual nature of the site, Gibbs (2023) notes that although its open, unbuilt and vegetated nature provides a moment of 'green relief' within the street scape, it is not of significant scale to constitute a major feature. He further states that the development of the site will not compromise the matrix of green spaces along the Victoria Road / Kloof Road strip at the base of the mountain as several

of the 'green' properties are zoned Public Open Space, and therefore unlikely to be developed. This will serve to retain a substantial portion of the green matrix.

In terms of views and view corridors, the site is highly visible within the foreground due to its proximity to Victoria Road; however, it is not of sufficient extent to be significant when viewed from further away. Moreover, the mountain's topography and curvilinear nature of Victoria Road reduce the visibility of the site. Gibbs (2023) notes that while Kloof Road is also considered a scenic drive, the site is well below sight-lines from this elevation and will not obstruct views towards the ocean or mountains. The large pine trees on Kloof Road provide an ever-green over-shadowing canopy, which provide some screening of the site. Whereas the site would become more visible with the removal of some trees, the site is sufficiently below Kloof Road so that development will not obstruct the view lines towards the ocean (Gibbs, 2023).

Gibbs (2023) concluded that whereas the character of the site is likely to change with development, it is unlikely to affect the overall character of the streetscape of both Kloof Road and Victoria Road, which is already heavily built-up and highly urbanized, thus the nature of proposed development would be entirely consistent with the pattern of development immediately adjacent and along Victoria Road (Gibbs, 2023). Development of this scale can thus not be considered as "visual intrusion into the landscape."

Furthermore, it is unlikely that the development of the is site will affect the visual experience of Victoria Road or Kloof Road in any material way, especially as the site is situated above Victoria Road and well-below Kloof Road (Gibbs, 2023).

Cultural Landscape

A Visual Impact Statement was undertaken by Gibbs (2023) of the potential impacts upon the cultural landscape associated with the construction and operational phases of the proposed development.

Gibbs (2023) notes that the site is located along a rocky cliff-face at the edge of the Atlantic seaboard along Victoria Road, which is a scenic route. The Atlantic seaboard is considered the 'cultural landscape' which constitutes a meaningful visual (spatial, scenic and aesthetic) resource to communities of people (Gibbs, 2023) The Atlantic seaboard is characterized by the sharp juxtaposition of highly 'urbanized' townscape foreground against a dramatic coastal mountain 'wilderness' background (Gibbs, 2023). On the visual nature of the site Gibbs (2023) notes that although its open, unbuilt and vegetated nature provides a moment of 'green relief' within the street scape, it is not of significant scale to constitute a major feature.

Nevertheless, given the scenic drives of Victoria Road as well as Kloof Road, and the special character of Clifton within the urban cultural landscape of the Atlantic seaboard, the immediate environment of the site is considered to be of medium scenic, cultural and historical significance, i.e. having valued characteristics, reasonably tolerant of some changes of the type proposed (Gibbs, 2023).

The potential change to the landscape (Victoria Road) has been simulated in the Visual Impact Assessment which can be found under **Appendix G1**.

Gibbs (2023) concludes that whereas the character of the site is likely to change with development, it is unlikely to affect the overall character of the streetscape of both Kloof Road and Victoria Road, which is already heavily built-up and highly urbanized, thus the nature of proposed development would be entirely consistent with the pattern of development immediately adjacent and along Victoria Road (Gibb, 2023). Development of this scale can thus not be considered as "visual intrusion into the landscape."

Furthermore, it is unlikely that the development of the site will affect the visual experience of Victoria Road or Kloof Road in any material way, especially as the site is situated above Victoria Road and well-below Kloof Road, and therefore does not obscure views of the ocean from either Victoria Road or Kloof Road (Gibb, 2023).

The results of the studies on cultural and historical aspects have informed the proposal in the following ways:

Confirmation that there are no heritage constraints to the proposal, however, the existing building on site is older than 60 years. An application for a SAHRA Section 34 Permit for Demolition has been made and can be found under **Appendix G5**.

- The VIS has confirmed that the proposed development responds to the visual character of the surrounding context and presents no visual constraints (owing to deliberate careful design which limits aspects of the proposed building such as height and massing).
- Building design considerations which will be incorporated into detailed design.

Impact Management Measures:

The following **broad design measures** have been recommended and must be considered:

The design resolution has evolved to mitigate potential visual intrusion upon sightlines from Kloof road, and to reduce excavation, and will cause less visual impact than previous proposals. The 'Azalea' New development proposal by Nieuw Architects is well-within the thresholds of visual congruence (Gibbs, 2023).

- Height and scale of building: Buildings should take cognisance of the slope of the site, and step, accordingly, avoiding looming cantilevered overhangs. Whereas the scale of the buildings is high, the form reflects the local typology, and is subordinate to the mountainous landscape (these measures are already implicit in the design/plans of the proposed development).
- Massing and aggregation of buildings: Taking cues from adjacent buildings with respect to setbacks, heights, streetscape interface and continuity of urban morphology.
- Landscape and building integration: Ensure that new development within its environmental context is in sympathy with the topography, drainage patterns and microclimate. The underlying purpose must be to weave the development seamlessly into the existing cultural landscape pattern, enabling congruence and the continuity of the site within its broader context.

The following **detail design measures** must be considered:

- Texture and colour: Muted colours and 'earth tones' are more subtle and are more easily absorbed (visually) than bright or highly reflective surfaces. Suitable colours include grey, olive green, ochre, brown, etc. – refer to on-site geology, soil and vegetation types for reference. Rough/textured surfaces are preferable to shiny/highly reflective surfaces in terms of visual absorption (as they minimize reflection / glare). Roadways should not be over-scaled and should include tree planting where possible.)
- Edge conditions: Consider 'dissolving' buildings into the environment through subtle transition from building to landscape, using screen/shade planting to soften the interface.
- Lighting and signage conditions: Avoid light 'pollution' by reducing lighting to the minimum necessary. Lighting is to be carefully controlled and well-integrated into the design proposal and coordinate with signage. Light sources must be shielded to reduce light spillage. Up-lightning onto the outer sides of the building must be used sparingly. Shielded down-lights must be used on all open areas. Neon or unshielded bright security lights may not be used.

General mitigation measures for the **construction phase**:

- Sound environmental management of the site and construction operations - including dust prevention and erosion control – should suffice as mitigation of construction phase visual impacts. The preparation and implementation of a Construction Phase Environmental Management Plan (CEMP) should be provided to ensure that this is achieved.

General mitigation measures for the **operational phase**:

- Together with an operational environmental management plan (OEMP), the thorough implementation, maintenance and management of a detailed landscape plan, indicating viable planting areas, to be prepared by suitably qualified landscape architect (as a further

development of landscape framework plans included for SDP submission) should suffice as mitigation of the operational phase visual impacts.

- A detailed landscape plan to be compiled by registered Landscape Architects, must be submitted for approval by the Heritage and Environmental Management Division of the local authority. Such a plan is to indicate, inter alia, the extent, location and design of the following:
  - existing vegetation to be retained or removed, indicating the types of all vegetation and trees;
  - all proposed newly planted vegetation, including types (species) and planting specifications;
  - tree staking details;
  - the size of all trees to be planted (roots to be established in min 80 – 100 L size container, with a clear stem height of 1.8 m minimum, and a minimum girth of approximately 60 mm);
  - density of plant species/plant mixes, size of plants to be planted;
  - existing and finished ground levels at the base of the trees to be retained/planted;
  - all landscaping features, including fences, walls, retaining walls, paving, street furniture and lighting;
  - All Sustainable Urban Drainage Systems (SUDS), including cross-sections of storm-water ponds and/or swales;
  - Irrigation plan (alternative water sources to be indicated); and
  - phasing and timing of implementation, including a twelve-month establishment period.

Influence on Proposal:

The study has informed the proposal in the following ways:

- Identification of appropriate building and landscape design measures; and
- The VIA has confirmed that the proposed development does not conflict with the visual character of the surrounding context and presents no visual constraints.

Other technical inputs:

Technical inputs from the geotechnical, structural, civil and electrical engineers informed the design and served to understand service capacities, the construction process and required engineering interventions. This was taken into account by the EAPs in considering the impacts and mitigation measures.

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

See section above.

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.

There are no measures which have been recommended by the specialists that would not be implemented by the project. All have/will be incorporated into project design and implementation, and all specifications have been written into the EMPr for the design, construction and operational phase of the proposed development.

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

While the character of the site will change with re-development, it is unlikely to affect the overall character of the streetscape (of both Kloof Road and Victoria Road), which is already heavily built-up and highly urbanized. The proposal will thus not significantly impact on the "sense of place" or character of Clifton which surrounding communities currently enjoy. It is acknowledged that compared to a single residential structure, the development proposal will result in a change in the visual experience for the immediately adjacent neighbours. In this regard, the NIEUW design centres the structure in relation to the site boundaries with a view to providing balanced spaciousness for both abutting neighbours. Landscaping measures will serve to soften the development proposal.

From a traffic perspective, impacts will be realised during construction. With the implementation of identified traffic management measures, these impacts can be mitigated to an acceptable level. During the operational phase, it has been determined that Victoria Road can sustain the additional traffic. As such, no significant impact on traffic will be realised during the operational phase.

There will likely be noise and dust impacts for adjacent landowners during construction. Management and mitigation measures to minimise such impacts have been written into the EMPr for strict

implementation by Contractors. Demolition and blasting will remain within legal limits and also be controlled through the EMPr. Also, access to and use of the coastline would remain unfettered and not impacted by proposed development.

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.

Given the location of the proposed development on the coast, the most applicable climate change impact to consider is that of sea-level rise. The site is however located beyond modelled coastal flood risk zones. The City of Cape Town Coastal Management branch has furthermore indicated that given that the two erven are above Victoria Road, there is no risk from a sea-level rise/storm surge perspective.

As a result of variation in rainfall and extreme weather events (i.e., drought, flash floods, etc.), it is likely that water availability and flood related climate change impacts could be realised. It has been identified that sub-surface groundwater flow should be expected during times of heavy rainfall, which would need to be concentrated and removed to retain foundation integrity (Barrow & Muller, 2021). Measures to manage groundwater flow, particularly the installation of a subsurface drain and sump, have been recommended and will be incorporated into the stormwater design. The re-use of sump water for irrigation/domestic purposes as water-saving measure is a further recommendation which will be implemented. This will provide water for irrigation (and possible other uses) during droughts.

The Stormwater Management Plan will also account for the flow of stormwater on site, as well as potential extreme weather events such as a 1:100-year storm event, in line with the CCT's stormwater policies.

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

There are no conflicting recommendations amongst specialists.

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.

The findings and recommendations of the specialist studies have all been recorded in the BAR and the EMPr (refer to **Appendix H**) to ensure effective planning, design, construction, and operational management of the proposed development. The EMPr is a legally binding document, and the implementation thereof would be independently audited to ensure that the conditions contained therein are met by the developer/contractors.

It should be noted that the transport specialist considered impacts associated with the decommissioning phase. However, this development will not be decommissioned, and if it is, it will be subject to the regulatory processes required at the time. As such, these impacts have been excluded from the BAR.

Furthermore, the groundwater specialist repeated the same impact in the design and operational phase. To avoid double counting this impact, the BAR records this impact in the design phase (as this is where mitigation will be applied to limit impact in the operational phase).

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

The aspects of the proposal as they relate to levels of the mitigation hierarchy are provided in **Table 4**.

Table 4 Aspects of Proposed Development as they relate to the various levels of the mitigation hierarchy[1]

Mitigation hierarchy	Aspects of the project
Avoid	Given its low sensitivity, the site already **precludes (**avoids**)** sensitive natural areas. The stormwater passage **southeast of the site is avoided through a** building set-back.
Minimise / mitigate	The EMPr contains several mitigation measures to minimise the identified adverse impacts of the proposed development to acceptable levels. These measures relate to traffic management, freshwater and ground water, and visual considerations.
Restore	The drainage feature on Erf 47 would be re-aligned to the existing drainage passage and to address current erosion issues on site.

1 Table developed based on information derived from DEA (2014)

	The removal of overshadowing pine trees and re-introduction of indigenous riparian vegetation seen within the more natural stream immediately upslope at the Public Open Space, would assist in some restoration of the lower section of the stream. The landscape intent includes the use of indigenous plants which would tie into the Public Open Space above the site.
Offset/ compensate	No compensation or offsets are required given the overall low impact of the proposal.

SECTION J: GENERAL

1. Environmental Impact Statement

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

Key findings of the Basic Assessment study are detailed below.

Located within 100m of the high-water mark, the potential impacts of the development on the coastline served as a starting point for assessment. The site's position on the landward side of Victoria Road, in a section which is already densely developed and almost entirely transformed, however allows for development which would not disrupt coastal processes, negatively impact on marine resources or prevent the public from accessing or making use of the coastline in any way.

While Erf 47 is densely covered in vegetation, the plant species are mostly introduced and there is no longer any Critically Endangered Peninsula Granite Fynbos which was historically present on site. The remaining indigenous species are opportunistic and do not constitute a plant community that can be described as an 'ecosystem' which warrants preservation. Given its transformed nature, the habitat is unsuitable for playing host to any locally indigenous terrestrial biodiversity of importance, including fauna. Furthermore, while the site's open, and mostly unbuilt and vegetated nature provides a moment of 'green relief' within the street scape, it is not of significant scale to constitute a major feature given the heavily built-up and highly urbanized context.

The only sensitive natural feature at the site is a small critically modified stream that flows along its southeastern extent, largely within a defined drainage corridor. The stream has been considered by the development especially in terms of the building setback line, appropriate stormwater management which would aim to maintain the integrity of the surrounding surface system and ensure appropriate run-off management which would furthermore not result in coastal erosion and saturation of beach sand. Sub-surface groundwater flow has also been identified as an issue warranting consideration and will be addressed through the inclusion of sub-surface drains in the stormwater design. The realignment of the stormwater channel on Erf 47 also informed the design and overall approach to stormwater management on the site.

In terms of desirability, the site has been earmarked for development in terms of local planning policies and is congruent with regional and local spatial intentions to densify already developed urban areas. The apartment building has been carefully designed taking the surrounding environment and buildings into consideration and responds adequately to the established character of Clifton. The height has furthermore been limited so as not to prevent views from Kloof Road.

Practical considerations such as the current traffic-bearing capacity of the local road network has been assessed and found capable to sustain additional traffic during operations. Traffic impacts during the construction phase could also be managed to an acceptable level with the compilation and implementation of a Traffic Management Plan (TMP). The impacts on services would likely be negligible as required infrastructure exists and the site is already serviced. Sufficient capacity for services has been confirmed by the CoCT.

The Planning, Design and Development/Construction phase of the development alternative is anticipated to result in negative impacts of either 'Low' or 'Very Low' significance (after mitigation).

These include Low (-) ratings for aquatic biodiversity, terrestrial biodiversity, groundwater, traffic and visual impacts and 'Very Low' (-) for the use of natural resources, dust and noise impacts. Similarly, from an operational perspective, negative impacts are anticipated to be of 'Low' or 'Very Low' significance. Impacts of 'Low' (-) significance include those related to terrestrial biodiversity, groundwater, and traffic aspects while a 'Very Low' (-) impact on aquatic biodiversity and the use of natural resources would be realised. Anticipated positive impacts relate to socio-economic aspects during the development/construction and operational phase, as well as a positive visual impact through proper architectural design.

No other site or activity alternatives have been considered as the "preferred" site is owned by the applicant and is already partially developed for residential purposes. The owner/applicant is responding to the general developmental trend of the surrounding area (i.e., Victoria Road) and responding property market. Design/Layout alternatives have also not been considered as the preferred design and layout has made optimal use of the developable area of the site while taking into account the surrounding built and natural environment. More importantly the layout assessed does not present any environmental, social or cultural constraints or hold significant impacts, as assessed by a team of specialists.

By right, the landowner would be able to implement **6** single residences on the site (3 dwellings on Erf46 + 3 dwellings on Erf 47). Compared to this No-Go Alternative, the development Alternative is preferred as it would further intensify residential use of the site, yield positive socio-economic impacts and present a better traffic solution. In its current state, there is a negative impact on the flow and water quality of the watercourse at the site which would require mitigation under the No-Go Alternative.

Development of the No-Go alternative would require the Applicant to adhere to the "duty of care" requirements in the NEMA, however there would be no specific requirements in terms of design, construction and operational management and mitigation (as are indicated in the EMPr for the proposed development included in **Appendix H**).

In summary, all anticipated negative impacts can be mitigated to acceptable levels for the development alternative. In this regard, several mitigation measures to reduce/mitigate adverse impacts have been identified and must be carried out, should the proposed development be approved. These measures have all been written into the EMPr for strict implementation.

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)

Refer to **Appendix B2**.

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.

A summary of impacts for the development alternative (preferred) and No-Go alternative is provided in **Table 5.**

In summary, all anticipated negative impacts can be mitigated to acceptable levels for the preferred development alternative.

Table 5 Summary of Impacts for the Development Alternative (preferred) and No-Go Alternative

CONSTRUCTION PHASE				
Potential Impact and Risk	**ALTERNATIVES**			
	Development Alternative		**No-Go Alternative**	
	Significance prior to Mitigation	**Significance after Mitigation**	**Significance before Mitigation**	**Significance after Mitigation**
Aquatic habitat modification and potential for some flow and water quality modification	Medium to Low (-)	Low (-)	Not applicable	Not applicable
Displacement of faunal community due to habitat loss, disturbance and/or direct mortalities.	Low (-)	Low (-)	Not applicable	Not applicable
Change in groundwater flows paths and impact to neighbouring properties.	Medium (-)	Low (-)	Not applicable	Not applicable
Increased stormwater discharge resulting in coastal erosion and wetting of beaches	Medium (-)	Low (-)	Not applicable	Not applicable
Traffic entering and exiting the access poses risk of vehicle crashes.	Medium (-)	Low (-)	Medium (-)	Low (-)
Traffic Congestion/ Disruptions to Traffic flow	Medium (-)	Low (-)	Not applicable	Not applicable
Restricted pedestrian passage alongside site boundary exposes pedestrians to risk of being struck be a vehicle	Medium (-)	Low (-)	Not applicable	Not applicable
Obstruction or loose materials in the roadway creating risk of crashes during	Medium (-)	Low (-)	Not applicable	Not applicable
Workers using public transport / taxis arriving at / or leaving the site will cross Victoria Road, and will be exposed to risk of being struck by a motor vehicle.	Medium (-)	Low (-)	Not applicable	Not applicable
Site access difficult for heavy vehicles leading to possible crashes	Medium (-)	Low (-)	Not applicable	Not applicable
Potential impact on the visual/ heritage resources and cultural landscape character effected by site clearance, removal of existing vegetation, earthworks, site camp establishment etc.	Low (-)	Low (Neutral)	Not applicable	Not applicable
Noise and dust nuisance and disruption	Medium (-)	Very Low (-)	Not applicable	Not applicable
Use of natural resources	Low (-)	Very Low (-)	Not applicable	Not applicable
Job creation and contribution to the economy	Low (+)	Low (+)	Not applicable	Not applicable
OPERATIONAL PHASE				
Freshwater flow and water quality modification	Low (-)	Very Low (-)	Low (-)	Very Low (-)

Continued displacement and fragmentation of the faunal community due to ongoing anthropogenic disturbances (noise, traffic, dust and vibrations) and habitat degradation (litter, road mortalities and/or dumping of rubble).	Low (-)	Low (-)	Not Applicable	Not Applicable
Traffic entering and exiting the access poses risk of vehicle crashes.	Medium (-)	Low (-)	Medium (-)	Medium (-)
Traffic Congestion/ Disruptions to Traffic flow where vehicles park in the roadway - during Operations	Low (-)	Low (-)	Not applicable	Not applicable
Potential impact on the visual / heritage resources and cultural landscape character: Contemporary layer added to the cultural landscape, responding to important patterns.	Low (Neutral)	Low (+)	Low (+)	Not applicable
Job creation and overall impact on economy.	Low (+)	Low (+)	Not Applicable	Not Applicable

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

The identified impact management outcomes for the project:

- Legal compliance.
- No incidents of contamination / pollution of groundwater and surface water.
- A design that favours water, energy and resource efficiencies.
- Landscaping that is appropriate for the natural environmental context.
- No damage to the coastal environment.
- No harm to fauna.
- No non-conformances with the impact management outcomes of the EMPr.
- No intolerable disruptions or nuisance to adjacent land users.
- Effective notification and communication of actions that could lead to disruption / nuisances (e.g. blasting).
- Effective complaints handling. No repeat complaints received on valid issues.
- Effective traffic management measures with no vehicular / pedestrian incidents.
- A site that is free of debris.
- No unacceptable levels of dust.
- Effective management of emergency incidents.

These impact management outcomes were incorporated into the EMPr for the project.

2.2.	Provide a description of any aspects that were conditional to the findings of the assessment either by the EAP or specialist that must be included as conditions of the authorisation.

In general, the primary assumption by the EAP and specialists is that the proposed development would be developed as described and indicated in the Site Development Plan (refer to **Appendix B1**) for the preferred alternative, within the limits of the developable footprint contained therein (noting that detailed design within these limits is anticipated to still occur following this process). The second key assumption/aspect which is conditional to the findings of the specialists and the EAP is that the mitigation measures will be carried out as stipulated by each professional/specialist.

Considering the above, it is strongly recommended that the following be included as conditions of authorisation:

- Ensure that the proposed development is developed as per the intention and design philosophy as described in this report.
- All mitigation measures recommended by the specialists (including groundwater monitoring) must be implemented.
- That groundwater seepage must be used for irrigation of landscaping and for non-drinking purposes.
- The impact management outcomes of the EMPr must be upheld as conditions of authorisation.
- The EMPr should be incorporated into all contract documentation and it is the Applicant's responsibility to ensure that the Contractor/s is made aware of the requirements thereof when preparing a quote for the work.
- The Stormwater Management Plan must take into account the recommendations made by the aquatic and groundwater assessments and should be approved by the CoCT prior to implementation.
- The Landscaping Plan and associated planting list must be compiled by a registered landscape architect, according to the City's standard requirements for Landscape Plans, and be approved by the CoCT prior to commencement of the construction phase.
- The Traffic Management Plan must be compiled and submitted to the City's Roads Infrastructure and Management branch for comment prior to building plan approval.
- The ECO must be provided with a copy of the final approved Stormwater Management Plan.
- The ECO must be provided with a copy of the final approved Landscape Master Plan.

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 decision for the authorisation ultimately lies with the Competent Authority and should be taken based on the information provided in the BAR and supporting documents. The EAP and specialist team are confident that all significant impacts of the proposal have been identified and assessed, and appropriate mitigation and management measures to not cause undue harm to the environment recommended.

The biophysical context of the site is not considered particularly sensitive due to its partly transformed nature, urban setting and proximity to the coastline which is already densely developed. Nevertheless, consideration has been made for natural features particularly related to a stream which flows along the southeastern extent of the site and the undeveloped Open Space/" Other Natural Area" upslope of the site. While the stream has been highly modified and of low ecological importance and sensitivity, it would be protected through a carefully designed stormwater management system and management plan which would also address the current erosion issues visible on site. Some restoration of the stream would also be realised through the planting of indigenous riparian vegetation.

Given the unique character of the area and location of the site between two scenic routes, visual aspects were thoroughly investigated and assessed. This assessment concluded that the recommended mitigation measures should be sufficient to ensure that the visual impact of the proposed development remains within acceptable levels.

Overall, the proposal has responded to the development intention of the Applicant, the cultural landscape, built environment and natural environment which would be enhanced through careful planning and design considerations. The development of the site is not constrained by traffic or the infrastructure required to deliver municipal services.

Anticipated negative impacts of the proposed development can be mitigated to acceptable levels, all of which are anticipated to be of 'Low' or 'Vey Low' significance. Mitigation measures recommended by specialists are aligned and practicable.

The environmental process thus far, has not highlighted any environmental constraints or reasons why the preferred development alternative should not be implemented. The proposal aligns with the immediate built environment and is congruent with wider planning and development objectives for the area. For these reasons, the No-Go alternatives is not considered reasonable.

Further to the circulation of the DBAR, there were no comments or issues raised that warrant further investigation or shift the above sentiments of the EAP. Issues raised in the circulation of the BAR have been directly and thoroughly addressed through responses from the EAP, specialists with inputs from other professional team members, as required.

Considering the above, it is the opinion of the EAP that the preferred alternative could be authorised. Should the DEA&DP be in agreement with the EAP and grant Environmental Authorisation for the proposed development, it is critical that mitigation measures recommended by specialists and the specifications documented in the EMPr are adhered to.

The remaining recommended conditions of authorisation are listed in Section J 2.2. above.

2.4.	Provide a description of any assumptions, uncertainties and gaps in knowledge that relate to the assessment and mitigation measures proposed.

The following assumptions are relevant:

- That the Contractor would implement the EMPr as required, as ensured through the legal mechanisms that will be in place if Environmental Authorisation is granted.
- That all information provided by the Applicant is true and correct and that it is an accurate reflection of the intended proposed development.
- That the proposed development would take place as indicated in this report as that is the basis of this assessment. Should the development proposal be significantly altered, or a new development be proposed, this assessment may no longer be valid.
- That the specialists have conducted their assessments correctly. Refer also to individual specialist reports for their assumptions and limitations.

2.5.	The period for which the EA is required, the date the activity will be concluded and when the post construction monitoring requirements should be finalised.

The following validity periods are requested:

- Period within which construction must commence: within 7 years of receipt of EA.
- Period within which construction must be concluded: within 5 years of commencement of the activities.
- Post-construction monitoring and auditing of the implementation of the operational EMPr should occur annually for three years.

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.
The following water-saving measures would be considered during detailed design and implemented if feasible: • The utilisation and recycling grey water from the development for irrigation purposes; • The provision of on-site water storage from rainwater run-off for irrigation; • Utilize and specify low-flow fixtures throughout the project; and • Re-use of seepage / sump water for domestic/irrigation purposes, as recommended. These measures have been included in the planning and design specifications of the EMPr. Furthermore, the landscape intent is to incorporate largely indigenous species as well as water-wise plants to keep water demands to a minimum. Watering/ irrigation would also only be done if required and during appropriate times of the day. Measures to limit the use of water during construction activities have also been included in the EMPr.

4. Waste

Explain what measures have been taken to reduce, reuse or recycle waste.
Details on the waste management hierarchy have been included in the EMPr and would guide waste management during the construction phase of the proposed development. These measures include for example, waste sorting, recycling, careful temporary stockpiling, disposal, etc. During operations, the waste emanating from the residential development will feed into the standard municipal solid waste services offered in the area.

5. Energy Efficiency

8.1.	Explain what design measures have been taken to ensure that the development proposal will be energy efficient.
The proposal has been designed to reduce heating, cooling and lighting. The following energy-efficient measures would be considered during detailed design and implemented if found to be practicable: • Promotion of renewable energy by using a proportion of renewable energy from the electricity provider 's energies supply portfolio; • Combined heating and power using heat pumps for heat recovery; • Utilisation of natural materials with low carbon footprints throughout the architecture; • Parking areas to offer the infrastructure for a charging station for electrical cars; • Rooms equipped with thermostat and occupancy sensors connected to the energy management system for each apartment; • An HVAC system equipped with a crossflow make-up air heat recovery system; • Dimmable LED lights connected with the room occupancy sensor; • Exterior and facade lighting with dimmable LED lights on a timer and fitted with a lighting control system with photocell capabilities to protect against nocturnal light pollution and minimise energy consumption; • Appliances with an Energy star rating; • Wall and roof insulation with an R-value of no less the five; • Maximisation of air tightness and moisture migration; • Encourage natural cross ventilation through the architectural layout; • Exterior Glazing - double glazed units with low-e coating;	

- Having deep terraces cantilevering over the large-glazed area to protect the internal space from heat gain from the sun's exposure; and
- Providing an air lock lobby at the entrance.

These measures have been incorporated into the design and planning phase recommendations which are contained in the EMPr.