GAUTENG PROVINCE
ENVIRONMENT
REPUBLIC OF SOUTH AFRICA

Basic Assessment Report in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended, and the Environmental Impact Assessment Regulations, 2014 (2025 VERSION 1)

Kindly note that:

1. This **Basic Assessment Report** is the standard report required by the Gauteng Department of Environment in terms of the EIA Regulations, 2014.

2. This application form is current as of April 2025. It is the applicant's responsibility to check for any updated versions published by the competent authority.

3. A draft Basic Assessment Report must be submitted, for purposes of comments within a period of thirty (30) days, to all State Departments administering a law relating to a matter likely to be affected by the activity to be undertaken.

4. **A draft Basic Assessment Report must be submitted, for purposes of comments within thirty (30) days, to a Competent Authority (uploaded to the EIA online system) empowered in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended to consider and decide on the application. The EIA online system can be accessed at https://eia.gauteng.gov.za.**

5. **A copy (PDF) of the final report and attachments must be uploaded to the EIA online system. The EIA online system can be accessed at https://eia.gauteng.gov.za.**

6. **Draft and final reports submitted in terms of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) must be emailed to environmentsue@gauteng.gov.za.**

7. The report must be typed within the spaces provided in the form. The size of the spaces provided is not necessarily indicative of the amount of information to be provided. The report is in the form of a table that can extend itself as each space is filled with typing.

8. Selected boxes must be indicated by a cross and, when the form is completed electronically, must also be highlighted.

9. An incomplete report may lead to an application for environmental authorisation, or a Waste Management License being refused.

10. Any report that does not contain a titled and dated full-colour large-scale layout plan of the proposed activities including a coherent legend, overlain with the sensitivities found on site may lead to an application for environmental authorisation or a Waste Management License being refused.

11. The use of “not applicable” in the report must be done with circumspection because if it is used for material information that is required by the competent authority for assessing the application, it may result in the application for environmental authorisation or Waste Management License being refused.

12. The applicant must fill in all relevant sections of this form. Incomplete applications will not be processed. The applicant will be notified of the missing information in the acknowledgement letter that will be sent within 10 days of receipt of the application.

13. Unless protected by law, and indicated as such, all information filled in on this application will become public information on receipt by the competent authority. The applicant/EAP must provide any interested and affected party with the information contained in this application on request, during any stage of the application process.

14. Although pre-application meetings with the Competent Authority is optional, applicants are advised to have these meetings before submission of the application to seek guidance from the Competent Authority.

15. **Please note that your submission will be acknowledged within 10 days of receipt. If you do not receive an acknowledgement from the Department within this period, kindly follow up using our central email address: environmentenquiries@gauteng.gov.za**

DEPARTMENTAL DETAILS

Gauteng Department of Environment
Attention: Environmental Support Services of the Environmental Branch
P.O. Box 8769
Johannesburg
2000
Ground floor, Umnotho House, 56 Eloff Street, Johannesburg
Department central telephone number: (011) 240 2500
Email: ENVIRONMENTSUE@gauteng.gov.za or environmentenquiries@gauteng.gov.za

(For official use only)

NEAS Reference Number:						
File Reference Number:						
Application Number:						
Date Received:						

If this BAR has not been submitted within 90 days of receipt of the application by the competent authority and permission was not requested to submit within 140 days, please indicate the reasons for not submitting within time frame.

Not Applicable

The application form in support of this application was submitted to the Department on the 24th of July 2026. A copy of the Draft BAR is therefore currently in circulation as part of the Public Participation process which commenced on the 28th August 2026 and will conclude on the 30th September 2026.

Once the Public Participation process has concluded, all comments and responses received will be incorporated into the final BAR which will be submitted to the Department (GDE) for consideration.

Is a closure plan applicable for this application and has it been included in this report? No

if not, state reasons for not including the closure plan.

This application is a new application for the proposed development of a Boutique Hotel on Portion 566 of the Farm 199-IQ (Boskruin Extension 64) (also referred to as 122 Sherwell Avenue, Boskruin, Randburg)

No decommissioning or closure activities will be undertaken as part of the applied for project scope. The proposed development entails the establishment of a Boutique Hotel, comprising of 20 en-suite guest rooms, associated communal and recreational facilities including a pool, dining hall, conference venue, spa, and a caretakers flat, together with supporting infrastructure such as parking areas, retaining structures, storm water attenuation systems and hard landscaping.

Has a draft report for this application been submitted to a competent authority and all State Departments administering a law relating to a matter likely to be affected as a result of this activity? Yes

Is a list of the State Departments referred to above attached to this report including their full contact details and contact person? Yes

If no, state reasons for not attaching the list.

Not Applicable

Relevant State Departments, inclusive of the Gauteng Department of Environment (GDE) (as the Competent Authority), Department of Forestry, Fisheries and the Environment (DFFE), Department of Water and Sanitation (DWS) as well as the City of Johannesburg Metropolitan Municipality (COJMM) was included and provided copies of the Draft BAR for review and comment.

Refer to Annexure E for a copy of the current IAP register inclusive of relevant State Department contacts.

Have State Departments including the competent authority commented? No

If no, why?

The Public Participation Process in support of this application is still underway and will only conclude on the 30th September 2026.

A copy of the Draft BAR will be circulated to all relevant state departments, inclusive of the Competent Authority (CA) between the 28th August 2026 and the 30th September 2026.

Records of communication and circulation of the Draft BAR will be included in the Final BAR under Annexure E.

SECTION A: ACTIVITY INFORMATION

1. PROPOSAL OR DEVELOPMENT DESCRIPTION

Project title (must be the same name as per application form):

Application for the proposed development of a boutique hotel at 122 Sherwell Avenue, Randburg within the City of Johannesburg Municipality.

Select the appropriate box

The application is for an upgrade of an existing development		The application is for a new development	X	Other, specify	

Does the activity also require any authorisation other than NEMA EIA authorisation?

	NO X

If yes, describe the legislation and the Competent Authority administering such legislation

Not Applicable

No additional authorisations are required.

If yes, have you applied for the authorisation(s)?	NO X
If yes, have you received approval(s)? (attach in appropriate appendix)	NO X

2. APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES

List all legislation, policies and/or guidelines of any sphere of government that are applicable to the application as contemplated in the EIA regulations:

Title of legislation, policy or guideline:	Administering authority:	Promulgation Date:
Constitution of the Republic of South Africa	National	18 December 1996
National Environmental Management Act, 1998 (Act 107 of 1998) (NEMA)	National	27 November 1998
Environmental Impact Assessment Regulations, 2014	National	4 December 2014
NEMA Listing Notice 1 - GN R.983 of 2014	National	4 December 2014
NEMA Listing Notice 3 - GN R.985 of 2014	National	4 December 2014
Procedures for the Assessment and Minimum Criteria for Reporting on Identified Environmental Themes - GN 320	National	20 March 2020
National Environmental Management: Biodiversity Act, 2004 (Act 10 of 2004) – NEMBA	National	7 June 2004
Alien and Invasive Species Regulations and associated Lists under NEMBA	National	25 September 2020
National List of Ecosystems that are Threatened and in Need of Protection – GN 689	National	18 November 2022
National Water Act, 1998 (Act 36 of 1998)	National	26 August 1998
National Environmental Management: Waste Act, 2008 (Act 59 of 2008) – NEMWA	National	10 March 2009
National Environmental Management: Air Quality Act, 2004 (Act 39 of 2004) – NEMAQA	National	24 February 2005
National Heritage Resources Act, 1999 (Act 25 of 1999) – NHRA	National	28 April 1999
Occupational Health and Safety Act, 1993 (Act 85 of 1993) and applicable Regulations	National	2 July 1993
Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013) – SPLUMA	National	5 August 2013

Title of legislation, policy or guideline:	Administering authority:	Promulgation Date:
City of Johannesburg Municipal Planning By-Law, 2016, as amended	Municipal	3 August 2016
City of Johannesburg Land Use Scheme, 2018	Municipal	2 January 2019
City of Johannesburg Spatial Development Framework 2040 / SDF 2040	Municipal	2016
Johannesburg Metropolitan Municipality Public Open Space Bylaw	Municipal	2026
Gauteng Conservation Plan / Gauteng Biodiversity Conservation Plan	Provincial	2023
Gauteng Environmental Management Framework (GEMF)	Municipal	2015

Description of compliance with the relevant legislation, policy or guideline:

Legislation, policy of guideline	Description of compliance
Constitution of the Republic of South Africa, 1996	The proposed development must be designed and managed within its approved scope. By limiting the development footprint to a previously disturbed area (as per the applications proposed development footprint), the disturbance of virgin land or established natural habitat is avoided. The subdivision of the proposed property will promote the protection of intact and threatened habitat space along the eastern portion of the property which will be protected for the benefit of present and future generations. Impacts associated with the proposed development will also be managed by implementing and maintaining reasonable mitigation measures applicable to the activity and relevant phase of the project, with the aim of reducing possible impact to the local community and the receiving environment.
National Environmental Management Act, 1998 (Act 107 of 1998) (NEMA)	The proposed development is currently in the process of application to obtain relevant authorisation in terms of NEMA, prior to the undertaking of the proposed project. A Basic Assessment (BA) process is currently underway in order to assess the sustainability of the proposed development by taking into consideration the environmental, social and economic impacts associated therewith. In addition to the outcomes of the assessment and relevant public consultations, an Environmental Authorization has been compiled which will in turn provide enforceable management measures, monitoring requirements, responsibilities and performance standards to ensure ongoing compliance and impact management and the prevention of possible pollution throughout the life cycle of development.
Environmental Impact Assessment Regulations, 2014, as amended	A Basic Assessment (BA) process, as are applicable to the listed activities, is currently underway. The Basic Assessment Report has been compiled by an independent Environmental Assessment Practitioner (EAP) who is registered with the South African Environmental Assessment Practitioners Association of South Africa (EAPASA). The Basic Assessment process has been conducted in accordance with Regulation 19 and Appendix 1 of the

	EIA Regulations.
Environmental Impact Assessment Regulations, 2014 • Listing Notice 1 - GN R.983 of 2014 • Listing Notice 2 - GN R.984 of 2014 • Listing Notice 3 - GN R.985 of 2014	The proposed development triggers the following Listed Activities: <u>Listing Notice 1:</u> **Activity 27:** The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for – i. the undertaking of a linear activity; or ii. maintenance purposes <u>Listing Notice 2:</u> None <u>Listing Notice 3:</u> **Activity 3**: The development of resorts, lodges, hotels, tourism or hospitality facilities that sleeps 15 people or more. c) Gauteng: A protected area identified in terms of NEMPAA, excluding conservancies; i. National Protected Area Expansion Strategy Focus Areas; ii. Gauteng Protected Area Expansion Priority Areas; iii. Sites identified as Critical Biodiversity Areas (CBAs) or Ecological Support Areas (ESAs) in the Gauteng Conservation Plan or in bioregional plans; iv. Sites identified within threatened ecosystems listed in terms of the National Environmental Management Act: Biodiversity Act (Act No. 10 of 2004); v. Sensitive areas identified in an environmental management framework adopted by the relevant environmental authority; vi. Sites or areas identified in terms of an international convention; vii. Sites identified as high potential agricultural land in terms of Gauteng Agricultural Potential Atlas; viii. Important Bird and Biodiversity Area (IBA); ix. Sites managed as protected areas by provincial authorities, or declared as nature reserves in terms of the Nature Conservation Ordinance (Ordinance 12 of 1983) or the NEMPAA; x. Sites designated as nature reserves in terms of municipal Spatial Development Frameworks; or xi. Sites zoned for conservation use or public open space or equivalent zoning **Activity 12:** The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance

	management plan. c) Gauteng i. Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004; ii. Within Critical Biodiversity Areas or Ecological Support Areas identified in the Gauteng Conservation Plan or bioregional plans; or iii. On land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning. Relevant activities triggered were therefore applied for and a Basic Assessment process followed.
Procedures for the Assessment and Minimum Criteria for Reporting on Identified Environmental Themes – GN 320 of 20 March 2020, as amended	A Site Sensitivity Verification was undertaken using the DFFE Screening Tool findings and available site information to verify environmental sensitivities and determine the specialist assessments required for the project.
	The proposed development was assessed in accordance with the Procedures for the Assessment and Minimum Criteria for Reporting on Identified Environmental Themes, published under Government Notice (GN) 320 of 20 March 2020, as amended. The National Screening Tool was used to identify relevant sensitivities which were individually assessed and verified as part of a site visit by the appointed EAP. Relevant findings were then compiled and discussed in a site verification report as per the requirements of GN 320. Where necessary, appropriate mitigation measures have been recommended to ensure that any potential impacts remain within acceptable limits. The outcomes of all specialist assessments have been integrated into the Draft Basic Assessment Report and Environmental Management Programme (EMPr). The mitigation measures recommended by the specialists have informed both the project design and the environmental management commitments applicable during the construction and operational phases of the development.

National Environmental Management: Biodiversity Act, 2004 (Act 10 of 2004) – NEMBA	The proposed boutique hotel development is located in Randburg, Johannesburg, immediately adjacent to the Boschkop Nature Reserve. Given the site's proximity to a formally conserved natural area, biodiversity considerations have been specifically incorporated into the Basic Assessment process. The assessment has therefore considered not only the biodiversity value of the development site itself, but also the potential for direct, indirect and cumulative impacts on the adjacent nature reserve and the ecological connectivity between the two areas. Reasonable measures have been incorporated into the Draft BAR and EMPr which are aimed at avoiding possible encroachment and or disturbance of the adjacent natural spaces and to promote the protection of intact natural spaces. The outcomes of relevant specialist assessments were also used and form part of the recommended mitigation measures to be implemented during each phase of the proposed project.
Alien and Invasive Species Regulations and associated Lists under NEMBA	The proposed development is situated immediately adjacent to the Boschkop Nature Reserve. Given the proximity of the proposed development to a conserved natural area, the potential introduction and spread of alien and invasive species was specifically considered. The proposed development will be managed in a manner that prevents, as far as reasonably practicable, the introduction and spread of listed alien and invasive species. No construction materials, garden waste, soil, vegetation or other potentially contaminated material will be placed or disposed of within the nature reserve. Relevant monitoring and compliance inspections must be undertaken during each phase of the project and will form part of the requirements as included in the EMPr.
National Water Act, 1998 (Act 36 of 1998)	The National Water Act, 1998 (Act 36 of 1998) (NWA) provides the framework for the protection, use, development, conservation, management and control of South Africa's water resources. Section 21 identifies activities that constitute a "water use", including taking and storing water, impeding or diverting flow, discharging waste or water containing waste, disposing of waste in a manner that may detrimentally impact a water resource, and altering the bed, banks, course or characteristics of a watercourse. The proposed development was screened in accordance with the requirements of the National Water Act, 1998 (Act No. 36 of 1998) (NWA) which confirmed that the proposed development and or operation of the Boutique Hotel does not trigger relevant water use activities that would require authorisation on the form of a Water Use License (WUL). The development's anticipated water use will rely on municipal supply for domestic and hospitality-related uses, including guest accommodation, ablution facilities, kitchen facilities, cleaning, staff facilities and landscaping. Joburg Water, in a letter dated 1 July 2026,

	confirmed that the existing infrastructure and supply is able to support the proposed development.
National Environmental Management: Waste Act, 2008 (Act 59 of 2008) – NEMWA	NEMWA establishes measures for the prevention of waste generation, the reduction of waste generation where practicable, the reuse and recycling of waste, and the environmentally sound management and disposal of waste that cannot be recovered. The proposed development will incorporate appropriate waste-management measures throughout the construction and operational phases to ensure that waste is managed in accordance with the waste hierarchy and does not result in unacceptable impacts on the surrounding environment.
National Environmental Management: Air Quality Act, 2004 (Act 39 of 2004) – NEMAQA	NEMAQA provides the legislative framework for the protection and enhancement of the quality of ambient air in South Africa and provides measures for the prevention of pollution and ecological degradation while securing ecologically sustainable development and promoting justifiable economic and social development. The proposed boutique hotel is predominantly a commercial/hospitality development and is not anticipated to include industrial processes that would constitute significant atmospheric emission sources. The highest risk to air quality impacts in association with the proposed project was identified as part of the development phase. Although the development is not expected to be a significant atmospheric emission source, construction activities have the potential to temporarily generate nuisance dust. Dust generated during construction will be monitored through routine environmental inspections, with additional mitigation implemented where excessive dust is observed. Where applicable relevant mitigation measures were also included in the Draft EMPr for the management, where possible of vehicle exhaust emissions and possible odours.

National Heritage Resources Act, 1999 (Act 25 of 1999) – NHRA	The NHRA provides for the identification, assessment, management and protection of South Africa's heritage resources and establishes a framework for the conservation of places and objects of cultural significance. Heritage considerations were incorporated into the Basic Assessment process to determine whether the proposed development may adversely affect archaeological, palaeontological, historical, architectural or other heritage resources. As part of the impact assessment process, available heritage information, desktop resources, aerial imagery, historical information and the National Environmental Screening Tool was used to screen the site for potential heritage sensitivities associated with the site. Based on the outcomes no sensitivities were identified. Should any artifacts, archaeological or paleontological remains be uncovered during the development phase, the relevant authorities will be notified and appropriate procedure implemented.
Occupational Health and Safety Act, 1993 (Act 85 of 1993) and applicable Regulations	The proposed development will be undertaken with due consideration of the requirements of the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) (OHSA) and the regulations promulgated thereunder. Appointed contractors will be required to comply with the OHSA and applicable Construction Regulations. Appropriate health and safety measures will be implemented before and during construction, including site-specific health and safety planning, worker induction, risk assessments, appropriate personal protective equipment (PPE), safe work procedures and emergency preparedness as applicable.
Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013) – SPLUMA City of Johannesburg Municipal Planning By-Law, 2016, as amended City of Johannesburg Land Use Scheme, 2018, as amended City of Johannesburg Spatial Development Framework 2040 / SDF 2040	SPLUMA provides a national legislative framework for spatial planning, land-use management and sustainable development. The Act seeks to address historical spatial inequalities, promote sustainable and efficient land development, ensure that land-use decisions are made in public interest and provide for cooperative, integrated and transparent spatial planning. The property is currently zoned **Agricultural**. A **township establishment application** is currently underway to formally establish two erven over the property and to provide an appropriate land-use framework for the proposed development. The proposed township and associated zoning framework therefore seek to establish a clear distinction between the area intended for development and the area intended to remain as protected/private open space. This approach allows the proposed development to be appropriately integrated with the environmental sensitivities of the site whilst also supporting relevant economic and social growth and development in the area.

	The current Agricultural zoning does not provide the appropriate land-use rights for the proposed boutique hotel, however the applicant has accordingly initiated the necessary township establishment and land-use planning process with the City of Johannesburg. Should the application for the required Environmental Authorisation in terms of NEMA be approved, the applicant must still obtain relevant municipal approvals for the proposed development. The surrounding properties are predominantly zoned "Residential 1" and "Residential 2". Other zoning in the area include "Residential 3", "Agricultural", "Municipal" and "Special". Recent Zoning Surveys, indicate that the area is experiencing residential densification, which in turn increases the demand/need for social facilities such as a Boutique Hotel.
Johannesburg Metropolitan Open Space System (JMOSS)	The JMOSS is intended to conserve and protect Johannesburg's natural open-space resources and to guide development around ecologically important areas. JMOSS was developed in response to concerns regarding the loss and fragmentation of open-space resources and seeks to ensure that biodiversity, ecological systems and associated ecosystem services are considered in development planning. The City's JMOSS policy identifies open spaces as important resources for biodiversity conservation, ecological functioning, stormwater management, urban greening and other ecosystem services. The proposed township establishment provides a mechanism for ensuring that the boutique hotel is developed within a clearly defined spatial footprint. The development will be restricted to Erf 1, subject to the approved township layout and land-use rights. Erf 2 will be retained as Private Open Space, restricting and avoiding any future development potential, therefore supporting the city's conservation efforts.

Gauteng Conservation Plan / Gauteng Biodiversity Conservation Plan & Gauteng Environmental Management Framework (GEMF)	The proposed development was assessed with due consideration of the Gauteng Conservation Plan (C-Plan) and the provincial biodiversity conservation objectives applicable to the Gauteng Province. The Gauteng C-Plan is a spatial biodiversity planning tool intended to identify areas of importance for biodiversity conservation and to provide guidance for land-use planning, environmental assessment and conservation management. The current Gauteng C-Plan Version 4 identifies spatial biodiversity priorities including Protected Areas, Critical Biodiversity Areas (CBA1 and CBA2), Ecological Support Areas (ESA1 and ESA2) and Other Natural Areas (ONA). The C-Plan is intended to inform biodiversity inputs into land-use planning and environmental decision-making and therefore provides an important consideration in assessing the suitability of the proposed development. The proposed township establishment provides for a defined development footprint on Erf 1, proposed to be zoned "Special", while Erf 2 will be zoned "Private Open Space" and retained for conservation purposes. This approach is considered particularly appropriate given the site's proximity to Boschkop Nature Reserve. The retention of Erf 2 will assist in limiting development pressure, maintaining open space, reducing edge effects and providing an additional area for conservation and ecological management. The proposed development will be subject to appropriate biodiversity mitigation measures, including footprint control, vegetation management, invasive alien species control, stormwater management, fire management, pollution prevention and protection of the reserve boundary.

3. ALTERNATIVES

Describe the proposal and alternatives that are considered in this application. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity could be accomplished. The determination of whether the site or activity (including different processes etc.) or both is appropriate needs to be informed by the specific circumstances of the activity and its environment.

The no-go option must in all cases be included in the assessment phase as the baseline against which the impacts of the other alternatives are assessed. **Do not** include the no go option into the alternative table below.

Note: After receipt of this report the competent authority may also request the applicant to assess additional alternatives that could possibly accomplish the purpose and need of the proposed activity if it is clear that realistic alternatives have not been considered to a reasonable extent.

Please describe the process followed to reach (decide on) the list of alternatives below

The alternatives were identified by considering the purpose and need of the proposed Boutique Hotel, the existing land use of the property, environmental sensitivities, surrounding development patterns, economic feasibility and the Applicant's intention to develop a new hospitality operation at the existing property. Consideration was given to alternatives that could reasonably achieve the objectives of the development while limiting environmental impacts.

A Location Alternative was considered, involving the acquisition and development of an urban infill/brownfield property within the Randburg commercial node. Although such a location could potentially reduce certain environmental impacts, it would require the acquisition of another property and would reduce the social and economic benefits associated with expanding the existing hospitality operation. It was therefore not

considered a reasonable or feasible alternative.

The compulsory No-Go Alternative was also considered, representing the scenario in which the Boutique Hotel does not proceed, and the property remains under its existing land use or previously supported low-density development approach. Although this alternative would avoid all environmental impacts associated with the development, it would not achieve the purpose of the project and would result in the loss of anticipated employment, investment and other socio-economic benefits.

Based on this screening process, the Proposal was retained as the preferred alternative, as it was considered to provide the most appropriate balance between social, economic and environmental considerations, while allowing environmental impacts to be managed through the proposed development layout, retention of environmentally sensitive areas and implementation of the EMPr.

Provide a description of the alternatives considered

No.	**Alternative type**, either alternative: site on property, properties, activity, design, technology, energy, operational or other(provide details of "other")	**Description**
1	Proposal	DMFT Property Developers currently owns Portion 556 of the Farm Boschkop, 199 IQ, also referred to as 122 Sherwell Avenue, Randburg. A land use survey was conducted in March 2025 confirmed that the property in question currently accommodates a dwelling house, with a large portion of the property being vacant. The proposed development site is located within the well-established residential neighborhood of Boskruin and is surrounded by various housing typologies, ranging from low density to medium density residential schemes. The property is well located with easy access to main routes and within close proximity to social facilities and public amenities. Existing land use and zoning surveys undertaken have indicated that the area is experiencing residential densification, which in turn increases the need and demand for social facilities such as a boutique hotel. From an economic perspective, the proposed development will promote considerable economic inputs which will include the payment of bulk service contributions and higher municipal taxes payable due to the increased land use and associated rights and property value. The development will provide temporary employment opportunities during the construction and development phase as well as permanent employment opportunities during operation. The proposed township establishment provides a mechanism for ensuring that the boutique hotel is developed within a clearly defined spatial footprint. The development will be restricted to Erf 1, subject to the approved township layout and approved land-use rights. Erf 2 will be retained as Private Open Space, restricting and avoiding any future development potential, therefore supporting the city's conservation efforts. The proposed Boutique Hotel is envisaged to consist of 20 en-suite guest bedrooms, associated communal and recreational facilities including a swimming pool, dining hall, conference venue, spa, and caretaker's flat, together with supporting infrastructure such as parking areas, retaining structures,

		stormwater attenuation systems, and hard landscaping.
2	Alternative 1: Location Alternative	A Location Alternative was considered and included the possibility of procuring an urban infill brownfield site within the Randburg commercial node. Assessment of the alternative in terms of location and extent is considered feasible, however on an economic and social scale overall benefit losses reduced the alternative locations feasibility. Finally, the development of a brownfields site will reduce the risk and severity of relevant environmental impacts but not avoid them all together. In conclusion the development of an alternative site is not considered viable as the development of an alternative property does not support the outcomes of the proposed project. This alternative was not considered further.
3	Alternative 2: No-Go	The No-Go Alternative represents the scenario where the proposed Boutique Hotel does not proceed, and the property remains under its existing land use or previously supported low-density development approach. This alternative would avoid additional environmental impacts on the site's sensitive areas, including the CBAs, ESAs and Private Open Space. However, the employment, investment and other socio-economic benefits associated with the Boutique Hotel would not be realized. In conclusion, the No-Go alternative was not considered viable as the lack of development does not support the outcomes of the proposed project.

In the event that no alternative(s) has/have been provided, a motivation must be included in the table below.

Alternatives have been identified and assessed for the proposed Boutique Hotel Development. The assessment considered a Location Alternative, involving the potential development of an urban infill/brownfield site within the Randburg commercial node. The no-go alternative as indicated above and is based on the scenario where the proposed Boutique Hotel does not proceed, and the property remains under its existing land use. These alternatives were assessed against the Preferred Alternative with consideration of environmental, social, economic, engineering and technical feasibility. The Preferred Alternative was ultimately selected as it provides the most appropriate balance between achieving the objectives of the proposed development and limiting environmental impacts through concentrating development within previously disturbed areas while retaining the undeveloped portion of the property for conservation purposes.

4. PHYSICAL SIZE OF THE ACTIVITY

Indicate the total physical size (footprint) of the proposal as well as alternatives. Footprints are to include all new infrastructure (roads, services etc), impermeable surfaces and landscaped areas:

	Size of the activity:
Proposed activity ***(Total environmental (landscaping, parking, etc.) and the building footprint)***	1.42 ha
Alternatives:	
Alternative 1 (if any)	Not Applicable
Alternative 2 (if any)	Not Applicable

or, for linear activities:

	Length of the activity:
Proposed activity	Not Applicable
Alternatives:	
Alternative 1 (if any)	Not Applicable
Alternative 2 (if any)	Not Applicable

m/km

Indicate the size of the site(s) or servitudes (within which the above footprints will occur):

	Size of the site/servitude:
Proposed activity – Property extent	2.78 ha
Propoosed Activity – Development Footprint	1.42 ha
Alternatives:	
Alternative 1 (if any)	Not Applicable
Alternative 2 (if any)	Not Applicable

5. SITE ACCESS

Proposal

Does ready access to the site exist, or is access directly from an existing road?	YES X
If NO, what is the distance over which a new access road will be built	Not Applicable

Describe the type of access road planned:

Access to the proposed development site can be obtained via the existing 5-meter wide right-of-way servitude which links up with Sherwell Avenue.

Include the position of the access road on the site plan (if the access road is to traverse a sensitive feature the impact thereof must be included in the assessment).

Alternative 1

Does ready access to the site exist, or is access directly from an existing road?	YES X
If NO, what is the distance over which a new access road will be built	Not Applicable

Describe the type of access road planned:

Should an alternative property, located at an alternative location be required, a site and property will be selected based on the best location with established access and municipal infrastructure.

Include the position of the access road on the site plan. (if the access road is to traverse a sensitive feature the impact thereof must be included in the assessment).

Alternative 2

Does ready access to the site exist, or is access directly from an existing road?	YES X
If NO, what is the distance over which a new access road will be built	Not Applicable

Describe the type of access road planned:

Access to the proposed development site can be obtained via the existing 5-meter wide right-of-way servitude which links up with Sherwell Avenue.

Include the position of the access road on the site plan. (if the access road is to traverse a sensitive feature the impact thereof must be included in the assessment).

PLEASE NOTE: Points 6 to 8 of Section A must be duplicated where relevant for alternatives

Section A 6-8 has been duplicated **0** Number of times

(only complete when applicable)

6. LAYOUT OR ROUTE PLAN

A detailed site or route (for linear activities) plan(s) must be prepared for each alternative site or alternative activity. It must be attached to this document. The site or route plans must indicate the following:

- the layout plan is printed in colour and is overlaid with a sensitivity map (if applicable);
- layout plan is of acceptable paper size and scale, e.g.
  - A4 size for activities with development footprint of 10sqm to 5 hectares;
  - A3 size for activities with development footprint of > 5 hectares to 20 hectares;
  - A2 size for activities with development footprint of >20 hectares to 50 hectares);
  - A1 size for activities with development footprint of >50 hectares);

- The following should serve as a guide for scale issues on the layout plan:
  - A0 = 1: 500
  - A1 = 1: 1000
  - A2 = 1: 2000
  - A3 = 1: 4000
  - A4 = 1: 8000 (±10 000)
- shapefiles of the activity must be included in the electronic submission on the CD's;
- the property boundaries and Surveyor General numbers of all the properties within 50m of the site;
- the exact position of each element of the activity as well as any other structures on the site;
- the position of services, including electricity supply cables (indicate above or underground), water supply pipelines, boreholes, sewage pipelines, septic tanks, storm water infrastructure;
- servitudes indicating the purpose of the servitude;
- sensitive environmental elements on and within 100m of the site or sites (including the relevant buffers as prescribed by the competent authority) including (but not limited thereto):
  - Rivers and wetlands;

- the 1:100 and 1:50 year flood line;
- ridges;
- cultural and historical features;
- areas with indigenous vegetation (even if it is degraded or infested with alien species);

- Where a watercourse is located on the site at least one cross section of the water course must be included (to allow the position of the relevant buffer from the bank to be clearly indicated)

FOR LOCALITY MAP (NOTE THIS IS ALSO INCLUDED IN THE APPLICATION FORM REQUIREMENTS)

- the scale of locality map must be at least 1:50 000. For linear activities 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 locality map and all other maps must be in colour;
- locality map must show property boundaries and numbers within 100m of the site, and for poultry and/or piggery, locality map must show properties within 500m and prevailing or predominant wind direction;
- for gentle slopes the 1m contour intervals must be indicated on the map and whenever the slope of the site exceeds 1:10, the 500mm contours must be indicated on the map;
- areas with indigenous vegetation (even if it is degraded or infested with alien species);
- locality map must show exact position of development site or sites;
- locality map showing and identifying (if possible) public and access roads; and
- the current land use as well as the land use zoning of each of the properties adjoining the site or sites.

Refer to **Annexure A** of the Draft BAR

7. SITE PHOTOGRAPHS

Colour photographs from the center of the site must be taken in at least the eight major compass directions with a description of each photograph. Photographs must be attached under the appropriate Appendix**.** It should be supplemented with additional photographs of relevant features on the site, where applicable.

Refer to **Annexure B** of the Draft BAR

8. FACILITY ILLUSTRATION

A detailed illustration of the activity must be provided at a scale of 1:200 for activities that include structures. The illustrations must be to scale and must represent a realistic image of the planned activity. The illustration must give a representative view of the activity to be attached in the appropriate Appendix.

Refer to **Annexure C** of the Draft BAR

SECTION B: DESCRIPTION OF RECEIVING ENVIRONMENT

Note: Complete Section B for the proposal and alternative(s) (if necessary)

Instructions for completion of Section B for linear activities

1) For linear activities (pipelines etc) it may be necessary to complete Section B for each section of the site that has a significantly different environment.
2) Indicate on a plan(s) the different environments identified
3) Complete Section B for each of the above areas identified
4) Attach to this form in a chronological order
5) Each copy of Section B must clearly indicate the corresponding sections of the route at the top of the next page.

Section B has been duplicated for sections of the route **Not Applicable** times

Instructions for completion of Section B for location/route alternatives

1) For each location/route alternative identified the entire Section B needs to be completed
2) Each alterative location/route needs to be clearly indicated at the top of the next page
3) Attach the above documents in a chronological order

Section B has been duplicated for location/route alternatives **Not Applicable** times (complete only when appropriate)

Instructions for completion of Section B when both location/route alternatives and linear activities are applicable for the application

Section B is to be completed and attachments order in the following way

- All significantly different environments identified for Alternative 1 is to be completed and attached in a chronological order; then
- All significantly different environments identified for Alternative 2 is to be completed and attached chronological order, etc.

Section B - Section of Route **N/A** (complete only when appropriate for above)

Section B – Location/route Alternative No. **N/A** (complete only when appropriate for above)

1. PROPERTY DESCRIPTION

Property description: (Including Physical Address and Farm name, portion etc.)	Portion 556 of the Farm Boschkop 199-IQ, situated at 122 Sherwell Avenue in the established suburb of Boskruin, Johannesburg, Gauteng Province.

2. ACTIVITY POSITION

Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in decimal degrees. The degrees should have at least six decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

Proposed:	**Latitude (S):**	**Longitude (E):**
	-26.093250°	27.951850°

Alternative:	**Latitude (S):**	**Longitude (E):**
Alternative 1	-26.087855°	27.943905°
Alternative 2	-26.093250°	27.951850°

In the case of linear activities:

Alternative:	**Latitude (S):**	**Longitude (E):**
• Starting point of the activity	N/A	N/A
• Middle point of the activity	N/A	N/A
• End point of the activity	N/A	N/A

For route alternatives that are longer than 500m, please provide co-ordinates taken every 250 meters along the route and attached in the appropriate Appendix

Addendum of route alternatives attached N/A

The 21 digit Surveyor General code of each cadastral land parcel

PROPOSAL	**T**	**0**	**I**	**Q**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**9**	**9**	**0**	**0**	**5**	**5**	**6**
ALT. 1	**T**	**0**	**I**	**Q**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**9**	**9**	**0**	**0**	**1**	**0**	**9**
ALT. 2	**T**	**0**	**I**	**Q**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**9**	**9**	**0**	**0**	**5**	**5**	**6**
etc.																					

3. GRADIENT OF THE SITE

Indicate the general gradient of the site.

Flat	1:50 – 1:20	**1:20 – 1:15**	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5

4. LOCATION IN LANDSCAPE

Indicate the landform(s) that best describes the site.

Ridgeline	Plateau	**Side slope of hill/ridge**	Valley	Plain	Undulating plain/low hills	River front

5. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

a) Is the site located on any of the following?

Shallow water table (less than 1.5m deep)	NO X
Dolomite, sinkhole or doline areas	NO X
Seasonally wet soils (often close to water bodies)	NO X
Unstable rocky slopes or steep slopes with loose soil	NO X
Dispersive soils (soils that dissolve in water)	NO X
Soils with high clay content (clay fraction more than 40%)	NO X
Any other unstable soil or geological feature	NO X
An area sensitive to erosion	NO X

(Information in respect of the above will often be available at the planning sections of local authorities. Where it exists, the 1:50 000 scale Regional Geotechnical Maps prepared by Geological Survey may also be used).

b) are any caves located on the site(s) NO X
If yes to above provide location details in terms of latitude and longitude and indicate location on site or route map(s)
Latitude (S): **Longitude (E):**
° °

c) are any caves located within a 300m radius of the site(s) NO X
If yes to above provide location details in terms of latitude and longitude and indicate location on site or route map(s)
Latitude (S): **Longitude (E):**
° °

d) are any sinkholes located within a 300m radius of the site(s) NO X
If yes to above provide location details in terms of latitude and longitude and indicate location on site or route map(s)
Latitude (S): **Longitude (E):**
° °

If any of the answers to the above are "YES" or "unsure", specialist input may be requested by the Department

6. AGRICULTURE

Does the site have high potential agriculture as contemplated in the Gauteng Agricultural Potential Atlas (GAPA 4)? NO X

The site has a "moderate" and "moderate to high" rating. The proposed site has been subject to localized development, lowering the potential for agricultural development. Refer to **Annexure K** of the Draft BAR for a copy of the Site Verification Report which assesses the sites agricultural potential in line with the outcomes of the National Screening Tool.

Please note: The Department may request specialist input/studies in respect of the above.

7. GROUNDCOVER

To be noted that the location of all identified rare or endangered species or other elements should be accurately indicated on the site plan(s).

Indicate the types of groundcover present on the site and include the estimated percentage found on site

Natural veld - good condition % = 25	**Natural veld with scattered aliens % = 5**		**Veld dominated by alien species % = 5**	**Landscaped (vegetation) % = 10**
		Paved surface (hard landscaping) % = 15	**Building or other structure % = 20**	**Bare soil % = 20**

Please note: The Department may request specialist input/studies depending on the nature of the groundcover and potential impact(s) of the proposed activity/ies.

Are there any rare or endangered flora or fauna species (including red list species) present on the site NO X

If YES, specify and explain:

Not applicable.

In order to determine if any endangered flora or fauna species are present on site, a terrestrial biodiversity assessment was undertaken by Ramaro Environmental and Geological Services (Pty) Ltd (Annexure G of the Draft BAR). The assessment focused on the proposed development footprint (Erf 1) which will be subject to development of the proposed Boutique Hotel, if approved.

No confirmed Floral or Faunal Species of Conservation Concern (SCC) were recorded within the development footprint during the assessment, and no wetlands, riparian habitats, or other highly sensitive ecological features were identified within the proposed development area.

Although the DFFE Screening Tool identified potential sensitive animal species within the broader area, these species were not confirmed during the field assessment undertaken by the appointed EAP.

Should any protected species or Species of Conservation Concern be encountered during construction, activities within the affected area must cease and the relevantly appointed ECO must be notified for appropriate management.

Are there any rare or endangered flora or fauna species (including red list species) present within a 200m (if within urban area as defined in the Regulations) or within 600m (if outside the urban area as defined in the Regulations) radius of the site.

[redacted] NO X

If YES, specify and explain:

[redacted]

Are there any special or sensitive habitats or other natural features present on the site? YES X [redacted]

If YES, specify and explain:

The proposed development site is located within the Egoli Granite Grassland (Gm10) vegetation type, an ecosystem classified as Endangered due to extensive historical transformation associated with urban development in the Johannesburg Metropolitan area.

The property is situated on the lower western slopes of Boskruin Hill within a well-established residential suburb characterised by low- to medium-density residential development interspersed with remnant natural vegetation and rocky granite outcrops. Although the surrounding landscape has undergone extensive urban transformation, the site retains pockets of indigenous woody vegetation that contribute to the ecological functioning of the broader Boskruin landscape.

The Boschkop Nature Reserve forms part of the eastern half of the property. An application for the establishment of a township is currently underway, which if approved, will subdivide the property into two (2) erven, with one erf zoned "*Special*" (Erf 1) for the development and operation of a Boutique Hotel, and the second erf (Erf 2) zoned "Private Open Space".

Erf 2, to be zoned as "Private Open Space" will be fenced off to restrict any authorised entry or potential encroachment into the area. Erf 2, covering a total area of 1.3 ha in extent will therefore be protected from development in the future, thereby supporting local conservation efforts.

The current ecological condition of the property and specifically the development footprint (Erf 1) was assessed as part of a Biodiversity Impact Assessment conducted by Ramaro Environmental and Geological Services (Pty) Ltd (**Annexure G**) which confirmed that the site is located

within the Egoli Granite Grassland (Gm10) vegetation type, however the proposed development footprint (Erf 1) is predominantly situated within an area that has been previously disturbed and partially cleared, with remnant indigenous woody vegetation concentrated mainly on the rocky slopes outside the proposed development footprint.

Erf 2, which forms part of the eastern portion of the site, which also borders the Boschkop Nature Reserve, remains to be fully vegetated with limited disturbance. As previously indicated, this area is in process to be zoned as "Private Open Space" in order to ensure the ecological integrity of the 1.3 ha and to restrict any future development on the specific portion of land.

Was a specialist consulted to assist with completing this section YES X [redacted]

If yes complete specialist details

Name of the specialist:	Ronald Ramathieledza		
Qualification(s) of the specialist:	BSc Mining and Environmental Geology (Hons) MSc. Geohydrology		
Postal address:	29 Phepeng Street, Polokwane		
Postal code:	0163		
Telephone:	076 818 1251	Cell:	076 818 1251
E-mail:	ramathieledzar@gmail.com	Fax:	[redacted]

Are any further specialist studies recommended by the specialist? NO X

If YES, specify: [redacted]

If YES, is such a report(s) attached? Not Applicable

If YES list the specialist reports attached below

Not Applicable. No additional specialist studies recommended.

Signature of specialist:  Date: 25/08/2026

Please note; If more than one specialist was consulted to assist with the filling in of this section then this table must be appropriately duplicated

8. LAND USE CHARACTER OF SURROUNDING AREA

Using the associated number of the relevant current land use or prominent feature from the table below, fill in the position of these land-uses in the vacant blocks below which represent a 500m radius around the site

1. Vacant land	2. River, stream, wetland	3. Nature conservation area	4. Public open space	5. Koppie or ridge
6. Dam or reservoir	7. Agriculture	8. Low density residential	9. Medium to high density residential	10. Informal residential
11. Old age home	12. Retail	13. Offices	14. Commercial & warehousing	15. Light industrial
16. Heavy industrial[AN]	17. Hospitality facility	18. Church	19. Education facilities	20. Sport facilities
21. Golf course/polo fields	22. Airport[N]	23. Train station or shunting yard[N]	24. Railway line[N]	25. Major road (4 lanes or more)[N]
26. Sewage treatment plant[A]	27. Landfill or waste treatment site[A]	28. Historical building	29. Graveyard	30. Archeological site
31. Open cast mine	32. Underground mine	33.Spoil heap or slimes dam[A]	34. Small Holdings	
Other land uses (describe):				

NOTE: Each block represents an area of 250m X 250m, if your proposed development is larger than this please use the appropriate number and orientation of hashed blocks

NORTH

8	**8**	**8**	**3**	**8**
8	**9**	**8**	**3**	**8**
8	**8**		**3**	**8**
8	**8**	**3**	**3**	**8**
8	**8**	**8**	**8**	**8**

WEST EAST

SOUTH

Note: More than one (1) Land-use may be indicated in a block

Please note: The Department may request specialist input/studies depending on the nature of the land use character of the area and potential impact(s) of the proposed activity/ies. Specialist reports that look at health & air quality and noise impacts may be required for any feature above and in particular those features marked with an "[A]" and with an "[N]" respectively.

Have specialist reports been attached	YES X

If yes indicate the type of reports below

1.	Biodiversity Impact Assessment (**Annexure G.1**)
2.	Geotechnical Assessment (**Annexure G.2**)
3.	Civil Engineering Services Report (**Annexure G.3**)
4.	Stormwater Management Plan (**Annexure G.4**)

9. SOCIO-ECONOMIC CONTEXT

Describe the existing social and economic characteristics of the area and the community condition as baseline information to assess the potential social, economic and community impacts.

The proposed development is located within Boskruin, an established suburb in the northern part of the City of Johannesburg Metropolitan Municipality. The surrounding area is characterized predominantly by low-density residential neighborhoods comprising freestanding dwellings, with pockets of medium-density residential developments, including townhouse complexes and cluster housing. Commercial and community facilities are located within close proximity to the site, including shopping centers, schools, healthcare facilities, places of worship, recreational facilities and business nodes. The area is well served by an established road network, municipal infrastructure and public services, providing residents with convenient access to employment opportunities, education and essential services.

The local economy is diverse and forms part of the broader Johannesburg metropolitan economy, which is driven by the finance, business services, retail, tourism, hospitality and professional services sectors. The proximity of the site to major transport routes and commercial centers such as Randburg, Sandton and Fourways contributes to sustained economic activity and investment within the area. The proposed Boutique Hotel is expected to complement these existing economic activities by providing high-quality accommodation and conferencing facilities, supporting tourism and business travel, and creating both temporary employment during construction and permanent employment opportunities during operation. In addition, the development is anticipated to generate indirect economic benefits through the procurement of local goods and services and increased patronage of surrounding businesses.

From a community perspective, Boskruin is regarded as a well-established suburban area with a generally high standard of living and access to reliable municipal services, including water supply, sanitation, electricity, waste collection and stormwater infrastructure. The surrounding community benefits from a range of educational, healthcare, recreational and commercial facilities that contribute to a favorable quality of life.

The City of Johannesburg has an estimated population of 5.9 million and remains South Africa's leading metropolitan economy, contributing approximately 14.7% of national GDP. Despite high unemployment of 35.9% in Q2 2026, the economy is supported by finance, business services, retail, tourism and hospitality. Access to municipal services is generally high, including water (99.3%), sanitation (95.8%), electricity for lighting (92.2%) and weekly refuse collection (87%). (City of Johannesburg Final 2026/27 IDP) (Stats SA Quarterly Labor Force Survey, Q2 2026).

According to the 2022 Census, Randburg is home to approximately 337 053 people with a recorded 123 767 households. In the area, approximately 42.6% of the population is equipped with a higher education qualification or certificate. The highest number of individuals in the area are White (45.7%) followed by Black African (36.8%), Colored (8.6%) and Indian or Asian (7.5%). The Randburg area is characterized by a moderate to high average income which is also reflected in the areas' standard living conditions. The proposed development of a Boutique Hotel will blend in with the surrounding community's aesthetics.

10. CULTURAL/HISTORICAL FEATURES

Please be advised that if section 38 of the National Heritage Resources Act 25 of 1999 is applicable to your proposal or alternatives, then you are requested to furnish this Department with written comment from the South African Heritage Resource Agency (SAHRA) – Attach comment in appropriate annexure

38. (1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorised as-

(a) the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;

(b) the construction of a bridge or similar structure exceeding 50m in length;

(c) any development or other activity which will change the character of a site-

(i) exceeding 5 000 m2 in extent; or

(ii) involving three or more existing erven or subdivisions thereof; or

(iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or
(iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;

(d) the re-zoning of a site exceeding 10 000 m2 in extent; or

(e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority, must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.

Are there any signs of culturally (aesthetic, social, spiritual, environmental) or historically significant elements, as defined in section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999), including archaeological or palaeontological sites, on or close (within 20m) to the site?	NO X

If YES, explain:

Not Applicable

If uncertain, the Department may request that specialist input be provided to establish whether there is such a feature(s) present on or close to the site.

Briefly explain the findings of the specialist if one was already appointed:

Not Applicable – No Specialist was appointed

As part of the impact assessment process, available heritage information, desktop resources, aerial imagery, historical information and the National Environmental Screening Tool was used to screen the site for potential heritage sensitivities associated with the site.

Based on the outcomes no sensitivities were identified.

No specialist assessment was therefore undertaken.

Will any building or structure older than 60 years be affected in any way?	NO X
Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?	NO X

If yes, please attached the comments from SAHRA in the appropriate Appendix – Not Applicable

SECTION C: PUBLIC PARTICIPATION (SECTION 41)

1. The Environmental Assessment Practitioner must conduct public participation process in accordance with the requirement of the EIA Regulations, 2014.

2. LOCAL AUTHORITY PARTICIPATION

Local authorities are key interested and affected parties in each application and no decision on any application will be made before the relevant local authority is provided with the opportunity to give input. The planning and the environmental sections of the local authority must be informed of the application at least thirty (30) calendar days before the submission of the application to the competent authority.

Was the draft report submitted to the local authority for comment?	YES X
If yes, has any comments been received from the local authority?	NO X

If "YES", briefly describe the comment below (also attach any correspondence to and from the local authority to this application):

Not Applicable

If "NO" briefly explain why no comments have been received or why the report was not submitted if that is the case.

The application form in support to this application was submitted to the Department on the 24th of July 2026. A copy of the Draft BAR is therefore currently in circulation as part of the Public Participation process which will conclude on the 30th September 2026. Once the Public Participation process has concluded, all comments and responses as received will be incorporated into the final BAR which will be submitted to the Department (GDE) for consideration.

3. CONSULTATION WITH OTHER STAKEHOLDERS

Any stakeholder that has a direct interest in the activity, site or property, such as servitude holders and service providers, should be informed of the application at least **thirty (30) calendar days** before the submission of the application and be provided with the opportunity to comment.

Has any comment been received from stakeholders?	NO X

If "YES", briefly describe the feedback below (also attach copies of any correspondence to and from the stakeholders to this application):

Not Applicable

If "NO" briefly explain why no comments have been received

The application form in support to this application was submitted to the Department on the 24th of July 2026. A copy of the Draft BAR is therefore currently in circulation as part of the Public Participation process which will conclude on the 30th September 2026. Once the Public Participation process has concluded, all comments and responses as received will be incorporated into the final BAR which will be submitted to the Department (GDE) for consideration.

4. GENERAL PUBLIC PARTICIPATION REQUIREMENTS

The Environmental Assessment Practitioner must ensure that the public participation process is adequate and must determine whether a public meeting or any other additional measure is appropriate or not based on the particular nature of each case. Special attention should be given to the involvement of local community structures such as Ward Committees and ratepayers associations. Please note that public concerns that emerge at a later stage that should have been addressed may cause the competent authority to withdraw any authorisation it may have issued if it becomes apparent that the public participation process was flawed.

The EAP must record all comments and respond to each comment of the public / interested and affected party before the application report is submitted. The comments and responses must be captured in a Comments and Responses Report as prescribed in the regulations and be attached to this application.

5. APPENDICES FOR PUBLIC PARTICIPATION

All public participation information is to be attached in the appropriate Appendix. The information in this Appendix is to be ordered as detailed below

Appendix 1 – Proof of site notice *(to be included in the Final BAR)*

Appendix 2 – Written notices issued as required in terms of the regulations *(to be included in the Final BAR)*

Appendix 3 – Proof of newspaper advertisements *(to be included in the Final BAR)*

Appendix 4 –Communications to and from interested and affected parties *(to be included in the Final BAR)*

Appendix 5 – Minutes of any public and/or stakeholder meetings *(to be included in the Final BAR)*

Appendix 6 - Comments and Responses Report *(to be included in the Final BAR)*

Appendix 7 –Comments from I&APs on Basic Assessment (BA) Report *(to be included in the Final BAR)*

Appendix 8 –Comments from I&APs on amendments to the BA Report *(to be included in the Final BAR)*

Appendix 9 – Copy of the register of I&Aps *(Restricted version attached to the Draft BAR under Annexure E.9)*

SECTION D: RESOURCE USE AND PROCESS DETAILS

Note: Section D is to be completed for the proposal and alternative(s) (if necessary)

Instructions for completion of Section D for alternatives

1) For each alternative under investigation, where such alternatives will have different resource and process details (e.g. technology alternative), the entire Section D needs to be completed
4) Each alterative needs to be clearly indicated in the box below
5) Attach the above documents in a chronological order

Section D has been duplicated for alternatives	**0**	times	(complete only when appropriate)

Section D Alternative No.	Proposal	(complete only when appropriate for above)

1. WASTE, EFFLUENT, AND EMISSION MANAGEMENT

Solid waste management

Will the activity produce solid construction waste during the construction/initiation phase?	YES X
If yes, what estimated quantity will be produced per month?	Unknown

How will the construction solid waste be disposed of (describe)?

Construction waste generated during the development may include excavated material, vegetation cleared from the approved development footprint, packaging materials, scrap metal, concrete waste, timber off-cuts, plastics, paper, cardboard and general construction rubble. Waste generation will be minimised through the implementation of waste avoidance, reduction, reuse and recycling principles wherever practicable.

Waste will be separated at source into designated waste streams and temporarily stored in appropriately labelled containers or designated storage areas. Recyclable materials will be collected and diverted to approved recycling facilities where feasible. General construction waste and non-recyclable materials will be removed from site for safe disposal at local landfill sites. All waste removal records, weighbridge slips and disposal certificates will be retained for auditing and compliance purposes throughout the construction phase of the project.

Where will the construction solid waste be disposed of (describe)?

Recyclable or reusable materials, such as scrap, plastics and glass generated from the construction operations will, where possible be diverted to local recyclers authorised to accept such waste streams.

Organic material generated from the clearance of vegetation from the approved development footprint will be diverted to local Pikitup garden refuse sites applicable to the area.

Clean building rubble and soil generated during construction may be used internally for relevant backfilling and or stabilisation of development areas where applicable. Clean building rubble and soil which cannot be reused alternatively will be diverted to local landfill sites, licensed to accept such waste in the area.

Will the activity produce solid waste during its operational phase? NO X
If yes, what estimated quantity will be produced per month? Not Applicable

How will the solid waste be disposed of (describe)?

Waste generation during the operational phase of the boutique hotel will be limited to domestic waste streams, inclusive of plastics, paper, glass, packaging, and food waste.

Suitably registered and where applicable licensed services providers will be appointed to collect and remove waste generated by the operational hotel on a regular basis. Where possible, relevant service providers that offer relevant waste recycling programs tailored to hospitality needs will be favored.

Has the municipality or relevant service provider confirmed that sufficient air space exists for treating/disposing of the solid waste to be generated by this activity? NO X

Where will the solid waste be disposed if it does not feed into a municipal waste stream (describe)?

During the operational phase, the amounts of general waste to be generated are anticipated to be moderate to low, depending on relevant seasonal changes associated with local tourism in the area. As applicable, suitably registered and where applicable licensed providers will be appointed to collect and remove waste generated by the hotel. Where possible, source separation measures will be implemented to promote the successful recycling of relevant materials, such as plastic, glass, aluminium cans, paper and cardboard.

Service providers that offer relevant waste recycling programs tailored to the hospitality industry will be favoured. By promoting local recycling efforts , the diversion of waste to landfill is sustainably reduced. Only waste which cannot be recycled or repurposed will be sent to local landfill sites as applicable.

Note: If the solid waste (construction or operational phases) will not be disposed of in a registered landfill site or be taken up in a municipal waste stream, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

Can any part of the solid waste be classified as hazardous in terms of the relevant legislation? NO X
If yes, inform the competent authority and request a change to an application for scoping and EIA.

Is the activity that is being applied for a solid waste handling or treatment facility? NO X
If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

Describe the measures, if any, that will be taken to ensure the optimal reuse or recycling of materials:

During the operational phase, waste generation is expected to be moderate to low and will primarily comprise domestic waste streams, including plastics, paper, cardboard, glass, aluminum cans, packaging materials and food waste.

Source-separation measures will be implemented, where practicable, to facilitate the reuse and recycling of recoverable materials. Suitably registered and, where applicable, licensed waste service providers will be appointed to collect and remove waste regularly, with preference given to providers offering recycling programs tailored to the hospitality industry. Only waste that cannot reasonably be reused, recycled or repurposed will be disposed of at an appropriately authorized municipal waste disposal facility, thereby reducing the volume of waste sent to landfill.

The measures taken to ensure the optimal reuse or recycling of materials will be as follows:

1. Reuse of building materials for backfilling and stabilization
2. Promote recycling of scrap, glass cardboard, etc
3. Composting garden waste and vegetation
4. Appoint relevant service providers during operation that promotes and assists with recycling efforts.

Liquid effluent (other than domestic sewage)

Will the activity produce effluent, other than normal sewage, that will be disposed of in a municipal sewage system?	NO X
If yes, what estimated quantity will be produced per month?	Not Applicable
If yes, has the municipality confirmed that sufficient capacity exist for treating / disposing of the liquid effluent to be generated by this activity(ies)?	Not Applicable

Will the activity produce any effluent that will be treated and/or disposed of on site?	NO X
If yes, what estimated quantity will be produced per month?	Not Applicable

If yes describe the nature of the effluent and how it will be disposed.

Not Applicable.

The proposed project is limited to the construction and operation of a Boutique Hotel.
No water-related activity or activities generating effluent will be undertaken.

Note that if effluent is to be treated or disposed on site the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA

Will the activity produce effluent that will be treated and/or disposed of at another facility? NO X

If yes, provide the particulars of the facility:

Facility name:	Not Applicable		
Contact person:	Not Applicable		
Postal address:	Not Applicable		
Postal code:	Not Applicable		
Telephone:	Not Applicable	Cell:	Not Applicable
E-mail:	Not Applicable	Fax:	Not Applicable

Describe the measures that will be taken to ensure the optimal reuse or recycling of waste water, if any:

Not Applicable.

The proposed project is limited to the construction and operation of a Boutique Hotel.
No water-related activity or activities generating waste water will be undertaken.

Liquid effluent (domestic sewage)

Will the activity produce domestic effluent that will be disposed of in a municipal sewage system?	YES X
If yes, what estimated quantity will be produced per month?	90 m^3
If yes, has the municipality confirmed that sufficient capacity exist for treating / disposing of the domestic effluent to be generated by this activity(ies)?	YES X

Refer to Annexure F

Will the activity produce any effluent that will be treated and/or disposed of on site? NO X

If yes describe how it will be treated and disposed off.

Not Applicable

The proposed development property is connected to the City of Johannesburg's municipal sewer network.

The existing sewer connection point (manhole) is located at the entrance to the property, in the road reserve of Sherwell Avenue. All effluent generated during the operation of the Boutique Hotel will therefore be discharged to the municipal sewer system.

During construction, chemical toilets will be used and serviced by the relevant service provider. Once construction has been completed all relevant facilities will be removed from site.

Emissions into the atmosphere

Will the activity release emissions into the atmosphere? YES X

If yes, is it controlled by any legislation of any sphere of government? NO X

If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

If no, describe the emissions in terms of type and concentration:

During the construction phase, temporary emissions to the atmosphere may include fugitive dust generated from vegetation clearing, earthworks, excavation activities, vehicle movement on unpaved surfaces and the handling of construction materials.

Limited combustion emissions such as carbon dioxide (CO_2), Nitrogen oxides (NO_x), Carbon monoxide (CO) and Particulate Matter, may also be generated by construction vehicles, generators and machinery. These emissions are expected to be localised, short-term and of low significance with the implementation of appropriate mitigation measures.

2. WATER USE

Indicate the source(s) of water that will be used for the activity

Municipal X

If water is to be extracted from groundwater, river, stream, dam, lake or any other natural feature, please indicate the volume that will be extracted per month: Not Applicable

If Yes, please attach proof of assurance of water supply, e.g. yield of borehole, in the appropriate Appendix – *Not Applicable*

Does the activity require a water use permit from the Department of Water Affairs? NO X

If yes, list the permits required

If yes, have you applied for the water use permit(s)? NO X

If yes, have you received approval(s)? (attached in appropriate appendix) NO X

3. POWER SUPPLY

Please indicate the source of power supply eg. Municipality / Eskom / Renewable energy source

The proposed boutique hotel development will be supplied with electricity through the existing municipal electricity network operated by the City of Johannesburg. In addition, the development proposes the installation of a solar photovoltaic (PV) system to supplement electricity demand and improve energy efficiency. The PV system will assist in reducing reliance on grid-supplied electricity, particularly during periods of peak energy demand, while contributing towards the development's sustainability objectives. A backup generator may also be utilized during power outages or load-shedding events to ensure continuity of operations where required

If power supply is not available, where will power be sourced from?

Not Applicable

Electricity will primarily be supplied through the existing municipal electricity network operated by the City of Johannesburg. The development proposes the installation of a solar photovoltaic (PV) system to supplement electricity demand and improve energy efficiency. The PV system will assist in reducing reliance on grid-supplied electricity, particularly during periods of peak energy demand, while contributing towards the development's sustainability objectives. A backup generator may also be utilised during power outages or load-shedding events to ensure continuity of operations where required

4. ENERGY EFFICIENCY

Describe the design measures, if any, that have been taken to ensure that the activity is energy efficient:

The proposed development has been designed to promote energy efficiency through the incorporation of passive design principles, including appropriate building orientation, natural ventilation and the maximisation of natural daylight within occupied spaces. These measures will reduce reliance on artificial lighting and mechanical cooling systems, thereby lowering overall energy consumption.

Energy-efficient technologies, including LED lighting and energy-efficient appliances and equipment, will be incorporated where feasible. The development also proposes the installation of a solar photovoltaic (PV) system to supplement electricity supplied by the municipal grid, particularly during periods of peak demand. During the warmer summer months, when cooling requirements are expected to be higher, the PV system will assist in offsetting electricity consumption associated with mechanical cooling systems.

In addition, landscaping and building design measures will be implemented to improve thermal comfort and reduce heat gain, thereby further reducing operational energy requirements. Collectively, these measures will contribute towards reducing the development's carbon footprint, improving energy efficiency and promoting sustainable operation of the facility.

Describe how alternative energy sources have been taken into account or been built into the design of the activity, if any:

Alternative energy sources have been incorporated into the design of the proposed boutique hotel through the consideration of a solar photovoltaic (PV) system to supplement electricity supplied by the municipal grid. The PV installation will generate renewable energy on-site, reducing dependence on conventional electricity sources and contributing to lower greenhouse gas emissions and operational energy costs.

The proposed solar PV system is expected to offset a portion of the facility's daytime electricity demand, particularly during periods of peak consumption associated with guest accommodation, hospitality services and mechanical cooling systems. This is especially relevant during the summer months when cooling requirements are higher. During winter months, when cooling demand is reduced, the development's overall energy consumption is expected to decrease accordingly.

Although municipal electricity will remain the primary source of power, the integration of renewable energy technology demonstrates a commitment to sustainable development and resource efficiency. The feasibility of expanding renewable energy capacity and incorporating additional energy-saving technologies may be investigated further during the detailed design and operational phases of the project

SECTION E: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2014, and should take applicable official guidelines into account. The issues raised by interested and affected parties should also be addressed in the assessment of impacts as well as the impacts of not implementing the activity (Section 24(4)(b)(i).

1. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

Summarise the issues raised by interested and affected parties.

No issues or concerns in relation to the application have yet been received.

The Public Participation process in support of the application is still ongoing. Once the public participation process has been concluded, records of all communications will be recorded and incorporated into the final BAR

Summary of response from the practitioner to the issues raised by the interested and affected parties (including the manner in which the public comments are incorporated or why they were not included)
(A full response must be provided in the Comments and Response Report that must be attached to this report):

The draft BAR is currently in circulation as part of the ongoing Public Participation process, which will conclude on the 30th September 2026.

All comments and responses received during the Public Participation process will be recorded and a summary of all responses from the practitioner to the issues raised by the IAPs will be drafted and attached to the final BAR before being submitted to the Competent Authority for consideration.

2. IMPACTS THAT MAY RESULT FROM THE CONSTRUCTION AND OPERATIONAL PHASE

Briefly describe the methodology utilised in the rating of significance of impacts

A standardised assessment methodology was developed which will be utilised in determining the significance of impacts associated with the proposed development of a Boutique Hotel at 122 Sherwell Avenue, Randburg. Impacts from the proposed operations on the biophysical and socio-economic environment are explained in the following sections. The methodology is broadly consistent to that described in Integrated Environmental Management Series.

In order to assess each impacts significance as objectively as possible, the criteria as per the 1998 Department of Environmental Affairs and Tourism (DEAT) guidelines and the 2002 DEAT Information Series document were used as the basis for the assessment methodology adopted by LexEco.

The methodology applied to the assessment of the significance of potential impacts is based on the assessment criteria provided within the 1998 DEAT guidelines and the 2002 DEAT Information Series document (Impact Significance, Integrated Environmental Management, Information Series 5). The methodology has been adapted to be more user friendly and applicable to the proposed waste management activities and planned process, which is focused on the nature, extent, duration, intensity, probability of the identified impact.

The significance of each impact is determined through a synthesis of these criteria, ranking them as follows;

Table 1: Risk Classification

Significance Rating (SR)	Significance	
0 – 49		Insignificant
50 – 99		Low
100 - 149		Moderate
150 - 199		High
200 <		Severe

For each impact identified, the Significance Rating (SR) is determined by various factors. Significance is described prior to mitigation as well as with the most effective mitigation measure(s) in place where so required.

The Significant Rating or Risk prior to the implementation of appropriate and reasonable mitigation is calculated as follows;

Significance Rating (SR) = (Duration + Probability + Extent) x Severity

Duration: *Timeframe of the impact (how long will it last)*

Probability: *Likeliness (chance) of the event occurring*

Extent: *Scale of the impact (how far will the impact reach)*

Severity: *Degree to which the impacts can change the environment*

A risk rating value is assigned according to the following criteria;

Table 2: Marks Awarded to Duration

Duration	Guideline	Assigned Value
Permanent	Permanent	**10**
Long Term	As long as the facility is in operation	**7**
Medium Term	5 – 10 years	**5**
Short Term	0-4 years	**3**

Table 3: Marks Awarded for Probability

Probability	Guideline	Assigned Value
Definite	The impact will occur regardless of any prevention measures (100% probability rate)	**10**
Highly Probable	The impact is highly likely to occur (70% to 90% probability rate)	**8**
Probable	The impact is likely to occur (40% to 70% probability rate)	**6**
Improbable	The impact will occur very rarely (less than 40% of the time).	**3**
Impossible	The impact will not occur. No risk	**0**

Table 4: Marks Awarded to Extent

Extent	Guideline	Assigned Value
International	Impact will result in international impacts	**10**
National	Impact will result impact on a national scale	**9**
Regional	Impact will result impact on a provincial or regional scale	**7**
Local	Impact will result impact on a local or municipal area scale	**5**
Immediate	The impact will be localised only to the project site	**3**

Table 5: Marks Awarded to Severity

Severity	Guideline	Assigned Value
Highly Significant	Impact will cause irreversible damage	**20**
Severe	The impact will interfere with natural or social functions and processes which will be altered to the extent where they could temporarily or permanently cease	**15**
Major	The impact will interfere with natural or social functions and processes that will have to be modified in order to continue with operation.	**10**
Minor	The impact will not interfere with natural or social functions but be localised to the operational site.	**5**

Impacts without mitigation measures are not considered representative of the proposed project's actual extent of impact. The residual impact is what remains following the application of mitigation measures and is thus the final level of impact associated with the development. Residual impacts also serve as the focus of

management and monitoring activities during project implementation to verify that actual impacts are the same as those predicted in this report.

Mitigation measures are based on the mitigation sequence/hierarchy which allows for consideration of five (5) different levels, such as avoidance or prevention, minimisation, rehabilitation or restoration, offset and no-go.

The mitigation sequence or hierarchy as followed is presented in Figure 1 below.



Figure 1: Mitigation Hierarchy

Calculation of the Residual Risk Rating is calculated as follows;

Residual Risk Rating (RRR) = (Duration + Probability + Extent) x Severity – (Mitigation + Degree to which the impact can be reversed)

Mitigation: Actions taken to lessen or eliminate the negative impacts of a hazard, project, or risk.

Degree to which the impact can be reversed: *The chance that the impact can be reversed by applying mitigation measures*

Table 6: Marks Awarded to Mitigation

Mitigation	Guideline	Assigned Value
Engineering controls	A physical control or measure implemented to avoid or minimise the impact. Examples include construction and design measures	**-10%**
Administrative	Administrative measures such as procedures, policies, training or work instructions that guide and or manage the Activity	**-5%**

Table 7: Degree to which an Impact can be Reversed

Degree	Guideline	Assigned Value
High	The impact can easily be reversed by applying little effort	**-8%**
Medium	The impact can be reversed by applying effective mitigation measures	**-6%**
Low	The chance of revering the impact is low. However, by applying extensive measures the impact can be reversed.	**-4%**
None	The impact cannot be reversed	**-0%**

Any potential impact with a Risk Rating (SR) above "*medium risk*" must be assigned a mitigation measure to mitigate the identified impact. In this case, most of the impacts have been determined as a low or medium

impact, mitigation measures were however still assigned from a responsible corporate citizen and precautionary approach principal.

Impacts as well as recommended mitigation measures will be incorporated into the Environmental Management Programme (EMPr), Annexure H as part of the BAR phase of this application. Implementation will become the responsibility of the applicant.

ANTICIPATED IMPACTS AND PROPOSED MITIGATION MEASURES

Effective implementation of proposed mitigation measures will reduce the significance of the potential environmental impacts associated with the activities. Therefore, the residual risk will be lower after mitigation measures have been applied.

All identified aspects and impacts will be assessed in detail, following the methodology set out above.

ASPECTS TO BE ASSESSED AS PART OF THE IMPACT ASSESSMENT PROCESS

- Air Quality
- Waste Management
- Water and Soil Pollution
- Socio-Economics
- Traffic
- Noise
- Health and Safety
- Biodiversity and Vegetation

Briefly describe and compare the potential impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the construction phase for the various alternatives of the proposed development. This must include an assessment of the significance of all impacts.

The applicant currently owns the proposed development property and is in process of application for the rezoning and associated establishment of a township, consisting of two (2) erven. One of which will be zoned “special” which will be the allocated development area for the proposed Boutique Hotel. The second will be zoned “Private Open Space” which in turn will ensure that no future development can occur on the 1.3 ha area and that the portion of land is allocated for conservation purposes.

The proposed development of the proposed Boutique Hotel on Erf 1 of the proposed township development will consist of 20 en-suite guest bedrooms, associated communal and recreational facilities including a swimming pool, dining hall, conference venue, spa, and caretaker’s flat, together with supporting infrastructure such as parking areas, retaining structures, stormwater attenuation systems, and hard landscaping.

Proposal: Operational Phase				
Potential impacts:	**Significance rating of impacts (positive or negative):**	**Proposed mitigation:**	**Significance rating of impacts after mitigation:**	**Risk of the impact** and **mitigation not being implemented**
Construction: Air Quality				
• Temporary reduction in ambient air quality within the project area • Contribution to regional greenhouse gas emissions and climate change • Nuisance impacts to nearby receptors due to exhaust emissions, odours and dust generation activities • Generation of fugitive dust emissions due to earthmoving and construction activities	Moderate - Negative	• Construction vehicles and machinery shall be serviced and maintained in accordance with manufacturer specifications • Limit vehicle and equipment idling times when not in use. • Dust generated from earthworks and exposed surfaces shall be controlled through water spraying or other suitable dust suppression methods. • Construction materials likely to generate dust shall be covered during transport and storage • Open burning of vegetation, waste or construction material shall be strictly prohibited.	Low	Low
Construction: Waste Management				
• Littering, visual impacts and attraction of pests and vermin. • Pollution of soil, stormwater and groundwater through poor waste handling. • Hydrocarbon spills and fire hazards. • Windblown litter affecting adjacent residential properties and the retained Private Open Space. • Illegal dumping within environmentally sensitive areas.	High-Negative	• An integrated Waste Management approach based on Waste Minimization must be implemented prior to commencement of construction. Waste Minimization efforts focused on re-use, recycling and recovery of waste in terms of Section 26 of NEMWA must be implemented throughout the construction phase • Suitable receptacles must be provided for general, recyclable, green and hazardous waste. • Waste shall be removed regularly by appropriately licensed waste service providers and disposed of or recycled at authorized facilities only. • Records of all waste removed from site, including waste manifests, weighbridge tickets and disposal certificates, shall be maintained and made available during environmental audits • Hazardous substances including oils, paints, fuels	Low	Low

Proposal: Operational Phase				
Potential impacts:	**Significance rating of impacts (positive or negative):**	**Proposed mitigation:**	**Significance rating of impacts after mitigation:**	**Risk of the impact** and **mitigation not being implemented**
		and chemicals shall be stored within bunded, covered and secure areas away from drainage lines and environmentally sensitive areas. • No waste, surplus material or construction rubble shall be disposed of within the retained Private Open Space, surrounding natural vegetation or adjacent properties. • Construction areas shall be kept clean at all times. Windblown litter shall be collected daily and all waste containers shall remain covered when not in use. • Green waste generated from vegetation clearing shall be chipped for reuse where feasible or removed to an approved green waste recycling facility. The burning of vegetation is prohibited • Environmental awareness training shall be provided to all personnel regarding waste segregation, pollution prevention, spill response and housekeeping requirements.		
Construction: Water and Soil Pollution				
• Soil contamination. • Pollution of stormwater and downstream surface water resources • Sedimentation and erosion • Potential groundwater contamination • Degradation of ecological functioning within the retained Private Open Space and adjacent environmentally sensitive areas.	Moderate - Negative	• Construction vehicles, equipment and machinery that are no longer operational or are leaking fluids shall be removed from site immediately. • Construction activities shall be confined to the approved development footprint. No disturbance shall occur within the retained Private Open Space or environmentally sensitive "No-Go" areas. • Temporary erosion and sediment control measures (e.g. silt fences, berms, sediment traps and diversion channels) shall be installed before earthworks commence and maintained throughout construction. • All hydrocarbon spills, fuel leaks or chemical spills	Low	Low

Proposal: Operational Phase				
Potential impacts:	**Significance rating of impacts (positive or negative):**	**Proposed mitigation:**	**Significance rating of impacts after mitigation:**	**Risk of the impact** and **mitigation not being implemented**
		shall be contained and cleaned immediately using provided spill kits. • Contaminated soil shall be removed and disposed of at an authorised facility and records of waste removed kept on file for auditing purposes • A Spill Prevention and Emergency Response Procedure shall be implemented. Spill kits shall be readily available on site • All vehicles and or equipment must be maintained in accordance with manufacturer specifications to minimise the risk of leaks and equipment failure. • Equipment or vehicles that are not in use are to be equipped with drip trays. • Topsoil stockpiles shall be protected from erosion and shall not obstruct natural drainage paths. Exposed areas shall be stabilized as soon as practical to minimize sediment transport. • Stormwater drains shall be kept free of construction debris, cement washings, sediment and waste. Concrete batching and washout activities shall not occur where runoff may enter the stormwater system • Environmental awareness training shall be provided to all construction personnel on pollution prevention, spill response, stormwater protection and erosion control measures. • Temporary silt fences can be erected to prevent silt from the construction process, contaminating the properties to the west (downstream) of the proposed site.		
Construction: Noise				
• Temporary nuisance to neighboring residential properties and sensitive	High - Negative	• Construction activities generating excessive noise shall be limited to	Low	Low

Proposal: Operational Phase				
Potential impacts:	**Significance rating of impacts (positive or negative):**	**Proposed mitigation:**	**Significance rating of impacts after mitigation:**	**Risk of the impact** and **mitigation not being implemented**
receptors. • Occupational exposure of workers to elevated noise levels. • Disturbance to local fauna within the retained Private Open Space		normal working hours. No high-noise activities shall be undertaken outside approved working hours. • Personnel exposed to elevated noise levels shall be provided with appropriate hearing protection, and its use shall be enforced in accordance with the Occupational Health and Safety Act • Stationary plant, generators and compressors shall, where practical, be positioned away from neighboring residential properties and environmentally sensitive areas. Temporary acoustic barriers shall be utilized where required. • Construction vehicle movements shall be managed to minimize unnecessary receiving, engine braking, hooting and prolonged idling within and adjacent to the site. • An external complaints register shall be maintained. All noise-related complaints shall be investigated promptly, corrective measures implemented where necessary, and feedback provided to the complainant.		
Construction: Traffic				
• Increased traffic congestion in the immediate area and specifically Sherwell Avenue • Possible degradation of road and traffic infrastructure in the immediate area	Low - Negative	• No parking of trucks or vehicles outside the boundary of the site is permitted • All vehicles are to be road worthy and comply with the National Traffic Regulations. • Vehicles transporting raw materials, goods or waste to or from the site are not to be overloaded • All drivers are to be licensed in accordance with the vehicle and or equipment being driven	Insignificant	Low
Construction: Occupational Health and Safety				
• Personal injury • Slips, trips and falls	Moderate Negative	• All equipment used on site may only be operated by appropriately trained and /	Low	Low

Proposal: Operational Phase				
Potential impacts:	**Significance rating of impacts (positive or negative):**	**Proposed mitigation:**	**Significance rating of impacts after mitigation:**	**Risk of the impact** and **mitigation not being implemented**
• Falling objects • Vehicle and property collisions • Noise-induced hearing loss • Respiratory irritation due to dust exposure • Fire and emergency incidents • Public safety risks associated with construction activities • Unauthorized access to civilians • A site fence must be maintained to restrict unauthorized entry		or licensed personnel. • PPE and safety gear appropriate to the task being undertaken is to be provided to all site personnel (e.g., hard hats, safety boots, reflective vests, masks etc.). • Appropriate signage must be displayed on site to indicate the minimum PPE requirements for entry • Access to the site must be managed during all hours of operation		
Construction: Biodiversity and Vegetation				
• Loss of indigenous vegetation. • Habitat fragmentation • Disturbance to fauna • Introduction and spread of alien invasive plant species • Degradation of the ecological functioning of the Critical Biodiversity Area (CBA).	High Negative	• The approved development footprint shall be clearly demarcated prior to construction. No construction activities shall occur outside the approved footprint. • Vegetation clearing shall be limited to the minimum area required for construction. Clearing shall proceed progressively to minimize unnecessary disturbance • No stockpiling of construction materials, topsoil, waste, machinery or hazardous substances shall occur within the retained Private Open Space or any designated No-Go Area. • All construction personnel shall receive environmental awareness training on biodiversity protection, No-Go Areas, protected	Low	Low

Proposal: Operational Phase				
Operational Phase: Air Quality				
Potential impacts:	**Significance rating of impacts (positive or negative):**	**Proposed mitigation:**	**Significance rating of impacts after mitigation:**	**Risk of the impact** and **mitigation not being implemented**
• Generation of nuisance odors from waste storage areas. • Temporary release of Greenhouse gas emissions from the standby generator.	Low – Negative	• All standby generators shall be serviced and maintained in accordance with manufacturer specifications to minimize exhaust emissions. • Waste storage areas shall be enclosed, maintained in a clean and hygienic condition. • Waste generated shall be removed on a regular basis to prevent the generation of potential odors and possible attraction of vermin • Kitchen extraction and ventilation shall be maintained regularly to ensure efficient operation and minimized odor emissions.	Low	Low
Operational Phase: Waste Management				
• Littering, visual impacts and generation of nuisance odors • Attraction of pests and vermin. • Fire risks associated with waste accumulation. • Potential disposal of recyclable material	Moderate – Negative	• Recyclable, organic (food and garden waste) shall be separated at source using clearly labelled waste receptacles • All waste shall be removed by appropriately licensed waste service providers and transported only to authorized recycling or disposal facilities. • Waste storage areas shall be secure, covered, and well-ventilated and maintained in a clean and hygienic condition. Waste receptacles shall be clearly labelled to facilitate source separation and prevent cross-contamination. • Garden waste generated during landscape maintenance shall be chipped, composted or removed to an approved green waste recycling facility. Open burning of garden waste shall not be permitted. • Good housekeeping practices shall be maintained throughout the hotel property to prevent littering, pest infestations, odor generation and	Low	Low

		pollution. • Any illegal dumping or waste-related incidents shall be investigated and corrective actions implemented immediately.		
Operational Phase: Water and Soil Pollution				
• Contamination of soil, stormwater and groundwater • Pollution of downstream water resources through contaminated runoff. • Hydrocarbon spills and chemical leaks. • Degradation of the retained Private Open Space and surrounding environmentally sensitive areas • Sediment and pollutant transport into municipal stormwater infrastructure.	Moderate Negative	• Operations should be confined to the boundaries of the developed area. • Waste collection areas to be equipped with concreted or impermeable surfaces • Convey stormwater to the proposed attenuation pond before discharge, as per the facility's SWMP • Capture runoff through the internal piped stormwater network to prevent uncontrolled overland flow and soil erosion, as per the facility's SWMP	Low	Low
Operational Phase: Noise				
• Nuisance noise affecting neighboring residential properties. • Occupational exposure of maintenance personnel to elevated noise levels. • Temporary increases in noise during maintenance activities	Moderate Negative	• Activities likely to generate elevated noise levels, including maintenance works, landscaping and refuse collection, shall be restricted to normal operating hours where reasonably practicable. Outdoor events and functions shall comply with approved operating hours and applicable municipal requirements. • Employees undertaking maintenance activities involving elevated noise levels shall be provided with appropriate hearing protection and other required PPE in accordance with the Occupational Health and Safety Act. • An external complaints management procedure and complaints register shall be maintained. All noise-related complaints shall be investigated promptly, corrective actions implemented where necessary, and feedback provided to the complainant.	Low	Low
Operational Phase: Health and Safety				
• General Occupation exposures • Site fires	Low - Negative	• Suitable and sufficient fire-fighting equipment shall be provided throughout the hotel, including guest	Low	Low

		accommodation, kitchens, conference facilities, plant rooms and service areas. Fire equipment shall be inspected, serviced and maintained by a competent service provider. • Emergency evacuation procedures shall be implemented and displayed as per relevant guidelines. Fire drills and emergency response training shall be conducted regularly for all employees as per relevant guidelines • Adequate first aid equipment and trained first aid personnel should be available at all times. • All incidents, injuries shall be recorded and managed in accordance with the OHSA		
Operational Phase: Biodiversity and Vegetation				
• Disturbance of indigenous vegetation • Introduction and spread of alien invasive plant species. • Encroachment into the retained Private Open Space and environmentally sensitive areas. • Long-term degradation of the ecological functioning of the Critical Biodiversity Area (CBA).	High - Negative	• The retained Private Open Space and all environmentally sensitive areas shall remain protected throughout the operational life of the development. No infrastructure, storage of materials, dumping or unauthorized access shall be permitted within designated No-Go Areas. • Existing demarcation, fencing and signage identifying environmentally sensitive areas and No-Go Areas shall be maintained in good condition and repaired where necessary. • Landscaping shall utilize indigenous, locally occurring and water-wise plant species compatible with the surrounding Egoli Granite Grassland vegetation. • Irrigation systems shall be managed efficiently to maintain landscaped areas while avoiding excessive runoff, erosion or unnecessary water consumption.	Low	Low
Operational Phase: Ownership and Responsibility				
• Non-compliance with the conditions of the Environmental Authorization (EA) and approved Environmental Management Program (EMPr).	Low Negative	• Where ownership of the property or management of the development changes, the Competent Authority shall be notified and any required amendment to the	Low	Low

• Failure to clearly assign environmental responsibilities following changes in ownership, management or operation of the development. • Regulatory non-compliance resulting from failure to notify the Competent Authority of changes requiring amendment to the Environmental Authorization. • Reduced environmental performance and ineffective environmental management throughout the construction and operational phases of the development		Environmental Authorization shall be submitted in accordance with the Environmental Impact Assessment Regulations. • All contractors, operators and future property managers shall be provided with a copy of the approved Environmental Authorization and EMPr and shall be made aware of their environmental responsibilities before commencing any activities.		
Operational Phase: Safety and Security				
• Personal injury or illness to guests, employees, contractors or visitors. • Fire, spills, environmental contamination and other emergency incidents. • Unauthorized access, theft, vandalism and criminal activity • Exposure to hazardous substances • Non-compliance with health, safety and environmental legislation.	Low – Negative	• Maintain and regularly update emergency procedures, emergency contact details, responsible personnel and evacuation plans. Updated information shall be communicated to all relevant personnel. • Maintain emergency signage, evacuation plans, fire escape signage and hazard warning signs in good condition. • Conduct regular emergency response exercises, including fire evacuation drills, first aid response and spill response training, to evaluate the effectiveness of emergency procedures and identify opportunities for continual improvement. • Maintain records of all safety incidents, emergency events, training, inspections and monitoring activities for auditing purposes and to demonstrate compliance with the Environmental Authorization and approved EMPr	Low	Low
Operational Phase: Ecologically Sensitive and Flora Management				
• Disturbance or damage to indigenous vegetation and ecological habitats. • Disturbance to fauna utilizing the retained Private Open Space. • Introduction and spread of alien invasive plant species. • Degradation of the ecological integrity of the retained conservation area due to inappropriate landscaping or	High – Negative	• Indigenous plant species appropriate to the local Egoli Granite Grassland vegetation type shall be utilized within landscaped areas wherever practicable to promote biodiversity and reduce water requirements • The retained Private Open Space and environmentally sensitive areas shall be protected from unauthorized access,	Low	Low

maintenance activities. • Fire risk associated with uncontrolled ignition sources		vegetation disturbance, dumping and inappropriate recreational activities • No dumping of garden refuse, construction materials, waste or hazardous substances shall be permitted within the retained Private Open Space or landscaped areas • Any damage to indigenous vegetation or environmentally sensitive areas resulting from operational activities shall be rehabilitated as soon as reasonably practicable using indigenous vegetation appropriate to the surrounding ecosystem		
Operational Phase: Faunal Management				
• Disturbance and displacement of indigenous fauna due to routine hotel operations and human activity. • Injury or mortality of fauna resulting from vehicle movements within the development. • Disturbance of reptiles, birds and small mammals during landscape maintenance and routine maintenance activities. • Loss or degradation of habitat resulting from inappropriate maintenance or encroachment into the retained Private Open Space • Increased human-wildlife interactions leading to disturbance, injury or displacement of indigenous fauna. • Disturbance to nocturnal fauna resulting from external lighting and increased night-time activity.	High – Negative	• Vehicle movement shall be restricted to designated parking areas and approved access routes. No off-road driving shall be permitted within the retained Private Open Space or environmentally sensitive areas • Guests, staff and contractors shall not intentionally disturb, capture, feed, hunt or harm indigenous fauna occurring within the retained Private Open Space or landscaped areas. Appropriate signage shall be installed where necessary • Any injured or distressed wildlife encountered on-site shall be reported immediately to the Hotel Manager and, where required, an appropriately qualified wildlife rehabilitator or conservation authority shall be contacted for assistance. • Outdoor lighting shall be appropriately directed and maintained to minimize unnecessary disturbance to nocturnal fauna within the retained Private Open Space.	Low	Low
Operational Phase: Stormwater Management				
• Pollution of stormwater runoff due to litter, hydrocarbons, cleaning chemicals or other contaminants. • Localized flooding resulting	**High – Negative**	• Stormwater infrastructure shall be kept free of litter, sediment, vegetation and other debris that may obstruct the natural flow of stormwater or reduce	Low	Low

from blocked, damaged or poorly maintained stormwater infrastructure. • Soil erosion and sediment transport from landscaped areas, embankments and stormwater discharge points. • Damage to stormwater attenuation infrastructure reducing its effectiveness. • Degradation of the ecological integrity of the retained Private Open Space and surrounding environmentally sensitive areas due to uncontrolled stormwater discharge. • Increased maintenance requirements and potential damage to hotel infrastructure resulting from ineffective stormwater management		system capacity. • Landscaping and maintenance activities shall be undertaken in a manner that promotes infiltration, minimizes sediment transport and protects the integrity of the approved stormwater management system • Oils, fuels, cleaning chemicals, waste, garden refuse and other pollutants shall not be discharged into the stormwater drainage system. • All stormwater shall be captured through a piped internal stormwater network within the development, which will then be conveyed to the outlet point from the attenuation pond, as per requirements in the SWMP		
Operational Phase: Visual Impact Management				
• Light pollution affecting neighboring properties and environmentally sensitive areas. • Degradation of the visual character of the site due to poor housekeeping, litter or inadequate maintenance. • Establishment and spread of alien invasive plant species • Visual impacts from the development impacting the aesthetic of the area	Moderate - Negative	• External lighting shall be directed downward and shielded where practicable to minimized light spill onto adjacent properties and the retained Private Open Space • Energy-efficient lighting, including LED luminaires or equivalent technology, shall be utilized throughout the development wherever practicable to minimized electricity consumption and greenhouse gas emissions. • Landscaped areas shall be maintained using predominantly indigenous vegetation suited to local climatic conditions. Dead or damaged vegetation shall be replaced where necessary to maintain the visual quality of the site • The site, parking areas, landscaped areas and surrounding open spaces shall be kept free of litter and waste. Routine housekeeping and litter collection shall be undertaken to maintain a high standard of cleanliness	Low	Low
Operational Phase: Traffic				
• Noise nuisance resulting from vehicle movements and	Low - Negative	• All guests, staff, contractors and service	Low	Low

unnecessary hooting.		providers shall utilize designated access routes and parking areas. Unauthorized vehicle access into landscaped or environmentally sensitive areas shall be prohibited • Unnecessary hooting and reckless driving within the property shall be prohibited to minimized noise disturbance to guests and neighboring properties. • Delivery vehicles, refuse collection vehicles and service providers shall utilize designated loading and service areas and, where practicable, deliveries shall be scheduled outside peak guest activity periods		
Operational Phase: Socio-Economic				
• Positive contribution to local employment and economic development. • Increased demand for local goods and services, benefiting the local economy. • Increased local socio-economic benefits where local employment and procurement opportunities are maximized • Heightened tax benefit due to increased property value and associated taxes	Positive	• Preference shall, where practicable, be given to local suppliers, contractors and service providers for the procurement of goods and services. • Employment opportunities shall where possible be given to local residents		Low

Alternative 1: Location Alternative

The proposed development site was not selected from a number of potential properties but rather represents a site that is already available to the Applicant for the intended development.

The Applicant's development objective is specifically to establish a Boutique Hotel on Portion 556 of the Farm Boschkop 199-IQ, situated at 122 Sherwell Avenue, Boskruin, Randburg.

The environmental assessment has therefore focused on determining whether the proposed development can be undertaken responsibly on this property, rather than identifying an alternative property elsewhere within Johannesburg.

The investigation of alternative locations was not considered reasonable or feasible for the following reasons:

- The Applicant is the registered owner of the subject property and has secured the necessary rights to pursue the proposed development on this land.
- The proposal is intrinsically linked to the ongoing township establishment application, which has been specifically prepared for this property and provides a planning framework that separates the development footprint from a dedicated conservation area.
- The acquisition and assessment of alternative properties would require new land negotiations, separate planning processes, independent environmental investigations and additional statutory approvals, which fall outside the purpose and scope of the current application.
- The Basic Assessment process is intended to determine whether the proposed activity can be authorised at the preferred site through appropriate avoidance, mitigation and management measures, rather than to require an applicant to identify or purchase alternative land where no reasonable or feasible alternative exists.

Furthermore, the property has been subjected to a comprehensive environmental assessment, including specialist investigations and consideration of the applicable legislative and planning framework. The assessment has informed the design of the proposed development, resulting in a layout that deliberately limits development to Erf 1 while retaining Erf 2 as Private Open Space for conservation purposes.

The mandatory No-Go Alternative has also been assessed as part of the Basic Assessment process. Under the No-Go Alternative, the proposed boutique hotel would not be developed, and the property would remain in its current state. While this option would avoid the direct environmental impacts associated with construction, it would also forego the anticipated socio-economic benefits of the development, including employment creation, investment, tourism opportunities and the formal protection of a portion of the property through the establishment of Erf 2 as Private Open Space. The No-Go Alternative therefore serves as the benchmark against which the impacts and benefits of the proposed development have been assessed.

It is therefore concluded that the consideration of alternative geographical locations would not have been reasonable or practicable in the circumstances of this application. The environmental assessment has instead appropriately focused on determining whether the proposed boutique hotel can be developed on the Applicant's property in an environmentally responsible manner and on identifying the preferred development footprint and mitigation measures required to minimise environmental impacts.

An alternative location was therefore not considered further.

No-Go

The No-Go Alternative represents the scenario where the proposed Boutique Hotel does not proceed, and the property remains under its existing land use or previously supported low-density development approach. This alternative would avoid additional environmental impacts on the site's sensitive areas, including the CBAs, ESAs and Private Open Space. However, the employment, investment and other socio-economic benefits associated with the Boutique Hotel would not be realized.

No-Go Alternative

Potential impacts:	**Significance rating of impacts (positive or negative):**	**Proposed mitigation:**	**Significance rating of impacts after mitigation:**	**Risk of the impact and mitigation not being implemented**
• Loss of direct and indirect employment opportunities during construction and operation. • Loss of skills development and training opportunities for local communities • Reduced economic growth and investment within the local area.	Severe – Negative	• Explore alternative development or investment opportunities on the local area that may contribute to local job creation. • Explore alternative development or investment opportunities on the local area that may contribute to local job creation.	Severe – Negative	High

• Possible encroachment of alien invasive species into the Boschkop Nature Reserve due to lack of vegetation maintenance and implementation of control measures from the residential property • Inaccurate zoning of the property may result in the potential for future encroachment into the Boschkop Nature Reserve along the portion of the proposed site which may result in unofficial or unregulated development within the 1.3 ha which would otherwise be protected.	High – Negative	• None	High – Negative	High
• Sedimentation of municipal storm water infrastructure downstream of the site due to lack of storm water control implementation that would have been associated with the development of the site	Severe – Negative	• None - Without prior approval, no further development within the designated site will be authorized. Restricting possible upgrades to existing infrastructure	Severe – Negative	High
• Positive impact through the avoidance of construction and operational noise impacts.	Moderate – Negative	• No mitigation required. Existing ambient noise conditions will be maintained	Moderate – Negative	High
• Positive impact through the avoidance of additional traffic volumes and associated road impacts	Positive	• No mitigation required. Existing traffic conditions will remain unchanged.	Positive	Not Applicable
• Positive impact through the avoidance of construction-related injuries, dust exposure, noise exposure and other occupational risks	Positive	• No mitigation required. Construction-related occupational health and safety risks will not arise.	Positive	Not Applicable
• Positive impact through the avoidance of construction dust, vehicle emissions and increased energy consumption	Positive	• No mitigation required. Existing air quality conditions will remain unchanged, and no additional emissions will be generated.	Positive	Not Applicable
• Positive impact through the avoidance of habitat disturbance and loss of indigenous vegetation	Positive	• None	Positive	Not Applicable

List any specialist reports that were used to fill in the above tables. Such reports are to be attached in the appropriate Appendix.

Stormwater Management Plan (**Annexure G**)
Biodiversity Impact Assessment (**Annexure G**)

Describe any gaps in knowledge or assumptions made in the assessment of the environment and the impacts associated with the proposed development.

No significant gaps in knowledge were identified that are considered likely to prevent an informed assessment of the proposed development. The assessment was undertaken using available project information, site observations, applicable spatial datasets, previous environmental information and specialist studies, including the Biodiversity Impact Assessment and Stormwater Management Plan.

Certain assumptions and limitations nevertheless apply. The impact assessment is based on the current proposed development layout and footprint, and it is assumed that the final detailed design will remain

substantially consistent with the layout assessed. It is further assumed that the mitigation and management measures contained in the BAR, specialist recommendations and EMPr will be implemented throughout construction and operation. The significance ratings therefore represent the anticipated impacts based on the information available at the time of assessment and the effective implementation of prescribed mitigation measures. The BAR applies a standardized methodology considering factors including duration, probability, extent and severity to determine impact significance.

With regard to biodiversity, the assessment confirmed that no floral or faunal Species of Conservation Concern (SCC), threatened, endangered or protected species were present within the proposed development footprint. However, the site occurs within the Endangered Egoli Granite Grassland ecosystem and a mapped Critical Biodiversity Area, and there remains a possibility that fauna or flora not detected during the field survey could occur on the property. The assessment therefore assumes that appropriate precautionary measures will be implemented should protected species or SCC be encountered during construction. The specialist assessment also found no evidence of significant breeding sites, migration corridors or habitat critical for SCC within the development footprint.

GAPA 4 data was unavailable, and GAPA 5 data obtained from the Gauteng Department of Environment was therefore used to inform the agricultural potential assessment and spatial analysis.

Finally, the Public Participation Process is ongoing at the draft BAR stage. Consequently, additional environmental or community concerns may still be identified through comments from Interested and Affected Parties and commenting authorities. These comments, together with the EAP's responses, will be incorporated into the Final BAR and may result in refinement of the assessment or mitigation measures where necessary.

3. IMPACTS THAT MAY RESULT FROM THE DECOMISSIONING AND CLOSURE PHASE

Briefly describe and compare the potential impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the decommissioning and closure phase for the various alternatives of the proposed development. This must include an assessment of the significance of all impacts.

Proposal

Potential impacts:	**Significance rating of impacts(positive or negative):**	**Proposed mitigation:**	**Significance rating of impacts after mitigation:**	**Risk of the impact** and **mitigation not being implemented**
Decommissioning: Air Quality				
• Temporary deterioration in local air quality due to dust, exhaust emissions and greenhouse gas emissions; nuisance dust affecting neighboring residential properties	Moderate - Negative	• Apply dust suppression measures (e.g. water spraying) where required • Maintain good housekeeping and remove demolition waste regularly • Minimize vehicle and equipment idling times • Service and maintain demolition equipment and vehicles regularly • Use fuel-efficient machinery and equipment where feasible or alternatively promote the use of low sulphur containing fuels • Open burning of waste or vegetation is prohibited • Gas cutting and or grinding must be undertaken in well-ventilated areas or in open air	Insignificant	Low
Decommissioning: Waste Management				

• Littering, visual impacts on surrounding landowners and occupants • Visual degradation of the site leading to nuisance conditions to surrounding land users • Risk of hydrocarbon spills, leaks & site fires when decommissioning machinery and equipment	High – Negative	• Waste to be removed from site with the purpose of recycling, recovery, treatment and or disposal by licensed service providers • Waste removed for the purpose of recycling recovery, treatment or disposal is only to be diverted to licensed facilities authorized to accept the waste for the intended recycling, recovery, treatment or disposal. • Contractors shall be inducted on the approved EMPr and Closure Plan • Waste generated during the decommissioning phase is to be separated at source in order to limit cross contamination between general and hazardous waste	Moderate	Low
Decommissioning: Water and Soil Pollution				

• Soil, surface water and potentially ground water contamination • Potential storm water contamination • Machinery malfunction posing a risk of hydrocarbon spills or leaks leading to soil or potential surface water or storm water contamination	Moderate – Negative	• Concrete or impermeable surfaces are to be kept intact as far as reasonably possible before being removed as part of decommissioning operations • A spill response procedure is to be implemented throughout the decommissioning phase • A spill response kit to be kept on site and used for the cleanup of spills as and when they occur • An incident register must be maintained throughout the decommissioning phase • Vehicles and equipment stored on site for periods exceeding 24 hours are to be equipped with drip trays • Use of drip trays a, tarps and absorbent material must be promoted and kept on hand when manually decommissioning or disassembling equipment and or machinery that may contain hydrocarbon fluids or hydraulics • Vehicles and equipment used for decommissioning activities must be well maintained and serviced in accordance with manufacturer specifications	Low	Low
Decommissioning: Noise				
• Personal exposure to high noise levels over an extended period of time leading to noise induced hearing loss • Nuisance conditions to surrounding landowners and occupants due to high noise levels during the decommissioning phase	High – Negative	• Decommissioning activities are to be restricted to normal operating hours maintained by the Boutique Hotel • All personnel undertaking high noise activities or that are working in high noise areas must be equipped with appropriate hearing protection. • Employees are to be made aware of noise induced hearing loss and appropriate prevention measures • An external complaints register is to be maintained and all complaints relating to excessive noise recorded and appropriately addressed before feedback is provided to the complaining party	Moderate	Low
Decommissioning: Socio Economic				

• Loss of employment opportunities when site closes	High - Negative	• Engagement with employees in advance whilst following legal requirements.	**High**	**Low**

No-Go

Potential impacts:	**Significance rating of impacts(positive or negative):**	**Proposed mitigation:**	**Significance rating of impacts after mitigation:**	**Risk of the impact and mitigation not being implemented**
Decommissioning: Air Quality				
• Temporary deterioration in local air quality due to dust, exhaust emissions and greenhouse gas emissions; nuisance dust affecting neighboring residential properties	Moderate – Negative	• Apply dust suppression measures (e.g. water spraying) where required • Maintain good housekeeping and remove demolition waste regularly • Minimize vehicle and equipment idling times • Open burning of waste or vegetation is prohibited	Low	Moderate
Decommissioning: Waste Management				
• Littering, visual impacts on surrounding landowners and occupants • Visual degradation of the site leading to nuisance conditions to surrounding land users	High – Negative	• Waste removed for the purpose of recycling recovery, treatment or disposal is only to be diverted to licensed facilities authorized to accept the waste for the intended recycling, recovery, treatment or disposal. • Waste generated during the decommissioning phase is to be separated at source in order to limit cross contamination between general and hazardous waste	Moderate	High
Decommissioning: Water and Soil Pollution				

• Soil, surface water and potentially ground water contamination • Potential storm water contamination • Machinery malfunction posing a risk of hydrocarbon spills or leaks leading to soil or potential surface water or storm water contamination	Moderate – Negative	• Concrete or impermeable surfaces are to be kept intact as far as reasonably possible before being removed as part of decommissioning operations • A spill response kit to be kept on site and used for the cleanup of spills as and when they occur • Vehicles and equipment stored on site for periods exceeding 24 hours are to be equipped with drip trays	Low	Moderate
Decommissioning: Noise				
• Personal exposure to high noise levels over an extended period of time leading to noise induced hearing loss • Nuisance conditions to surrounding landowners and occupants due to high noise levels during the decommissioning phase	High – Negative	• Decommissioning activities are to be restricted to normal operating hours maintained by the Boutique Hotel • All personnel undertaking high noise activities or that are working in high noise areas must be equipped with appropriate hearing protection. • Employees are to be made aware of noise induced hearing loss and appropriate prevention measures • An external complaints register is to be maintained and all complaints relating to excessive noise recorded and appropriately addressed before feedback is provided to the complaining party	Moderate	Low
Decommissioning: Socio Economic				

• Loss of employment opportunities when site closes	High – Negative	• Engagement with employees in advance whilst following legal requirements.	High	Low

List any specialist reports that were used to fill in the above tables. Such reports are to be attached in the appropriate Appendix.

Not Applicable

No Specialist reports were used for the Decommissioning phase impact assessment.

The Boutique Hotel is intended to operate on a long-term basis, and there are currently no plans for closure or decommissioning.

Where applicable indicate the detailed financial provisions for rehabilitation, closure and ongoing post decommissioning management for the negative environmental impacts.

Not yet Available

4. CUMULATIVE IMPACTS

Describe potential impacts that, on their own may not be significant, but is significant when added to the impact of other activities or existing impacts in the environment. Substantiate response:

Potential cumulative impacts were identified by considering the impacts associated with the proposed Boutique Hotel Development together with the existing residential character, ongoing development and environmental sensitivities within the surrounding Boskruin area. While several impacts associated with the development are individually rated as Low or Insignificant following mitigation, their combined effect with existing and future activities in the surrounding area could result in cumulative impacts if not appropriately managed. The assessment identifies construction-related impacts associated with air quality, waste, water and soil pollution, noise, traffic, health and safety, and biodiversity, as well as a broader range of operational impacts.

Potential cumulative impacts include:

Biodiversity and habitat loss: Continued urban development and residential densification within Boskruin may cumulatively reduce remaining natural habitat and ecological connectivity. This is particularly relevant given the site's association with a Critical Biodiversity Area (CBA) and the retained Private Open Space. The proposed development could contribute to cumulative vegetation disturbance, habitat fragmentation, faunal disturbance and the spread of alien invasive species if development extends beyond the approved footprint. During operation, encroachment and inappropriate management could further contribute to long-term degradation of the CBA.

The establishment of the proposed township and demarcation of the eastern portion of the property for conservation purposes counteracts the negative impact, by supporting local conservation efforts whilst also providing much needed development and investment opportunity in the area.

Traffic and noise: Construction vehicles and, subsequently, vehicles associated with guests, employees, deliveries and service providers may add to existing traffic and noise levels within the surrounding residential area. Construction activities may temporarily increase congestion along Sherwell Avenue and contribute to deterioration of local road infrastructure. Operational vehicle movements, outdoor activities, maintenance and refuse collection could cumulatively increase background noise when considered with existing residential and traffic-related noise.

Appropriate fleet management and maintenance of access controls to and from the development site and proposed Boutique Hotel will however reduce overall risk and impact which will finally fall within a allowable and manageable threshold.

Air quality: The generation of fugitive dust emissions especially during the construction and development phase is considered to be the highest risk of impact to the local areas air quality. Overall contribution of relevant vehicles and equipment which rely on fossil fuels as energy sources may also contribute to localized greenhouse gas emissions on a lower scale.

Appropriate management and implementation of dust suppression measures will reduce possible impact and can easily be maned during the construction phase.

Stormwater, soil and water quality: Increased development and hard surfaces within the broader area may cumulatively increase stormwater runoff and pollutant loads entering municipal drainage infrastructure. Poorly managed runoff from the development could contribute to erosion, sediment transport, contamination and degradation of the retained Private Open Space. The operational assessment specifically identifies contaminated runoff, localized flooding, erosion and potential degradation of environmentally sensitive areas as relevant risks.

As part of the development relevant measures are recommended and will be implemented to ensure that on site storm water controls align with industry standard. AS such a storm water management plan was developed which forms part of the development designs and must be implemented to ensure continued management of storm water controls on site.

Waste: Construction waste and the ongoing generation of general, recyclable, organic and garden waste during the operational phase was assessed. Poor waste management could cumulatively contribute to litter, nuisance odors, pests and increased demand for waste collection and disposal infrastructure. Appropriate waste management measures have, however, proven successful in teh at source reduction of waste generated as well as the promotion of appropriate recycling or re-use efforts. By implementing associated waste reduction strategies throughout each phase of the proposed development, the potential for waste disposal to land is appropriacy reduced.

Visual and light impacts: The introduction of hotel infrastructure, external lighting and increased night-time activity may contribute to the gradual change in the visual character of the surrounding residential area. When combined with other development, external lighting could also contribute to cumulative light pollution affecting neighboring properties and environmentally sensitive areas. By implementing the recommended mitigation measures as set out in terms of the EMPr, the overall impacts associated with light pollution and or possible visual impacts will be reduced.

Socio-economic impacts: The proposed development is expected to contribute positively to cumulative socio-economic conditions through employment creation, increased demand for local goods and services, local procurement and increased municipal tax revenue associated with the development and increased property value.

Overall, the cumulative impacts are not expected to result in unacceptable environmental effects provided that development remains within the approved footprint, the Private Open Space is protected, and the mitigation measures contained in the BAR, specialist recommendations, Stormwater Management Plan and EMPr are effectively implemented. Particular emphasis should be placed on biodiversity protection, stormwater management, traffic and noise control, waste management and preventing encroachment into environmentally sensitive areas

5. ENVIRONMENTAL IMPACT STATEMENT

Taking the assessment of potential impacts into account, please provide an environmental impact statement that sums up the impact that the proposal and its alternatives may have on the environment after the management and mitigation of impacts have been taken into account with specific reference to types of impact, duration of impacts, likelihood of potential impacts actually occurring and the significance of impacts.

Proposal

Based on the impact assessment undertaken for the proposed Boutique Hotel Development, the project is expected to result in a combination of temporary construction-related impacts and longer-term operational impacts. During construction, the principal potential negative impacts relate to air quality and dust, waste generation, soil and water pollution, noise, traffic, health and safety, and biodiversity and vegetation disturbance. Prior to mitigation, these impacts are generally assessed as moderate to high, with the prescribed management measures reducing them predominantly to low significance. Construction impacts are expected to be temporary and largely localised to the development site and immediate surroundings, with a high degree of reversibility following completion of construction.

During the operational phase, potential negative impacts include nuisance dust and emissions, waste generation, contamination of soil and stormwater, noise, health and safety risks, traffic, light and visual impacts, and disturbance of biodiversity and fauna. Particular consideration is required for the protection of the retained Private Open Space and Critical Biodiversity Area (CBA) from encroachment, alien invasive species and long-term ecological degradation. Operational impacts are longer-term and, given the intended lifespan of the Boutique Hotel, may persist for the duration of the development. However, following implementation of the proposed mitigation measures, the assessed operational impacts are

predominantly reduced to Low significance, indicating that significant adverse environmental effects are unlikely where the EMPr and specialist recommendations are effectively implemented.

The development will also result in positive socio-economic impacts, including local employment, increased demand for local goods and services, procurement opportunities and increased municipal revenue associated with the increased property value and applicable taxes. These benefits are expected to continue throughout the operational life of the Boutique Hotel.

The No-Go Alternative would avoid the additional environmental impacts associated with construction and operation of the Boutique Hotel and would provide the residents a degree of avoidance of disturbance to the site's environmentally sensitive areas. However, it would also result in the loss of the anticipated employment, investment, local procurement and other socio-economic benefits associated with the proposal. These alternatives were therefore not considered reasonable and feasible for further detailed impact assessment.

Overall, the Preferred Alternative is considered to provide the most appropriate balance between environmental protection and the social and economic benefits of the development. Although some impacts are likely to occur, their spatial extent is predominantly site-specific to local, construction impacts are generally short-term and reversible, and operational impacts are long-term but manageable. Following implementation of the prescribed mitigation and management measures, the likelihood of impacts resulting in significant environmental harm is considered low, with residual negative impacts predominantly falling within the Low or Insignificant significance categories. On this basis, the proposed Boutique Hotel is considered environmentally acceptable, provided that development is restricted to the approved footprint, the retained Private Open Space is protected, and all mitigation measures contained in the BAR, specialist recommendations and EMPr are implemented and monitored throughout the project lifecycle

Alternative 1: Location Alternative

The Location Alternative considered the development of the Boutique Hotel on an urban infill/brownfield site within the Randburg commercial node. Although potentially feasible and likely to reduce certain environmental risks, it would require the acquisition of an alternative property and would not support the Applicant's objective of expanding the existing hospitality operations. The alternative was therefore not considered reasonable and feasible and was not subjected to detailed impact assessment.

Alternative 2: No – Go Alternative

The No-Go Alternative represents the scenario where the Boutique Hotel does not proceed, and the property remains under its existing land use or previously supported low-density development approach. Although this would avoid environmental impacts directly associated with the proposed development, the anticipated social and economic benefits would not be realised.

Restriction of authorised development or upgrades to the property due to conservation efforts also pose a long term risk as existing storm water control issues will continue and increase in severity. Local landscaping will also continue without any precautionary measures, increasing the risk of encroachment of alien invasive species into the declared CBA Area.

Lastly, the rejection of the proposed township development which is in process concurrently with this application will result in the property's "Agricultural" zoning to remain. As such, it increases the risk of future developers to apply for alternative zoning of the entire property which in turn will result in significant loss of habitat.

6. IMPACT SUMMARY OF THE PROPOSAL OR PREFERRED ALTERNATIVE

For proposal:

The Preferred Alternative entails the development and operation of the proposed Boutique Hotel within the designated development portion of the property. Potential impacts during construction include dust and emissions, waste generation, soil and water pollution, noise, traffic, health and safety risks, and biodiversity disturbance. Following implementation of the prescribed mitigation measures, construction impacts are generally reduced to Insignificant significance

During operation, potential impacts relate primarily to waste, noise, water and soil pollution, biodiversity and vegetation, fauna, safety and security, stormwater, visual impacts and traffic. These impacts are

generally assessed as Low following mitigation. The proposal will also result in positive socio-economic benefits, including employment opportunities, increased demand for local goods and services, local procurement and increased municipal revenue. The approval of the proposed establishment of the township consisting of two (2) erven will further promote relevant conservation efforts in the area as an additional 1.3 ha of land will be zoned as “Private Open Space” and will form part of the larger footprint of the Boschkop Nature Reserve to the east of the property. Appropriate demarcation of the proposed development footprint limits encroachment into the protected area all together.

The development, if approved will provide in essence, more ecological support in terms of monitoring and management of the development, ensuring that overall impact on the eastern portion of the property and associated CBA area is limited.

For alternative:

The Location Alternative and compulsory No-Go Alternative were considered during the alternatives assessment but were not subjected to detailed impact assessment as they were not considered reasonable and feasible alternatives for further consideration. The Location Alternative would require acquisition and development of another property and would not meet the Applicant's objective of expanding the existing hospitality operations at the current property. The No-Go Alternative would avoid impacts associated with the proposed development but would also prevent the anticipated social and economic benefits of the Boutique Hotel from being realized.

Having assessed the significance of impacts of the proposal and alternative(s), please provide an overall summary and reasons for selecting the proposal or preferred alternative.

The Preferred Alternative was selected as it provides the most appropriate balance between environmental protection, social benefit and economic development. The layout concentrates development within the designated development portion of the property while retaining the environmentally sensitive area as Private Open Space, thereby limiting unnecessary disturbance and providing for the continued protection of ecological features.

The impact assessment demonstrates that, with appropriate mitigation, the majority of negative impacts associated with construction can be reduced to Insignificant significance, while operational impacts are generally reduced to Low significance. The proposal also provides longer-term positive socio-economic benefits through employment, local procurement, investment and increased municipal revenue. On this basis, the Preferred Alternative is considered environmentally acceptable, provided that the mitigation measures contained in the BAR, specialist recommendations and EMPr are effectively implemented and monitored.

7. SPATIAL DEVELOPMENT TOOLS

Indicate the application of any spatial development tool protocols on the proposed development and the outcome thereof.

The proposed development was assessed using a range of applicable spatial development and environmental planning tools to inform the site assessment and project design. The City of Johannesburg GeoLIS Web Map Application was utilised to verify property boundaries, zoning, cadastral information and other relevant spatial planning datasets. In addition, the Department of Forestry, Fisheries and the Environment (DFFE) Environmental Screening Tool was used to identify the environmental sensitivities associated with the site and determine the specialist assessment requirements for the proposed development.

The Gauteng Agricultural Potential Atlas (GAPA 5), obtained from the Gauteng Department of Environment (GDEnv), was consulted to evaluate the agricultural potential of the site, while the GAPA 4 dataset was unavailable. The GAPA 5 spatial data was used to fulfil the reporting requirements of the Basic Assessment process

Furthermore, supplementary Geographic Information System (GIS) datasets for Gauteng were obtained from the Agricultural Geo-referenced Information System (AGIS) to support the preparation of environmental sensitivity maps and the spatial analysis undertaken as part of the assessment.

8. RECOMMENDATION OF THE PRACTITIONER

Is the information contained in this report and the documentation attached hereto sufficient to make a decision in respect of the activity applied for (in the view of the Environmental Assessment Practitioner as bound by professional ethical standards and the code of conduct of EAPASA).	YES X	

If "NO", indicate the aspects that require further assessment before a decision can be made (list the aspects that require further assessment):

Not Applicable

If "YES", please list any recommended conditions, including mitigation measures that should be considered for inclusion in any authorisation that may be granted by the competent authority in respect of the application:

It is recommended that all mitigation, management, monitoring and environmental control measures outlined in the Environmental Management Program (EMPr) be incorporated as conditions of the Environmental Authorization, where applicable. The EMPr provides the measures required to avoid, minimize and manage environmental impacts throughout the construction, operational and decommissioning phases of the proposed development. Compliance with the approved EMPr should therefore be maintained for the duration of the project, together with the recommendations and conditions arising from the applicable specialist studies and Environmental Authorization.

9. THE NEEDS AND DESIREBILITY OF THE PROPOSED DEVELOPMENT (as per notice 792 of 2012, or the updated version of this guideline)

The proposed development is considered both needed and desirable as it builds on the established hospitality use of the property and will provide additional accommodation, conferencing and recreational facilities within a well-established urban area. The zoning application identifies ongoing residential densification and a corresponding planning need for additional hospitality facilities within Boskruin and the broader northern Johannesburg area. The development will therefore support tourism and business travel while making efficient use of existing municipal infrastructure and services.

The proposed Boutique Hotel represents appropriate infill development on a serviced property within the City of Johannesburg's identified Consolidation Zone. The surrounding area is characterised predominantly by residential uses, with existing guest houses, commercial centres and community facilities nearby. The development is therefore considered compatible with the surrounding land-use pattern and will contribute to land-use diversification without promoting outward urban expansion.

Development will be concentrated on the approximately 1.42 ha "Special" erf, while approximately 1.30 ha of the property will be retained as "Private Open Space" to protect the Boskruin Ridge and associated natural environment. Existing roads, water and sewerage infrastructure can accommodate the proposed development, while the planned internal stormwater network and attenuation pond will manage increased runoff. Applicable development controls, including building lines, height restrictions, landscaping requirements and on-site parking, will further promote compatibility with neighbouring properties.

The development will contribute positively to the local and regional economy through private investment in the tourism and hospitality sector. Temporary employment opportunities will be created during construction, while permanent employment will be generated during operation through hotel management, administration, maintenance, housekeeping, security and hospitality-related services. Indirect benefits will include the procurement of local goods and services, increased patronage of surrounding businesses, payment of municipal service contributions and property rates, and support for sustainable economic development within the City of Johannesburg.

10. THE PERIOD FOR WHICH THE ENVIRONMENTAL AUTHORISATION IS REQUIRED
(CONSIDER WHEN THE ACTIVITY IS EXPECTED TO BE CONCLUDED)

10 Years

11. ENVIRONMENTAL MANAGEMENT PROGRAMME (EMPr) (must include post construction monitoring requirements and when these will be concluded.)

If the EAP answers "Yes" to Point 7 above then an EMP is to be attached to this report as an Appendix

EMPr attached	Appendix H

SECTION F: APPENDIXES

The following appendixes must be attached as appropriate (this list is inclusive, but not exhaustive):

It is required that if more than one item is enclosed that a table of contents is included in the appendix

Appendix A: Site plan(s) – *(must include a scaled layout plan of the proposed activities overlain on the site sensitivities indicating areas to be avoided including buffers)*

Appendix B: Photographs

Appendix C: Facility illustration(s)

Appendix D: Route position information

Appendix E: Public participation information

Appendix F: Water use license(s) authorisation, SAHRA information, service letters from municipalities, water supply information

Appendix G: Specialist reports

Appendix H: EMPr

Appendix I: Other information

CHECKLIST

To ensure that all information that the Department needs to be able to process this application, please check that:

- Where requested, supporting documentation has been attached;
- All relevant sections of the form have been completed.

Appendix A: Locality Maps and Site Plans

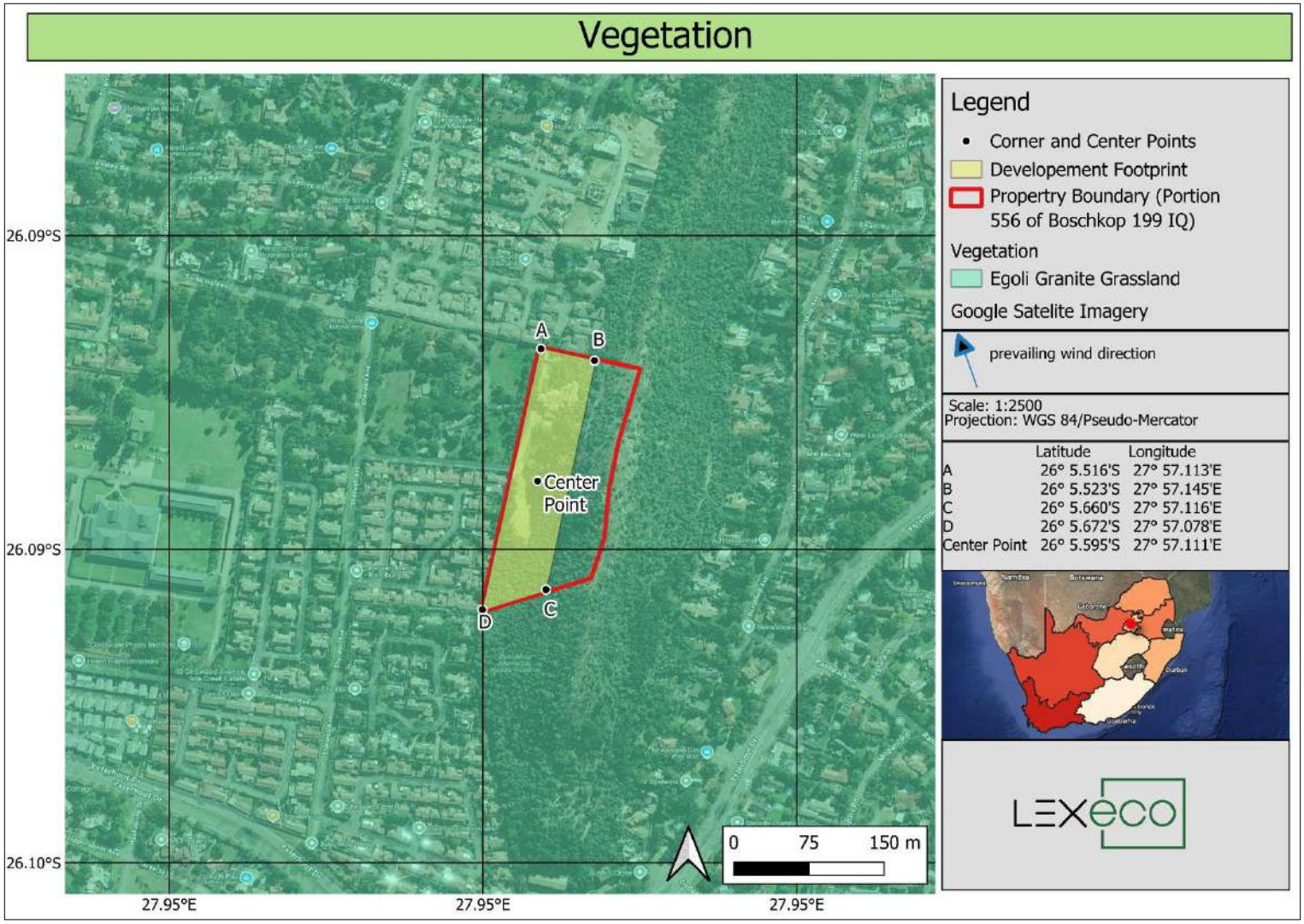


Figure 3: Locality map showing the Vegetation

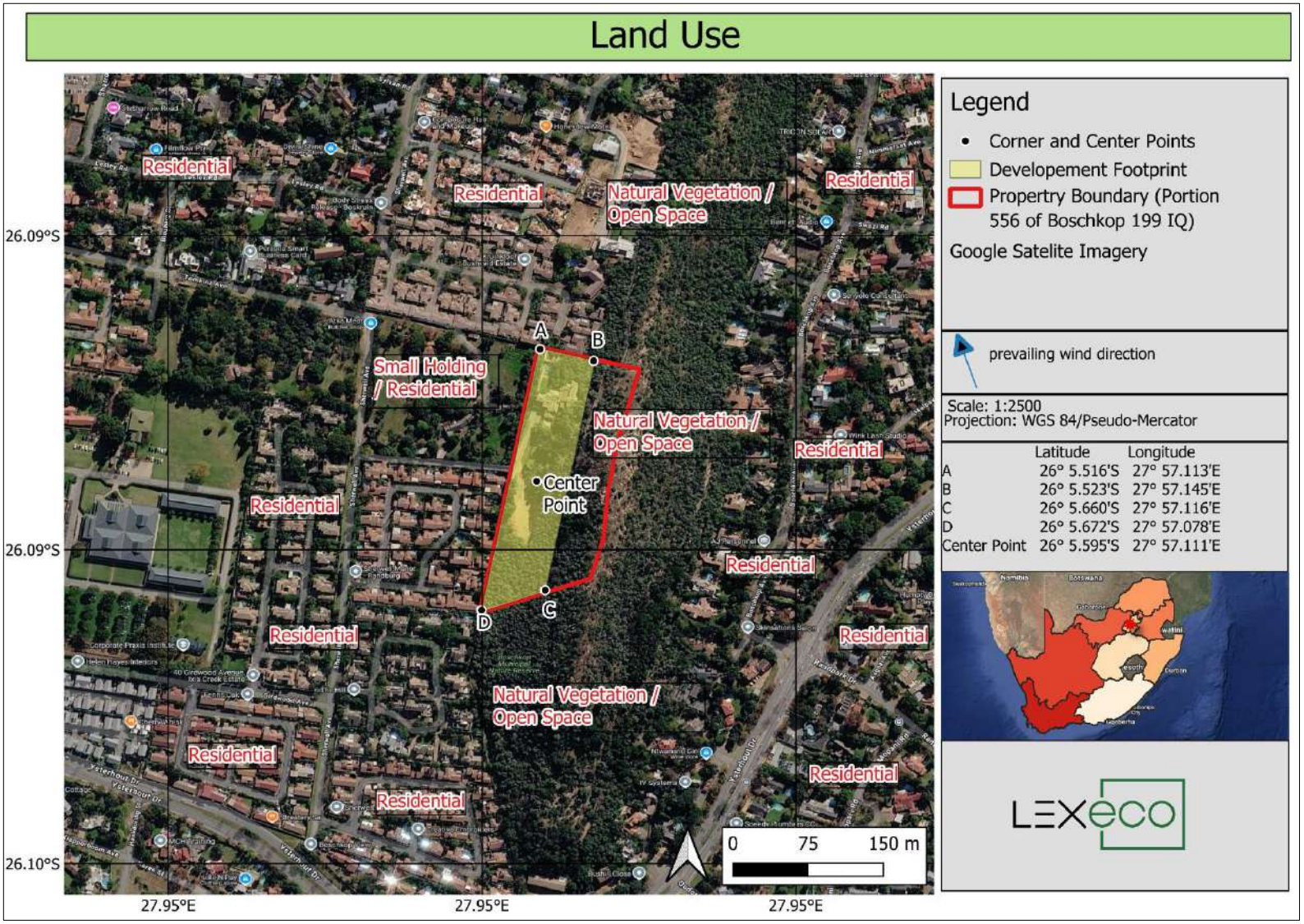


Figure 4: Locality map showing Land Use

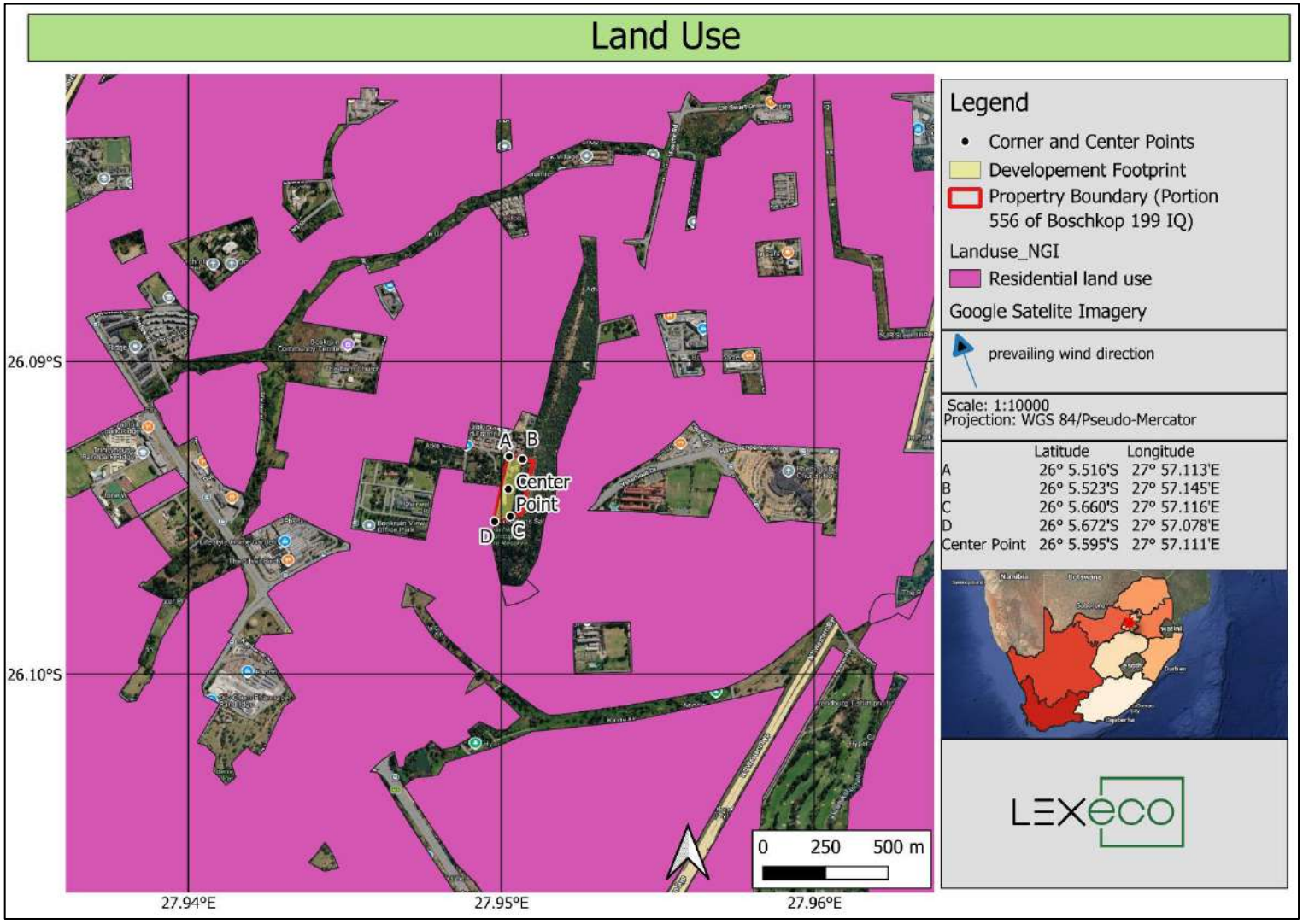


Figure 5: Locality map showing Land Use

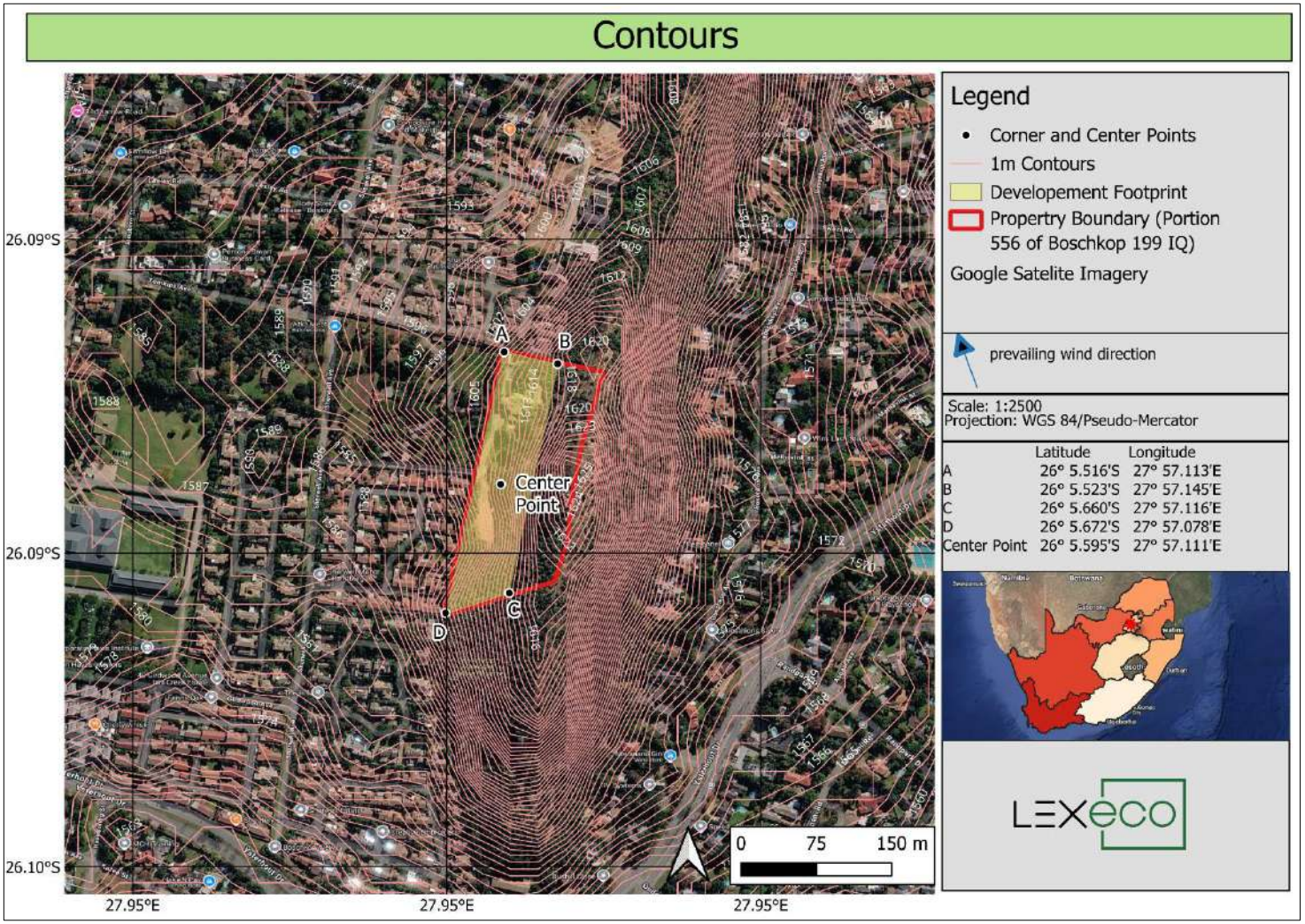
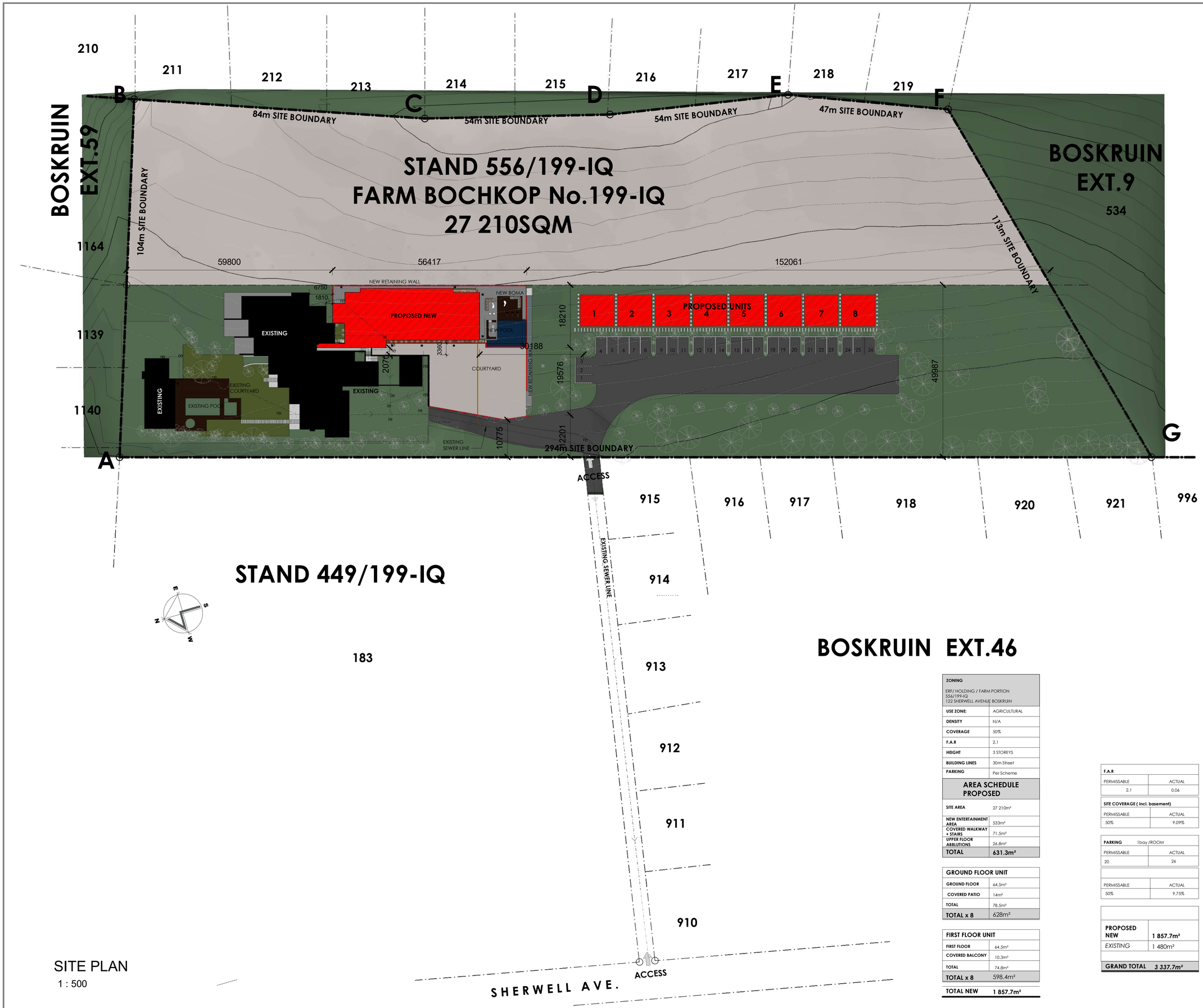


Figure 6: Locality map showing 1m Contour lines



SITE PLAN
1 : 500

* ALL WORK TO COMPLY WITH LOCAL AUTHORITIES AND NBR BY-LAW
1. Read figured dimensions in preference to scaling
2. The contractor must verify all levels , heights and dimensions on site and to check same against the set of drawings before commencing work and to convince himself that the information given is correct and in accordance with the conditions on site
3. Contractors are to locate existing services on site and to protect these from damage throughout the duration of the works.
4. The contractor is responsible for the correct identification of all surveyor pegs and markers and setting out of the building with particular reference to grid lines ,column positions ,internal and external walls from surveyor markers boundaries and building lines etc.
5. Any errors ,discrepancies or omissions to be reported to the architect before commencing any work.
6. 4 ply damp proof-course under all walls and sills and vertical dpc. to all changes of floor levels
7. Flashing to all changes of roof levels and parapet walls
8. All concrete beds on well rammed filling.
9.10mm softboard joints to be placed between all new and existing construction joints.

*UNLESS OTHERWISE INSTRUCTED BY THE STRUCTURAL ENGINEER THE MINIMUM OF CONCRETE MIXES SHALL BE AS FOLLOWS:

- blinding	10 mpa
- strip foundations	15 mpa
- 75mm traffic surfaces	20 mpa
- 75mm surface beds to be screeded	15 mpa

NB: ALL REINFORCED CONCRETE AND STEEL COLUMNS,SLABS,BEAMS FOUNDATIONS ETC.TO BE STRICTLY IN ACCORDANCE WITH THE STRUCTURAL ENGINEERS SPECIFICATIONS.

PLUMBING
1. All plumbing and drainage must comply with the relevant local authority and nbr by-laws and regulations
2. All bends and junctions in drain to be fitted with ie's and marked covers at ground level.
3. Waste fittings to have reseal traps and to be fully accessible.
4. Rain water down pipes to be min. 2450 from gullies
5. Any portion of drain at a depth of 450 mm or less below ground level shall be encased in concrete having a min. thickness at all points of 100mm measured from the external surface of the pipe.
6. Any portion of drain passing under any part off the building or footing shall be protected against the load, this pipe must be without bends or junctions along its entire length under the building and should have a re. before and after passing under the building.
7. The minimum fall to all drain pipes to be 1 : 40
8. 110mm ∅ for soil pipes (SP)
9. 50mm ∅ for waste pipes (WP)

ENERGY REGULATION NOTES
1. All new building work, including new buildings, alterations, additions and renovations must comply to SANS 10400-XA:2011, SANS 204:2011, SANS 613:2011.
2. All exposed hot water piping to be insulated with R value of 1 according to SANS 10400-XA:2011, clause 4.1.3
3. All roof insulation to comply with SANS 10400-XA:2011, clause 4.4.5
4. When underfloor heating is required, it shall comply with SANS 10400-XA:2011, clause 4.4.2
5. All external walls to have a minimum R-value of 0.35 according to SANS 10400-XA:2011, clause 4.4.3
6. All fenestration and infiltration to comply with SANS 204:2011, Table 6 and with SANS 613, Clause 4.4

DESIGN: SANS 10400-XA CLAUSE 4.2.1 (b)
1. ORIENTATION: Living room and major areas of glazing to face north longer axis of building to run East / West. SANS 10400-XA Clause 4.4.1.1
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6. FENESTRATION: Air leakage shall not exceed 2Ls/m² revolving/swing doors. SANS 10400-XA Clause 4.4.1.1 SANS 613 Clause 4.4
Fenestration more than 15% area to nett floor area per storey then.. SANS 10400-XA Clause 4.4.4.2
Fenestration up to 15% area to nett floor area per storey complies SANS 10400-XA Clause 4.4.4.1
Solar Heat Gain and heat conductance to comply with SANS 204 Clause 4.3.4. SANS 204 Clause 4.3.4

REV	ISSUE DATE	DRAWING REVISION DESCRIPTION
0	25-07-2024	ISSUED FOR APPROVAL
1	20-03-2025	ISSUED FOR APPROVAL
2	15-03-2025	UPDATED PARKING - ISSUED FOR APPROVAL

ZONING	
ERF/ HOLDING / FARM PORTION 556/199-IQ 122 SHERWELL AVENUE BOSKRUIN	
USE ZONE:	AGRICULTURAL
DENSITY	N/A
COVERAGE	50%
F.A.R	2.1
HEIGHT	3 STOREYS
BUILDING LINES	30m Street
PARKING	Per Scheme
AREA SCHEDULE PROPOSED	
SITE AREA	27 210m²
NEW ENTERTAINMENT AREA	533m²
COVERED WALKWAY + STAIRS	71.5m²
UPPER FLOOR ABBLUTIONS	26.8m²
TOTAL	631.3m²

GROUND FLOOR UNIT	
GROUND FLOOR	64.5m²
COVERED PATIO	14m²
TOTAL	78.5m²
TOTAL x 8	628m²

FIRST FLOOR UNIT	
FIRST FLOOR	64.5m²
COVERED BALCONY	10.3m²
TOTAL	74.8m²
TOTAL x 8	598.4m²
TOTAL NEW	1 857.7m²

F.A.R	
PERMISSABLE	ACTUAL
2.1	0.06

SITE COVERAGE (incl. basement)	
PERMISSABLE	ACTUAL
50%	9.09%

PARKING 1bay /ROOM	
PERMISSABLE	ACTUAL
20	26

PERMISSABLE	ACTUAL
50%	9.75%

PROPOSED NEW	1 857.7m²
EXISTING	1 480m²
GRAND TOTAL	3 337.7m²

CLIENT :
MALIBU

SIGNATURE _____ DATE _____

MTWA PROPERTIES
THE BUSINESS CENTRE, LESLIE AVE EAST
FOURWAYS JHB 2091
T : +27 72 252 6369 E: design@mtwa.coza
www.mtwa.coza

APPROVED SACAP :

THE MASTER HELD AT **MTWA CONCEPTS** BEARS THE ORIGINAL SIGNATURE OF APPROVAL

SIGNATURE: NAME: DATE:

ENGINEER :

SIGNATURE _____ DATE _____

PROJECT STATUS:
FOR APPROVAL

NEW ADDTIOTION ON ERF 556/199-IQ BOSCHKOP

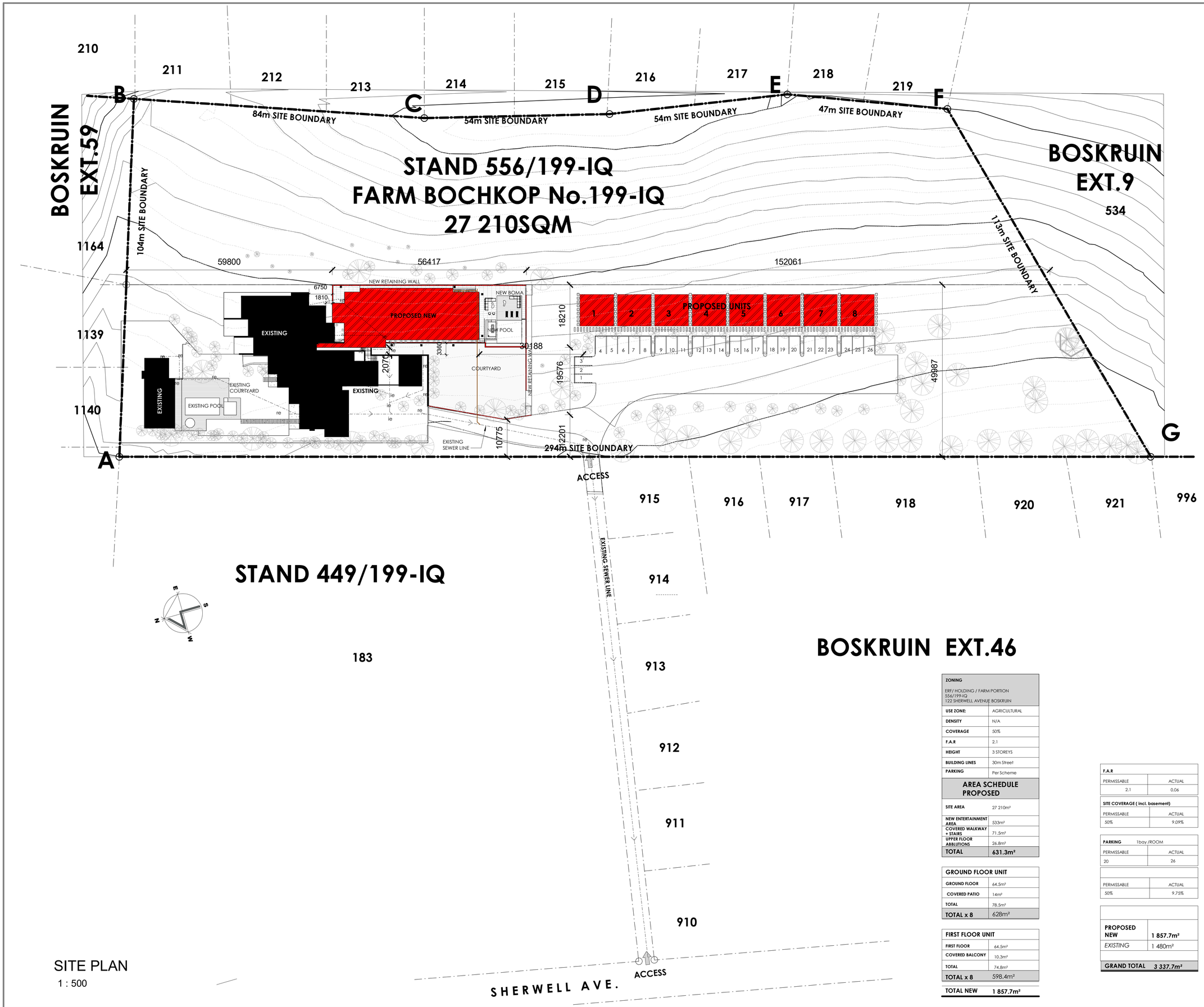
SITE PLAN +AREA SCHEDULE

DRAWING UNITS : MILLIMETERS

DATE	SCALE	DESIGNED BY
07/23/24	As indicated	P.M
CHECKED BY	DRAWN BY	APPROVED BY
P.M	P.M	P.M

DRAWING NUMBER	REVISION
A1-WD-000	2

PRINT SIZE A1



SITE PLAN
1 : 500

ZONING	
ERF/ HOLDING / FARM PORTION 556/199-IQ 122 SHERWELL AVENUE BOSKRUIN	
USE ZONE:	AGRICULTURAL
DENSITY	N/A
COVERAGE	50%
F.A.R	2.1
HEIGHT	3 STOREYS
BUILDING LINES	30m Street
PARKING	Per Scheme

AREA SCHEDULE PROPOSED	
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CLIENT :
MALIBU
SIGNATURE DATE

MTWA PROPERTIES
THE BUSINESS CENTRE, LESLIE AVE EAST
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T : +27 72 252 6369 E: design@mtwa.co.za
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APPROVED SACAP :
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SIGNATURE: NAME: DATE:

ENGINEER :
SIGNATURE DATE

PROJECT STATUS:
FOR APPROVAL

NEW ADDTIOTION ON ERF 556/199-IQ BOSCHKOP

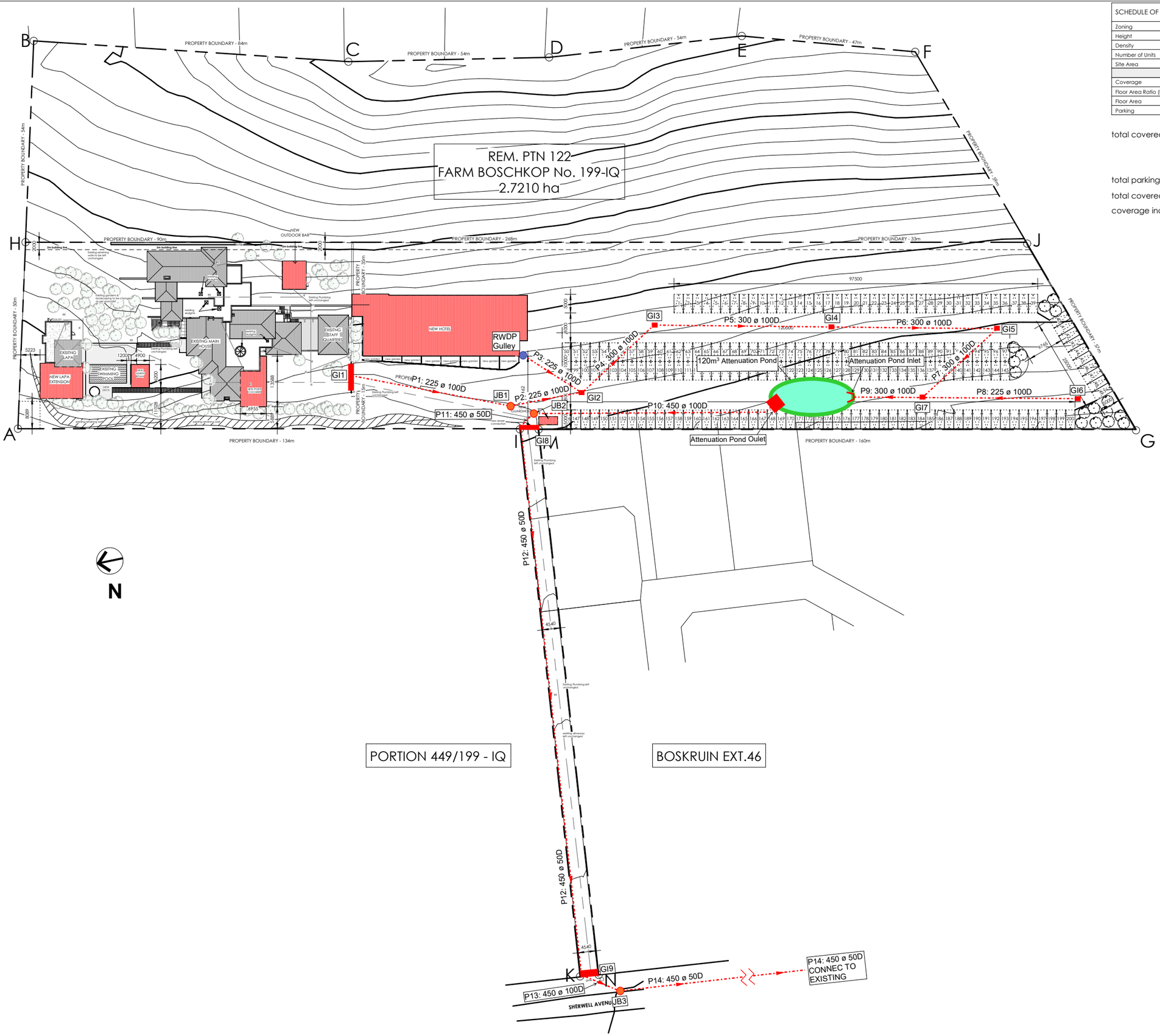
SITE PLAN +AREA SCHEDULE

DRAWING UNITS : MILLIMETERS

DATE	SCALE	DESIGNED BY
07/23/24	As indicated	P.M
CHECKED BY	DRAWN BY	APPROVED BY
P.M	P.M	P.M

DRAWING NUMBER	REVISION
A1-WD-000	2

PRINT SIZE A1



SCHEDULE OF RIGHTS	PORTION 556 OF 122, BOSCHKOP ERF 199	
Zoning	AGRICULTURAL	
Height	3 STOREYS	
Density	N/A	
Number of Units	N/A	
Site Area	8210 m²	
	Permitted	Actual
Coverage		**25.57%**
Floor Area Ratio (FAR)		**0.26**
Floor Area		**2155.556 m²**
Parking		**0**

excl. parking**

total covered area =2099.483 m² excl. possible covered parking

total parking @ 12.5m²/ bay= 2500m² total area

total covered area =4,599.483 m² incl. possible covered parking

coverage incl parking= 56,02%

DAFFONCHIO ARCHITECTS
www.daffonchio.co.za | tel: 011 447 8118

GENERAL NOTES

1. This drawing is protected under the copyright Act 1956, and cannot be used or reproduced in part or in whole without authors consent.

2. Read only figured dimensions.

3. All construction work is to comply with the latest S.A.B.S. standard codes of practice.

4. Contractors must verify all dimensions and levels on site before commencing work. Any discrepancies must be reported to the architect before work is put in hand.

5. All levels shown are finished levels unless otherwise stated.

6. All surface beds to be cast on well compacted and well consolidated filling.

7. Depth of foundation trenches to be minimum 550mm below reduced ground level.

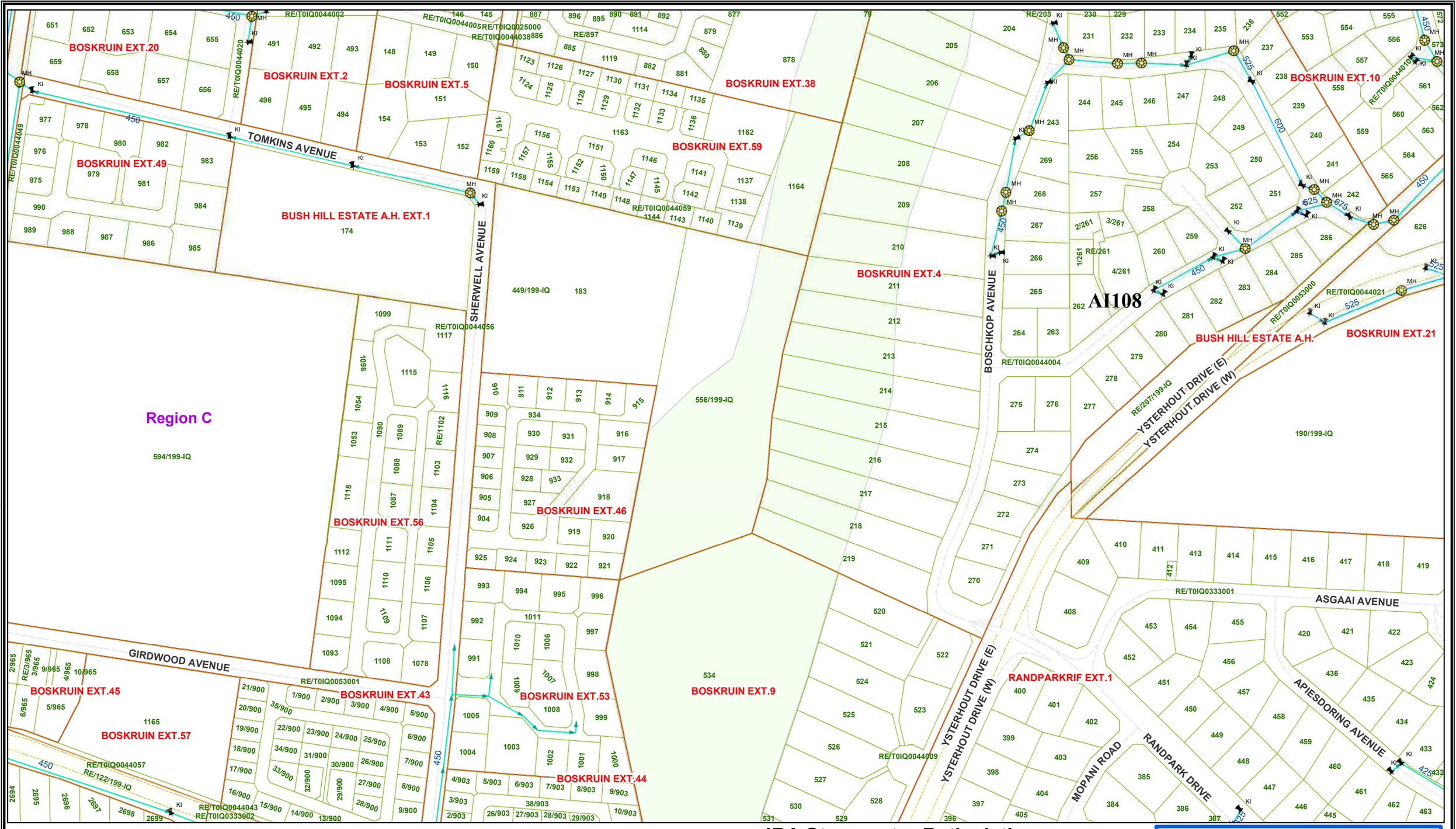
8. All pipes and services to be minimum 450mm below reduced ground level.

REV	DATE	DESCRIPTION

PROJECT NAME
122 Sherwell Avenue, Boskruin

DRAWING NAME
Site Development Plan

scale	**1 : 500**
dwg #	**109**
drawn by	**SM**
revision	
date	**12/06/23**
status	**council**



ROADS
NATIONAL
PROVINCIAL
MOTORWAY
MAJOR ROADS
INDUSTRIAL
LOCAL ROADS
GRAVEL
PRIVATE
S'water Inlets
ASSET
CATCH PIT
END CAP
INLET
GRID
HEADWALL
INLET MANHOLE
JUNCTION BOX
KERB OUTLET
MANHOLE
OUTLET MANHOLE
UNDEFINED
S'water Culverts
CULVERTS
CULVERT
LINED CHANNED
UNLINED CHANNEL
DRAIN
UNDEFINED
S'water-p
DIAMETER
0 - 200
201 - 500
501 - 750
751 - 1200
1201 - 2000
Floodline 100yr
Hazards
HAZARD
High Hazard
Medium Hazard
Low Hazard

JRA Stormwater Reticulation

** PLEASE NOTE:
THIS IS NOT A WAY-LEAVE APPROVAL
INFORMATION SUPPLIED BY THIS OFFICE IS NOT GAURENTEED. ALL INFORMATION MUST BE CONFIRMED ON SITE BEFORE WORK COMMENCES.

1:3,000

0.045 0.0225 0 0.045 0.09 0.135 Kilometers

City of Johannesburg

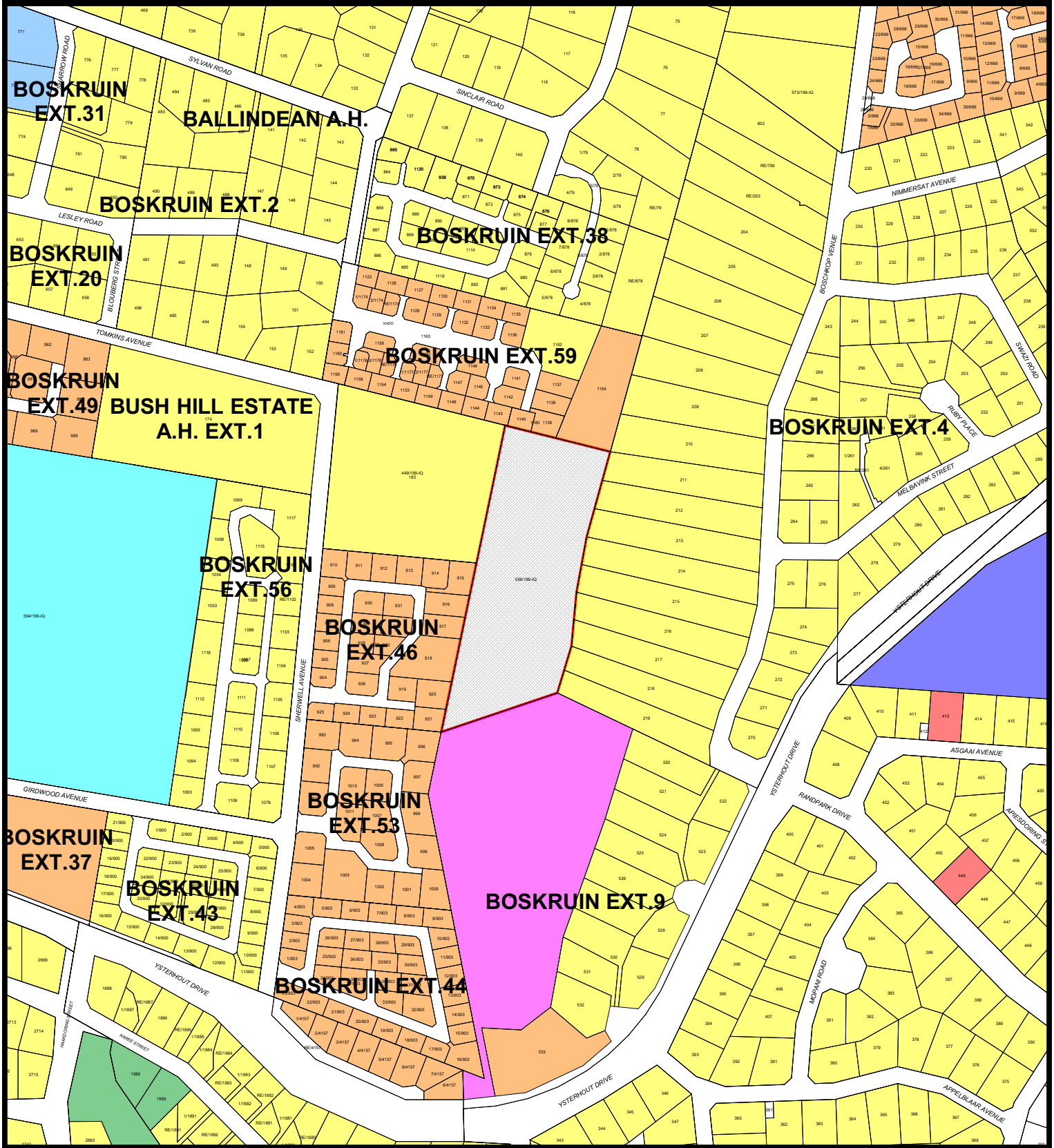
Johannesburg Roads Agency
Road Asset Management Systems:

Telephone : +2711 491 5766
e-mail : servicesinfo@jra.org.za

Compiler : Tintswalo Shivambu
Projection: Transverse Mercator (Lo 29)
Datum: Hartebeeshoek 94 (WGS84 Ellipsoid)
Map Size: A3
Workspace : C:\Users\tshivambu\Desktop\A3 (landscape) - Way-leaves1.mxd
23/06/2023 11:53:12

LAND USE MAP

PROPOSED TOWNSHIP: BOSKRUIN EXTENSION 64



Legend

APPLICATION SITE			
Single Residential		Boschkop Municipal Nature Reserve	
Medium Density Residential		Open Space / Park	
Church		Rand Park High School	
Study Centre		Creche	

Scale

N

SCALE 1 : 5 000 (A4)

0 25 50 75 100m

March 2025

LANDMARK PLANNING

Town & Regional Planning | Stads- & Streekbeplanning

75 Jean Avenue, Doringkloof, Centurion | PO Box 16936, Centurion, 0046

(012) 667 4773 | (012) 667 4450 | 082 371 5770

willem@land-mark.co.za | www.landmarkplanning.co.za

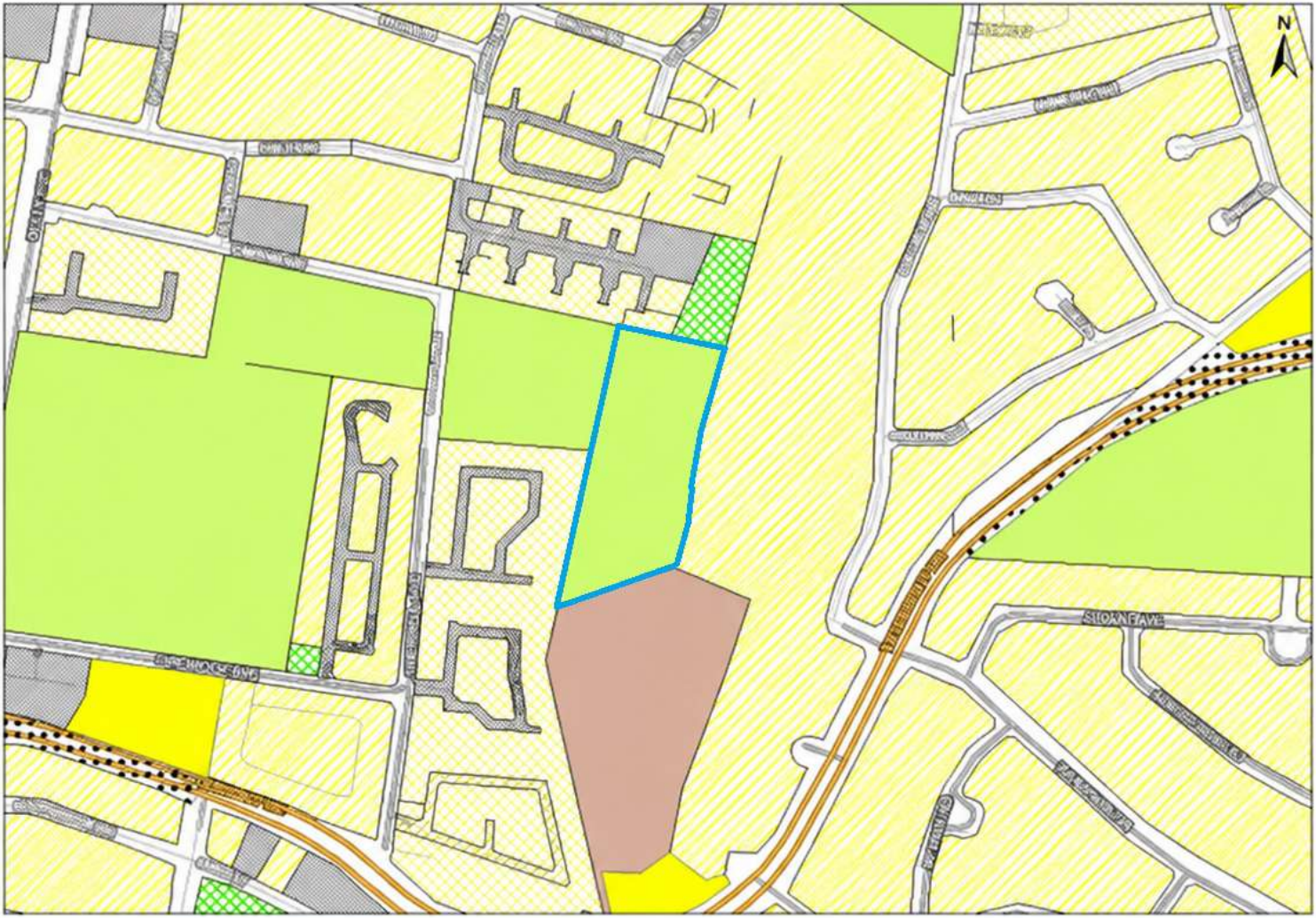
CITY OF JOHANNESBURG: Corporate Geo-Informatics

Property Report

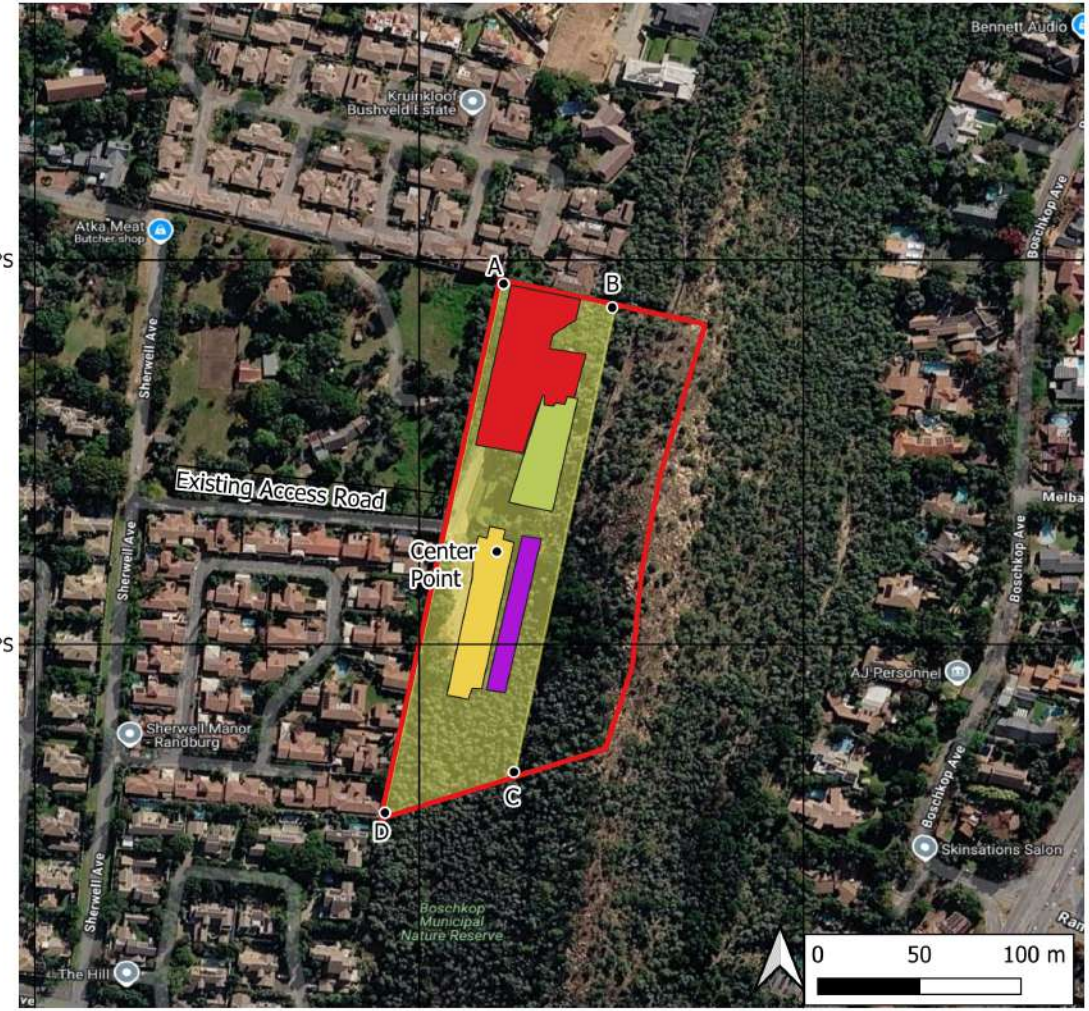
Reports generated from the website can be used for the purpose of zoning information. Zoning information must be read in conjunction with the applicable Town Planning Scheme clauses and Amendment Scheme relevant to the erf. More information can be obtained from the information desk on the upper ground level, Nedbank building, Newtown Junction Mall.

Status Subtype	1
Use Zone	ZAGR01
Tps Name	RANDBURG
Zone Desc	Agricultural
Shape	Polygon
Shape.STArea()	49969,481813
Shape.STLength()	1094,337695

Map of the location



Site Layout



Legend

- Corner and Center Points
- Existing Units
- Proposed New Recreational Area
- Proposed New Units
- Car Park Area
- Propertry Boundary (Portion 556 of Boschkop 199 IQ
- Developement Footprint
- prevailing wind direction

Projection: WGS 84/Pseudo-Mercator

	Latitude	Longitude
A	26° 5.516'S	27° 57.113'E
B	26° 5.523'S	27° 57.145'E
C	26° 5.660'S	27° 57.116'E
D	26° 5.672'S	27° 57.078'E
Center Point	26° 5.595'S	27° 57.111'E



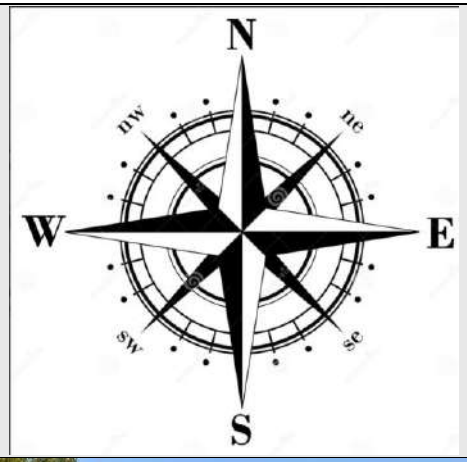
LEXeco

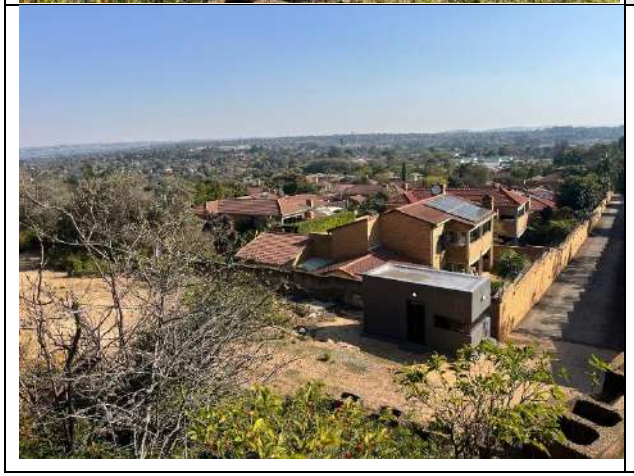
Appendix B: Photographs

+27(0)12 023 8543 | info@lexeco.co.za | lexeco.co.za
11 Alice Lane, Building 3, 5th Floor, Sandton, Johannesburg, 2196 | Registration Number 2020/642/160/07






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Appendix C: Facility Illustrations

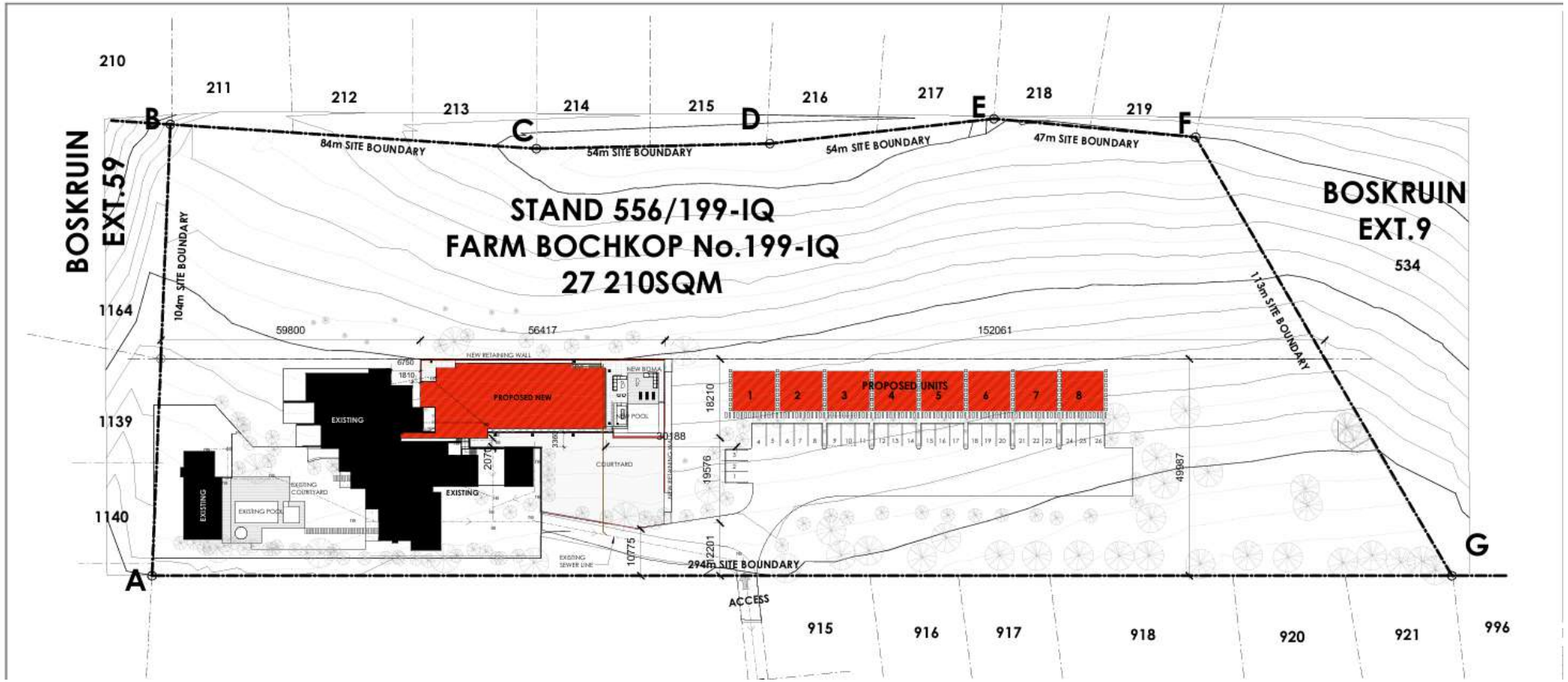
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11 Alice Lane, Building 3, 5th Floor, Sandton, Johannesburg, 2196 | Registration Number 2020/642/160/07



Facility Illustration 1



Facility Illustration 2



Facility Illustration 3

Appendix D: Route Position Information (Not Applicable)

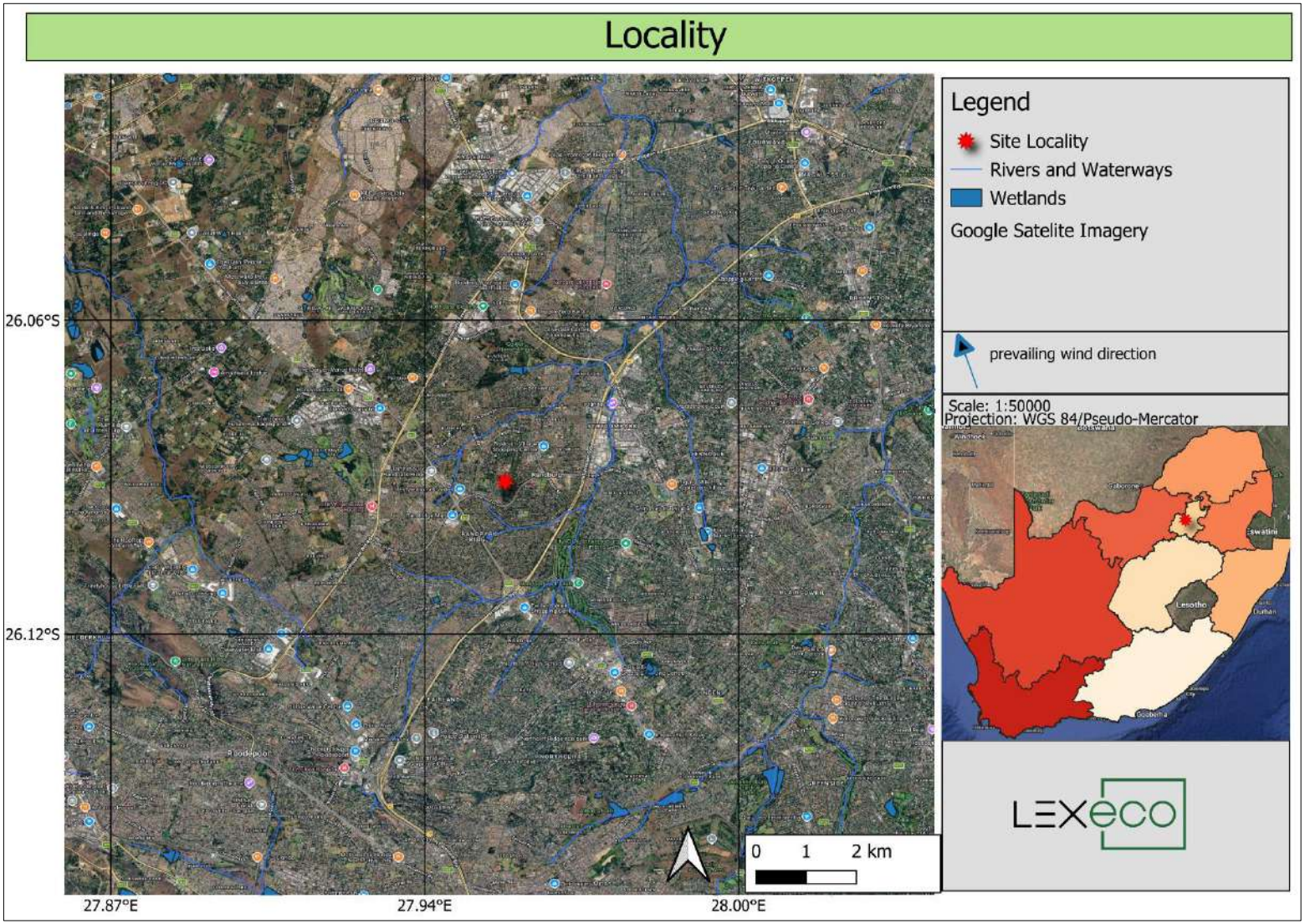


Figure 1: Locality map (Zoomed Out)

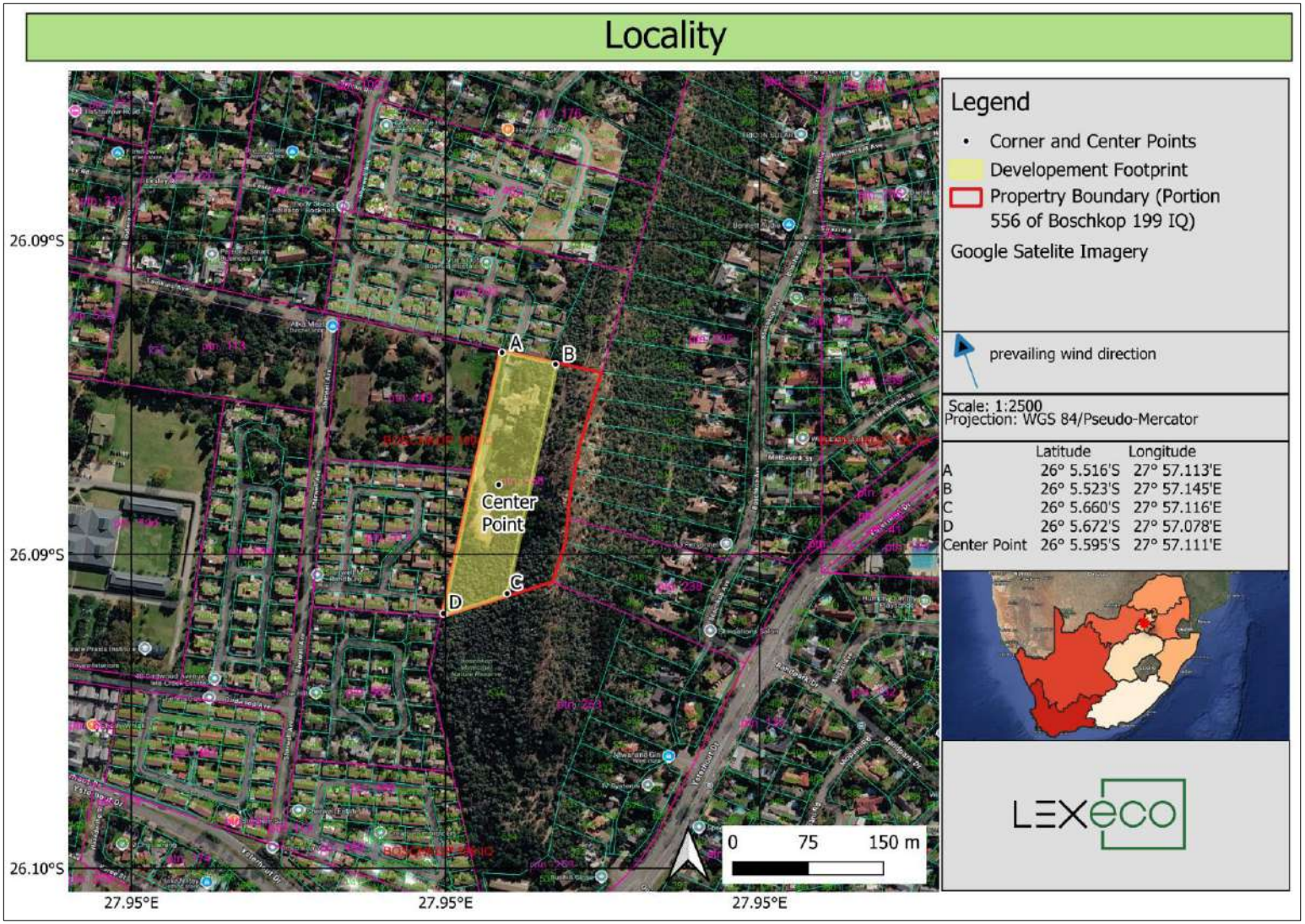


Figure 2: Locality map (Zoomed in) showing neighbouring properties

Appendix E: Public Participation Information

To be Included in the Final BAR

+27(0)12 023 8543 | info@lexeco.co.za | lexeco.co.za
11 Alice Lane, Building 3, 5th Floor, Sandton, Johannesburg, 2196 | Registration Number 2020/642/160/07

Appendix F: Water use license(s) authorisation, SAHRA information, service letters from municipalities, water supply information

+27(0)12 023 8543 | info@lexeco.co.za | lexeco.co.za
11 Alice Lane, Building 3, 5th Floor, Sandton, Johannesburg, 2196 | Registration Number 2020/642/160/07

City of Johannesburg

Johannesburg Water SOC Ltd

Turbine Hall
65 Ntemi Piliso Street
Newtown
Johannesburg

Johannesburg Water
PO Box 61542
Marshalltown
2107

Tel +27(0) 11 688 1400
Fax +27(0) 11 688 1528

www.johannesburgwater.co.za

Date: 1 July 2026

LANDMARK PLANNING TOWN & REGIONAL PLANNERS
75 Jean Avenue
Doringkloof
Centurion

T: 012 667 4773/ 082 371 5770
E: info@land-mark.co.za

ATTENTION: LANDMARK PLANNING

Dear Sir/ Madam

SCHEME REPORT
BOSKRUIN EXT.64 PORTION 556/199-IQ

Johannesburg Water acknowledges receipt of the **scheme**

We respond as follows:

Water:

This development falls within the Boschkop/Honeydew Reservoirs Water Sub-district. The proposed development will be of land use Special zoning with AADD of 3.5kl/day and a peak demand of 4.502ℓ/s. There is an existing 110mm dimater uPVC pipe on Sherwell Avenue that may be connected into.

Following the incorporation of the proposed demand on the hydraulic model, the results indicate the pipe to be experiencing peak demand head that are adequate to supply the additional demand of the proposed development, however, should be confirmed on site. The velocities are also within the acceptable limits.

The combined hourly storage capacity of the existing 13.5ML Boschkop Reservoir and 15Ml Honeydew is 19h x AADD, which is below the allowable minimum storage capacity of 24h x AADD of Johannesburg Water's engineering guidelines. However, JW purchased the storage capacity at Rand Water’s 100Ml Weltervreden Reservoir 100 ML RW which will absorb storage capacity.

Sewer

The proposed development falls within Western Klein Jukskei Sewer Sub-drainage Basin. There 160mm Ø sewer pipe Sherwell Avenue, where the development is proposed to connect into. The above pipe is having adequate modeled relative spare capacity to accommodate additional flows from the proposed development.

Based on the above sewer hydraulic model attributes, the existing sewer system is adequate to accommodate additional flows from the proposed development.

The report / comments are valid for 5 years from date of this letter.

Directors:
Ms Dineo Majavu (Chairperson), Mr Ntshavheni Mukwevho (Managing Director and Executive Director),
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Yours faithfully

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Appendix G: Specialist Reports

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Appendix G.1: Biodiversity Impact Assessment

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UPDATED BIODIVERSITY IMPACT ASSESSMENT FOR THE PROPOSED RESIDENTIAL DEVELOPMENT ON PROPERTY 122 SHERWELL AVENUE BOSKRUIN, RANDBURG, UNDER CITY OF JOHANNESBURG METROPOLITAN MUNICIPALITY, GAUTENG PROVINCE.

Review and update of the November 2023 Biodiversity Impact Assessment to support a revised development proposal for the Environmental Authorisation application



PREPARED BY:

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Report No: RMR VP02 - 22/07

July 2026

DOCUMENT CONTROL

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REVIEWED BY:		
Dr. Beatrice Otunola	PhD Environmental Management, Project Overseer, Pr. Sci. Nat	 2026/07/21

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DECLARATION

I Ronald Ramathieledza, as duly authorised representative of Ramaro Environmental and Geological Services, hereby confirm my independence and declare that I:

- I act as the independent specialist in this application;
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting the specialist report relevant to this application, including knowledge of the Act, regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, regulations and all other applicable legislation;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing any decision to be taken with respect to the application by the competent authority; and the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
- all the particulars furnished by me in this form are true and correct; and
- I realise that a false declaration is an offence in terms of Regulation 71 and is punishable in terms of Section 24F of the Act.

Signature of the specialists:	
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Qualifications:	BSc Mining and Environmental Geology (Hons) MSc. Geohydrology
Experience (years):	Seven (7)
Date:	21 July 2026

EXECUTIVE SUMMARY

Ramaro Environmental and Geological Services (Pty) Ltd was appointed to undertake an update of the Biodiversity Impact Assessment originally prepared in November 2023 for the proposed development at 122 Sherwell Avenue, Boskruin, Randburg, Gauteng Province. The updated assessment was commissioned to support a revised development proposal as part of the Environmental Authorization process.

The assessment comprised a review of the original Biodiversity Impact Assessment, the revised site development layout, and updated site information to determine whether any material changes in ecological conditions had occurred since the original assessment.

SUMMARY OF KEY FINDINGS

- The proposed development site is located within the Egoli Granite Grassland (Gm10) vegetation type, an ecosystem classified as Endangered due to extensive historical transformation associated with urban development in the Johannesburg Metropolitan area.

- The Department of Forestry, Fisheries and the Environment (DFFE) National Environmental Screening Tool classifies the site as having Very High Terrestrial Biodiversity Sensitivity, Medium Animal Species Sensitivity, and Low Plant Species Sensitivity.

- Field verification confirmed that the revised development footprint is predominantly situated within an area that has been previously disturbed and partially cleared, with remnant indigenous woody vegetation concentrated mainly on the rocky slopes outside the proposed development footprint.

- The project site occurs within a Critical Biodiversity Area (CBA); however, the ecological condition of the proposed development footprint is lower than the regional biodiversity sensitivity due to historical disturbance, habitat fragmentation, and the presence of alien invasive plant species.

- No confirmed Floral or Faunal Species of Conservation Concern (SCC) were recorded within the revised development footprint during the assessment, and no wetlands, riparian habitats, or other highly sensitive ecological features were identified within the proposed development area.

- The principal ecological impacts associated with the proposed development relate to vegetation clearing, temporary disturbance of fauna, soil disturbance and erosion, the spread of alien invasive plant species, and localized pollution during the construction phase.

- The ecological impact assessment determined that all identified impacts can be reduced from Low to Medium negative significance before mitigation to Low negative significance

following implementation of the recommended mitigation measures and Environmental Management Programme (EMPr).

- The updated assessment confirms that the findings, conclusions, and recommendations of the November 2023 Biodiversity Impact Assessment remain applicable to the revised development proposal, as no material changes in ecological conditions or biodiversity sensitivity were identified.

- From a terrestrial biodiversity perspective, the proposed residential development is considered environmentally acceptable, provided that the recommended mitigation measures are fully implemented during both the construction and operational phases.

- It is therefore the opinion of the specialist that the proposed development may be considered by the competent authority for Environmental Authorization, subject to compliance with the mitigation measures and environmental management recommendations contained in this report.

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LIST OF ACCRONYMS AND ABBREVIATIONS

Acronyms/Abbreviation	Description
°C	Degrees Celsius
CBA	Critical biodiversity Areas
DMRE	Department of Mineral Resources and Energy
EIA	Environmental Impact Assessment
ESRI	Environmental Systems Research Institute
GPS	Global Positioning System
Ha	Hectare
IDP	Integrated Development Plan
IUCN	International Union for Conservation of Nature
K-feldspar	Potassium Feldspar
Km	Kilometre
Mm	Millimetre
M	meter
MPRDA	Mineral and Petroleum Resources Development Act
NEMA	National Environmental Management Act
NEMBA	National Environmental Management Biodiversity Act
PNCO	Provincial Nature Conservation Ordinance
SANBI	South African National Institute for Biodiversity
SCC	Species of Conservation Concern
TOPS	Threatened or Protected Species

1. INTRODUCTION

Ramaro Environmental and Geological Services (Pty) Ltd was appointed by Lexeco (Pty) Ltd to undertake an updated Biodiversity Impact Assessment in support of the Environmental Authorization application for the proposed residential development at 122 Sherwell Avenue, Boskruin, Randburg, within the City of Johannesburg Metropolitan Municipality, Gauteng Province. The purpose of this assessment is to evaluate the potential impacts of the revised development proposal on terrestrial biodiversity, verify the ecological sensitivity of the site, and provide specialist recommendations to support informed environmental decision-making in accordance with the applicable environmental legislation and biodiversity assessment protocols.

2. PROJECT BACKGROUND AND DESCRIPTION

The proposed development is located at 122 Sherwell Avenue, Boskruin, Randburg, within the City of Johannesburg Metropolitan Municipality, Gauteng Province, approximately 7 km north-west of the Randburg Central Business District. The property is situated on the lower western slopes of Boskruin Hill within a well-established residential suburb characterised by low- to medium-density residential development interspersed with remnant natural vegetation and rocky granite outcrops. Although the surrounding landscape has undergone extensive urban transformation, the site retains pockets of indigenous woody vegetation that contribute to the ecological functioning of the broader Boskruin landscape.

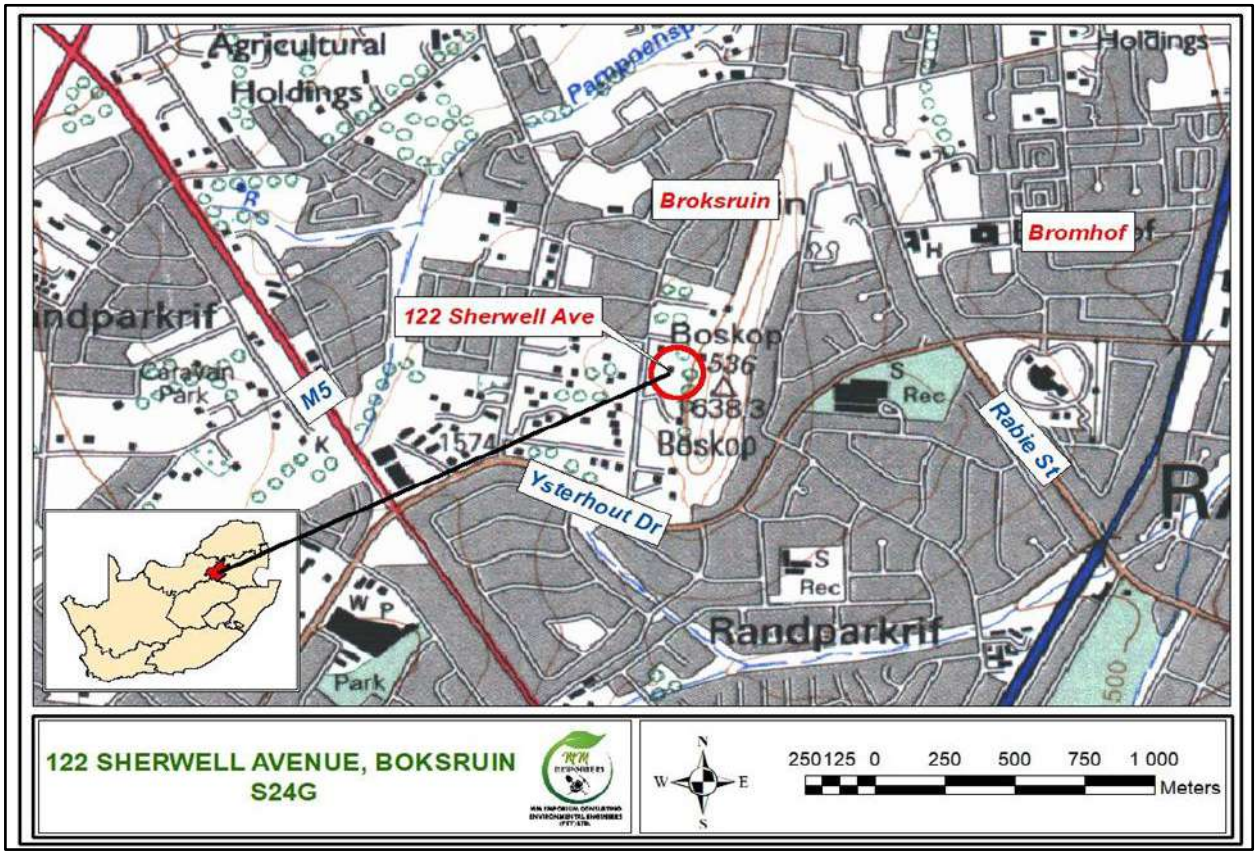


Figure 1: Geographic location of the project focus area

3. PURPOSE OF THE BIODIVERSITY IMPACT ASSESSMENT UPDATE

A Biodiversity Impact Assessment was undertaken for the proposed development at 122 Sherwell Avenue, Boskruin, Randburg, in November 2023 in support of an Environmental Authorisation application. Following revisions to the proposed development layout, Ramaro Environmental and Geological Services (Pty) Ltd was appointed to review and update the previous biodiversity assessment to determine whether the revised development proposal would result in any material changes to the ecological findings, impact assessment, or mitigation measures presented in the original report.

The updated assessment comprised a review of the original Biodiversity Impact Assessment, the revised development layout, available desktop information, applicable environmental legislation, and recent site information supplied for the purpose of verifying current ecological conditions.

The objectives of this update are to:

- confirm the current ecological condition of the site;
- assess the implications of the revised development footprint on terrestrial biodiversity;
- determine whether the findings of the 2023 Biodiversity Impact Assessment remain applicable;
- revise the biodiversity impact assessment where necessary; and
- provide updated specialist recommendations to support the Environmental Authorisation process.

4. AIMS & OBJECTIVES

The primary aim of this Biodiversity Impact Assessment update is to evaluate the implications of the revised development proposal on the terrestrial biodiversity of the project site and to determine whether the findings, conclusions and recommendations of the November 2023 Biodiversity Impact Assessment remain applicable.

The assessment seeks to verify the current ecological condition of the site through a review of the revised development layout, available desktop information and recent site information, while ensuring compliance with the requirements of the National Environmental Management Act (Act No. 107 of 1998), the National Environmental Management: Biodiversity Act (Act No. 10 of 2004), and other applicable environmental legislation and guidelines.

The specific objectives of the updated assessment are to:

- Review the baseline ecological information contained in the 2023 Biodiversity Impact Assessment.

- Assess the revised development footprint in relation to the site's terrestrial biodiversity.
- Verify the current ecological condition of the site using available site information and recent photographic evidence.
- Determine whether any significant changes in vegetation, faunal habitat or ecological sensitivity have occurred since the original assessment.
- Identify any additional biodiversity impacts associated with the revised development proposal.
- Review and update the significance rating of identified impacts where necessary.
- Update mitigation measures to minimise adverse impacts on biodiversity during the construction and operational phases.
- Provide specialist recommendations to support the Environmental Authorisation process.s.

5. LIMITATIONS AND ASSUMPTIONS

This Biodiversity Impact Assessment update is based on a review of the November 2023 Biodiversity Impact Assessment, the revised development layout, available desktop information, and updated site information obtained during the current Environmental Authorisation process. The original ecological baseline established during the 2023 assessment is considered representative of the site, and the purpose of this update is to determine whether any material changes have occurred that would alter the findings and recommendations of the previous assessment.

As with any ecological assessment, certain limitations are acknowledged. Plant species that emerge or flower only during specific seasons may not always be detectable, while highly mobile faunal species may utilise the site intermittently and therefore may not be observed at the time of assessment. Nevertheless, these limitations are not considered sufficient to compromise the overall findings of this report.

The assessment is based on the following assumptions:

- The revised development will remain within the proposed development footprint provided by the applicant.
- No significant ecological changes have occurred outside those identified during the review of the updated site information.
- All recommended mitigation measures will be implemented during the construction and operational phases of the proposed development.

6. REGULATORY AND LEGISLATIVE FRAMEWORK

This Biodiversity Impact Assessment has been undertaken in accordance with the applicable environmental legislation governing biodiversity conservation and environmental management in South Africa. The assessment provides specialist input to the Environmental Authorisation process by identifying biodiversity constraints associated with the proposed development and recommending measures to avoid, minimise and manage potential impacts on terrestrial ecosystems.

The primary legislation applicable to the proposed development includes the following:

6.1. Constitution of the Republic of South Africa (Act No. 108 of 1996)

Section 24 of the Constitution provides every person with the right to an environment that is not harmful to their health or well-being and requires that the environment be protected through reasonable legislative and other measures that prevent pollution and ecological degradation, promote conservation, and secure ecologically sustainable development while supporting justifiable economic and social development.

6.2. National Environmental Management Act, 1998 (Act No. 107 of 1998)

The National Environmental Management Act (NEMA) provides the overarching framework for environmental management in South Africa and establishes the environmental management principles that guide decision-making. These principles require that environmental impacts be identified and assessed before development is authorised and that adverse impacts on biodiversity are avoided or minimised wherever practicable.

6.3. National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)

The National Environmental Management: Biodiversity Act (NEMBA) provides for the management and conservation of South Africa's biodiversity. The Act promotes the protection of ecosystems and species of conservation concern and provides the legislative framework for the management of threatened ecosystems, protected species and alien invasive species that may be affected by development activities.

6.4. National Environmental Management Act Environmental Impact Assessment Regulations, 2014 (as amended)

The Environmental Impact Assessment Regulations promulgated under NEMA prescribe the requirements for specialist assessments undertaken in support of Environmental Authorisation applications. This Biodiversity Impact Assessment has been prepared to support the Basic Assessment process and to provide biodiversity information required by the competent authority during decision-making.

6.5. National Biodiversity Screening Tool

The National Biodiversity Screening Tool was consulted during the desktop assessment to identify biodiversity sensitivities associated with the project site. The site is classified as having **Medium Floral Sensitivity**, indicating that specialist assessment is required to verify on-site ecological conditions and determine the significance of potential impacts. The findings of this specialist assessment supersede the screening results where supported by site-specific information and professional judgement.

7. SCOPE OF THE ASSESSMENT UPDATE

This Biodiversity Impact Assessment updates the specialist study completed in November 2023 for the proposed development at 122 Sherwell Avenue, Boskruin, Randburg. The update was undertaken following revisions to the proposed development layout to determine whether the amended development footprint introduces any material changes to the ecological findings presented in the original assessment.

The scope of the assessment included:

- Review of the November 2023 Biodiversity Impact Assessment.
- Assessment of the revised development layout and footprint.
- Review of available desktop information and updated site information.
- Verification of the ecological baseline and biodiversity sensitivity.
- Review and update of the impact assessment and mitigation measures where necessary.

The updated assessment is intended to verify the continued applicability of the original biodiversity findings and provide specialist input in support of the Environmental Authorisation process.

8 DESCRIPTION OF THE RECEIVING ENVIRONMENT

The proposed development is situated at 122 Sherwell Avenue, Boskruin, Randburg, within the City of Johannesburg Metropolitan Municipality, Gauteng Province. The site is located on the western footslopes of Boskruin Hill within a well-established urban residential area. Although the surrounding landscape has undergone substantial urban transformation over the past several decades, remnant natural vegetation persists along the rocky slopes and undeveloped portions of Boskruin Hill, contributing to local ecological connectivity and habitat diversity.

The project area falls within the Egoli Granite Grassland vegetation type (Gm10), an ecosystem listed as Endangered, which has experienced extensive transformation due to urban expansion throughout the Johannesburg Metropolitan area. Consequently, the remaining natural vegetation within the vicinity of the site contributes to the ecological functioning of the broader landscape despite its fragmented nature

8.1. Climate

The project area experiences a temperate summer rainfall climate characterised by warm, wet summers and cool, dry winters. Mean annual rainfall ranges between approximately **600 mm and 700 mm**, with the majority of precipitation occurring between October and April. Average annual temperatures generally range between **16°C and 30°C**, supporting the natural occurrence of Egoli Granite Grassland vegetation and associated woody communities.

8.2. Topography

The site occupies the lower western slopes of Boskruin Hill and is characterised by gently sloping to moderately steep terrain. Elevation across the property ranges from approximately **1 599 m to 1 612 m above mean sea level**, increasing towards the rocky hillside situated along the eastern portion of the property. The topography has influenced both historical development patterns and the distribution of natural vegetation across the site.

8.3. Land Use/Cover

The surrounding area is predominantly characterised by residential development, with commercial and institutional land uses occurring within the broader Randburg urban area. The project site itself has been substantially transformed through previous residential development and associated infrastructure.

Review of the revised development layout and recent site information indicates that the property continues to comprise a combination of developed areas and remnant natural vegetation concentrated primarily along the eastern rocky hillside. Mature woody vegetation remains associated with exposed rock outcrops, while the western and central portions of the site exhibit evidence of historical disturbance, landscaped areas, and existing infrastructure. No wetlands, drainage lines, or other aquatic ecosystems were identified within the proposed development footprint based on the available information.

8.4. Geology and Pedology

The project site is underlain by weathered granitic rocks of the Halfway House Granite within the Johannesburg–Pretoria Dome. These granitic rocks weather to produce shallow, coarse-grained sandy soils that are generally well drained and relatively nutrient poor. Rocky outcrops associated with the granite bedrock are evident along the eastern portion of the site and contribute to local habitat heterogeneity by supporting woody vegetation typical of granite-associated ecosystem.

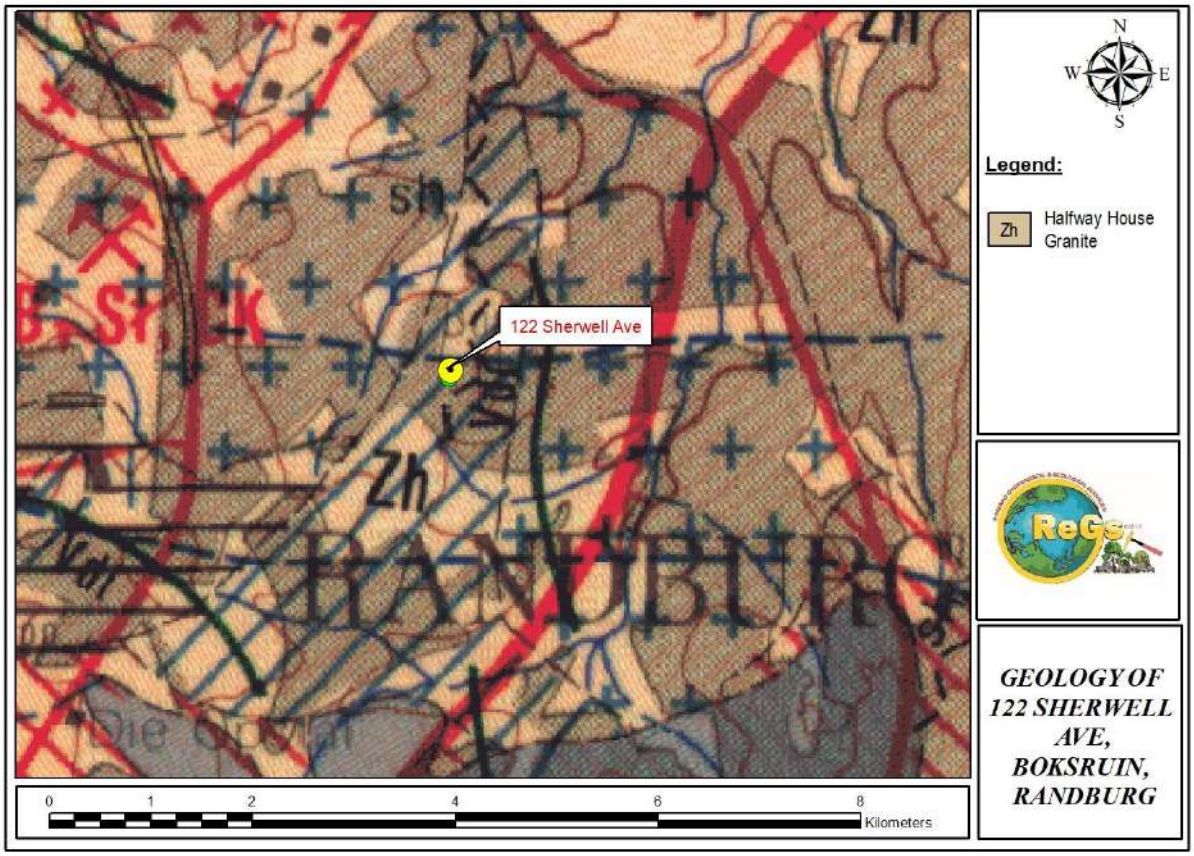


Figure 2: Geological map of the project focus area

9 METHODOLOGY

9.1. Assessment Approach

This Biodiversity Impact Assessment update was conducted through a desktop review to assess the implications of the revised development proposal for terrestrial biodiversity. The assessment builds upon the ecological baseline established during the November 2023 Biodiversity Impact Assessment and incorporates the revised development layout together with updated site information to determine whether the original findings, impact assessment, and mitigation measures remain applicable.

9.2. Desktop Assessment

A desktop review was undertaken using the original Biodiversity Impact Assessment, the revised development layout, available aerial imagery, recent site information, published literature and relevant biodiversity datasets. The information was used to verify the ecological baseline and assess the biodiversity implications of the revised development proposal

9.3. Site Verification

Site verification was undertaken through a review of recent site photographs and updated project information supplied for the proposed development. The information was used to confirm the current condition of the site and identify any significant ecological changes since completion of the 2023 assessment.

9.4. Biodiversity Assessment

The assessment considered the vegetation communities, faunal habitats, ecological sensitivity and potential occurrence of Species of Conservation Concern within the project area. Potential impacts associated with the revised development footprint were evaluated, and mitigation measures were reviewed where necessary.

9.5. Impact assessment and rating

Potential biodiversity impacts associated with the construction and operational phases of the proposed development were assessed using the impact assessment methodology adopted in the original Biodiversity Impact Assessment. Where appropriate, the significance of identified impacts and the recommended mitigation measures were updated to reflect the revised development proposal.

10 TERRESTRIAL VEGETATION AND FLORISTIC ASSESSMENT

The project site falls within the **Egoli Granite Grassland (Gm10)** vegetation type as described by Mucina and Rutherford (2006). This vegetation type is characterised by moderately undulating plains and rocky granitic hills supporting predominantly grassland vegetation interspersed with woody species associated with rocky outcrops. The project area is part of the Johannesburg Granite Dome, where natural vegetation has been extensively transformed by urban development, leaving fragmented remnants of the original vegetation community. A map showing the spatial distribution of vegetation types and/or bioregions is presented in Figure 3:

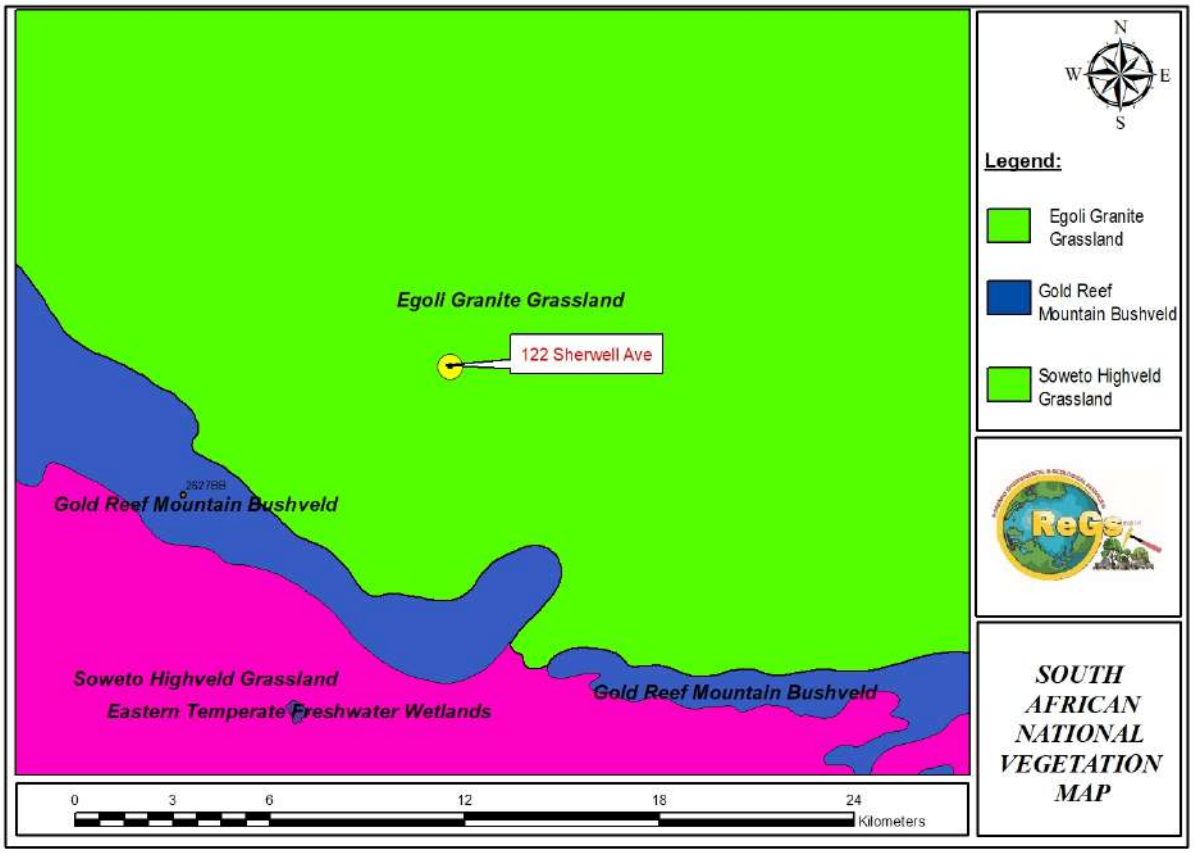


Figure 3: Vegetation distribution map of the project site

A comprehensive description of the aforementioned vegetation types is provided in Table 1 overleaf.

Table 1: Desktop description of the Egoli Granite Grassland (Gm10) vegetation within the study area (adapted from Mucina & Rutherford, 2006).

Distribution	Vegetation& Landscape features	Geology and Soils	Climate	Important Taxa	Conservation
Gauteng Province: Johannesburg Dome extending in the region between northern Johannesburg in the south, and from near Lanseria Airport and Centurion (south of Pretoria) to the north, westwards to about Muldersdrif and eastwards to Tembisa. Altitude 1 280–1 660 m.	Moderately undulating plains and low hills supporting tall, usually Hyparrhenia hirta-dominated grassland, with some woody species on rocky outcrops or rock sheets. The rocky habitats show a high diversity of woody species, which occur in the form of scattered shrub groups or solitary small trees	Archaean granite and gneiss of the Halfway House Granite at the core of the Johannesburg Dome supporting leached, shallow, coarsely grained, sandy soil poor in nutrients of Glenrosa form. Small area is built by ultramafics. Dominant land types Bb and Ba.	Strongly seasonal summer-rainfall region, with very dry winters. MAP 620–800 mm (overall average 680 mm). The coefficient of variation in MAP from 24–27% across the unit. Incidence of frost frequent, but higher in the south than the north. See also climate diagram for Gm 10 Egoli Granite Grassland.	*Graminoids: Aristida canescens (d), A. congesta (d), Cynodon dactylon (d), Digitaria monodactyla (d), Eragrostis capensis (d), E. chloromelas (d), E. curvula (d), E. racemosa (d), Heteropogon contortus (d), Hyparrhenia hirta (d), Melinis repens subsp. repens (d), Monocymbium ceresiiforme (d), Setaria sphacelata (d), Themeda triandra (d), Tristachya leucothrix (d), Andropogon eucomus, Aristida aequiglumis, A. diffusa, A. scabrivalvis subsp. borumensis, Bewsia biflora, Brachiaria serrata, Bulbostylis burchellii, Cymbopogon caesius, Digitaria tricholaenoides, Diheteropogon amplec¬tens, Eragrostis gummiflua, E. sclerantha, Panicum natalense, Schizachyrium sanguineum, Setaria nigrirostris, Tristachya rehmannii, Urelytrum agropyroides. Herbs: Acalypha angustata, A. peduncularis, Becium obovatum, Berkheya insignis, Crabbea hirsuta, Cyanotis speciosa, Dicoma*	Endangered. Target 24%. Only about 3% of this unit is conserved in statutory reserves (Diepsloot and Melville Koppies Nature Reserves) and a number of private conservation areas including Motsetse and Isaac Stegmann Nature Reserves, Kingskloof Natural Heritage Site, Melrose and Beaulieu Bird Sanctuaries as well as the Walter Sisulu National Botanical Garden. More than two thirds of the unit has already undergone transformation mostly by urbanisation, cultivation or by building of roads.

				anomala, Helichrysum rugulosum, Justicia anagalloides, Kohautia amatymbica, Nidorella hottentotica, Pentanisia prunelloides subsp. latifolia, Pseudognaphalium luteo-album, Senecio venosus. Geophytic Herbs: Cheilanthes deltoidea, C. hirta. Small Tree: Vangueria infausta. Tall Shrub: Rhus pyroides. Low Shrubs: Anthospermum hispidulum, A. rigidum subsp. pumilum, Gnidia capitata, Helichrysum kraussii, Ziziphus zeyheriana. Succulent Shrub: Lopholaena coriifolia.	Current rates of transformation threaten most of the remaining unconserved areas. There is no serious alien infestation in this unit, although species such as Eucalyptus grandis, E. camaldulensis and E. sideroxylon are commonly found. Erosion is moderate and very low.

The Egoli Granite Grassland is classified as an **Endangered ecosystem** due to extensive transformation associated with urban expansion. Although the project site occurs within this vegetation type, much of the original vegetation has been modified by historical residential development, resulting in a fragmented landscape

10.1 Site Vegetation

The project site comprises a combination of transformed residential areas and remnant woody vegetation associated with the western slopes of Boskruin Hill. Vegetation is characterised by mature trees and shrubs occurring on rocky outcrops, interspersed with landscaped gardens, disturbed open spaces and isolated patches of alien invasive vegetation.

Review of the updated site information indicates that the general vegetation structure has remained largely unchanged since the November 2023 assessment. The eastern portion of the property continues to support the most intact vegetation, while the western and central portions remain substantially modified by existing development and associated infrastructure. The revised development footprint is primarily concentrated within previously disturbed areas, thereby limiting additional impacts on the remaining natural vegetation.

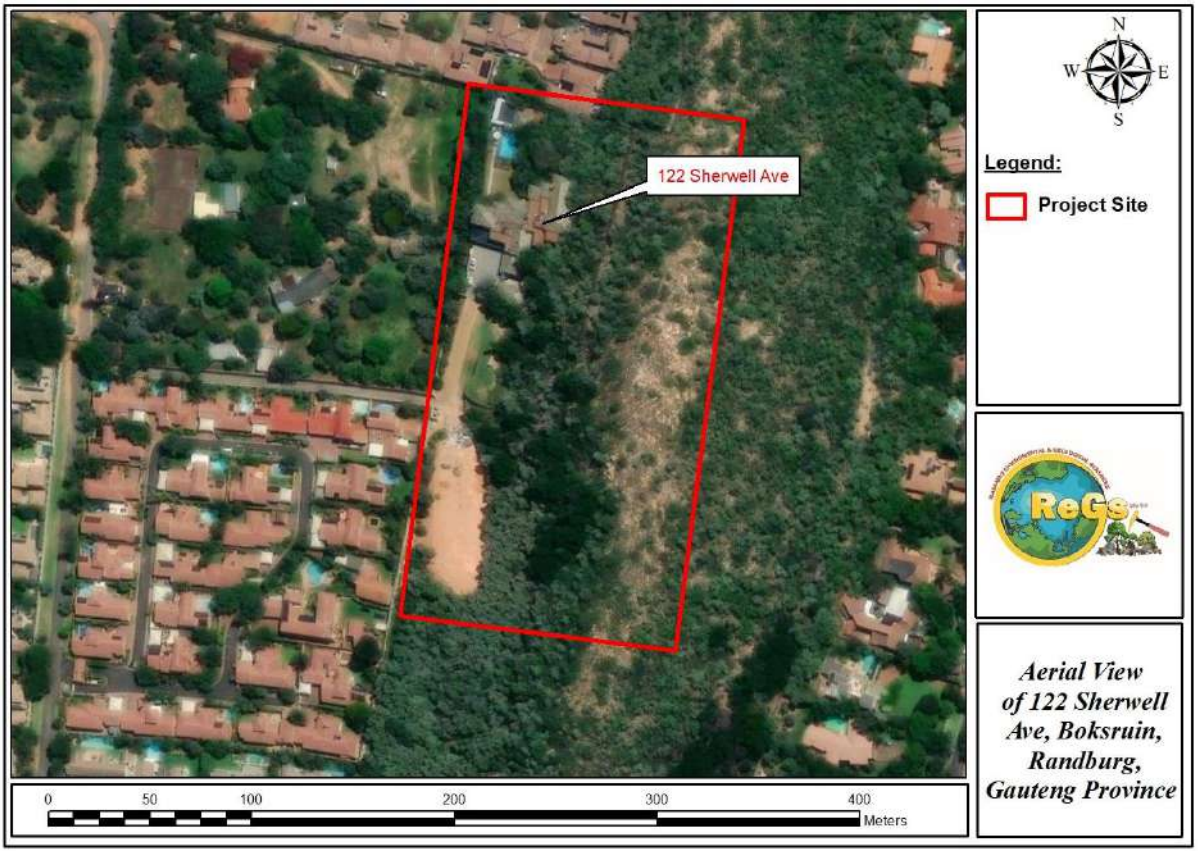


Figure 4: Aerial view of tall shrubs within the project site.

Key vegetation characteristics observed include:

- Mature woody vegetation associated with exposed granite outcrops.
- Fragmented indigenous vegetation interspersed with landscaped areas.
- Occurrence of alien and invasive plant species within previously disturbed portions of the site.

- Limited natural grassland due to historical urban transformation.
- No wetlands or riparian vegetation observed within the proposed development footprint.

The current ecological condition of the study area was assessed through a review of recent site photographs provided following the revised development layout. The photographic record confirms that the site retains indigenous woodland and rocky habitat in the eastern portion of the property, while the proposed development footprint is predominantly associated with previously disturbed areas. The photographs presented in Figure 5 provide a representative overview of the existing vegetation communities, habitat features and anthropogenic disturbance within the study area.

Figure 5: Representative views of the project site illustrating the existing site conditions, surrounding vegetation, development footprint and current level of disturbance



B) Excellent panoramic overview of the site and surrounding landscape. Shows topography and existing access.



C) Broad view of the open development footprint with surrounding woodland.



C) Wide-angle view showing the cleared footprint against the intact natural vegetation upslope.



D) Existing cleared area within the revised development footprint.



E) Existing exposed cut slope resulting from previous earthworks.



F) Existing residential development adjoining the proposed development footprint.

Figure 6: Representative vegetation communities and habitat characteristics observed across the project site during the site assessment.

			
A) Representative indigenous woodland vegetation occurring on the upper slope	**B)** Mature woodland canopy associated with the rocky hillside.	**C)** Shrub-dominated vegetation occurring within disturbed portions of the site	**D)** Mixed indigenous shrubs occupying previously disturbed areas.
			
E) Indigenous fruiting shrub providing seasonal food resources for birds and small mammals.	**F)** Closed woody vegetation providing shelter and nesting opportunities for avifauna.	**G)** Leaf litter layer providing habitat for invertebrates and contributing to nutrient cycling.	**H)** Mature woodland canopy associated with the rocky hillside.

Figure 7: Representative photos of floral species surveyed on site:

			
Nightshades *(Genus Solanum)*	**Thorn Apple** *(Datura stramonium)*	**Wattle** *(Acacia spp)*	**Shiny Leaf** *(Rhamnus prinoides)* – tentative identification
			
Wild Pear (*Dombeya cf. rotundifolia*)	**Pinus sp. (Pine)** – Alien tree (identification to species level not confirmed).	**Dysphania** (Dysphania spp)	**Thorn-tree Subfamily** *(Subfamily Mimosoideae)*

11 GENERAL DESCRIPTIONS OF THE FAUNAL ELEMENTS

The faunal assessment presented herein is based on a review of the November 2023 Biodiversity Impact Assessment, the revised development layout, recent site verification photographs, and available desktop biodiversity information. The purpose of this assessment update was to determine whether any material changes to faunal habitat or ecological sensitivity have occurred since completion of the original assessment that would alter the previous findings, impact assessment, or recommended mitigation measures. The review focused on evaluating the current condition of habitats within the revised development footprint, together with evidence of faunal utilisation observed during the recent site verification.

The project site comprises a combination of previously disturbed residential land, landscaped areas, and remnant indigenous woody vegetation associated with rocky granite outcrops. These habitat features continue to provide shelter, nesting opportunities, refuge, and foraging resources for a variety of common bird, mammal, reptile, and invertebrate species characteristic of urban and peri-urban environments. No wetlands, rivers, or other permanent aquatic habitats occur within the proposed development footprint, thereby limiting habitat suitability for aquatic-dependent fauna and amphibians.

Recent site observations, including evidence of animal activity such as droppings within the remaining natural vegetation, indicate that the site continues to support common wildlife species despite the surrounding urban development. However, no evidence was recorded to suggest the presence of significant breeding sites, migration corridors or habitat critical for Species of Conservation Concern. Based on the review of the revised development footprint and current habitat condition, the conclusions of the November 2023 faunal assessment remain applicable, with no material changes identified that would alter the anticipated ecological impacts of the proposed development.

11.1 Avifauna (Birds)

The project site provides suitable habitat for a variety of common bird species associated with urban and peri-urban environments. The remaining indigenous woodland, mature trees, shrub layer, and rocky outcrops provide opportunities for foraging, roosting, and nesting, while the surrounding residential landscape supports a range of adaptable bird species. These habitat characteristics remain largely unchanged from those documented during the November 2023 Biodiversity Impact Assessment. Table 2 provides a list of bird species known to occur around Boksruin Nature Reserve.

Review of the revised development layout and recent site information indicates that no significant changes to avifaunal habitat have occurred since the original assessment. No active nesting sites or habitat considered critical for bird Species of Conservation Concern were identified within the revised development footprint. Accordingly, the original findings remain applicable, and the anticipated impacts on avifauna are not expected to differ from those previously assessed.:

Table 2: Common bird species known to occur on site.

Common Name	Scientific Name
Red-faced Mousebird	*Urocolius indicus*
Black-collared Barbet	*Lybius torquatus*
Crested Barbet	*Trachyphonus vaillantii*
Hadada Ibis	*Bostrychia hagedash*
Spotted Eagle-Owl	*Bubo africanus*
Laughing Dove	*Spilopelia senegalensis*
Grey Go-Away-Bird	*Crinifer concolor*

11.2 Mammals

The project site provides suitable habitat for common small mammal species typically associated with fragmented woodland and urban environments. The remaining indigenous vegetation, rocky outcrops, and shrub layer offer shelter, refuge, and foraging opportunities for species capable of adapting to disturbed habitats. However, the surrounding residential development and historical habitat modification limit the occurrence of larger mammals.

Review of the updated site information identified evidence of mammalian activity in the form of *herbivore droppings* within the remaining natural vegetation, indicating continued use of the site by common terrestrial mammals. No evidence of breeding sites or habitat critical for mammal Species of Conservation Concern was recorded. Consequently, the original findings remain applicable, and no additional impacts on mammalian habitat are anticipated as a result of the revised development proposal

11.3 Frogs and Reptiles

The remaining natural habitat, particularly the rocky outcrops, leaf litter and woody vegetation, provides suitable refuge for common reptile species that are adapted to urban and peri-urban environments. Conversely, the absence of wetlands, rivers, and other permanent aquatic habitats substantially limits the occurrence of amphibians within the project area.

Review of the revised development layout and recent site information did not identify any habitat considered critical for reptile or amphibian Species of Conservation Concern. The available habitat remains fragmented and subject to historical disturbance, and no material changes have been identified since the November 2023 assessment. Accordingly, the original findings remain applicable, and the revised development proposal is not expected to result in additional impacts on herpetofauna.

12 SPECIES OF CONSERVATION CONCERN

12.1 Floral and Faunal Species of Conservation Concern

A review of the revised development layout, recent site verification photographs, and available desktop biodiversity information did not identify any confirmed Floral Species of Conservation Concern within the proposed development footprint. The remaining vegetation is largely associated with fragmented secondary woodland and previously disturbed areas, with no evidence to suggest the presence of threatened or protected plant species. The conclusions of the November 2023 Biodiversity Impact Assessment, therefore, remain applicable.

12.2 Faunal Species of Conservation Concern

No evidence of Faunal Species of Conservation Concern was identified during the review of the updated site information or recent site photographs. Although the remaining woodland and rocky habitat continue to provide refuge for common terrestrial fauna, no breeding sites, critical habitat or other ecological features indicative of threatened faunal species were observed within the revised development footprint. Consequently, the revised development proposal is not expected to result in additional impacts on Species of Conservation Concern beyond those assessed in the original Biodiversity Impact Assessment.

12.3 National Environmental Screening Tool Results

The proposed development was screened using the Department of Forestry, Fisheries and the Environment (DFFE) National Environmental Screening Tool in accordance with the Environmental Impact Assessment Regulations (2014, as amended). The screening assessment was undertaken for the proposed development footprint situated at 122 Sherwell Avenue, Boskruin, Randburg, Gauteng Province, to identify environmental sensitivities and determine the specialist studies required to support the Environmental Authorisation application. The results presented below are intended to supplement the findings of this Biodiversity Impact Assessment and provide additional spatial context regarding environmental sensitivities within and surrounding the project area

12.3.1 Terrestrial Biodiversity Sensitivity

The National Environmental Screening Tool classifies the project site as having **Very High Terrestrial Biodiversity Sensitivity** (Figure 8), indicating that the broader landscape contributes to important ecological processes and biodiversity conservation objectives. The site forms part of the Egoli Granite Grassland ecosystem and occurs within a Critical Biodiversity Area (CBA), highlighting its regional conservation importance. However, site verification undertaken during the present assessment confirmed that the proposed development footprint has been substantially modified by historical disturbance, vegetation clearing and the presence of alien invasive plant species. Consequently, although the regional screening identifies a very high sensitivity, the field assessment indicates that the ecological condition of the proposed development footprint is lower than the regional-scale classification suggests



Figure 8: Terrestrial Biodiversity Sensitivity Theme

12.3.2 Animal Species Sensitivity

The screening assessment indicates that the project area falls within a **Medium Animal Species Sensitivity zone** (Figure 9), suggesting the potential occurrence of faunal species requiring further consideration during the environmental assessment process. Desktop screening identified several mammal and invertebrate species that may occur within the broader landscape. Nevertheless, field observations undertaken during the site assessment did not record any Species of Conservation Concern or evidence of significant faunal habitat within the proposed development footprint. The existing disturbance, habitat fragmentation and urban influences surrounding the site are considered to reduce its suitability for sensitive faunal species, and the proposed development is therefore expected to have a low residual impact on terrestrial fauna following implementation of the recommended mitigation measures

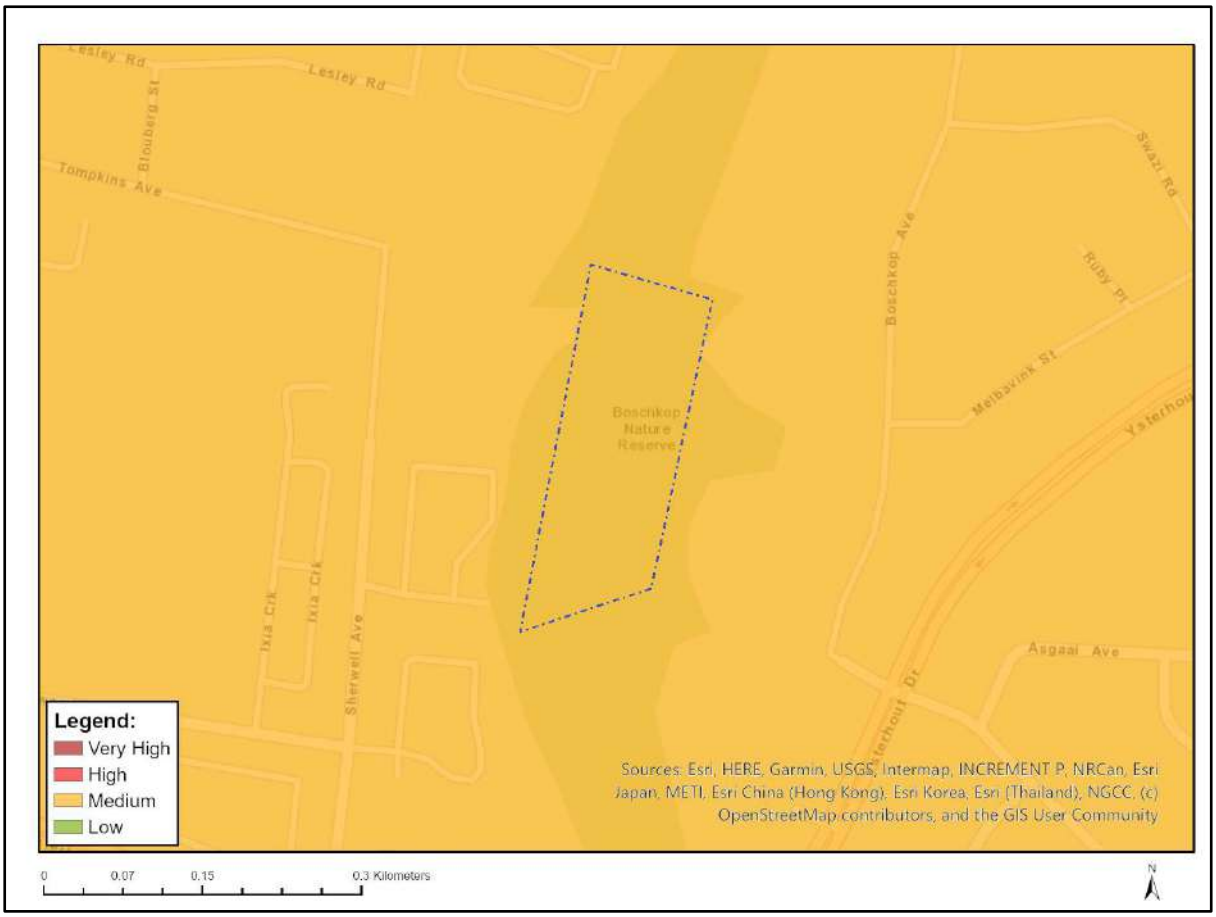


Figure 9: Animal Species Sensitivity Theme

12.3.3 Plant Species Sensitivity

The National Environmental Screening Tool classifies the proposed development area as having **Low Plant Species Sensitivity** (Figure 10), indicating a relatively low likelihood of supporting plant Species of Conservation Concern within the proposed development footprint. This finding is consistent with the field investigation, which recorded a vegetation community dominated by common indigenous species together with several alien invasive species, while no threatened or protected plant species were observed during the survey. The low plant sensitivity identified through both the desktop screening and field verification supports the conclusion that the proposed development is unlikely to result in significant impacts on plant species of conservation importance, provided that the recommended mitigation measures are implemented during construction.

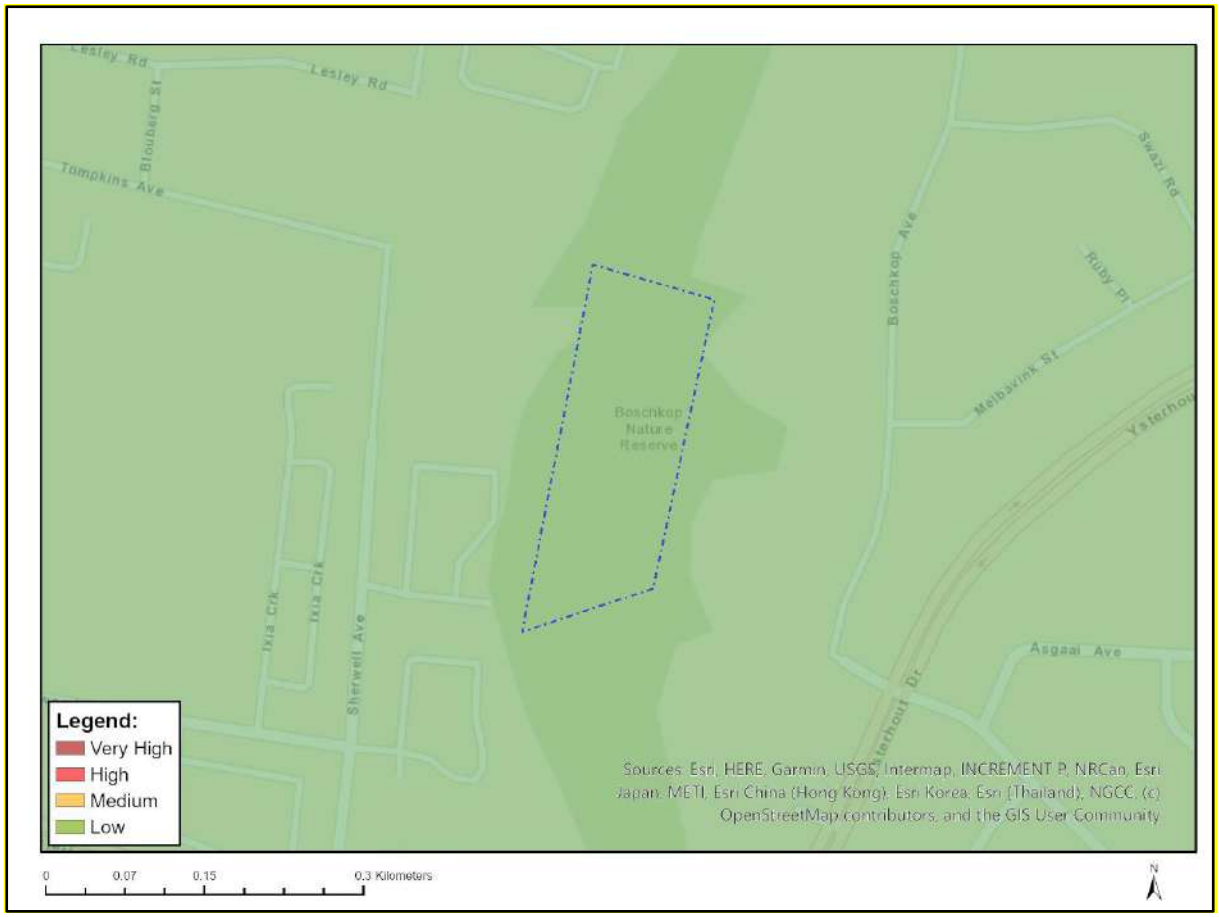


Figure 10: Plant Species Sensitivity Theme

13 ECOLOGICAL IMPACTS ASSESSMENT

13.1 Impact Assessment Methodology

The potential ecological impacts associated with the proposed residential development were assessed to determine their significance before and after the implementation of appropriate mitigation measures. The assessment considered the nature, extent, duration, intensity, probability, and significance of each identified impact in accordance with the methodology described in Appendix A1 of this report. Both negative and positive impacts associated with the construction and operational phases were evaluated.

The assessment focuses on impacts affecting terrestrial biodiversity, vegetation communities, faunal habitat and ecological functioning within the proposed development footprint. Mitigation measures were developed to avoid, minimise or rehabilitate ecological disturbances where reasonably practicable. The residual significance of each impact was then reassessed to determine whether the proposed development could proceed with acceptable environmental risk.

13.2 List of activities and anticipated impacts

Table 3: List of activities and potential impacts

Construction and Operational Phases		
Project Phase	**Activity**	**Potential Ecological Impact**
Construction	Vegetation clearing and site preparation	Loss of indigenous vegetation, habitat modification and temporary displacement of common fauna.
Construction	Earthworks, excavation and movement of heavy machinery	Soil disturbance, erosion and localised habitat degradation.
Construction	Construction activities and increased human presence	Disturbance to terrestrial fauna through noise, vibration and human activity.
Construction	Storage and handling of fuels, oils, cement and construction materials	Localised pollution of soils and degradation of terrestrial habitat.
Construction	Disturbance of exposed soils and movement of vehicles and equipment	Introduction and spread of alien invasive plant species within disturbed areas.
Operational	Residential occupation and routine human activities	Long-term disturbance of fauna and reduced habitat quality within the development footprint.
Operational	Landscaping and site maintenance	Establishment and spread of alien invasive plant species if not properly managed.
Operational	Stormwater discharge from developed surfaces	Increased runoff and localised soil erosion if stormwater is not adequately controlled.
Operational	Domestic waste generation	Attraction of pest species and degradation of surrounding habitat if waste is poorly managed.
Operational	Artificial lighting and increased human activity	Disturbance of nocturnal fauna and alteration of natural behavioural patterns.

13.3 Construction phase Impacts

The construction phase of the proposed residential development has the greatest potential to affect the terrestrial biodiversity of the project site. Potential impacts are primarily associated with vegetation clearing, earthworks, construction activities and increased human presence, which may result in habitat disturbance, soil degradation and temporary impacts on flora and fauna. The identified impacts were assessed before and after the implementation of appropriate mitigation measures to determine their significance and ensure that potential ecological risks are reduced to acceptable levels

Table 4: Impacts on floral species and habitat fragmentation

Nature of Impact: Loss of indigenous vegetation and Habitat		
Description: The construction phase may require clearing indigenous vegetation within the proposed development footprint to accommodate the residential development and associated infrastructure. Although the study area occurs within the Egoli Granite Grassland ecosystem and a Critical Biodiversity Area, field investigations confirmed that the vegetation within the footprint has been modified by previous disturbance and is characterised by a mixture of indigenous woody species and alien invasive vegetation. The clearing of vegetation will therefore result in the permanent loss of a portion of disturbed habitat and temporary displacement of common faunal species occupying the site.		
Criteria	**Rating**	
	Before Mitigation	**After Mitigation**
Geographical Extent (E)	**1**	**1**
Probability (Pr)	4	3
Reversibility (Re)	3	2
Irreplaceable loss of resources (L)	2	1
Duration (D)	4	3
Cumulative effect (CE)	3	2
Intensity/Magnitude (M)	2	1
Significance Rating = (Ex+Pr+Re+L+D+CE) x M	**34 (Negative Medium Impact)**	**12 Negative Low Impact**
Mitigation measures	• Demarcate the approved construction footprint prior to vegetation clearing. • Restrict vegetation clearing to areas required for construction. • Retain mature indigenous trees wherever practicable. • Remove alien invasive plant species in accordance with the NEMBA Alien and Invasive Species Regulations. • Prevent unnecessary disturbance to vegetation outside the development footprint. • Rehabilitate disturbed areas using indigenous species representative of the Egoli Granite Grassland vegetation. • Implement environmental awareness training for construction personnel.	

Table 5: Impact on faunal species

Nature of Impact: Disturbance to Fauna		
Description: Construction activities, including vegetation clearing, excavation, movement of construction vehicles and increased human presence, have the potential to disturb faunal species inhabiting or utilising the proposed development site. The removal of vegetation and increased noise levels may temporarily displace common mammals, reptiles, amphibians and birds to adjacent natural habitats. Although the site provides refuge for common indigenous fauna, no Species of Conservation Concern or significant breeding sites were recorded during the field assessment. Given the urbanised nature of the surrounding environment and the availability of suitable habitat within the adjacent Boschkop Nature Reserve, most mobile species are expected to relocate with minimal long-term effects.		
Criteria	**Rating**	
	Before Mitigation	**After Mitigation**
Geographical Extent (E)	1	1
Probability (Pr)	3	2
Reversibility (Re)	2	1
Irreplaceable loss of resources (L)	1	1
Duration (D)	2	2
Cumulative effect (CE)	2	1
Intensity/Magnitude (M)	2	1
Significance Rating = (Ex+Pr+Re+L+D+CE) x M	**(1 + 3 + 2 + 1 + 2 + 2) × 2-=22 Negative Low Impact**	**(1+2+1+1+2+1+1)x1 =8 Negative Low Impact**
Mitigation measures	• Restrict construction activities to the approved development footprint. • Limit vegetation clearing to the minimum area required for construction. • Conduct vegetation clearing progressively to allow mobile fauna to disperse naturally. • Prohibit the hunting, trapping or collection of wildlife by construction personnel. • Maintain good housekeeping practices to avoid attracting nuisance animals. • Brief construction personnel on the ecological sensitivity of the site through environmental awareness training. • Where safe and practical, any reptiles or other slow-moving fauna encountered during construction should be relocated by a suitably qualified Environmental Control Officer (ECO) or biodiversity specialist. • Immediately report any observation of Species of Conservation Concern to the ECO for appropriate management.	

Table 6: Soil Disturbance and Erosion

Nature of Impact: Soil Disturbance and Erosion		
Description: Construction activities involving vegetation clearing, excavation, earthworks and the movement of heavy machinery may disturb the existing soil profile and increase the susceptibility of exposed surfaces to erosion. The removal of vegetation reduces soil stability, particularly on sloping areas where runoff may accelerate soil loss during rainfall events. If not adequately managed, sediment may be transported downslope, resulting in localized soil degradation and the deposition of sediment in adjacent natural areas. Although the proposed development footprint has experienced previous disturbance, inappropriate construction practices could exacerbate erosion and reduce the effectiveness of future rehabilitation efforts. The implementation of erosion control measures and progressive rehabilitation will minimise soil loss and maintain the stability of the surrounding environment throughout the construction phase.		
Criteria	**Rating**	
	Before Mitigation	**After Mitigation**
Geographical Extent (E)	1	1
Probability (Pr)	3	2
Reversibility (Re)	2	1
Irreplaceable loss of resources (L)	2	1
Duration (D)	3	2
Cumulative effect (CE)	2	1
Intensity/Magnitude (M)	2	1
Significance Rating = (Ex+Pr+Re+L+D+CE) x M	**(1 + 3 + 2 + 2 + 3 + 2) × 2 = 26 (Negative Low Impact)**	**(1+2+1+1+2+1+1) x 2 = 8 Negative Low Impact**
Mitigation measures	• Restrict earthworks to the approved development footprint. • Minimise the area of exposed soil at any one time. • Install temporary erosion and sediment control measures, including silt fences, berms or sediment traps where required. • Schedule major earthworks during the dry season where practicable. • Stockpile topsoil separately and protect it from erosion for use during rehabilitation. • Rehabilitate disturbed areas immediately after construction using indigenous vegetation. • Inspect erosion control measures regularly and repair any damage following rainfall events. The adoption of these mitigation measures will significantly reduce the potential for soil erosion and sediment movement beyond the development footprint. Residual impacts are expected to remain of Low significance, provided that erosion control and rehabilitation measures are effectively implemented throughout the construction phase.	

Table 7: Establishment and Spread of Alien Invasive Plant Species

Nature of Impact: Establishment and Spread of Alien Invasive Plant Species		
Description: Construction activities may facilitate the introduction and spread of alien invasive plant species through vegetation disturbance, soil excavation, stockpiling of topsoil and the movement of construction vehicles and equipment. Disturbed areas provide favourable conditions for invasive species to establish, potentially suppressing indigenous vegetation, reducing habitat quality and altering ecological functioning. Given that alien invasive plants were already recorded within portions of the study area, there is a moderate risk that construction activities could accelerate their spread if appropriate management measures are not implemented. The spread of invasive species may also hinder post-construction rehabilitation by outcompeting indigenous vegetation and reducing the ecological integrity of restored areas. Effective alien plant management throughout the construction phase will therefore be essential to maintain the ecological condition of the remaining natural vegetation and ensure successful rehabilitation.		
Criteria	**Rating**	
	Before Mitigation	**After Mitigation**
Geographical Extent (E)	1	1
Probability (Pr)	3	2
Reversibility (Re)	2	1
Irreplaceable loss of resources (L)	2	1
Duration (D)	3	2
Cumulative effect (CE)	3	2
Intensity/Magnitude (M)	2	1
Significance Rating = (Ex+Pr+Re+L+D+CE) x M	**(1 + 3 + 2 + 2 + 3 + 3) × 2 = 28 (Medium Negative Impact)**	**(1+2+1+1+2+1+1) x 2 = 9 Negative Low Impact**
Mitigation measures	• Implement an Alien Invasive Plant Management Plan before construction commences. • Remove and dispose of alien invasive plant species in accordance with the National Environmental Management: Biodiversity Act (NEMBA) Alien and Invasive Species Regulations. • Prevent the importation of contaminated topsoil, fill material or construction equipment carrying invasive plant propagules. • Monitor disturbed areas regularly for the emergence of alien invasive plants during construction. • Undertake follow-up clearing of invasive species throughout the construction and rehabilitation phases. • Rehabilitate disturbed areas promptly using indigenous plant species representative of the local vegetation community. • Ensure that all cleared invasive plant material is disposed of at an approved waste disposal facility or treated in accordance with legal requirements	

Table 8: Pollution of the Terrestrial Environment

Nature of Impact: Pollution of the Terrestrial Environment		
Description: Construction activities may result in localised pollution through accidental fuel and oil spills, cement washout, leakage from machinery, and the inappropriate disposal of construction waste. If not properly managed, these activities may degrade soil quality, damage vegetation and reduce habitat quality within the development footprint. However, the impact is expected to remain localized and can be effectively managed through good housekeeping practices and implementation of the Environmental Management Program (EMPr).		
Criteria	**Rating**	
	Before Mitigation	**After Mitigation**
Extent (Ex)	1	1
Probability (Pr)	3	2
Reversibility (Re)	2	1
Irreplaceable Loss of Resources (L)	2	1
Duration (D)	2	2
Cumulative Effect (CE)	2	1
Intensity / Magnitude (M)	2	1
Significance Rating = (Ex+Pr+Re+L+D+CE) x M	**(1 + 3 + 2 + 2 + 2 + 2) × 2 = 24 (Negative Low Impact)**	**(1 + 2 + 1 + 1 + 2 + 1) × 1 = 8 (Negative Low Impact)**
Mitigation measures	• Store fuels, oils, paints, and other hazardous materials in designated bunded areas. • Refuel and service construction equipment only within approved areas fitted with spill containment measures. • Maintain spill kits on site and ensure that all personnel are trained in spill response procedures. • Collect and dispose of construction waste at a licensed waste disposal facility. • Prohibit the discharge of cement slurry, wastewater or hazardous substances onto exposed soils. • Conduct regular inspections to identify and rectify leaks from construction vehicles and equipment. • Implement good housekeeping practices throughout the construction period to prevent littering and contamination.	

13.4 Operational Phase Impacts

The operational phase of the proposed residential development is expected to result in relatively low ecological impacts compared to the construction phase. Most impacts are localised, long-term in nature, and can be effectively managed through implementation of the recommended mitigation measures and routine environmental management practices. The anticipated operational impacts are summarised in Table 8 below.

Table 9: Summary of Operational Phase Ecological Impacts (Landscape)

Impact	Nature of Impact	Anticipated Impact Before Mitigation	Key Mitigation Measures	After Mitigation
Habitat disturbance	Continued human activity may reduce habitat quality for common fauna.	Medium	Restrict access to natural areas, maintain indigenous vegetation, implement environmental awareness.	Low
Alien invasive plants	Landscaping and disturbed areas may encourage invasive plant establishment.	Low	Routine alien plant monitoring and removal; use indigenous species for landscaping.	Low
Stormwater runoff	Increased impermeable surfaces may increase runoff and localised erosion.	Medium	Install and maintain appropriate stormwater drainage and erosion control measures.	Low
Waste generation	Domestic waste may attract pest species and reduce habitat quality.	Low	Provide adequate waste storage facilities and ensure regular waste collection.	Low
Noise and lighting	Artificial lighting and human activity may disturb nocturnal fauna.	Low	Direct lighting away from natural vegetation and minimise unnecessary night lighting.	Low

The operational impacts associated with the proposed development are generally of low significance and are primarily related to routine residential activities. The implementation of the recommended mitigation measures, together with ongoing site management and maintenance, is expected to minimise long-term ecological impacts and maintain the ecological functioning of the remaining natural habitat surrounding the development footprint.

13.5 Cumulative Impacts

The proposed residential development will contribute to the cumulative loss and fragmentation of natural habitat within the Boskruin area, where urban expansion has progressively transformed portions of the Egoli Granite Grassland ecosystem. Although the proposed development footprint is relatively small and has already experienced historical disturbance, the incremental loss of indigenous vegetation may contribute to the long-term reduction of habitat availability and ecological connectivity within the broader landscape. The implementation of the recommended mitigation measures, together with the retention of vegetation outside the approved development footprint and ongoing rehabilitation of disturbed areas, will minimise the cumulative ecological effects of the proposed development. The residual cumulative impact is therefore considered to be of Low significance.

Table 10: Assessment of Cumulative Impacts

Nature of Impact: Cumulative Ecological Impacts		
Criteria	**Rating**	
	Before Mitigation	**After Mitigation**
Extent (Ex)	2	2
Probability (Pr)	3	2
Reversibility (Re)	2	1
Irreplaceable Loss of Resources (L)	2	1
Duration (D)	3	3
Cumulative Effect (CE)	3	2
Intensity / Magnitude (M)	2	1
Significance Rating = (Ex+Pr+Re+L+D+CE) x M	**30 (Negative Medium Impact)**	**11 (Negative Low Impact)**
Mitigation measures	• Limit vegetation clearing to the approved development footprint. • Retain natural vegetation wherever practicable. • Implement rehabilitation immediately after construction. • Undertake routine alien invasive plant control. • Maintain ecological buffers surrounding the remaining natural habitat. • Ensure long-term implementation of the Environmental Management Programme (EMPr).	

13.6 No-Go Alternative

The No-Go Alternative represents the option whereby the proposed development is not undertaken. Under this scenario, no direct vegetation clearing, habitat loss, or disturbance to terrestrial fauna associated with the proposed development would occur. However, the site would remain subject to existing anthropogenic pressures, including the continued spread of alien invasive plant species and ongoing disturbance associated with the surrounding urban environment. While the No-Go Alternative would avoid development-related impacts, it would not necessarily result in an improvement of the ecological condition of the site without active ecological management and rehabilitation. Consequently, the implementation of the proposed development together with the recommended mitigation measures is considered to represent an environmentally acceptable outcome.

14 RESULTS

The Biodiversity Impact Assessment update confirmed that the proposed development site remains situated within the **Egoli Granite Grassland (Gm10)** vegetation type, an Endangered ecosystem that has undergone extensive transformation due to urban development throughout the Johannesburg Metropolitan area. The DFFE National Environmental Screening Tool identified the site as having **Very High Terrestrial Biodiversity Sensitivity**, while the Animal Species Theme was classified as **Medium** and the Plant Species Theme as **Low** sensitivity. The field verification and desktop review, however, confirmed that the revised development footprint is largely confined to previously disturbed areas characterised by fragmented woody vegetation, landscaped areas and the presence of several alien invasive plant species.

No confirmed floral or faunal Species of Conservation Concern were identified within the revised development footprint during the assessment, and no wetlands, riparian habitats or other sensitive aquatic ecosystems were recorded within the project area. Although the site occurs within a Critical Biodiversity Area and contributes to the broader ecological functioning of the Boskruin landscape, the ecological condition of the proposed development footprint is considered to be lower than that indicated by the regional biodiversity screening datasets due to historical disturbance and surrounding urban development.

The ecological impact assessment demonstrated that the most significant potential impacts are associated with vegetation clearing, temporary disturbance to fauna, soil disturbance, the spread of alien invasive plant species and pollution during the construction phase. Prior to mitigation, these impacts range from **Low to Medium negative significance**. Following implementation of the recommended mitigation measures, all identified impacts can be reduced to **Low negative significance**, indicating that the proposed development is environmentally acceptable from a terrestrial biodiversity perspective.

15 CONCLUSIONS AND RECOMMENDATIONS

15.1 Conclusions

The updated Biodiversity Impact Assessment confirmed that the findings of the November 2023 assessment remain applicable to the revised development proposal. Review of the amended development layout, desktop biodiversity information, and updated site verification data did not identify any material changes to the ecological baseline, vegetation communities, faunal habitat, or biodiversity sensitivity that would alter the conclusions of the original assessment.

Although the project site occurs within the **Endangered Egoli Granite Grassland** ecosystem and a **Critical Biodiversity Area**, the proposed development footprint is predominantly located within previously disturbed habitat characterised by fragmented indigenous vegetation and a notable presence of alien invasive plant species. Additionally, the new development footprint is located on part of the Vharanani property where minimal vegetation clearing has already been completed to develop a parking lot. No Species of Conservation Concern were recorded within the development footprint, and no ecologically sensitive habitats requiring avoidance were identified during the assessment. Consequently, the proposed development is not expected to result in significant residual impacts on terrestrial biodiversity, provided that the recommended mitigation measures are fully implemented throughout the construction and operational phases.

15.2 Recommendations

Based on the findings of this assessment, the following recommendations are made:

- Vegetation clearing should be restricted to the approved development footprint.
- Mature indigenous trees should be retained wherever practicable.
- Alien invasive plant species should be removed and managed in accordance with the National Environmental Management: Biodiversity Act (Act No. 10 of 2004).
- Disturbed areas should be rehabilitated using indigenous vegetation representative of the Egoli Granite Grassland ecosystem.
- Construction activities should be undertaken in accordance with the approved Environmental Management Programme (EMPr).
- Environmental awareness training should be provided to all construction personnel prior to the commencement of site works.
- An Environmental Control Officer (ECO) should monitor compliance with biodiversity mitigation measures during construction.

- Should any protected species or Species of Conservation Concern be encountered during construction, work within the affected area should cease immediately and the ECO should be notified for appropriate management.

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Appendix A1: Impact Assessment Methodology

1.1. Impact Assessment Methodology

1.1.1. Determination of Significance of Impacts

Significance is calculated by a synthesis of effect characteristics that include an impact's meaning and severity. Context refers to the regional scale, i.e. location, local, national or global, while intensity is characterized by the severity of the effect, e.g. the degree of variance from background conditions, the size of the affected area, the length of the impact and the overall likelihood.

Significance is an indicator of the importance of the effect, both in terms of physical scale and time scale, and thus demonstrates the degree of mitigation required. For each impact, the total number of points scored shows the extent of the impact's importance. Significance is calculated as shown in **Table 1** below.

1.1.2. Impact Rating System

Impact assessment must take into account the nature, scale and length of environmental impacts, whether they are positive (beneficial) or negative (negative) or not (detrimental). Each impact is also assessed according to the project stages:

- Operation
- Decommissioning

The proposal for mitigation or optimization of an effect is specific, where appropriate. It also includes a brief discussion of the effect and the reasoning behind the evaluation of its importance.

1.1.3. Rating System Used to Classify Impacts

The following rating system is applicable to the possible effects on the receiving environment and contains an objective impact mitigation assessment. Impacts were combined into one ranking. In assessing the significance of each issue, the following criteria, including an allocated point system, are used:

Table 1: Description of parameters used to determine impact significance

NATURE		
A brief overview of the effects of the environmental parameters being evaluated in the context of the project is included. These criteria require a short-written statement of the environmental factor that a specific action or behaviour affects.		
GEOGRAPHICAL EXTENT		
This is described as the region over which the effect is transmitted. The magnitude and significance of an effect usually have distinct scales and grouping ranges are often needed. This is also useful in the thorough evaluation of a project in order to better define it.		
1	Site	The impact only affects the site.
2	Local/district	Have an effect on the local area or district.
3	Province/region	Have an effect on the entire province or region.
4	International and National	Have an effect on the entire country.
PROBABILITY		
This describes the chance of occurrence of an impact.		
1	Unlikely	The chance of the impact occurring is extremely low (Less than a 25% chance of occurrence).
2	Possible	The impact may occur (with a 25% to 50% chance of occurrence).
3	Probable	The impact is likely occurring (Between a 50% to 75% chance of occurrence).
4	Definite	Impact certainly occurs (Greater than a 75% chance of occurrence).
REVERSIBILITY		
This describes the degree to which an impact on an environmental parameter can be successfully reversed upon completion of the proposed activity.		
1	Completely reversible	The impact is reversible with implementation of minor mitigation measures.
2	Partly reversible	The impact is partly reversible but more intense mitigation measures are required.
3	Barely reversible	The impact is unlikely to be reversed even with intense mitigation measures.
4	Irreversible	The impact is irreversible, and no mitigation measures exist.
IRREPLACEABLE LOSS OF RESOURCES		
This describes the degree to which resources are irreplaceably lost because of a proposed activity.		
1	No loss of resource.	The impact does not result in the loss of any resources.
2	Marginal loss of resource	The impact results in marginal loss of resources.
3	Significant loss of resources	The impact results in significant loss of resources.
4	Complete loss of resources	The impact is result in a complete loss of all resources.

DURATION		
This describes the duration of the impacts on the environmental parameter. Duration indicates the lifetime of the impact because of the proposed activity.		
1	Short term	The impact and its effects will either disappear with mitigation or will be mitigated through natural process in a span shorter than the construction phase (0 – 1 years), or the impact and its effects will last for the period of a relatively short construction period and a limited recovery time after construction, thereafter it will be entirely negated (0 – 2 years).
2	Medium term	The impact and its effects will continue or last for some time after the construction phase but will be mitigated by direct human action or by natural processes thereafter (2 – 10 years).
3	Long term	The impact and its effects will continue or last for the entire operational life of the development but will be mitigated by direct human action or by natural processes thereafter (10 – 50 years).
4	Permanent	The only class of impact that will be non-transitory. Mitigation either by man or natural process will not occur in such a way or such a time span that the impact can be considered transient (Indefinite).
CUMULATIVE EFFECT		
This describes the cumulative effect of the impacts on the environmental parameter. A cumulative effect/impact is an effect which may not be significant but may become significant if added to other existing or potential impacts emanating from other similar or diverse activities as a result of the project activity in question.		
1	Negligible Cumulative Impact	The impact would result in negligible to no cumulative effects.
2	Low Cumulative Impact	The impact would result in insignificant cumulative effects.
3	Medium Cumulative impact	The impact would result in minor cumulative effects.
4	High Cumulative Impact	The impact would result in significant cumulative effects.
INTENSITY/ MAGNITUDE		
Describes the severity of an impact.		
1	Low	Impact affects the quality, use and integrity of the system/component in a way that is barely perceptible.
2	Medium	Impact alters the quality, use and integrity of the system/component but system/ component still continues to function in a moderately modified way and maintains general integrity (some impact on integrity).
3	High	Impact affects the continued viability of the system/ component, and the quality, use, integrity and functionality of the system or component is severely impaired and may temporarily cease. High costs of rehabilitation and remediation.
4	Very high	Impact affects the continued viability of the system/component, and the quality, use, integrity and functionality of the system or component permanently ceases and is irreversibly impaired (system collapse). Rehabilitation and remediation often impossible. If possible, rehabilitation and remediation often unfeasible due to extremely high costs of rehabilitation and remediation.

Table 2: Significance calculation and ratings.

SIGNIFICANCE
Significance is determined through a synthesis of impact characteristics. Significance is an indication of the importance of the impact in terms of both physical extent and time scale, and therefore indicates the level of mitigation required. This describes the significance of the impact on the environmental parameter. The calculation of the significance of an impact uses the following formula:
SIGNIFICANCE = (*Extent* + *probability* + *reversibility* + *irreplaceability* + *duration* + *cumulative effect*) x *magnitude*/*intensity*.
The summation of the different criteria will produce a non-weighted value. By multiplying this value with the magnitude/intensity, the resultant value acquires a weighted characteristic which can be measured and assigned a significance rating.

Points	Impact Type	Impact Significance Rating	Description
>-90	Negative	Negative Very High Impact	The impact has highly significant effects and are unlikely to be able to be mitigated adequately. These impacts could be considered "fatal flaws".
-61 to -90	Negative	Negative High Impact	The impact has significant effects and requires significant mitigation measures to achieve an acceptable level of impact.
-31 to -60	Negative	Negative Medium Impact	The impact has moderate negative effects and requires moderate mitigation measures.
-1 to -30	Negative	Negative Low Impact	The impact has negligible negative effects and requires little to no mitigation.
0	Neutral	No Impact	The impact has moderate positive effects.
1 to 30	Positive	Positive Low Impact	The impact has minor positive effects.
31 to 60	Positive	Positive Medium Impact	The impact has moderate positive effects.
61 to 90	Positive	Positive High Impact	The impact has significant positive effects.
>90	Positive	Positive Very High Impact	The impact has highly significant positive effects.

Table Error! No text of specified style in document.**-3: Example:** Rating of impacts

IMPACT TABLE FORMAT			
	Description	**Before Mitigation**	**After Mitigation**

[Environmental Parameter] **e.g., Biodiversity**	*A brief description of the nature of the impact that is likely to affect the environmental aspect as a result of the activity e.g. alteration of aquatic biota The environmental impact that is likely to positively or negatively affect the environment as a result of the proposed activity e.g. oil spill in surface water.*		
Extent (Ex)	*A brief description indicating the chances of the impact occurring.*	4	1
Probability (Pr)	*A brief description of the ability of the environmental components recovery after a disturbance as a result of the activity.*	4	1
Reversibility (Re)	*A brief description of the environmental aspect likely to be affected by the activity e.g. Surface water.*	4	1
Irreplaceable loss of resources (L)	*A brief description of the degree in which irreplaceable resources are likely to be lost.*	4	1
Duration (D)	*A brief description of the amount of time the activity is likely to take to its completion.*	4	1
Cumulative effect (CE)	*A brief description of whether the impact will be exacerbated as a result of the activity.*	4	1
Intensity/magnitude (M)	*A brief description of whether the impact has the ability to alter the functionality or quality of a system permanently or temporarily.*	2	2
Significance Rating	*A brief description of the importance of an impact which in turn dictates the level of mitigation required.*	-48 (Negative Medium Impact)	-12 (Negative Low Impact)
Mitigation measures	*Outline/explain the mitigation measures to be undertaken to ameliorate the impacts that are likely to have risen from the activity. Describe how the mitigation measures have reduced/enhanced the impact with relevance to the impact criteria used in analysing the significance. These measures will be detailed in the EMPr.*		

Appendix G.2: Geotechnical Assessment

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GEOTECHNICAL INVESTIGATION REPORT OF

PORTION 556 OF THE FARM BOSCHKOP 199-IQ, JOHANNESBURG

Prepared for: SCHALK BOTES TOWN PLANNERS

Report No. : **3507**
Date : **MAY 2007**

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PORTION 556 OF THE FARM, BOSCHKOP 199-IQ. JOHANNESBURG.

GEOTECHNICAL INVESTIGATION REPORT

1. INTRODUCTION

1.1 Preamble

During November 2007, Mr. S. Botes of Schalk Botes Town and Regional Planners invited Africa Exposed Consulting Engineering Geologists to submit a proposal for the completion of a geotechnical investigation on Portion 556 of the farm Boschkop 199-IQ in Johannesburg.

Subsequently on 16th April 2007 an e-mail was received from Glynden Props 21 (Pty) Ltd confirming Africa Exposed's appointment to undertake the geotechnical investigation in terms of the proposal.

1.2 Database

The following information was supplied to Africa Exposed;

- The site is to be re-zoned for residential purposes.
- The surface area of the site is approximately 0.857ha in extent.
- A locality map of the site was provided.

1.3 Objectives

The objectives of the investigation were:

- To comment on the nature and extent of the near surface and outcropping strata.
- To recommend suitable foundation systems, and founding depths for the proposed structures.
- To comment on any perceived geotechnical problems which may affect either the design or construction of the project.
- To classify the site in terms of the National Home Builders Registration Council (NHBRC) Home Builders Manual of 1999.

2. FACTUAL REPORT

2.1 Programme of Work

2.1.1 *Literary Review*

A literary review was conducted in order to obtain data from previous investigations carried out in the area. The 1: 250 000 geological map, No 2626 West Rand was consulted to determine the regional geology in the vicinity of the site.

A geological map of the Johannesburg-Pretoria Dome , published by C.R. Annhaeusser (1971), together with the accompanying paper "The Geology and Geochemistry of the Archaean Granites and Gneisses of the Johannesburg-Pretoria Dome was used to identify the geological structures present in the immediate vicinity of the site.

2.1.2 *Field Work*

On 26th April 2007, the outcropping strata on the site was mapped. No test pits were excavated due to the inaccessibility of the site as well as the extensive surface outcrop of rock. The site was mapped by means of a walk over survey in conjunction with data obtained from published mapping and extensive use was made of the 1:10 000 orthophoto, sheet No. 2627 BB 10 Randburg.

2.1.3 *Office and Laboratory Work*

Due to the fact that no test pits were excavated and extremely poor soil cover exists on the site, no soil samples were recovered or testing.

2.2 Site Description

The site is situated on the western side of the Boskruin Ridge and access to the site is gained via Sherwell Road in Boskruin, Johannesburg. The site boundaries are well defined and at the time of the investigation and residential properties are located on the western side, while undeveloped properties, located on the ridge are situated on the remaining sides. A private double storey dwelling is situated on the northern side of the property, while the remainder of the site is undeveloped.

The site investigated covers a surface area of some 0.857ha and is situated on the steep west facing slope of an north south trending ridge.

Extensive rock outcrop occurs over the entire site and the vegetation cover consists of a mixture of grass lands interspersed with groves of indigenous tree and shrubs which occupy the crest of the ridge.

2.3 Site Geology

From the available literature as well as the observations during the site investigation, it is evident that the site is underlain by granitic rocks of the Basement Complex, as exposed in the Johannesburg-Pretoria Dome. Typically, these Archaean intrusive igneous rocks are cross cut by diabase dykes of various ages, and may contain a prominent structural fabric. The Boskruin Ridge is formed along a prominent fracture zone in which clear north south

trending foliation is developed in the host rocks. Secondary quartz mineralisation within the fracture zone has resulted in extensive quartz veins occurring. The resistance of the quartz to weathering has enable the well defined ridge to form

Though usually referred to broadly as "granite" these rocks in fact constitute a complex suite ranging from true granite to gneiss, granodiorite and migmatite. Veins of pegmatite, aplite and quartz are common.

2.4 Hydrology

The average annual rainfall in this area is approximately 750mm, most of which occurs as heavy, isolated thunder showers between October and March. The site slopes down to the west at a gradient of some 15 to 20% and due to the steep slopes on the property, storm water runoff will be in the form of sheetwash, with localised concentration in shallow gullies that occur on the site.

2.5 Observations

From the geological field mapping completed it is immediately apparent the upper slopes of the ridge are underlain by prominent quartz veins that are developed within the fractured granite host rock, while the lower slopes are underlain by transported talus that overlies granite.

Although only limited sections of the lower portions of the site are underlain by any soils it was apparent that the thin soil cover, that appears to be less than 0.6m thick, consists of dense, coarse gravels and boulders held in a matrix of silty sand of colluvial origin. Where exposures were available, the underlying residual soils are all but non existent, and the transported soils have been deposited directly onto medium hard to hard rock granite.

On the upper portions of the site where extensive outcrop of slightly weathered hard to very hard rock quart occurs, the degree of weathering of the granite is significantly reduced due to the protective capping provided by the vein quartz.

2.6 Laboratory and Field Test Results

No laboratory testing was undertaken.

3. INTERPRETIVE REPORT

3.1 Classification of Site.

The site is characterised by steep slopes that are underlain by extensive outcrops of quartz and granite. The lower portions of the site are blanketed by a very thin layer of transported silty sand, with gravels and boulders that are generally of dense consistency. These soils in turn are underlain by medium hard to hard rock granite within approximately 0.6m of the surface.

In order to classify the geotechnical characteristics of the underlying soils, the geotechnical classification method proposed in the National Home Builders Registration Council (NHBRC) of 1999 has been applied to this site. Table 1 shown below indicates the various geotechnical characteristics and the criteria used to evaluate the soils.

TABLE 1. Residential Site Class Designations NHBRC (1999).				
Typical Founding Material	**Character of Founding Material**	**Expected Range of Total Soil Movements (mm)**	**Assumed Differential Movement (%of Total)**	**Site Class**
Rock (excluding mud rocks which may exhibit swelling to some depth)	STABLE	NEGLIGIBLE	-	R

The geotechnical properties of the soils which occur on the site have been mapped, and are shown in Appendix 1. The geotechnical classification of the site is shown below:-

R Underlain by rock, negligible settlement anticipated.

3.2 Design Solutions

3.2.1 ***Structures***

*Areas classified as **R***
(Area underlain by bedrock)

The site is characterised by a outcropping bedrock or quartzite bedrock that occurs within 0.6m of the surface. Negligible consolidation settlement is anticipated and total settlements of less than 5mm have been determined.

It is recommended that structures built within this zone should be founded using normal strip footings placed on medium hard to hard rock granite bedrock. The maximum allowable bearing pressure should not exceed 500kPa.

It must be stressed that the foundations must be placed on uniform materials and should be founded completely on bedrock or completely on transported soils. Should the footings straddle rock and soil, it is strongly recommended that the entire structure is placed on soil mattress in order to prevent differential settlement occurring. The rock should be removed to a minimum depth of 1.0m below the proposed founding level. A suitable G7 to G8 quality fill material should be placed in layers of 150mm, compacted to 93% Mod AASHTO at -1% to +2% OMC. The final two layers below the foundations should be compacted to 95% Mod AASHTO. The structures may be placed on conventional strip footings, applying a maximum load of 100kPa.

It would be recommended that the upper portions of the slope and the crest of the ridge where prominent outcrops of bedrock protrudes above ground level, and where attractive indigenous flora has been preserved, that no construction takes place and the area is set aside as an open space for residents.

3.2.2. ***Excavation Classification***

The excavation class will be "hard" according to SABS 1200 D: Earthworks, with portions on the lower levels of the site characterised by "intermediate" and possible "soft" conditions being encountered in isolated areas.

Excavation conditions for roads, terraces and service trenches will be difficult particularly along the upper portions of the site.

It is anticipated that the excavated material obtained from the site will be suitable for the construction of terraces as well as the lower layers beneath pavements.

3.2.3 ***Stormwater Management***

No ground water seepage was encountered on the site, however appropriate precautions should be implemented beneath all the structures and paved areas, as well as on any exposed excavated surfaces in the terraces.

3.3 Construction Problems

It must be anticipated that corestones and boulders may be encountered in the excavations, and large areas of "hard" class material will be encountered over the entire site.

3.4 Additional Investigations

This investigation was completed for the purposes of township proclamation, and whilst the site has been zoned and generalised foundation recommendations have been presented for typical residential structures, the results contained in this report should not be used for site specific foundation design purposes. Additional detailed geotechnical investigations would be required for structures other than single and double storey residential units.

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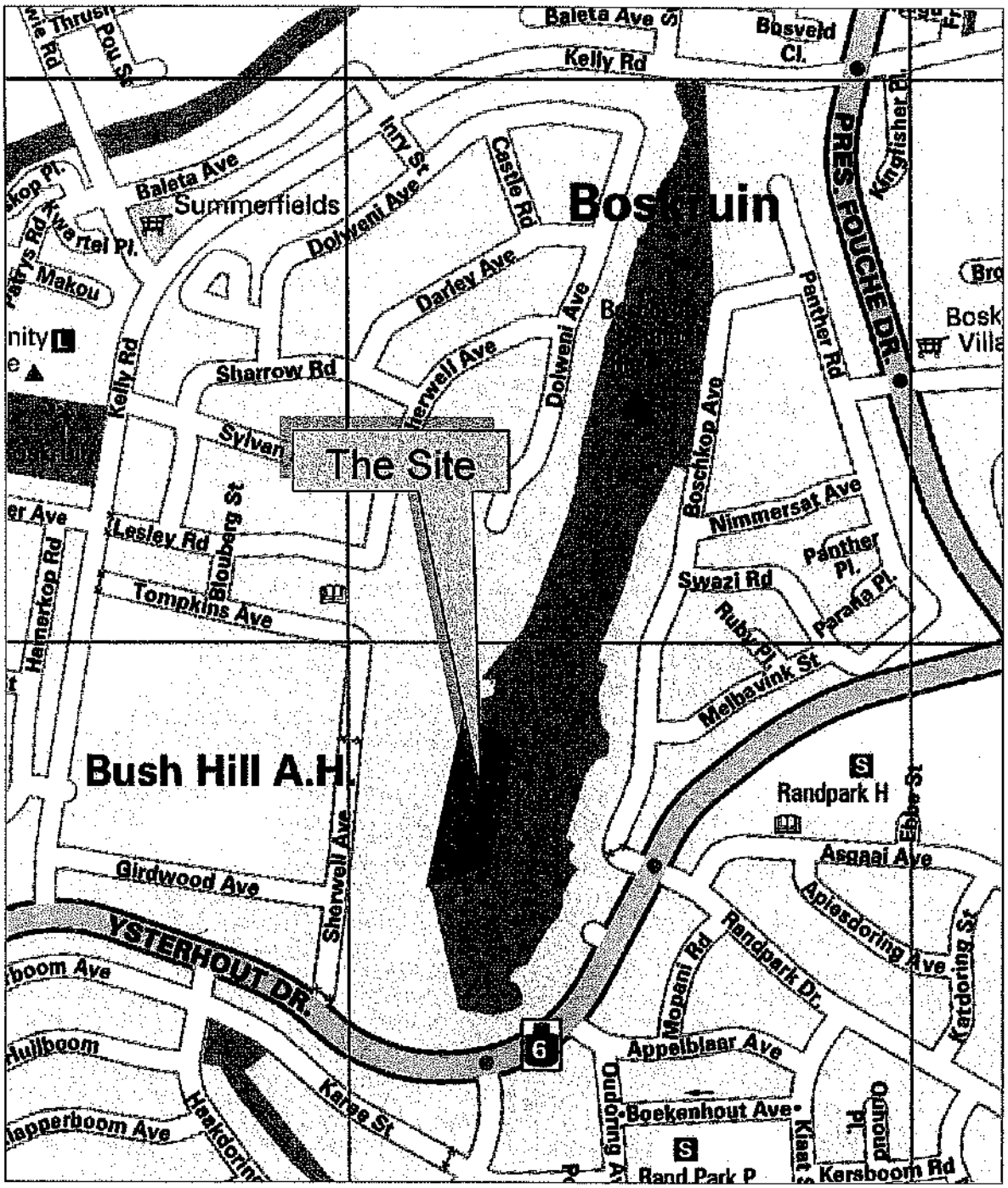
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APPENDIX 1

LOCALITY PLAN
AND
SITE PLAN



AFRICA EXPOSED CONSULTING ENGINEERING GEOLOGISTS	**GLYNDEN PROPS 21 (PTY) LTD** **PORTION 556 BOSCHKOP 199-IQ.** **JOHANNESBURG.** **LOCALITY MAP**	Job No. 3507 May 2007 Figure No. 1



AFRICA EXPOSED CONSULTING ENGINEERING GEOLOGISTS	**GLYNDEN PROPS 21 (PTY) LTD** **PORTION 556 BOSCHKOP 199-IQ. JOHANNESBURG.** **GEOTECHNICAL SITE PLAN**	Job No. 3507 May 2007 Figure No. 2

Appendix G.3: Civil Engineering Services Report

Civil Engineering Services Report

Portion 556 (a Portion of Portion 122) of the Farm Boschkop 199-IQ, City of Johannesburg

Report Status: Confidential
Project No: DES_438
Date: August 2023

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PORTION 556 (A PORTION OF PORTION 122) OF THE FARM BOSCHKOP 199-IQ, CITY OF JOHANNESBURG, GAUTENG PROVINCE

CIVIL ENGINEERING SERVICES REPORT

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QUALITY MANAGEMENT

ISSUE/REVISION	FIRST ISSUE	REVISION 1	REVISION 2
Remarks	Issue 1		
Date	August 2023		
Prepared by	Tumelo Makubo		
Checked by	Tumelo Makubo		
Signature			
Authorised by	Edward Krause *Pr Tech Eng*		
Signature			
Project number	DES_438		
Report number	438-001-SR		

SIGNATURES

PREPARED BY
Tumelo Makubo



REVIEWED BY
Edward Krause, *Pr Tech Eng*



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1. INTRODUCTION

Designed Engineering Solutions (Pty) Ltd (DES) was appointed by Lanmark Planning to compile an Engineering Services Report for the proposed development on Portion 556 (a Portion of Portion 122) of the Farm Boschkop 199-IQ, falling under the jurisdiction of the City of Johannesburg Metropolitan Municipality in the Gauteng Province.

DES is committed to providing a Transportation and Infrastructure preliminary design for the proposed township which will incorporate as many possible elements which are sustainable with the environment, but cost-effective at the same time and this will form part of the development application.

2. PROFESSIONAL TEAM

The professional team is as follows:

PROFESSIONAL DISCIPLINE	NAME OF COMPANY	CONTACT PERSON(S)
CLIENT	Landmark Planning	Cecile Augustyn
DIRECTOR	Designed Engineering Solutions (Pty) Ltd	Eddie Krause
PRINCIPAL ASSOCIATE	Designed Engineering Solutions (Pty) Ltd	Tumelo Makubo

3. PURPOSE OF THIS REPORT

This report deals with the provision of Civil Engineering Infrastructure for the proposed development located along Sherwell Avenue on Portion 556 (a Ptn of Ptn 122) of the Farm Boschkop 199-IQ in Boskruin.

The purpose of this outline services scheme report is to confirm the proposed site can be serviced economically with the existing infrastructure.

4. LOCATION OF DEVELOPMENT

The proposed development is situated on Remainder of Erf 2043 Frankfort Ext 14. Refer to **Figure 4-1** indicating the regional location of the site.

The aerial locality is included in **Figure 4-2**.

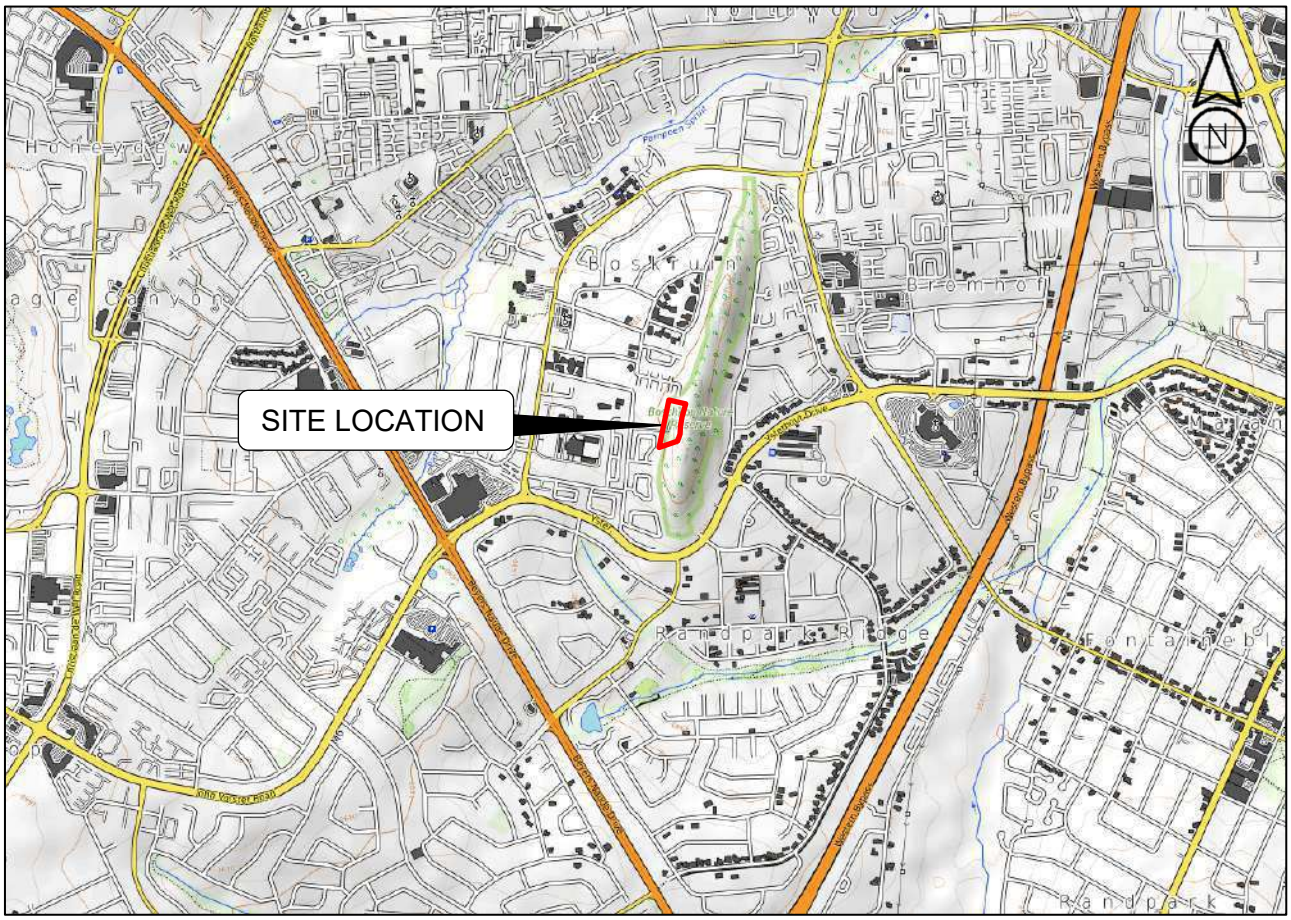


Figure 4-1: Site Locality



Figure 4-2: Aerial View of Locality

5. LAND USES

Portion 556 (a Ptn of Ptn 122) of the Farm Boschkop 199-IQ is currently zoned Agricultural. The proposal is to establish a township over this property, the proposed township being Boskruin Extension 61. The township will comprise two erven namely Erf 1 and Erf 2, measuring 14 206 m^2 and 13 004 m^2 respectively.

The proposed township layout can be seen in **Figure 5-1** below.

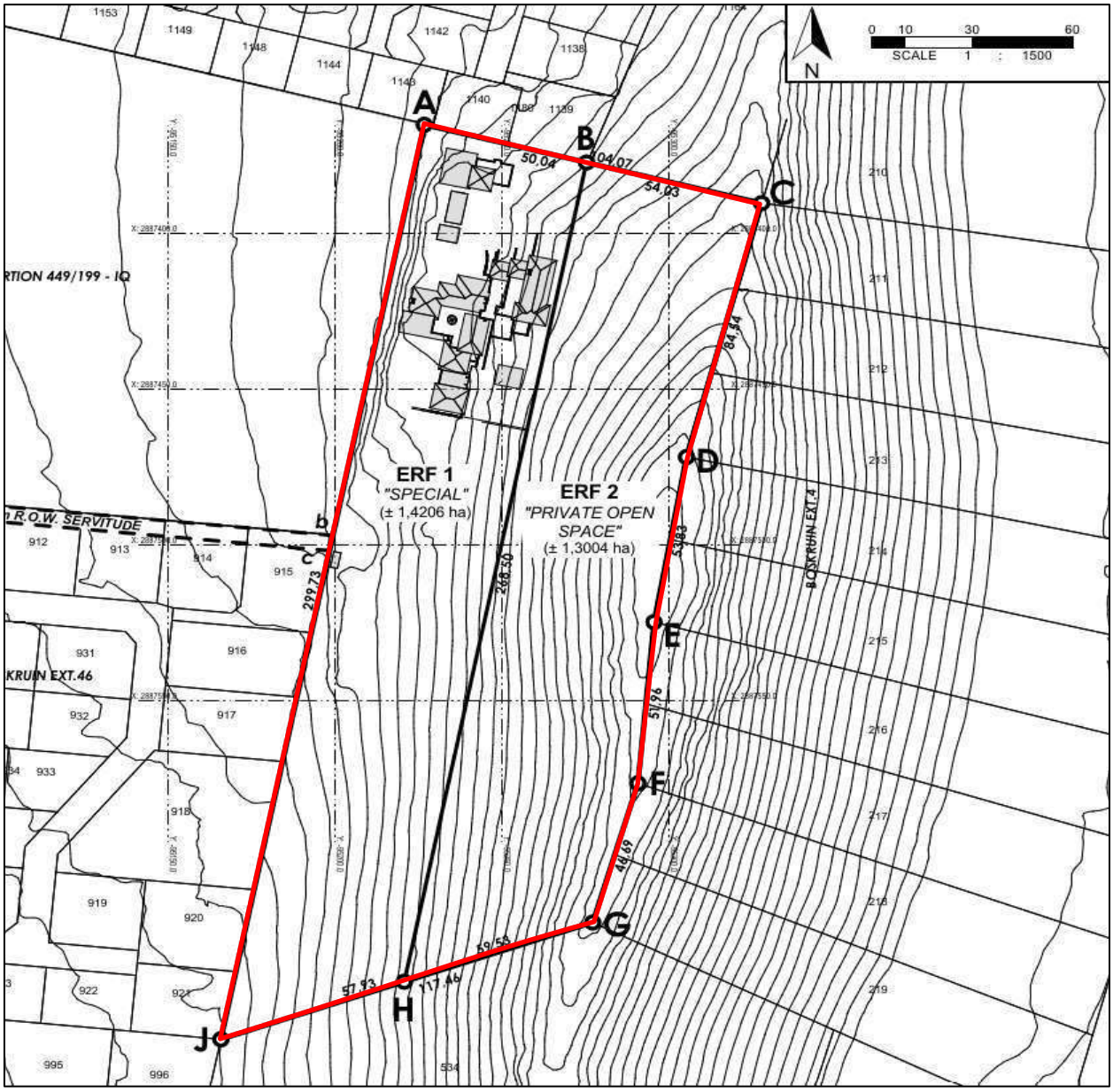


Figure 5-1: Proposed Township

The proposed development controls are shown in **Table 5-1** and **Table 5-2** for each erf.

Table 5-1: Proposed Development Controls for Erf 1

Use Zone	10: Special
Primary Rights	Hotel including an ancillary Caretakers Unit
Uses not Permitted	All other uses
Height	3 Storeys
Coverage	65%
FAR	0.4
Density	N/A
Parking	As per the approved SDP
Building Lines	As per the approved SDP

Table 5-2: Proposed Development Controls for Erf 2

Use Zone	26: Private Open Space
Primary Rights	As per the Scheme
Uses not Permitted	As per the Scheme
Height	N/A
Coverage	N/A
FAR	N/A
Density	N/A
Parking	N/A
Building Lines	N/A

Refer to **Appendix A** for the proposed Township Layout Plan and the proposed Zoning Conditions.

According to the proposed Zoning Conditions, development of this proposed township is restricted to Erf 1 and no development shall be allowed on Erf 2 where a conservation servitude is proposed to be registered.

The Site Development Plan is included in **Appendix B**.

5.1. SERVITUDES

A registered servitude is identified on Servitude Diagram No 5645/1993, indicating a servitude over the Remainder of Portion 122 Boschkop 199-IQ.

Furthermore, there is a Right of Way servitude registered over erven 910 to 915 of the Boskruin Ext. 46 township, in favour of Portion 556 (a Ptn of Ptn 122) of the Farm Boschkop 199-IQ, refer to **Appendix C** for the servitude diagrams.

Figure 5-2 below indicates servitudes in the vicinity of the site.

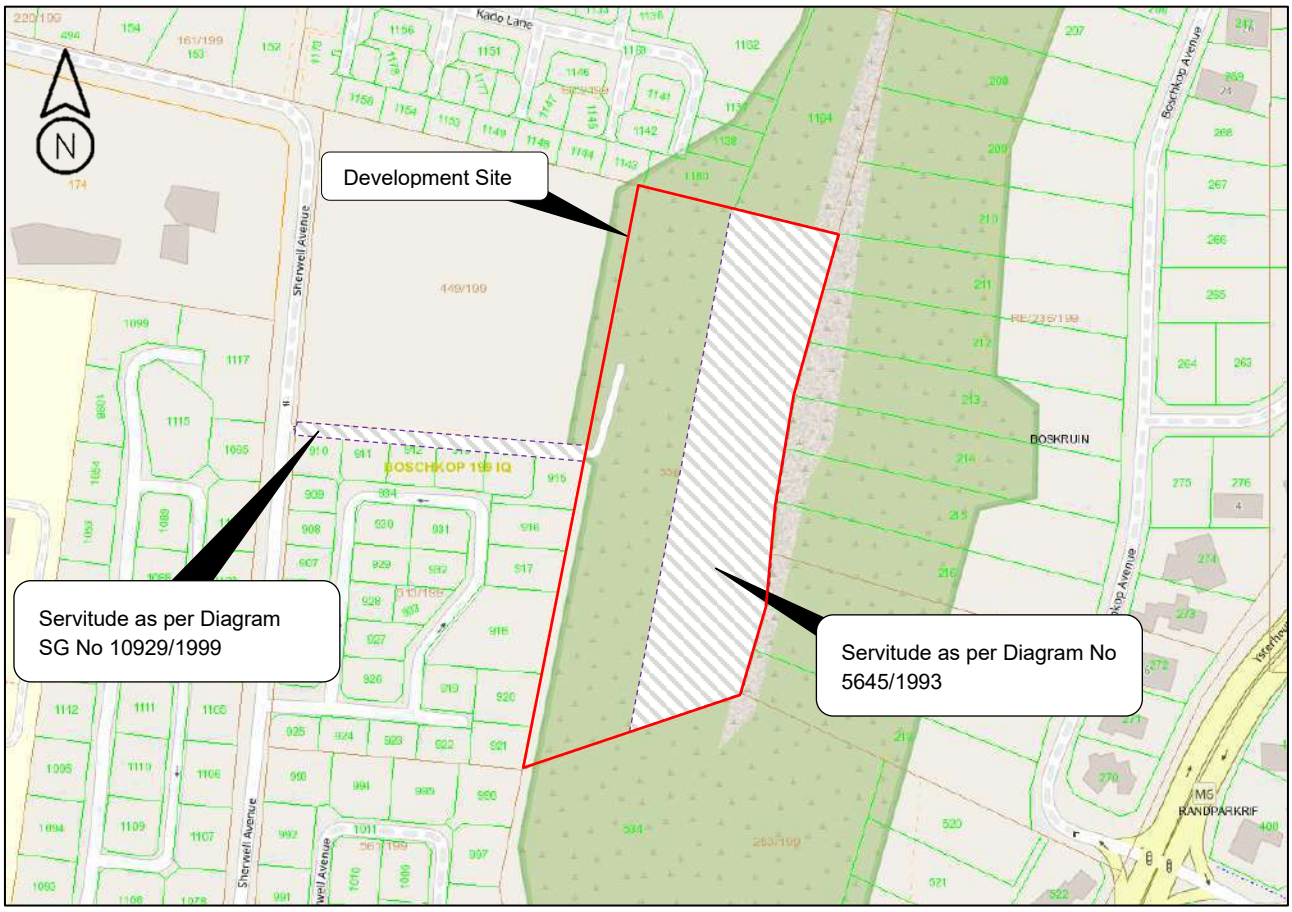


Figure 5-2: Servitudes in the Vicinity of the Site

6. CIVIL ENGINEERING SERVICES

6.1. DESIGN STANDARDS

The design standards to be followed are in accordance with the standards specified in the “Guidelines for the Provision of Engineering Services and Amenities in Residential Townships” (Red Book).

The design of the water and sewer reticulation will be done in accordance with the latest edition of the Guidelines for the Design and Consruction of Water and Sanitation Services issued by City of Johannesburg Metropolitan Municipality.

All internal and external roads and stormwater will be designed according to the standards and specifications of the City of Johannesburg Metropolitan Municipality.

6.2. DESIGN SOFTWARE

The designs of the civil engineering services will be carried out using Autodesk Civil 3D design programs.

6.3. OWNER OF SERVICES

All internal services will remain private property and the property owner will be responsible for the maintenance thereof.

All new external services and services connections will be handed over to the controlling authorities which will be responsible for the maintenance thereof.

7. STORMWATER DRAINAGE

7.1. SITE TOPOGRAPHY AND STORMWATER MANAGEMENT

Existing stormwater on the property flows by means of overland flow in a westerly direction. It then flows out towards the driveway and follows the topography to finally flow into the catchments along the in and along Sherwell Avenue. Refer to **Figure 7-1** below.

The existing stormwater systems existing on the property will need to be upgraded to accommodate the post-development run-off.

The stormwater from the site is intended to be discharged westerly through an underground piped system that will connect into the identified catchments along Sherwell Ave. A minimum 450mm dia concrete pipe is proposed. Refer to **Appendix D**.

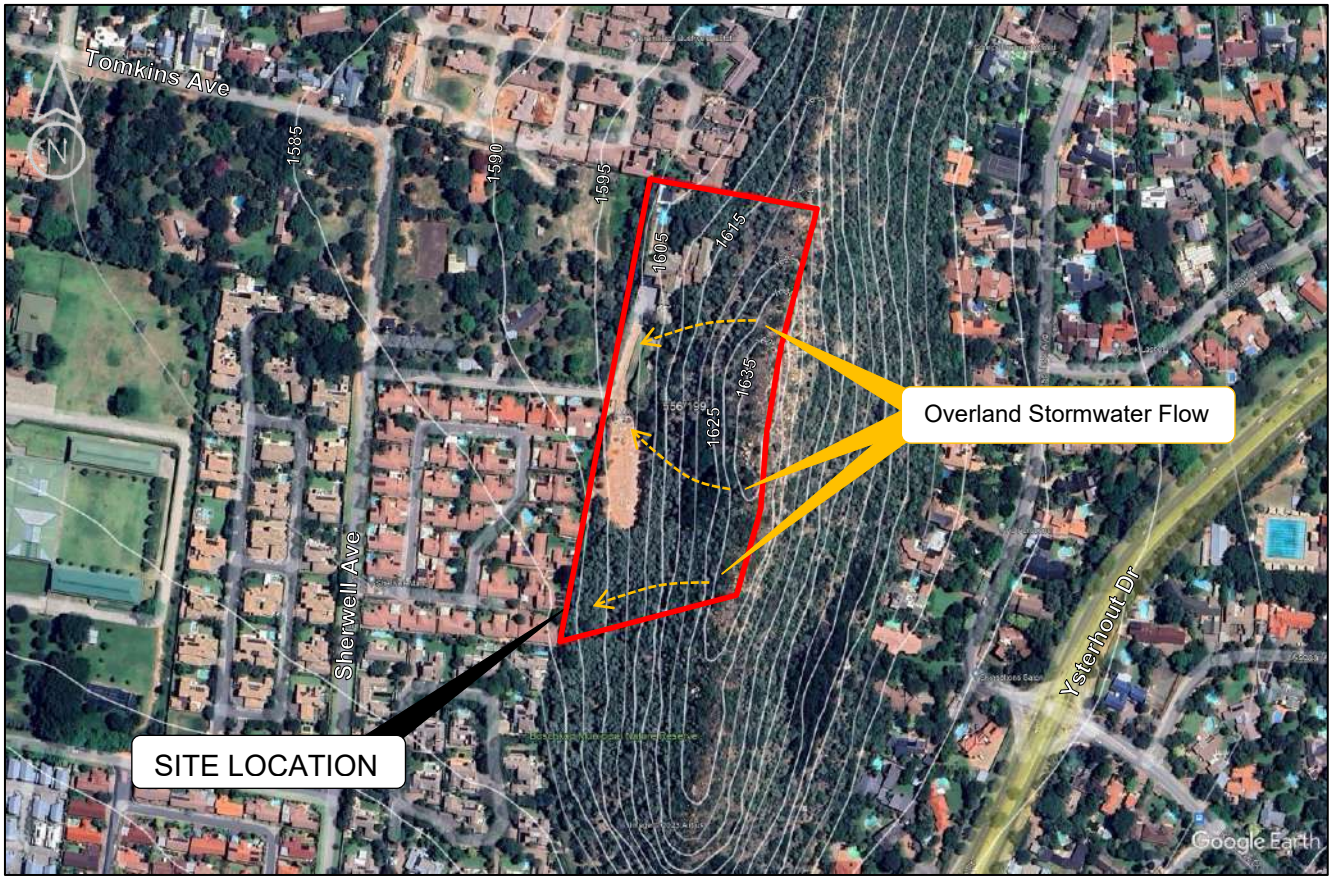


Figure 7-1: Site Topography

7.2. HYDROLOGY

Hydrological data that is used in the design of the stormwater drainage system for the proposed development is summarized in **Table 7-1** below.

Table 7-1: Hydrology

HYDROLOGICAL DATA	
Flood return period	1:5 and 1:25
Average yearly rainfall	659 mm
Minimum time of concentration and run-off co-efficient according to Guidelines for the Provision of Engineering Services and Amenities (Red Book) incorporating the City of Johannesburg Standard Specifications.	
Design method	Rational method for smaller catchment areas
Pre-development run-off factor (C)	0.43
Post-development run-off factor (C)	0.58

7.3. DESIGN STANDARDS

Table 7-2 lists the standards to be used in the design of the stormwater drainage system into existing stormwater network.

Table 7-2: Design Standards

DESIGN ELEMENT	SPECIFICATION
Minimum pipe size	200 mm diameter internal and 450 mm diameter external
Pipe type	Type: Interlocking Pipe class: 50D (100D for road crossings)
Minimum pipe gradient	0.67%
Stormwater details	According to the Redbook and the Johannesburg Roads Agency Roads and Stormwater Manual.

7.4. STORMWATER RUN-OFF

The stormwater run-off generated by the proposed development is summarised below using the Rational Method (Alternative 3) deterministic analysis. Refer to **Table 7-3** and **Table 7-4**.

Table 7-3: Rational Method, Pre-Development

Flood Return Period	Pre-Dev Factor	Pre-Dev Run-Off (m^3/s)
1:5	0.39	0.156
1:25	0.43	0.240

Table 7-4: Rational Method, Post-Development

Flood Return Period	Post-Dev Factor	Post-Dev Run-Off (m^3/s)
1:5	0.57	0.232
1:25	0.58	0.326

7.5. POST-DEVELOPMENT STORMWATER DRAINAGE

The Stormwater Management Plan report that was prepared for this proposed development indicates that an attenuation pond size of 120 m^3 will be required, in line with the *Stormwater Management JRA Policy Statement, 30 June 2015*.

Stormwater shall be captured through an internal stormwater network with v-channels, grid inlets, and underground piped systems within the new development, which will then convey the stormwater to the outlet point from the attenuation pond. From the attenuation pond outlet, a 450mm dia stormwater pipe will be installed along the driveway of the property, westwards towards Sherwell Ave to finally connect into the existing stormwater catchpit approximately 170 m south of the access driveway on Sherwell Ave.

Figure 7-2 indicates the identified catchpit along Sherwell Ave to which the connection is proposed. Further reference is made to **Appendix D** for the existing stormwater infrastructure.



Figure 7-2: Existing Stormwater Catchpit

Table 7-5 below indicates the calculated attenuation storage for the proposed attenuation pond.

Table 7-5: Calculated Attenuation Storage

Flood Return Period	Peak Post-Dev Run-Off (m^3/s)	Peak Pre-Dev Run-Off (m^3/s)	Pond Outflow (m^3/s)	Pond Storage (m^3)
1:5	0.232	0.156	0.146	78.8
1:25	0.326	0.240	0.182	120.9

7.6. ENVIRONMENTAL AUTHORISATIONS AND WULA

Environmental Authorisations to continue with the proposed development will be applied for as required under the National Environmental Management Act, 1998 (Act No. 107 of 1998) (as amended) and the Environmental Impact Assessment Regulations, 2014.

The owner shall at his own expense comply with further conditions imposed by the Department of Agriculture, Land Reform and Rural Development, if applicable, as the case may be.

The proposed new development or installation of roads & stormwater and water & sanitation services may constitute listed activities in terms of the prevailing legislation. The owner shall ensure that all environmental authorisations or WULA requirements will be addressed for the proposed development.

8. ROADS

8.1. ACCESS TO THE DEVELOPMENT

Access to this development already is gained through a driveway from Sherwell Ave, eastwards to the development property. There is a 5m wide registered right of way servitude (RoW) over erven 910 to 915 of the Boskruin Ext 46 Township in favour of this access. This existing access will service this proposed development. Refer to **Figure 8-1** below for the RoW denoted by *ABef*, the diagram is included in **Appendix C**.

Figure 8-2 shows a photograph of the existing driveway.

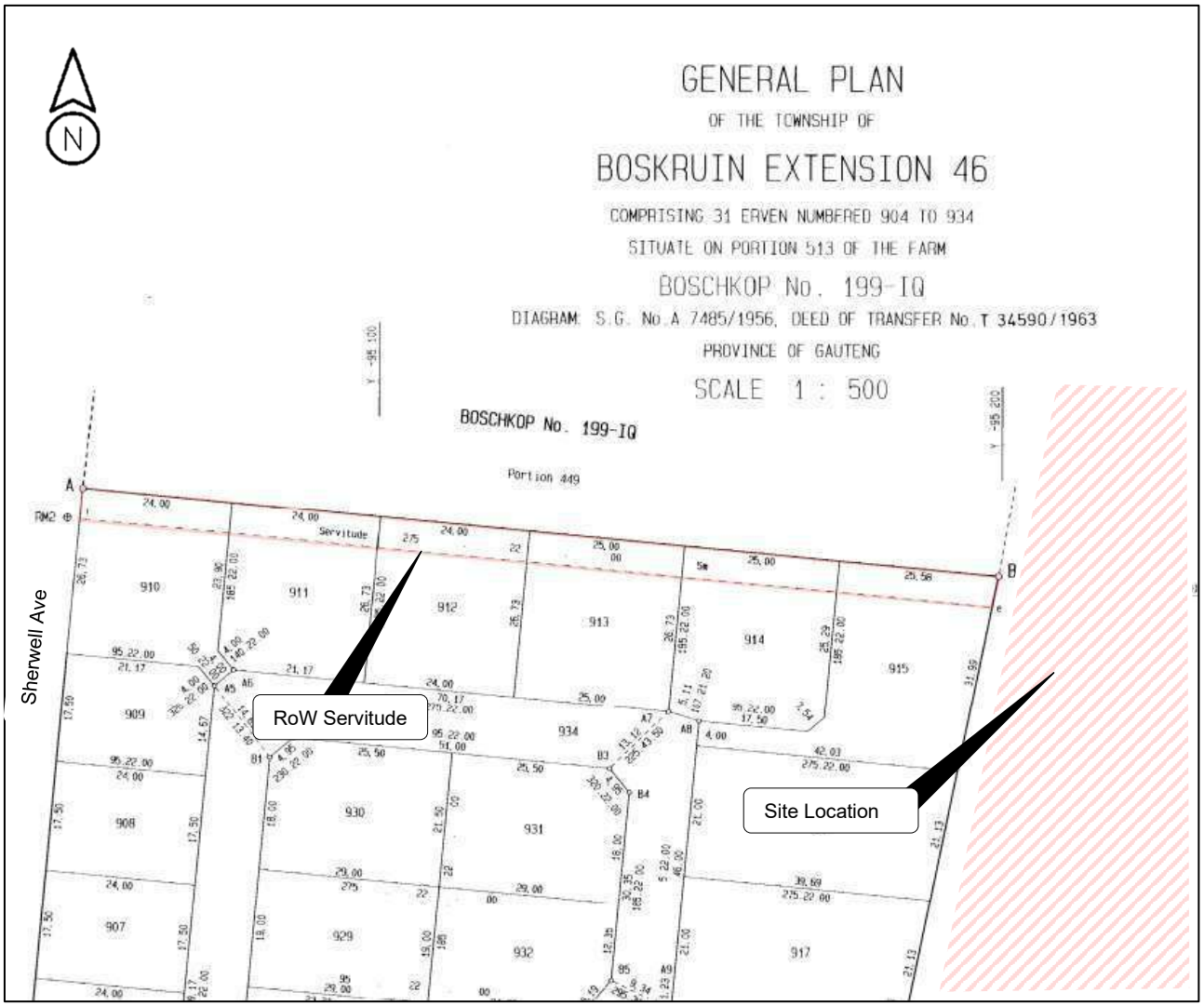


Figure 8-1: RoW Servitude



Figure 8-2: Access Driveway

8.2. UPGRADES TO THE EXISTING ROAD NETWORK

No upgrades to the existing road network were identified as required. The existing road network is deemed as adequate to accommodate this proposed development.

8.3. CLASSIFICATION OF ROADS

The classification of roads in the vicinity of the proposed site is shown in **Table 8-1**.

Table 8-1: Classification of external roads

DESCRIPTION	CLASS NO.	FUNCTION
Sherwell Avenue	5b	Local Street

9. WATER

9.1. BULK SERVICES

Currently, there is an existing water reticulation line servicing the property. Water to service the building additions will be drawn from the existing water line. A fire hose reel is already in place on the property, for fire protection measures.

The new reticulation will be done in accordance latest edition of the Guidelines and Standards for the Design and Maintenance of Water and Sanitation Services issued by City of Johannesburg.

9.2. WATER DESIGN CRITERIA

The works will be designed and detailed in full compliance with the Red Book (Guidelines for Human Settlement Planning and Design) and the latest details and specifications prescribed by the City of Johannesburg Guidelines and Standards for the Design and Maintenance of Water and Sanitation Services.

Design criteria to be used for the analysis and design of the water network are indicated in **Table 9-1** below.

Table 9-1: Water Design Criteria

ITEM NO.	DESIGN ELEMENT	CRITERIA
1	Average Annual Daily Demand (AADD)	Refer to **Table 9-2** below
2	Gross Average Annual Daily Demand (GAADD)	Allow 10% losses
3	Instantaneous Peak Factor (IPF)	4.0
4	Design Peak Flow Rate (DPFR) for domestic flows	GAADD x IPF
5	Maximum static head	90m
6	Minimum residual head under conditions of domestic peak flows	25m
7	Maximum linear flow velocity under conditions of domestic peak flows	3.6m/s
8	Pipe type	uPVC pressure pipes
9	Minimum pipe class	Class 16

ITEM NO.	DESIGN ELEMENT	CRITERIA
10	Fire flow at any one hydrant under the condition of domestic peak flows (one hydrant at a time)	100 ℓ/s
11	Minimum residual head (fire plus domestic peak flow)	8m
12	Maximum linear flow velocity under conditions of fire-fighting	3.5m/s
13	Boundary roughness (K-value)	0.1mm
14	Available static head	To be confirmed
15	Available dynamic head under fire flow conditions	To be confirmed
16	Flow formulae	D'Arcy Weissbach
17	Minimum pipe diameter	75mm

9.3. ESTIMATED WATER DEMAND

The estimated water demand for the proposed development is shown in **Table 9-2** below.

Table 9-2: Estimated Water Demand

Use Zone	Floor Area (m^2)	Average Annual Daily Demand (AADD)	Water Demand (kℓ /day)
Residential II	2155.56	0.8 kℓ/500m^2 Gross Floor Area/day	3.45
TOTAL	**2155.56**	**-**	**3.45**

Peak weekly Consumption = PWF x AADD = 1.45 x 3.45 kℓ/day

= 5.00 kℓ/day

Peak Daily Consumption = PDF x AADD = 1.70 x 3.45 kℓ/day

= 5.87 kℓ/day

Peak Hourly Consumption = PHF x AADD = 3.30 x 3.45 kℓ/day

= 11.39 kℓ/day (*0.13 ℓ/s*)

Total water consumption = PHC + Total fire flow = 0.13 ℓ/s + 25 ℓ/s

= 25.13 ℓ/s

10. SEWER

10.1. BULK SERVICES

There is currently an existing sewer reticulation line on the property and connections for building additions will be linked to this existing line. The sewer connection point (manhole) is located at the entrance to the property, on Sherwell Avenue.

10.2. SEWER DESIGN CRITERIA

The works will be designed and detailed in full compliance with the Red Book (Guidelines for Human Settlement Planning and Design) and the latest details and specifications prescribed by the City of Johannesburg Guidelines and Standards for the Design and Maintenance of Water and Sanitation Services.

The design criteria to be used to design the sewerage network are indicated in **Table 10-1** below.

Table 10-1: Sewer Design Criteria

ITEM NO.	DESIGN ELEMENT	CRITERIA
1	Average Annual Daily flow	Refer to **Table 10-2** below
2	Peak Factor	2.5
3	Allowance for infiltration	0.04 ℓ/min/m length/ m dia.
4	Capacity of sewer	Pipes shall be designed to run at 70% full
5	Sewer pipe type	uPVC Class 34
6	Minimum velocity	0.75 m/s
7	Minimum pipe diameter	160 mm ID
8	Minimum depth of cover	1.0 m

10.3. ESTIMATED SEWERAGE FLOW

The estimated sewerage flow for the proposed development is shown in **Table 10-2** below.

Table 10-2: Estimated Sewerage Flow

Use Zone	Floor Area (m^2)	Average Annual Daily Flow (AADF)	Sewer Flow (kℓ /day)
Residential II	2155.56	0.7 kℓ/500m^2 Gross Floor Area/day	3.0
TOTAL	**2155.56**	**-**	**3.0**

Peak discharge = ADSF x Peak Factor

= 3.0 kℓ/day x 2.5

= 7.5 kℓ/day + 0.04 (ℓ/min x m length x m dia.) (*allowance for infiltration*)

= 0.087 ℓ/s + 0.04 x [(1/60)(176)(0.16)]

= 0.10558 ℓ/s

= 0.00011 m^3/s

11. BULK SERVICES CONTRIBUTIONS

The amount of Bulk Services Contributions (if required) for Civil services payable to the City of Johannesburg Metropolitan Municiaplity will be determined with the compilation of a service agreement.

12. WAYLEAVE APPROVALS

Wayleave approvals are required for all works within the road reserves subsequently the relevant wayleave applications will be done and only after approval is received from the affected authorites; will the works commence in the affected areas.

The works that require wayleave approvals are:

- Stormwater drainage works and upgrades (*JRA*);

13. COST ESTIMATES

Table 13-1 shows the preliminary costing for the services required external to the proposed development.

Table 13-1: Preliminary Costing

STORMWATER DRAINAGE, SITE CLEARANCE AND EXCAVATION

Item No	Payment	Description	Unit	Qty	Rate	Amount
		Clear Site				
		Excavate, select materials, backfill and dispose of surplus/unsuitable material				
1	SANS 1200 LE	PIPES				
	8.2.1	Supply, handle, lay, bed concrete pipes Class 50D				
1.1		450 mm diameter concrete pipes in accordance with SANS 677	m	265.00	430.00	113 950.00
	8.2.1	Supply, handle, lay, bed concrete pipes Class 100D				
1.3		225 mm diameter concrete pipes in accordance with SANS 677	m	80.00	470.00	37 600.00
1.3		300 mm diameter concrete pipes in accordance with SANS 677	m	110.00	470.00	51 700.00
1.4		450 mm diameter concrete pipes in accordance with SANS 677	m	60.00	695.00	41 700.00
	8.3.2	Excavate in all material for trenches for stormwater in depths not exceeding 2,5 m				
1.5		225 mm nominal diameter	m^3	120.00	95.00	11 400.00
1.5		300 mm nominal diameter	m^3	165.00	95.00	15 675.00
1.6		450 mm nominal diameter	m^3	487.50	95.00	46 312.50
1.7		Attenuation pond cut to stockpile or spoil	m^3	150.00	95.00	14 250.00
2	8.2.10	ACCESSORIES				
2.1		Junction Box	No	4.00	7 500.00	30 000.00
2.2		Heavy duty stormwater grid inlet 450x450 mm including frame	No	6.00	8 500.00	51 000.00
2.3		Heavy duty stormwater rectagrid 600x3500 mm including frame	No	3.00	9 500.00	28 500.00
2.4		Headwall structures complete with invert slabs according to headwall detail	No	1.00	9 600.00	9 600.00
2.5		Attenuation pond overflow structure, with 1200x2400 mm grid	No	1.00	10 500.00	10 500.00
	8.3.3.1	Backfilling				
2.7		At least G7 quality material compacted to 93% MOD AASHTO	m^3	800.00	110.00	88 000.00
Total						550 187.50

14. CONCLUSION

All the required engineering services, in respect of roads, water and sanitation are existing on the subject property. Concerning upgrades to the stormwater, it is concluded that these can be supplied economically to the proposed development.

The total budget amount for the infrastructure of the proposed upgrades to accommodate the proposed development will be finalized upon the approval of the land uses and the acceptance of the services report.

- Access to the development will be gained via the RoW servitude along the existing driveway from Sherwell Ave.
- Stormwater shall be captured through an internal stormwater network with v-channels, grid inlets, and underground piped systems within the new development, which will then convey the stormwater to the outlet point of the attenuation pond (120 m^3). From the attenuation pond outlet, a 450mm dia stormwater pipe will be installed along the driveway of the property, westwards towards Sherwell Ave to finally connect into the existing stormwater catchpit approximately 170 m south of the access driveway on Sherwell Ave.
- Water to service the building additions will be drawn from the existing water line on the property.
- Sewer for the building additions will be connected to the existing sewer line on the property.

We trust that the above report meets your requirements.

APPENDIX A

TOWNSHIP LAYOUT PLAN

PROPOSED TOWNSHIP: BOSKRUIN EXTENSION 64

LANDMARK PLANNING
Town & Regional Planning | Stads- & Streekbeplanning
75 Jean Avenue, Doringkloof, Centurion | PO Box 10936, Centurion, 0046
(012) 667 4773 | (012) 667 4450 | 082 371 5770
willem@land-mark.co.za | www.landmarkplanning.co.za

N

0 10 30 60
SCALE 1 : 1500

A B C D E F G H J

50,04 | 104,07 | 54,03 | 84,54 | 53,83 | 51,96 | 49,69 | 59,53 | 117,46 | 57,93 | 299,73 | 288,50

ERF 1
"SPECIAL"
for the purpose of a Boutique Hotel including ancillary Caretakers unit
(± 1,4206 ha)

ERF 2
"PRIVATE OPEN SPACE"
(± 1,3004 ha)

PORTION 449/199 - IQ

BOSKRUIN EXT.46

BOSKRUIN EXT.4

SHERWELL AVENUE (15,74m)

5m R.O.W. SERVITUDE

3m B/L

10m B/L

10

X: 2887400.0 | X: 2887450.0 | X: 2887500.0 | X: 2887550.0

Y: -95150.0 | Y: -95200.0 | Y: -95250.0 | Y: -95300.0

GEOLOGICAL REPORT (MAY 2007): AFRICA EXPOSED - CONSULTING ENGINEERING GEOLOGISTS CC

TABLE 1. RESIDENTIAL SITE CLASS DESIGATIONS

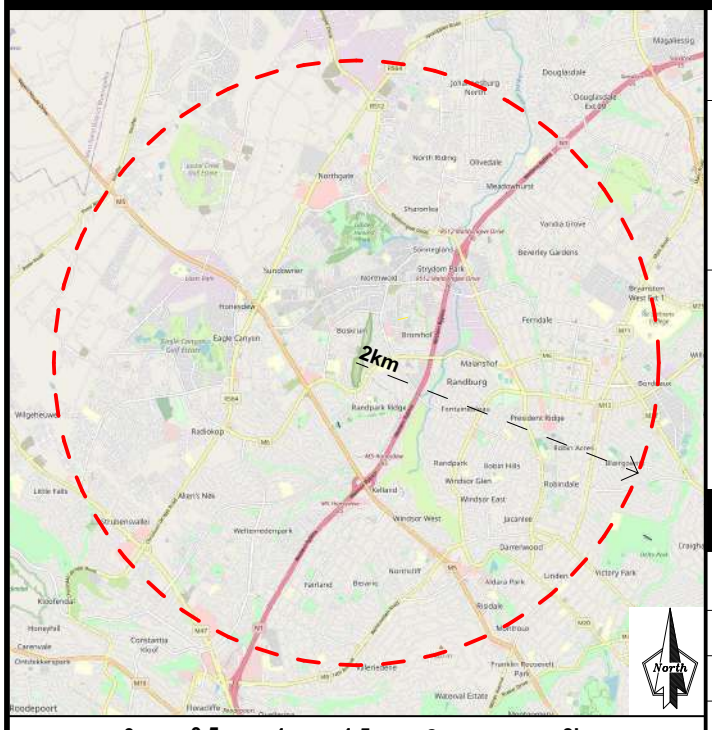
TYPICAL FOUNDING MATERIAL	CHARACTER OF FOUNDING MATERIAL	EXPECTED RANGE OF SOIL MOVEMENT (mm)
ROCK (EXCLUDING MUD ROCKS WHICH MAY EXHIBIT SWELLING TO SOME DEPTH)	STABLE	NEGLIGABLE

NHBRC CLASSIFICATION: R

SERVITUDE NOTES:

1. THE FIGURE a-b-c-d-a REPRESENTS A 5m R.O.W; VIDE S.G. No. 10929/1999 AND DEED OF SERVITUDE K6113/1999s.

LOCALITY MAP



PLAN No.: BOSKRUINX64/1

JUNE 2025

LOCALITY: SITUATED ON PORTION 556 (A PORTION OF PORTION 122) OF THE FARM BOSCHKOP No. 199-IQ. *REPRESENTED BY FIGURE A-B-C-D-E-F-G-H-J-A*

LOCAL AUTHORITY: CITY OF JOHANNESBURG METROPOLITAN MUNICIPALITY

GENERAL NOTES:

ALL DIMENSIONS AND AREAS ARE APPROXIMATE PENDING FINAL SURVEY
CONTOURS: SUPPLIED BY GERHARD SWART LAND SURVEYOR;
2m INTERVALS; DATUM: MEAN SEA LEVEL GEOID SA2010
THE TOWNSHIP LAYOUT PLAN IS IN ACCORDANCE WITH THE SECTION 26 READ WITH SCHEDULE 1 OF THE CITY OF JOHANNESBURG LAND USE MANAGEMENT BY-LAW, 2016.

W.G. GROENEWALD
PR.PLN No: A/1060/1998

FLOOD LINE CERTIFICATION:

I HEREBY CERTIFY THAT IN TERMS OF THE REQUIREMENTS OF SECTION 144 OF THE WATER ACT, 1998 (ACT 36 OF 1998), THIS PROPOSED TOWNSHIP IS NOT AFFECTED BY A FLOOD WITH AN EXPECTED FREQUENCY OF 1:50 OR 1:100 YEARS

EDDIE KRAUSE (PR. ENG. No. 200770156)

DATE: JUNE 2025

PROPOSED ZONING: CITY OF JOHANNESBURG LAND USE SCHEME, 2018

	USE ZONE / RESERVATION	ERF NO:	AREA:	%
10	"SPECIAL" for the purpose of a Boutique Hotel including ancillary Caretakers Unit	1	± 1,4206 ha	52
26	"PRIVATE OPEN SPACE"	2	± 1,3004 ha	48
	TOTAL:	**2**	**± 2,7210 ha**	**100**

PROPOSED SCHEME CONDITIONS/CONDITIONS OF APPROVAL

The following Development Controls are proposed in terms of the City of Johannesburg Land Use Scheme, 2018:

Erf 1 (Approximately 14 206 m²)

Use Zone	:	10: "SPECIAL"
Primary Rights		Boutique Hotel including an ancillary Caretakers Unit
Consent Uses	:	Dwelling units, Residential Buildings.
Uses Not Permitted	:	All other uses
Height	:	3 Storeys 2 Storeys - alongside and east of Erven 915-918 and 920-921, Boskruin X46
Coverage	:	50%
FAR	:	0,4
Parking	:	As per Scheme
Density	:	Not applicable
Building Lines	:	Street – 3 meters Along Erven 915-918 and 920-921, Boskruin X46 – 10 meters All other Boundaries – 3 meters

Erf 2 (Approximately 13 004 m²)

Use Zone	:	26: "Private Open Space"
Primary Rights	:	As per Scheme
Consent Uses	:	As per Scheme
Uses Not Permitted	:	As per Scheme
Height	:	N/A
Coverage	:	N/A
FAR	:	N/A
Parking	:	N/A
Density	:	N/A
Building Lines	:	N/A

Special Conditions

1. Development shall be restricted to Erf 1.

2. No development shall be allowed on Erf 2 (i.e. zoned "Private Open Space").

3. For the purpose of this scheme, a Boutique Hotel shall mean "a building/s used as a temporary residence for transient guests, where lodging and meals are provided, and may include:

   (i) A restaurant;
   (ii) Associated meeting rooms, conference and entertainment facilities, recreational and service facilities that are subservient and ancillary to the dominant use of the property as a Boutique Hotel
   (iii) A Spa;

(iv) Premises which are licensed to sell alcoholic beverages for consumption on the property; but does not include an off-sales facility; and

(v) However, it excludes self-catering suites/units for permanent residents; no suites/units may be sectionalized.

4. The developer shall develop and implement an Environmental Management Plan to maintain the ecological integrity of the remaining area (i.e. Private Open Space-erf).

5. All parking including manoeuvring space must be provided on site and as stipulated in the Town Planning Scheme.

6. Stormwater Management must be provided to JRA and EISD satisfaction.

7. The total width of the 5m private right-of-way servitude providing access to the township off Sherwell Avenue shall be paved to the satisfaction of JRA.

8. The erf lies in an area where soil conditions can affect buildings and structures and result in damage to them. Building Plans submitted to the Local Authority must indicate measures to be taken, in accordance with recommendations contained in the Engineering-Geological Report for the township, to limit possible damage to buildings and structures as a result of detrimental foundation conditions unless it is proved to the Local Authority that such measures are unnecessary or that the same purpose can be achieved by other more effective means

   NHBRC classification for foundations is considered as R.

9. A Site Development Plan and a landscape development plan, unless otherwise determined by the Municipality, compiled by a person suitably qualified to the satisfaction of the Municipality, shall be submitted to the Municipality for approval prior to the submission of building plans.

   i. The landscaping, in terms of the landscape development plan, shall be completed by completion of the development or any phase thereof. The continued maintenance of the landscape development shall be to the satisfaction of the Municipality.

   ii. When the Site Development Plan is evaluated, special attention must be given to elements such as exterior finishes, style, landscaping, boundary walls etc. in order to create a special character which is harmonious with the surrounding residential area.

   iii. An approved Site Development Plan shall only be amended with the permission of the Municipality and building plans which do not comply with the proposals and conditions as set out in the approved site development plan will not be approved by the Municipality.

10. Other Internal Requirements

    10.1 The township owner shall install and provide all internal services in and for the township at his/her own cost, subject to the approval of the Council.

    10.2 The township owner shall obtain clearance from City Power and Johannesburg Water with regard to the availability of electricity, water and sewerage, before the township register is opened.

10.3 If, by reason of the establishment of the township, it should become necessary to remove or replace any existing municipal services, the cost thereof shall be borne by the township owner.

10.4 Any matter pertaining to the installation of engineering services and implementation of land use rights as granted shall be implemented to the satisfaction of the Council upon township proclamation.

10.5 Contributions in respect of external sewerage, water, stormwater and electrical engineering services shall be payable to the Council in accordance with Section 47 of the City of Johannesburg Municipal Planning By-Law 2016.

10.6 The owner must ensure that any applicable existing restrictive conditions of title are removed, prior to proclamation of the township.

10.7 The following conditions must be included as conditions of title in respect of all erven in the township:

i. All erven to be subject to a servitude, 2 metres wide, in favour of the local authority, for sewerage and other municipal purposes, along any two boundaries other than a street boundary and in the case of a panhandle erf, an additional servitude for municipal purposes 2 metres wide across the access portion of the erf, if and when required by the local authority: Provided that the local authority may dispense with any such servitude.

ii. No building or other structure shall be erected within the aforesaid servitude area and no large-rooted trees shall be planted within the area of such servitude or within 2 metres thereof.

iii. The local authority shall be entitled to deposit temporarily on the land adjoining the aforesaid servitude such material as may be excavated by it during the course of the construction, maintenance or removal of such sewerage mains and other works as it, in its discretion may deem necessary and shall further be entitled to reasonable access to the said land for the aforesaid purpose subject to any damage done during the process of the construction, maintenance or removal of such sewerage mains and other works being made good by the local authority.

10.8 The requirements of the Council Departments and Municipal Owned Entities shall be complied with to the satisfaction of the Council.
City Power.
Environmental Management
Johannesburg Roads Agency.
Johannesburg Water.
Technical Support.
Pikitup.
Environmental Infrastructure Services Department.

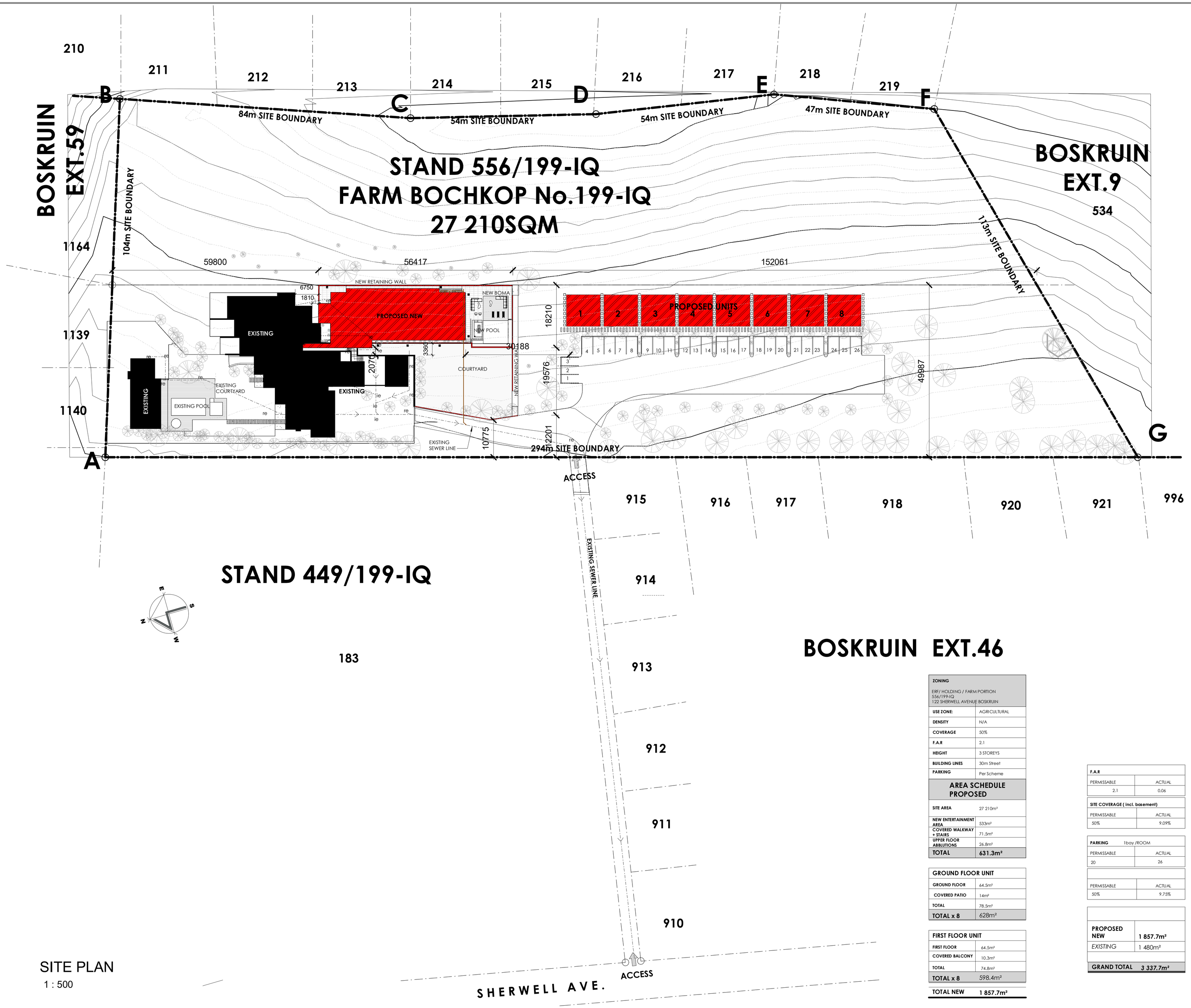
APPENDIX B

SITE DEVELOPMENT PLAN

Designed Engineering Solutions (Pty) Ltd
PO Box 90760
Garsfontein
0042

266 Sprite Avenue
Faerie Glen
Pretoria
0081

Edward Krause, *Pr Tech Eng*
Mobile: 082 306 9830



SITE PLAN
1 : 500

* ALL WORK TO COMPLY WITH LOCAL AUTHORITIES AND NBR BY-LAW
1. Read figured dimensions in preference to scaling
2. The contractor must verify all levels , heights and dimensions on site and to check same against the set of drawings before commencing work and to convince himself that the infomation given is correct and in accordance with the conditions on site
3. Contractors are to locate existing services on site and to protect these from damage throughout the duration of the works.
4. The contractor is responsible for the correct identification of all surveyor pegs and markers and setting out of the building with particular reference to grid lines ,column positions ,internal and external walls from surveyor markers boundaries and building lines etc.
5. Any errors ,discrepancies or omissions to be reported to the architect before commencing any work.
6. 4 ply damp proof-course under all walls and sills and vertical dpc. to all changes of floor levels
7. Flashing to all changes of roof levels and parapet walls
8. All concrete beds on well rammed filling.
9.10mm softboard joints to be placed between all new and existing construction joints.

*UNLESS OTHERWISE INSTRUCTED BY THE STRUCTURAL ENGINEER THE MINIMUM OF CONCRETE MIXES SHALL BE AS FOLLOWS:

- blinding	10 mpa
- strip foundations	15 mpa
- 75mm traffic surfaces	20 mpa
- 75mm surface beds to be screeded	15 mpa

NB: ALL REINFORCED CONCRETE AND STEEL COLUMNS,SLABS,BEAMS FOUNDATIONS ETC.TO BE STRICTLY IN ACCORDANCE WITH THE STRUCTURAL ENGINEERS SPECIFICATIONS.

PLUMBING
1. All plumbing and drainage must comply with the relevant local authority and nbr by-laws and regulations
2. All bends and junctions in drain to be fitted with ie's and marked covers at ground level.
3. Waste fittings to have reseal traps and to be fully accessible.
4. Rain water down pipes to be min. 2450 from gullies
5. Any portion of drain at a depth of 450 mm or less below ground level shall be encased in concrete having a min. thickness at all points of 100mm measured from the external surface of the pipe.
6. Any portion of drain passing under any part off the building or footing shall be protected against the load, this pipe must be without bends or junctions along its entire length under the building and should have a re. before and after passing under the building.
7. The minimum fall to all drain pipes to be 1 : 40
8. 110mm ∅ for soil pipes (SP)
9. 50mm ∅ for waste pipes (WP)

ENERGY REGULATION NOTES
1. All new building work, including new buildings, alterations, additions and renovations must comply to SANS 10400-XA:2011, SANS 204:2011, SANS 613:2011.
2. All exposed hot water piping to be insulated with R value of 1 according to SANS 10400-XA:2011, clause 4.1.3
3. All roof insulation to comply with SANS 10400-XA:2011, clause 4.4.5
4. When underfloor heating is required, it shall comply with SANS 10400-XA:2011, clause 4.4.2
5. All external walls to have a minimum R-value of 0.35 according to SANS 10400-XA:2011, clause 4.4.3
6. All fenestration and infiltration to comply with SANS 204:2011, Table 6 and with SANS 613, Clause 4.4

DESIGN: SANS 10400-XA CLAUSE 4.2.1 (b)
1. ORIENTATION: Living room and major areas of glazing to face north longer axis of building to run East / West. SANS 10400-XA Clause 4.4.1.1
2. SHADING: Roof overhang must shade Northern windows from summer sun. Eastern & Western windows to be minimised or screened.
3. ROOFING: Roof assembles to receive insulation to achieve the R value as indicated in table 7.Thickness given in SANS 204 Table 10. SANS 10400-XA Clause 4.4.5 (SANS 204 Table 10)
4. UNDERFLOOR HEATING: When underfloor heating is provided, add insulation underfloor with R value of 1. SANS 10400-XA Clause 4.4.2
5. WALLS: Non-Masonry wall will have R value as provided. SANS 10400-XA Clause4.4.3.1 : Double skin masonry with plaster inside or render outside complies. Single leaf, min 140mm with plaster inside & render outside complies. SANS 10400-XA Clause 4.4.3.2: Other Masonry walls will have R value of 0.35. SANS 10400-XA Clause 4.4.3.3
6. FENESTRATION: Air leakage shall not exceed 2L/s/m² revolving/swing doors. SANS 10400-XA Clause 4.4.1.1 SANS 613 Clause 4.4
Fenestration more than 15% area to nett floor area per storey then.. SANS 10400-XA Clause 4.4.4.2
Fenestration up to 15% area to nett floor area per storey complies SANS 10400-XA Clause 4.4.4.1
Solar Heat Gain and heat conductance to comply with SANS 204 Clause 4.3.4. SANS 204 Clause 4.3.4

REV	ISSUE DATE	DRAWING REVISION DESCRIPTION
0	25-07-2024	ISSUED FOR APPROVAL
1	20-03-2025	ISSUED FOR APPROVAL
2	15-03-2025	UPDATED PARKING - ISSUED FOR APPROVAL

CLIENT :
MALIBU

SIGNATURE DATE

MTWA PROPERTIES
THE BUSINESS CENTRE, LESLIE AVE EAST
FOURWAYS JHB 2091
T : +27 72 252 6369 E: design@mtwa.coza
www.mtwa.coza

APPROVED SACAP :

THE MASTER HELD AT **MTWA CONCEPTS** BEARS THE ORIGINAL SIGNATURE OF APPROVAL

SIGNATURE: NAME: DATE:

ENGINEER :

SIGNATURE DATE

PROJECT STATUS:
FOR APPROVAL

NEW ADDTIOTION ON ERF 556/199-IQ BOSCHKOP

SITE PLAN +AREA SCHEDULE

DRAWING UNITS : MILLIMETERS

DATE	SCALE	DESIGNED BY
07/23/24	As indicated	P.M
CHECKED BY	DRAWN BY	APPROVED BY
P.M	P.M	P.M

DRAWING NUMBER	REVISION
A1-WD-000	2

PRINT SIZE **A1**

ZONING	
ERF/ HOLDING / FARM PORTION 556/199-IQ 122 SHERWELL AVENUE BOSKRUIN	
USE ZONE:	AGRICULTURAL
DENSITY	N/A
COVERAGE	50%
F.A.R	2.1
HEIGHT	3 STOREYS
BUILDING LINES	30m Street
PARKING	Per Scheme
AREA SCHEDULE PROPOSED	
SITE AREA	27 210m²
NEW ENTERTAINMENT AREA	533m²
COVERED WALKWAY + STAIRS	71.5m²
UPPER FLOOR ABBLUTIONS	26.8m²
TOTAL	631.3m²

GROUND FLOOR UNIT	
GROUND FLOOR	64.5m²
COVERED PATIO	14m²
TOTAL	78.5m²
TOTAL x 8	628m²

FIRST FLOOR UNIT	
FIRST FLOOR	64.5m²
COVERED BALCONY	10.3m²
TOTAL	74.8m²
TOTAL x 8	598.4m²
TOTAL NEW	1 857.7m²

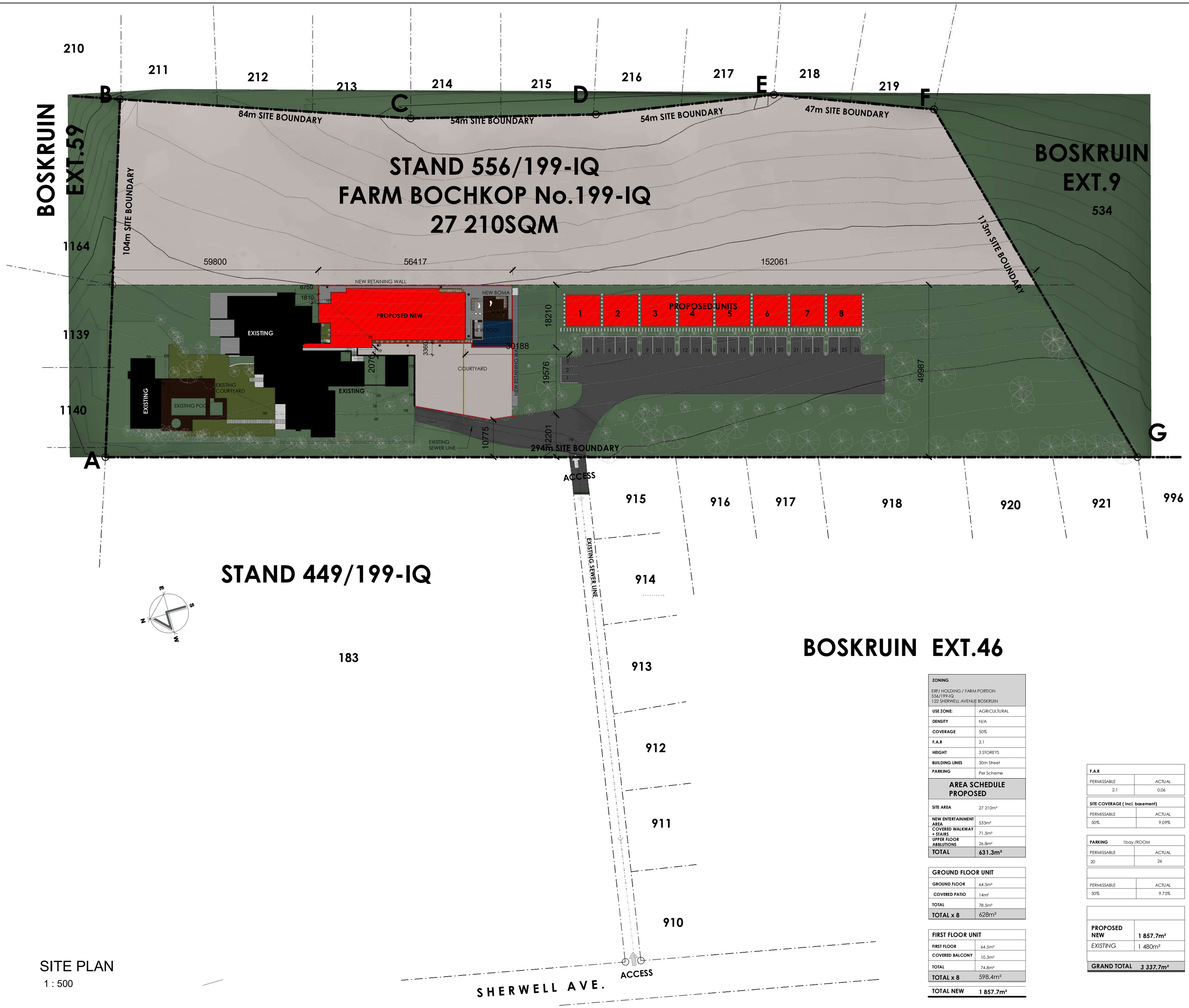
F.A.R	
PERMISSABLE	ACTUAL
2.1	0.06

SITE COVERAGE (incl. basement)	
PERMISSABLE	ACTUAL
50%	9.09%

PARKING 1bay /ROOM	
PERMISSABLE	ACTUAL
20	26

PERMISSABLE	ACTUAL
50%	9.75%

PROPOSED NEW	1 857.7m²
EXISTING	1 480m²
GRAND TOTAL	3 337.7m²



SITE PLAN
1 : 500

ZONING	
ERF/ HOLDING / FARM PORTION 556/199-IQ 122 SHERWELL AVENUE BOSKRUIN	
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DENSITY	N/A
COVERAGE	50%
F.A.R	2.1
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1	20-03-2025	ISSUED FOR APPROVAL
2	15-03-2025	UPDATED PARKING - ISSUED FOR APPROVAL

CLIENT :
MALIBU
SIGNATURE DATE

MTWA PROPERTIES
THE BUSINESS CENTRE, LESLIE AVE EAST
FOURWAYS JHB 2091
T : +27 72 252 6369 E: design@mtwa.coza
www.mtwa.coza

APPROVED SACAP :
THE MASTER HELD AT **MTWA CONCEPTS** BEARS THE ORIGINAL SIGNATURE OF APPROVAL
SIGNATURE: NAME: DATE:

ENGINEER :
SIGNATURE DATE

PROJECT STATUS:
FOR APPROVAL

NEW ADDTIOTION ON ERF 556/199-IQ BOSCHKOP

SITE PLAN +AREA SCHEDULE

DRAWING UNITS : MILLIMETERS

DATE	SCALE	DESIGNED BY
07/23/24	As indicated	P.M
CHECKED BY	DRAWN BY	APPROVED BY
P.M	P.M	P.M

DRAWING NUMBER	REVISION
A1-WD-000	2

PRINT SIZE A1

APPENDIX C

SG DIAGRAM & SERVITUDES DIAGRAM

Designed Engineering Solutions (Pty) Ltd
PO Box 90760
Garsfontein
0042

266 Sprite Avenue
Faerie Glen
Pretoria
0081

Edward Krause, *Pr Tech Eng*
Mobile: 082 306 9830

Ptn 522 Boschkop 199-IQ, Boskruin – SR

SERVITUDE DIAGRAM

SIDES Metres		ANGLES OF DIRECTION		CO-ORDINATES Y System: LO27° X	
		Constants:		-90 000,00	2880 000,00
AB	54,03	283 58 40	A	- 5 309,01	+ 7 082,65
BC	84,54	15 25 50	B	- 5 361,44	+ 7 095,70
CD	53,83	10 24 30	C	- 5 338,95	+ 7 177,19
DE	51,96	5 18 50	D	- 5 329,22	+ 7 230,13
EF	46,69	16 52 10	E	- 5 324,41	+ 7 281,87
FG	59,53	71 23 20	F	- 5 310,86	+ 7 326,55
GA	268,50	191 43 30	G	- 5 254,45	+ 7 345,55
	CONNECTING	DATA			
AH	50,04	103 58 40	H	- 5 260,45	+ 7 070,56
GJ	57,93	71 23 20	J	- 5 199,54	+ 7 364,04
	(536)	Pre 78	△	- 5 331.40	+ 7 205.40
	(701)	Ranch	△	- 2 788.98	+ 5 820.42

S. G. No. A 5645/1993

Approved

for SURVEYOR-GENERAL

1993 -07- 21

Description of Beacons

A, G : 25mm iron pipe
B : 12mm iron peg in concrete
C, F : Hole in rock
D, E : 12mm iron peg
H : 16mm iron peg
J : Iron standard

Sheet 1 of 2 sheets

EXAMINATION FEES PAID
for SURVEYOR-GENERAL

The figure A B C D E F G

represents 1,3004 hectares of land being a Servitude Area over the Remainder of Portion 122 of the farm BOSCHKOP No. 199 - IQ

Province of Transvaal

Surveyed in April-May 1993 by me

P R BARNARD
Professional Land Surveyor

This diagram is annexed to No. d. d. i. f. o. Registrar of Deeds	The original diagram is S. G. No. A 4704/1968 Transfer T 22646/1970 Grant	File -/70 S. R. 2370/1993 G. P. Comp. IQ 2B-20/C

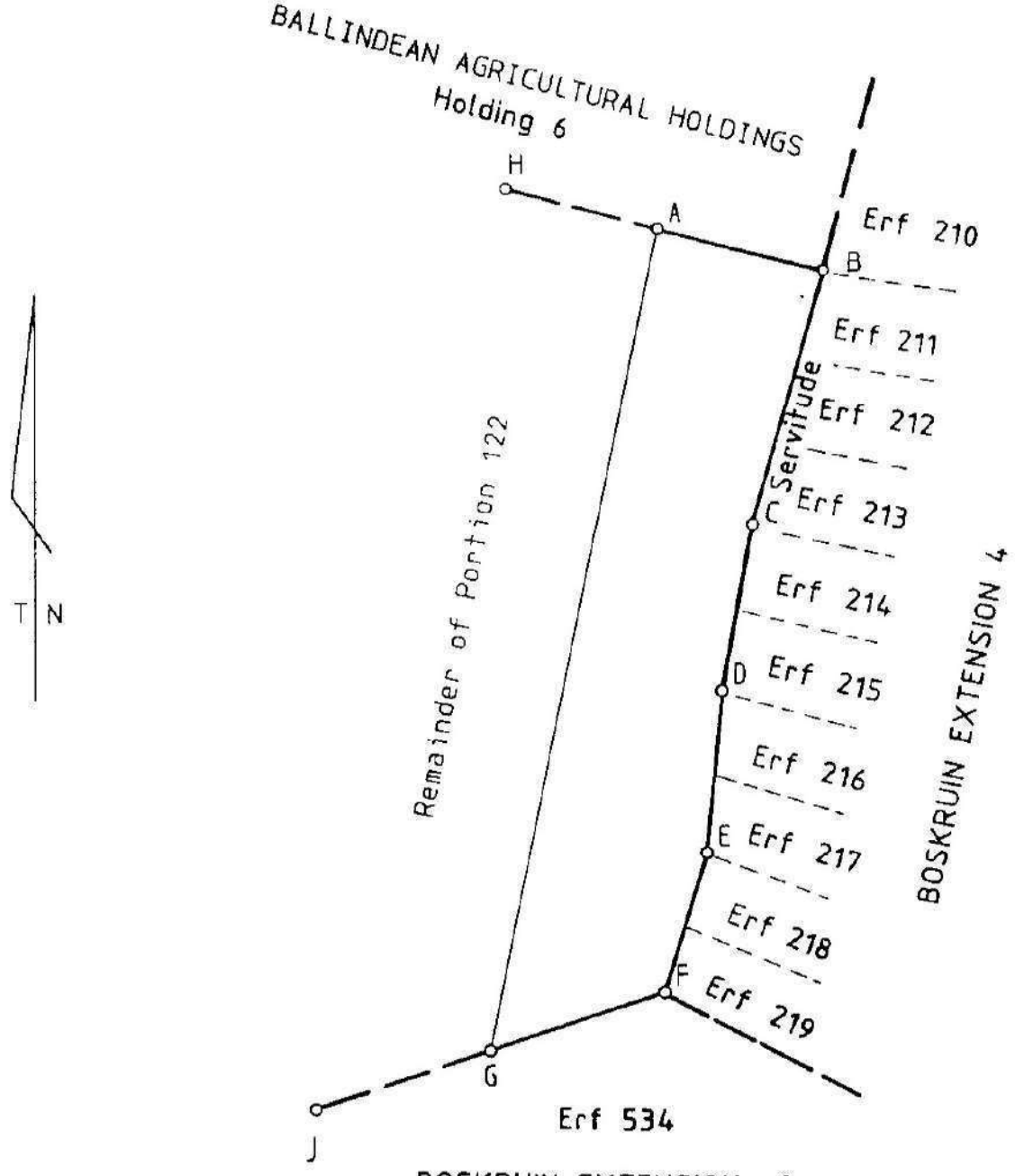
a Servitude Area over Remainder
of Portion 122 of the farm
BOSCHKOP No. 199 - IQ

5645/1993

Approved

for
SURVEYOR-
GENERAL
1993 -07- 21

Sheet 2 of 2 sheets



BOSKRUIN EXTENSION 9

Scale 1: 2500

Surveyed in April-May 1993 by me

P. P. BARNARD

APPENDIX D

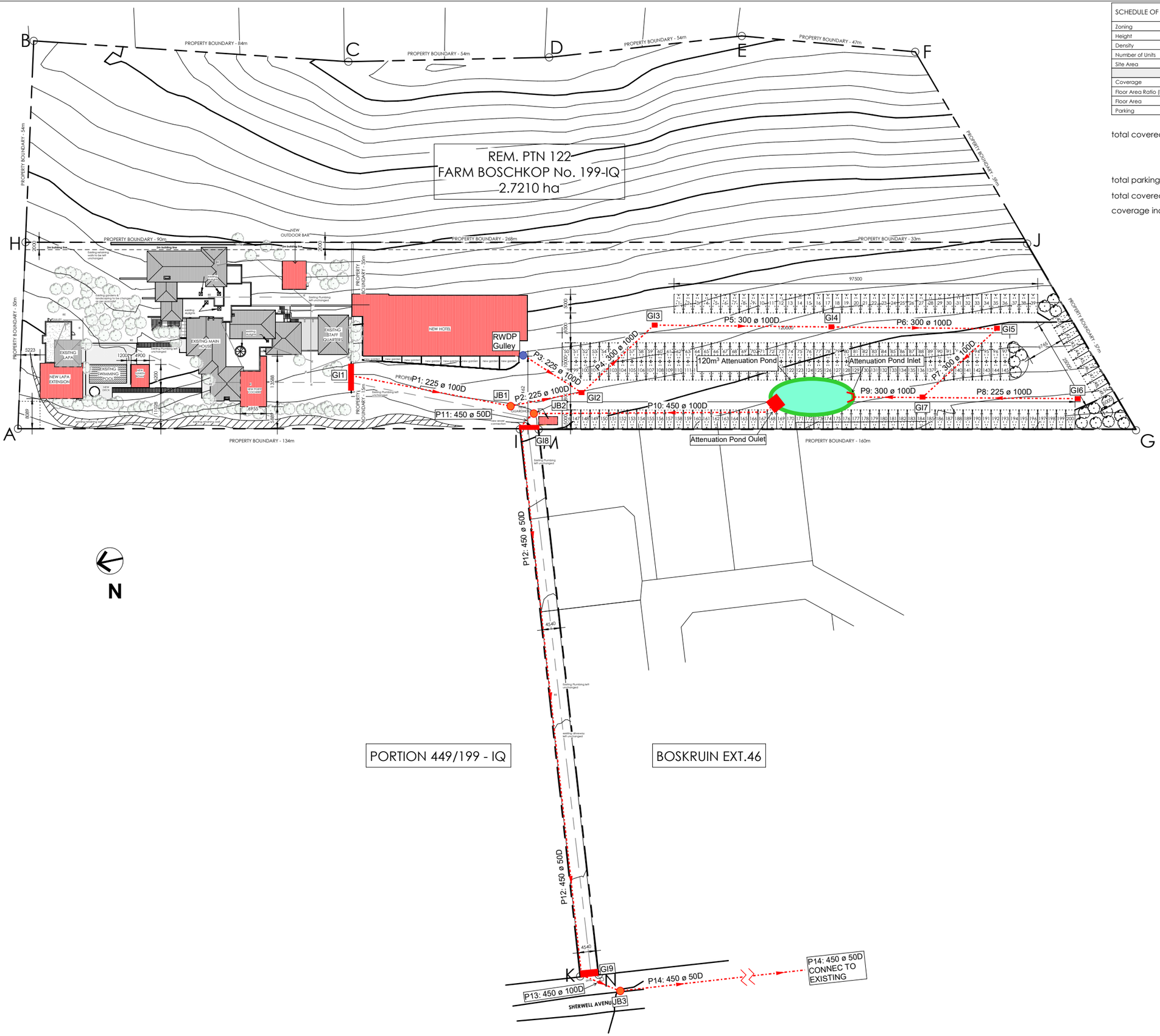
PROPOSED AND EXISTING STORMWATER LAYOUT

Designed Engineering Solutions (Pty) Ltd
PO Box 90760
Garsfontein
0042

266 Sprite Avenue
Faerie Glen
Pretoria
0081

Edward Krause, *Pr Tech Eng*
Mobile: 082 306 9830

Ptn 522 Boschkop 199-IQ, Boskruin – SR



SCHEDULE OF RIGHTS	PORTION 556 OF 122, BOSCHKOP ERF 199	
Zoning	AGRICULTURAL	
Height	3 STOREYS	
Density	N/A	
Number of Units	N/A	
Site Area	8210 m²	
	Permitted	Actual
Coverage		**25.57%**
Floor Area Ratio (FAR)		**0.26**
Floor Area		**2155.556 m²**
Parking		**0**

excl. parking**

total covered area =2099.483 m² excl. possible covered parking

total parking @ 12.5m²/ bay= 2500m² total area

total covered area =4,599.483 m² incl. possible covered parking

coverage incl parking= 56,02%

DAFFONCHIO ARCHITECTS
www.daffonchio.co.za | tel: 011 447 8118

GENERAL NOTES

1. This drawing is protected under the copyright Act 1956, and cannot be used or reproduced in part or in whole without authors consent.

2. Read only figured dimensions.

3. All construction work is to comply with the latest S.A.B.S. standard codes of practice.

4. Contractors must verify all dimensions and levels on site before commencing work. Any discrepancies must be reported to the architect before work is put in hand.

5. All levels shown are finished levels unless otherwise stated.

6. All surface beds to be cast on well compacted and well consolidated filling.

7. Depth of foundation trenches to be minimum 550mm below reduced ground level.

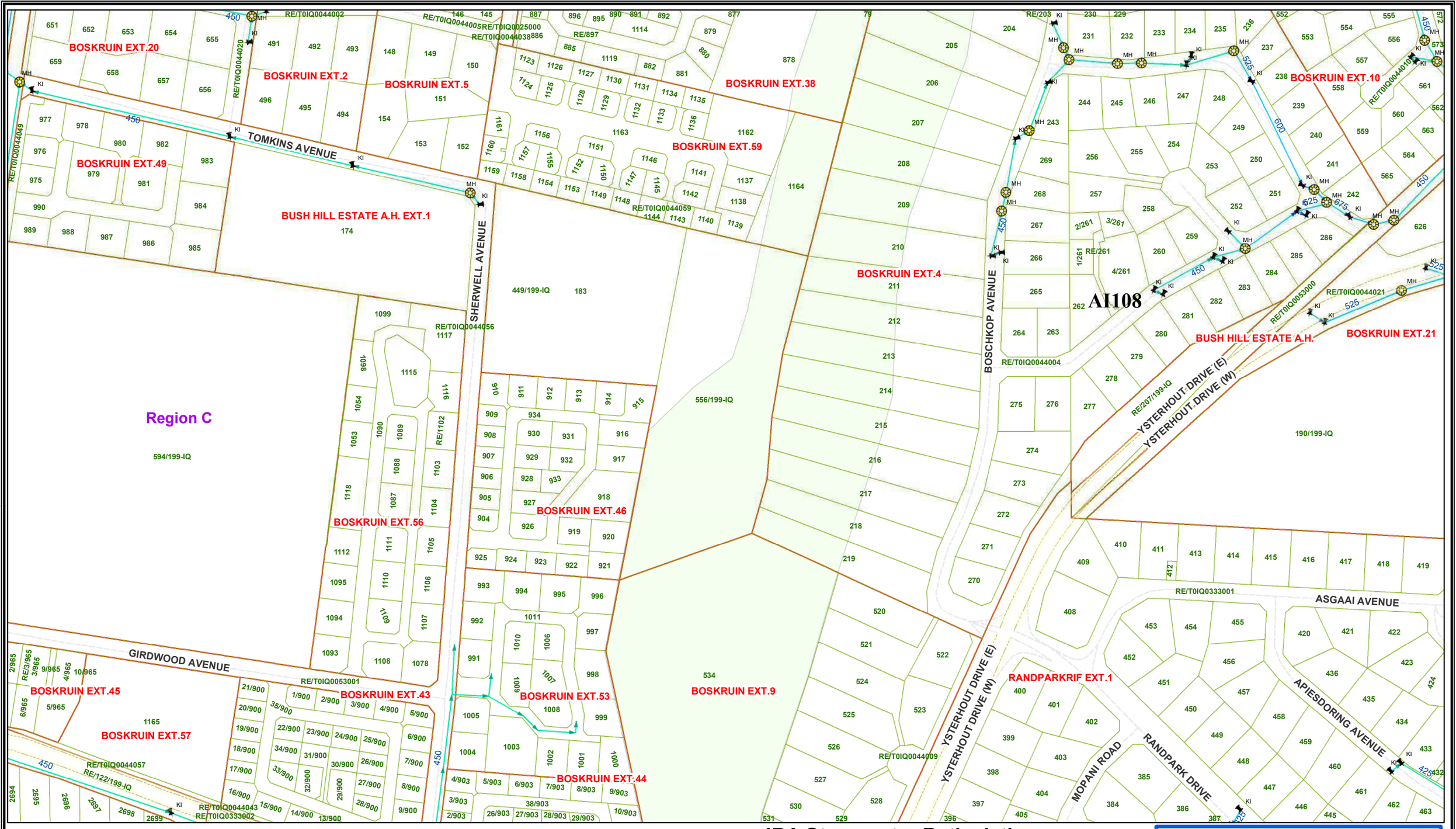
8. All pipes and services to be minimum 450mm below reduced ground level.

REV	DATE	DESCRIPTION

PROJECT NAME
122 Sherwell Avenue, Boskruin

DRAWING NAME
Site Development Plan

scale	**1 : 500**
dwg #	**109**
drawn by	**SM**
revision	
date	**12/06/23**
status	**council**



ROADS
NATIONAL
PROVINCIAL
MOTORWAY
MAJOR ROADS
INDUSTRIAL
LOCAL ROADS
GRAVEL
PRIVATE
S'water Inlets
ASSET
CATCH PIT
END CAP
INLET
GRID
HEADWALL
INLET MANHOLE
JUNCTION BOX
KERB OUTLET
MANHOLE
OUTLET MANHOLE
UNDEFINED
S'water Culverts
CULVERTS
CULVERT
LINED CHANNED
UNLINED CHANNEL
DRAIN
UNDEFINED
S'water-p
DIAMETER
0 - 200
201 - 500
501 - 750
751 - 1200
1201 - 2000
Floodline 100yr
Hazards
HAZARD
High Hazard
Medium Hazard
Low Hazard

JRA Stormwater Reticulation

** PLEASE NOTE:
THIS IS NOT A WAY-LEAVE APPROVAL
INFORMATION SUPPLIED BY THIS OFFICE IS NOT GAURENTEED. ALL INFORMATION MUST BE CONFIRMED ON SITE BEFORE WORK COMMENCES.

1:3,000

0.045 0.0225 0 0.045 0.09 0.135 Kilometers

City of Johannesburg

Johannesburg Roads Agency
Road Asset Management Systems:

Telephone : +2711 491 5766
e-mail : servicesinfo@jra.org.za

Compiler : Tintswalo Shivambu
Projection: Transverse Mercator (Lo 29)
Datum: Hartebeeshoek 94 (WGS84 Ellipsoid)
Map Size: A3
Workspace : C:\Users\tshivambu\Desktop\A3 (landscape) - Way-leaves1.mxd
23/06/2023 11:53:12

Appendix G.4: Stormwater Management Plan

+27(0)12 023 8543 | info@lexeco.co.za | lexeco.co.za
11 Alice Lane, Building 3, 5th Floor, Sandton, Johannesburg, 2196 | Registration Number 2020/642/160/07

Stormwater Management Plan Report

Portion 556 (a Portion of Portion 122) of the Farm Boschkop 199-IQ, City of Johannesburg

Report Status: Confidential
Project No: DES_438
Date: July 2023

DES
Designed Engineering Solutions

Block A Ground Floor
Glenwood Office Park
266 Sprite Avenue
Faerie Glen, Pretoria
0081

Office Number: 087 980 5107
Email: info@designedes.co.za
Web: www.designedes.co.za

PORTION 556 (A PORTION OF PORTION 122) OF THE FARM BOSCHKOP 199-IQ, CITY OF JOHANNESBURG, GAUTENG PROVINCE

STORMWATER MANAGEMENT PLAN REPORT

CLIENT:

LANDMARK PLANNING
75 Jean Avenue
Doringkloof
Centurion
0157

ATTENTION:

Name: Cecile Augustyn
e-mail: cecile@land-mark.co.za
Mobile: 066 043 3086

ENGINEER:

Designed Engineering Solutions (Pty) Ltd
Block A Ground Floor, Glenwood Office Park
266 Sprite Avenue
Faerie Glen
Pretoria
0081

www.desdesign.co.za

RESPONSIBILITY:

Name: Edward Krause *Pr Tech Eng*
e-mail: eddie.krause@desdesign.co.za
Mobile: 082 306 9830

DES
Designed Engineering Solutions

QUALITY MANAGEMENT

REVISION	FIRST ISSUE	REVISION 1	REVISION 2
Remarks			
Date	July 2023		
Prepared by	Tumelo Makubo		
Signature			
Checked by	Eddie Krause *Pr Tech Eng*		
Signature			
Authorized by	Eddie Krause *Pr Tech Eng*		
Signature			
Project number	438		
Report number	438-001-SMP		
File reference	"\DES Projects\438 Boskruin\SMP.pdf"		

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Edward Krause *Pr Tech Eng*
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SIGNATURES

PREPARED BY

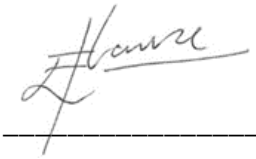
Tumelo Makubo



_____

REVIEWED BY

Eddie Krause *Pr Tech Eng*



_____

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Contact Person

Name :	Edward Krause *Pr Tech Eng*
Address:	PO Box 90760, Garsfontein 0042
Mobile:	082 306 9830
Email :	eddie.krause@desdesign.co.za

PRODUCTION TEAM

LANDMARK PLANNING

Function	Name
Client	Cecile Augustyn

DESIGNED ENGINEERING SOLUTIONS (PTY) LTD

Function	Name
Director	Eddie Krause *Pr Tech Eng*
Principal Associate	Tumelo Makubo

TABLE OF CONTENTS

1. INTRODUCTION 3

2. PROFESSIONAL TEAM 3

3. PURPOSE OF THE REPORT 3

4. LOCATION OF DEVELOPMENT 4

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6.2 DESIGN SOFTWARE 8

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1. INTRODUCTION

Designed Engineering Solutions (Pty) Ltd (DES) was appointed by Landmark Planning to compile a Stormwater Management Plan Report for the proposed development on Portion 556 (a Portion of Portion 122) of the Farm Boschkop 199-IQ, falling under the jurisdiction of the City of Johannesburg Metropolitan Municipality in the Gauteng Province.

DES is committed to providing an infrastructure preliminary design for the proposed development which will incorporate as many possible elements which are sustainable with the environment, but cost-effective at the same time and this will form part of the Township Development submission.

2. PROFESSIONAL TEAM

The professional team is as follows:

DISCIPLINE	NAME OF COMPANY	CONTACT PERSON(S)
Client	Landmark Planning	Cecile Augustyn
Director	Designed Engineering Solutions (Pty) Ltd	Eddie Krause
Principal Associate	Designed Engineering Solutions (Pty) Ltd	Tumelo Makubo

3. PURPOSE OF THE REPORT

This report deals with the management of stormwater and the associated infrastructure for the proposed development located along Sherwell Avenue on Portion 556 (a Ptn of Ptn 122) of the Farm Boschkop 199-IQ, Gauteng Province. Refer to **Appendix A** for the Site Development Plan.

Calculations indicate that an attenuation pond with a total volume of 120 m^3 will be adequate to limit the outflow to a pre-development state before discharging into the existing watercourse west of the proposed site. The implementation of the attenuation pond will be discussed throughout the report.

4. LOCATION OF DEVELOPMENT

This proposed development is located on Portion 556 (a Ptn of Ptn 122) of the Farm Boschkop 199-IQ along Sherwell Avenue in Boskruin. Refer to Figure 4-1 for the Site Locality.

The site is located approximately 520m upstream of the closest watercourse. The development is however not affected by floodlines. Refer to **Figure 4-2** for an indication of the watercourse in relation to the site.



Figure 4-1: Site Locality



Figure 4-2: Site Locality and Watercourse

5. LAND USES

Portion 556 (a Ptn of Ptn 122) of the Farm Boschkop 199-IQ is currently zoned Agricultural. The proposal is to establish a township over this property, the proposed township being Boskruin Extension 61. The township will comprise two erven namely Erf 1 and Erf 2, measuring 14 206 m^2 and 13 004 m^2 respectively.

Refer to **Figure 5-1** for an indication of the township layout. The proposed development controls are shown in Table 5-1 and **Table 5-12** for either erf.

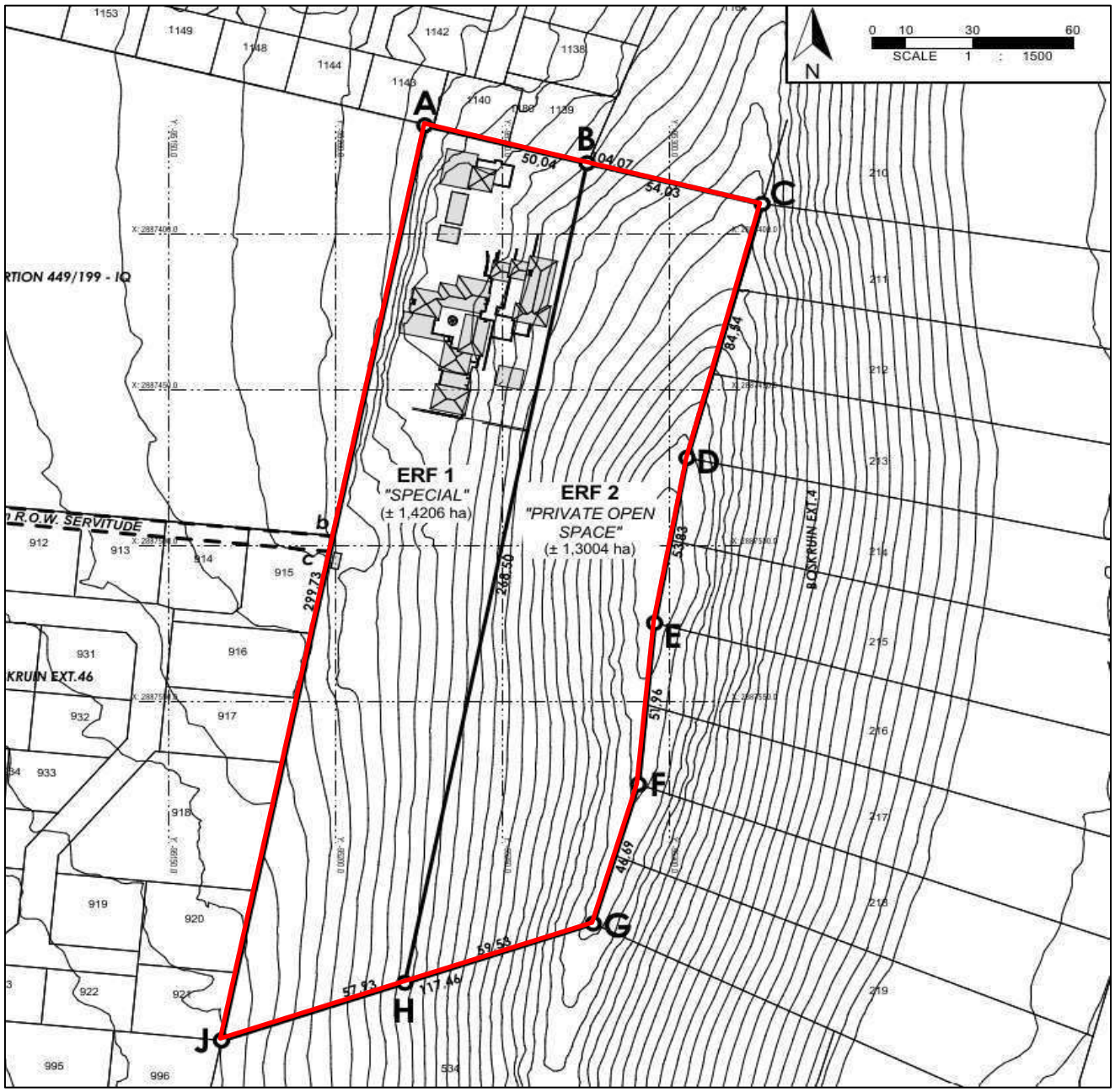


Figure 5-1: Proposed Township

Table 5-1: Proposed Development Controls for Erf 1

Use Zone	10: Special
Primary Rights	Hotel including an ancillary Caretakers Unit
Uses not Permitted	All other uses
Height	3 Storeys
Coverage	65%
FAR	0.4
Density	N/A
Parking	As per the approved SDP
Building Lines	As per the approved SDP

Table 5-2: Proposed Development Controls for Erf 2

Use Zone	26: Private Open Space
Primary Rights	As per the Scheme
Uses not Permitted	As per the Scheme
Height	N/A
Coverage	N/A
FAR	N/A
Density	N/A
Parking	N/A
Building Lines	N/A

Refer to **Appendix B** for the proposed Township Layout Plan and the proposed Zoning Conditions.

6. STORMWATER MANAGEMENT DESIGN CRITERIA

6.1 DESIGN STANDARDS

The design standards to be followed are per the standards specified in the "The Neighbourhood Planning and Design Guide" which was previously known as the "Guidelines for Human Settlement Planning and Design", commonly known as the "Red Book".

Internal stormwater within the property will be designed according to the standards and specifications of the City of Johannesburg Metropolitan Municipality. **Table 6-1** lists the standards to be used in the design of the stormwater drainage system.

Table 6-1: Design Standards

DESIGN ELEMENT	SPECIFICATION
Minimum pipe size	200 mm diameter internal and 450 mm diameter external
Pipe type	Type: Interlocking Pipe Class: 50D (100D for road crossings)
Minimum pipe gradient	0.67%
Stormwater details	According to the Redbook

6.2 DESIGN SOFTWARE

The designs of the civil engineering services will be carried out using the Autodesk Civil 3D design software.

6.3 OWNERSHIP OF SERVICES

All internal services will remain private property, and the property owner will be responsible for maintenance.

All new external services and services connections will be handed over to the controlling authorities which will be responsible for the maintenance thereof.

7. STORMWATER MANAGEMENT

7.1 EXISTING (PRE-DEVELOPMENT) STORMWATER DRAINAGE PATTERN AND FLOODLINES

The site slopes in a southwesterly direction where the overland stormwater runoff flows to the lowest point on the property and ultimately flows into the driveway and out of the site. Refer to **Figure 7-1**.

The existing stormwater systems existing on the property will need to be upgraded to accommodate the post-development run-off.

The site is located approximately 520m upstream of a natural watercourse. The development is however not affected by floodlines as per the National Water Act (Act 36 of 1998).

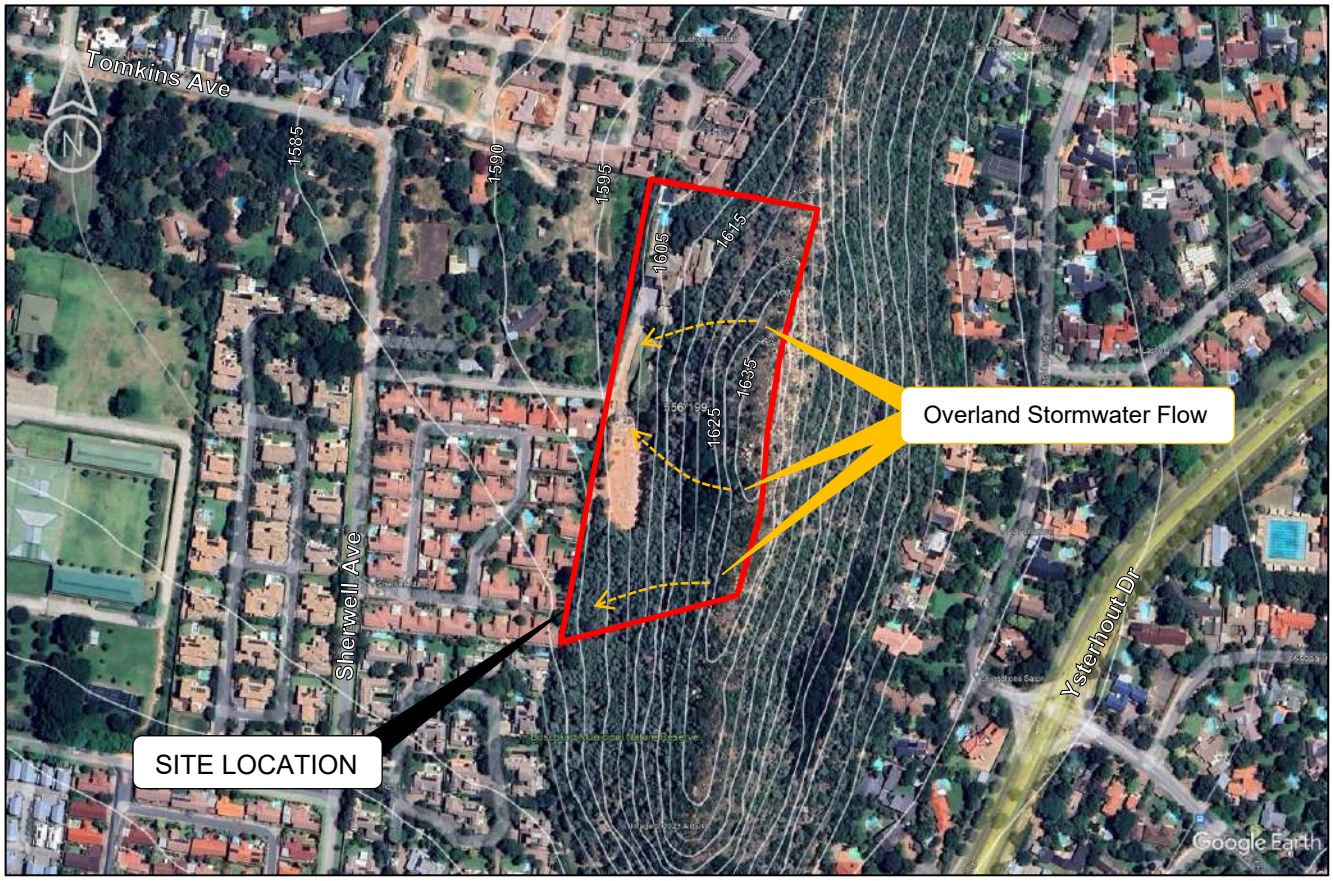


Figure 7-1: Site Topography

7.2 POST-DEVELOPMENT STORMWATER DRAINAGE

According to the proposed Zoning Conditions included in **Appendix B**, development of this proposed township is restricted to Erf 1 and no development shall be allowed on Erf 2 where a conservation servitude is proposed to be registered.

Erf 1 covers an area of approximately 14 206 m^2. As per the *Stormwater Management JRA Policy Statement, 30 June 2015*, the JRA requires that attenuation should be provided for developments exceeding an area of 8 500 m^2, with an estimated volume of 300 m^3 per hectare. In line with the aforementioned, calculations indicate that an attenuation pond size of 242.9 m^3 will be adequate for the proposed development. The report recommends an attenuation pond size of 120 m^3.

All stormwater shall be captured through a piped internal stormwater network within the development, which will then be conveyed to the outlet point from the attenuation pond. From the attenuation pond outlet, a 450mm dia stormwater pipe will be installed along the driveway of the property, westwards towards Sherwell Ave to finally connect into the existing stormwater system along the same street, approximately 170 m south of the said driveway. **Appendix C** indicates the proposed stormwater layout for the proposed development. Refer to **Appendix D** for the attenuation pond hydrographs.

The major pipe system will be designed to accommodate a 1:25-year storm event, all side branches will be designed to accommodate a 1:5-year storm event.

The attenuation pond will be designed to accommodate the post-development flows for the 1:25-year storm event and slowly discharge the pre-development flows to the outlet.

7.3 HYDROLOGY

Hydrological data that is used in the design of the stormwater drainage system for the proposed development is summarized in Table 7-1 below.

Table 7-1: Hydrological Data

HYDROLOGICAL DATA	
Flood return period	1:5 and 1:25
Average yearly rainfall	659 mm
Minimum time of concentration and run-off coefficient according to the Red Book and incorporating the City of Johannesburg specifications.	
Design method	Rational method for smaller catchment areas
Pre-development run-off factor (C)	0.43
Post-development run-off factor (C)	0.58

The rainfall data shown in Table 7-2 was used to calculate the run-off, using Rational Method (Alt. 3).

Table 7-2: Representative Rainfall Data

WEATHER SERVICE STATION					Summerhill		
WEATHER SERVICE STATION NO					0475661_W		
MEAN ANNUAL PRECIPITATION					659		
DURATION	RETURN PERIOD						
	2	5	10	25	50	100	200
5 min	10.3	13.8	16.1	19.1	21.3	23.5	25.7
10 min	15.4	20.5	23.9	28.4	31.6	34.9	38.2
15 min	19.4	25.8	30.2	35.9	39.9	44.0	48.2
30 min	24.5	32.7	38.2	45.4	50.5	55.8	61.1
45 min	28.2	37.5	43.8	52.2	58.0	64.0	70.1
1 hour	31.1	41.4	48.4	57.5	63.9	70.6	77.3

7.4 STORMWATER RUN-OFF

The stormwater run-off generated by the proposed development is shown in Table 7-3 below. **Appendix D** are the calculated run-off values according to pre and post-development.

Table 7-3: Total Development Run-off

FLOOD RETURN PERIOD	PRE-DEV FACTOR	PRE-DEV RUN-OFF (m^3/s)	POST-DEV FACTOR	POST-DEV RUN-OFF (m^3/s)
1:5	0.39	0.156	0.57	0.232
1:25	0.43	0.240	0.58	0.326

Table 7-4 below shows the calculations for the proposed attenuation pond outlet size. Determined with Hydro-CAD.

Table 7-4: Calculated Attenuation Storage

STORM EVENT	PEAK POST-DEV RUN-OFF (m^3/s)	PEAK PRE-DEV RUN-OFF (m^3/s)	POND OUTFLOW (m^3/s)	POND STORAGE (m^3)
1:5	0.232	0.156	0.146	78.8
1:25	0.326	0.240	0.182	120.9

An attenuation pond size of 120 m^3 will be adequate to limit the outflow to a pre-development state. The outlet is connected to a 450 mm dia stormwater pipe that channels it to the existing stormwater network along Sherwell Avenue adding a maximum of approximately 0.182 m^3/s, for a 1:25-year storm event, to the network.

7.5 STORMWATER MANAGEMENT DURING CONSTRUCTION

During the construction phase of the development, temporary silt fences can be erected to prevent silt from the construction process, contaminating the properties to the west (downstream) of the proposed site.

A typical fence consists of a piece of synthetic filter fabric (geotextile) stretched between a series of wooden or metal fence stakes along a horizontal contour level. The stakes are installed on the downhill side of the fence, and the bottom edge of the fabric is trenched into the soil and backfilled on the uphill side. The stormwater slowly passes through the fence while depositing its sediments on the uphill side of the fence. The fence is not designed to concentrate or channel stormwater. The fence is installed on a site before soil disturbance begins and is placed down-slope from the disturbance area.

7.6 PROPOSED MAINTENANCE SCHEDULE

The developer will be responsible for the cleaning and maintenance of the stormwater system constructed on the proposed development.

8. COST ESTIMATE

The preliminary costing for the proposed stormwater systems for Erf 1 of Portion 556 (a Ptn of Ptn 122) of the Farm Boschkop 199-IQ can be seen under **Appendix E**.

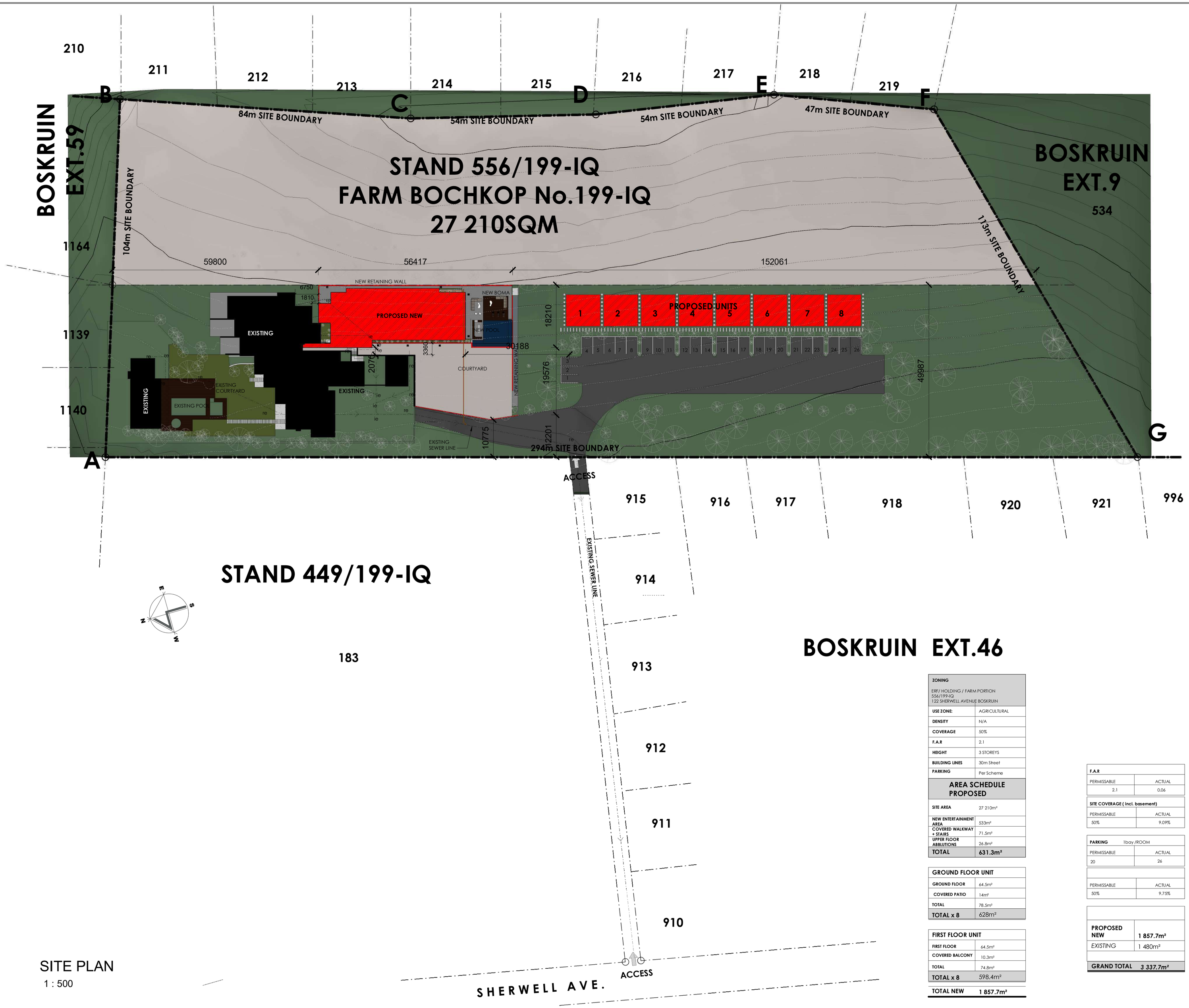
9. CONCLUSION

All stormwater shall be captured through a piped internal stormwater network within the development, which will then be conveyed to the outlet point from the attenuation pond. From the attenuation pond outlet, a 450mm dia stormwater pipe will be installed along the driveway of the property, westwards towards Sherwell Ave to finally connect into the existing stormwater system along the same street, approximately 170 m south of the said driveway.

At a storage size of 120 m^3, the attenuation pond will be designed to accommodate the post-development flows for the 1:25-year storm events and slowly discharge the pre-development flows to the proposed connection point along Sherwell Avenue.

The major pipe system will be designed to accommodate a 1:25-year storm event, all side branches will be designed to accommodate a 1:5-year storm event.

APPENDIX A – PROPOSED SITE LAYOUT



SITE PLAN
1 : 500

ZONING	
ERF/ HOLDING / FARM PORTION 556/199-IQ 122 SHERWELL AVENUE BOSKRUIN	
USE ZONE:	AGRICULTURAL
DENSITY	N/A
COVERAGE	50%
F.A.R	2.1
HEIGHT	3 STOREYS
BUILDING LINES	30m Street
PARKING	Per Scheme
AREA SCHEDULE PROPOSED	
SITE AREA	27 210m²
NEW ENTERTAINMENT AREA	533m²
COVERED WALKWAY + STAIRS	71.5m²
UPPER FLOOR ABBLUTIONS	26.8m²
TOTAL	631.3m²

GROUND FLOOR UNIT	
GROUND FLOOR	64.5m²
COVERED PATIO	14m²
TOTAL	78.5m²
TOTAL x 8	628m²

FIRST FLOOR UNIT	
FIRST FLOOR	64.5m²
COVERED BALCONY	10.3m²
TOTAL	74.8m²
TOTAL x 8	598.4m²
TOTAL NEW	1 857.7m²

F.A.R	
PERMISSABLE	ACTUAL
2.1	0.06

SITE COVERAGE (incl. basement)	
PERMISSABLE	ACTUAL
50%	9.09%

PARKING	1bay /ROOM
PERMISSABLE	ACTUAL
20	26

PERMISSABLE	ACTUAL
50%	9.75%

PROPOSED NEW	1 857.7m²
EXISTING	1 480m²
GRAND TOTAL	3 337.7m²

* ALL WORK TO COMPLY WITH LOCAL AUTHORITIES AND NBR BY-LAW
1. Read figured dimensions in preference to scaling
2. The contractor must verify all levels , heights and dimensions on site and to check same against the set of drawings before commencing work and to convince himself that the infomation given is correct and in accordance with the conditions on site
3. Contractors are to locate existing services on site and to protect these from damage throughout the duration of the works.
4. The contractor is responsible for the correct identification of all surveyor pegs and markers and setting out of the building with particular reference to grid lines ,column positions ,internal and external walls from surveyor markers boundaries and building lines etc.
5. Any errors ,discrepancies or omissions to be reported to the architect before commencing any work.
6. 4 ply damp proof-course under all walls and sills and vertical dpc. to all changes of floor levels
7. Flashing to all changes of roof levels and parapet walls
8. All concrete beds on well rammed filling.
9.10mm softboard joints to be placed between all new and existing construction joints.

*UNLESS OTHERWISE INSTRUCTED BY THE STRUCTURAL ENGINEER THE MINIMUM OF CONCRETE MIXES SHALL BE AS FOLLOWS:
- blinding 10 mpa
- strip foundations 15 mpa
- 75mm traffic surfaces 20 mpa
- 75mm surface beds to be screeded 15 mpa

NB: ALL REINFORCED CONCRETE AND STEEL COLUMNS,SLABS,BEAMS FOUNDATIONS ETC.TO BE STRICTLY IN ACCORDANCE WITH THE STRUCTURAL ENGINEERS SPECIFICATIONS.

PLUMBING
1. All plumbing and drainage must comply with the relevant local authority and nbr by-laws and regulations
2. All bends and junctions in drain to be fitted with ie's and marked covers at ground level.
3. Waste fittings to have reseal traps and to be fully accessible.
4. Rain water down pipes to be min. 2450 from gullies
5. Any portion of drain at a depth of 450 mm or less below ground level shall be encased in concrete having a min. thickness at all points of 100mm measured from the external surface of the pipe.
6. Any portion of drain passing under any part off the building or footing shall be protected against the load, this pipe must be without bends or junctions along its entire length under the building and should have a re. before and after passing under the building.
7. The minimum fall to all drain pipes to be 1 : 40
8. 110mm ∅ for soil pipes (SP)
9. 50mm ∅ for waste pipes (WP)

ENERGY REGULATION NOTES
1. All new building work, including new buildings, alterations, additions and renovations must comply to SANS 10400-XA:2011, SANS 204:2011, SANS 613:2011.
2. All exposed hot water piping to be insulated with R value of 1 according to SANS 10400-XA:2011, clause 4.1.3
3. All roof insulation to comply with SANS 10400-XA:2011, clause 4.4.5
4. When underfloor heating is required, it shall comply with SANS 10400-XA:2011, clause 4.4.2
5. All external walls to have a minimum R-value of 0.35 according to SANS 10400-XA:2011, clause 4.4.3
6. All fenestration and infiltration to comply with SANS 204:2011, Table 6 and with SANS 613, Clause 4.4

DESIGN: SANS 10400-XA CLAUSE 4.2.1 (b)
1. ORIENTATION: Living room and major areas of glazing to face north longer axis of building to run East / West. SANS 10400-XA Clause 4.4.1.1
2. SHADING: Roof overhang must shade Northern windows from summer sun. Eastern & Western windows to be minimised or screened.
3. ROOFING: Roof assembles to receive insulation to achieve the R value as indicated in table 7.Thickness given in SANS 204 Table 10. SANS 10400-XA Clause 4.4.5 (SANS 204 Table 10)
4. UNDERFLOOR HEATING: When underfloor heating is provided, add insulation underfloor with R value of 1. SANS 10400-XA Clause 4.4.2
5. WALLS: Non-Masonry wall will have R value as provided. SANS 10400-XA Clause4.4.3.1 : Double skin masonry with plaster inside or render outside complies. Single leaf, min 140mm with plaster inside & render outside complies. SANS 10400-XA Clause 4.4.3.2: Other Masonry walls will have R value of 0.35. SANS 10400-XA Clause 4.4.3.3
6. FENESTRATION: Air leakage shall not exceed 2Ls/m² revolving/swing doors. SANS 10400-XA Clause 4.4.1.1 SANS 613 Clause 4.4
Fenestration more than 15% area to nett floor area per storey then.. SANS 10400-XA Clause 4.4.4.2
Fenestration up to 15% area to nett floor area per storey complies SANS 10400-XA Clause 4.4.4.1
Solar Heat Gain and heat conductance to comply with SANS 204 Clause 4.3.4. SANS 204 Clause 4.3.4

REV	ISSUE DATE	DRAWING REVISION DESCRIPTION
0	25-07-2024	ISSUED FOR APPROVAL
1	20-03-2025	ISSUED FOR APPROVAL
2	15-03-2025	UPDATED PARKING - ISSUED FOR APPROVAL

CLIENT :
MALIBU
SIGNATURE DATE

MTWA PROPERTIES
THE BUSINESS CENTRE, LESLIE AVE EAST
FOURWAYS JHB 2091
T : +27 72 252 6369 E: design@mtwa.coza
www.mtwa.coza

APPROVED SACAP :
THE MASTER HELD AT **MTWA CONCEPTS** BEARS THE ORIGINAL SIGNATURE OF APPROVAL
SIGNATURE: NAME: DATE:

ENGINEER :
SIGNATURE DATE

PROJECT STATUS:
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NEW ADDTIOTION ON ERF 556/199-IQ BOSCHKOP

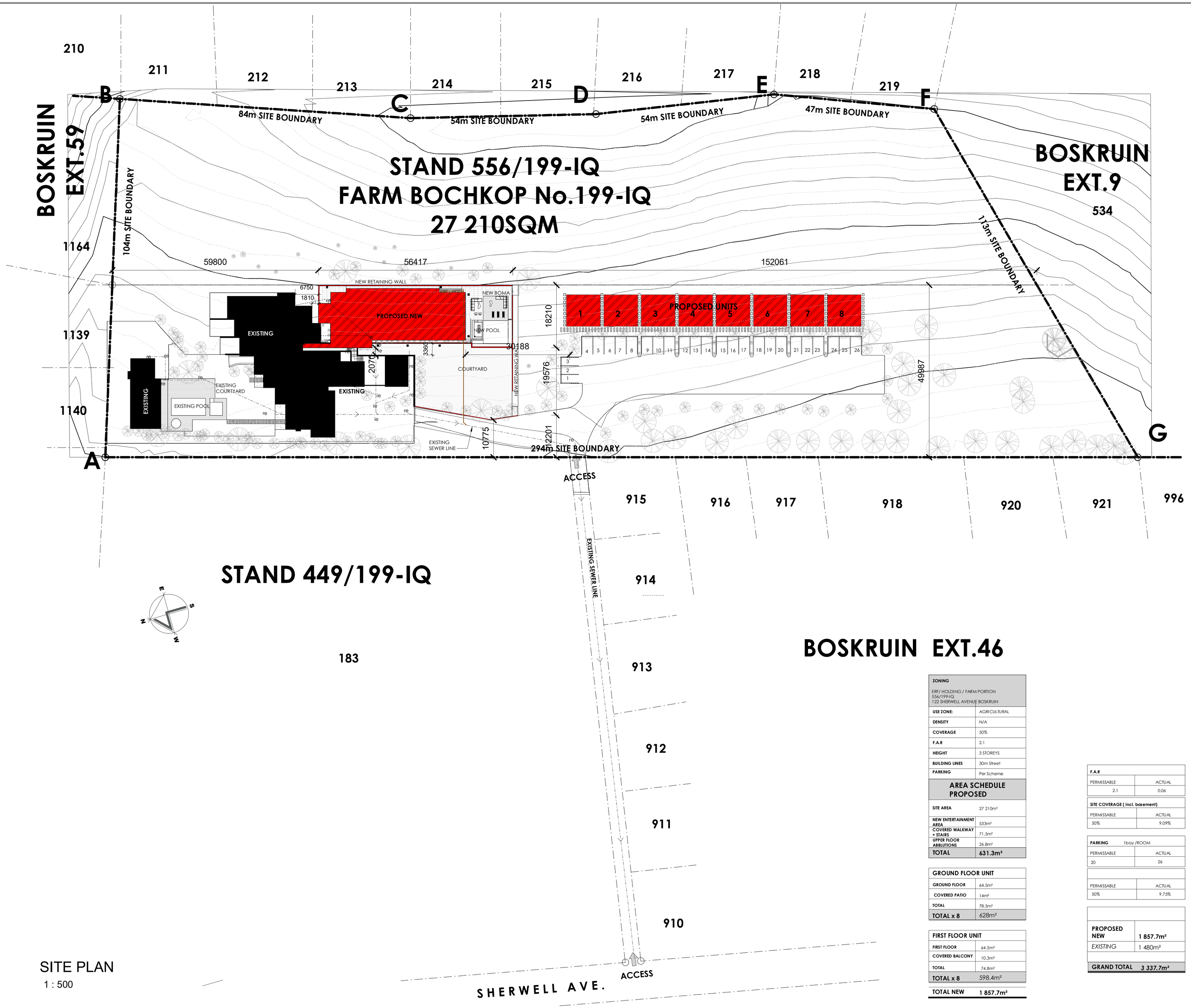
SITE PLAN +AREA SCHEDULE

DRAWING UNITS : MILLIMETERS

DATE	SCALE	DESIGNED BY
07/23/24	As indicated	P.M
CHECKED BY	DRAWN BY	APPROVED BY
P.M	P.M	P.M

DRAWING NUMBER	REVISION
A1-WD-000	2

PRINT SIZE A1



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APPROVED SACAP :

THE MASTER HELD AT **MTWA CONCEPTS** BEARS THE ORIGINAL SIGNATURE OF APPROVAL

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ENGINEER :

SIGNATURE DATE

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P.M	P.M	P.M

DRAWING NUMBER	REVISION
A1-WD-000	2

PRINT SIZE **A1**

ZONING	
ERF/ HOLDING / FARM PORTION 556/199-IQ 122 SHERWELL AVENUE BOSKRUIN	
USE ZONE:	AGRICULTURAL
DENSITY	N/A
COVERAGE	50%
F.A.R	2.1
HEIGHT	3 STOREYS
BUILDING LINES	30m Street
PARKING	Per Scheme
AREA SCHEDULE PROPOSED	
SITE AREA	27 210m²
NEW ENTERTAINMENT AREA	533m²
COVERED WALKWAY + STAIRS	71.5m²
UPPER FLOOR ABBLUTIONS	26.8m²
TOTAL	631.3m²

GROUND FLOOR UNIT	
GROUND FLOOR	64.5m²
COVERED PATIO	14m²
TOTAL	78.5m²
TOTAL x 8	628m²

FIRST FLOOR UNIT	
FIRST FLOOR	64.5m²
COVERED BALCONY	10.3m²
TOTAL	74.8m²
TOTAL x 8	598.4m²
TOTAL NEW	1 857.7m²

F.A.R	
PERMISSABLE	ACTUAL
2.1	0.06

SITE COVERAGE (incl. basement)	
PERMISSABLE	ACTUAL
50%	9.09%

PARKING 1bay /ROOM	
PERMISSABLE	ACTUAL
20	26

PERMISSABLE	ACTUAL
50%	9.75%

PROPOSED NEW	1 857.7m²
EXISTING	1 480m²
GRAND TOTAL	3 337.7m²

APPENDIX B – TOWNSHIP LAYOUT PLAN AND ZONING CONDITIONS

PROPOSED TOWNSHIP: BOSKRUIN EXTENSION 64

LANDMARK PLANNING
Town & Regional Planning | Stads- & Streekbeplanning
75 Jean Avenue, Doringkloof, Centurion | PO Box 10936, Centurion, 0046
(012) 667 4773 | (012) 667 4450 | 082 371 5770
willem@land-mark.co.za | www.landmarkplanning.co.za

N

0 10 30 60
SCALE 1 : 1500

A B C D E F G H J

50,04 | 104,07 | 54,03 | 84,54 | 53,83 | 51,96 | 49,69 | 59,53 | 117,46 | 57,93 | 299,73 | 288,50

ERF 1
"SPECIAL"
for the purpose of a Boutique Hotel including ancillary Caretakers unit
(± 1,4206 ha)

ERF 2
"PRIVATE OPEN SPACE"
(± 1,3004 ha)

PORTION 449/199 - IQ

BOSKRUIN EXT.46

BOSKRUIN EXT.4

SHERWELL AVENUE (15,74m)

5m R.O.W. SERVITUDE

3m B/L

10m B/L

10

X: 2887400.0 | X: 2887450.0 | X: 2887500.0 | X: 2887550.0

Y: -95150.0 | Y: -95200.0 | Y: -95250.0 | Y: -95300.0

GEOLOGICAL REPORT (MAY 2007): AFRICA EXPOSED - CONSULTING ENGINEERING GEOLOGISTS CC

TABLE 1. RESIDENTIAL SITE CLASS DESIGATIONS

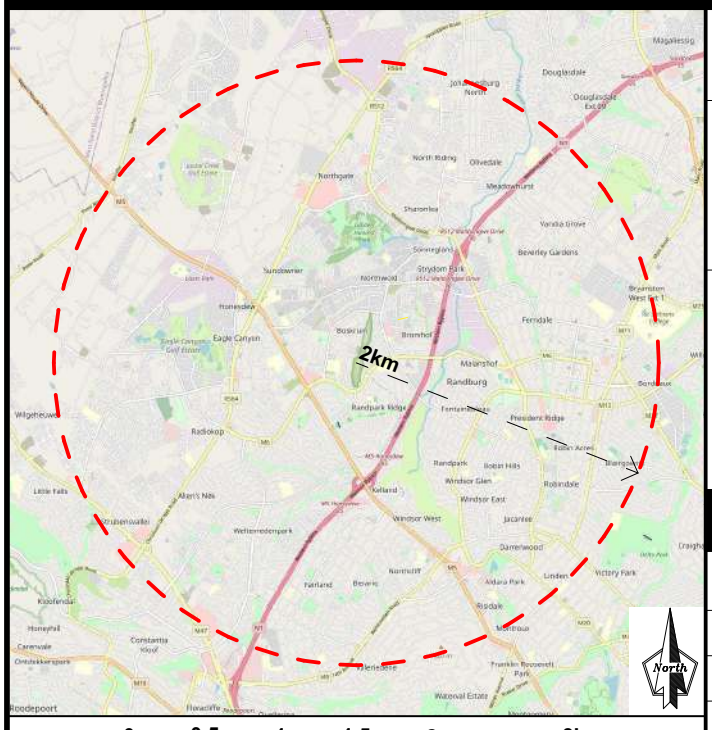
TYPICAL FOUNDING MATERIAL	CHARACTER OF FOUNDING MATERIAL	EXPECTED RANGE OF SOIL MOVEMENT (mm)
ROCK (EXCLUDING MUD ROCKS WHICH MAY EXHIBIT SWELLING TO SOME DEPTH)	STABLE	NEGLIGABLE

NHBRC CLASSIFICATION: R

SERVITUDE NOTES:

1. THE FIGURE a-b-c-d-a REPRESENTS A 5m R.O.W; VIDE S.G. No. 10929/1999 AND DEED OF SERVITUDE K6113/1999s.

LOCALITY MAP



PLAN No.: BOSKRUINX64/1

JUNE 2025

LOCALITY: SITUATED ON PORTION 556 (A PORTION OF PORTION 122) OF THE FARM BOSCHKOP No. 199-IQ. *REPRESENTED BY FIGURE A-B-C-D-E-F-G-H-J-A*

LOCAL AUTHORITY: CITY OF JOHANNESBURG METROPOLITAN MUNICIPALITY

GENERAL NOTES:

ALL DIMENSIONS AND AREAS ARE APPROXIMATE PENDING FINAL SURVEY
CONTOURS: SUPPLIED BY GERHARD SWART LAND SURVEYOR;
2m INTERVALS; DATUM: MEAN SEA LEVEL GEOID SA2010
THE TOWNSHIP LAYOUT PLAN IS IN ACCORDANCE WITH THE SECTION 26 READ WITH SCHEDULE 1 OF THE CITY OF JOHANNESBURG LAND USE MANAGEMENT BY-LAW, 2016.

W.G. GROENEWALD
PR.PLN No: A/1060/1998

FLOOD LINE CERTIFICATION:

I HEREBY CERTIFY THAT IN TERMS OF THE REQUIREMENTS OF SECTION 144 OF THE WATER ACT, 1998 (ACT 36 OF 1998), THIS PROPOSED TOWNSHIP IS NOT AFFECTED BY A FLOOD WITH AN EXPECTED FREQUENCY OF 1:50 OR 1:100 YEARS

EDDIE KRAUSE (PR. ENG. No. 200770156)

DATE: JUNE 2025

PROPOSED ZONING: CITY OF JOHANNESBURG LAND USE SCHEME, 2018

	USE ZONE / RESERVATION	ERF NO:	AREA:	%
10	"SPECIAL" for the purpose of a Boutique Hotel including ancillary Caretakers Unit	1	± 1,4206 ha	52
26	"PRIVATE OPEN SPACE"	2	± 1,3004 ha	48
	TOTAL:	**2**	**± 2,7210 ha**	**100**

PROPOSED SCHEME CONDITIONS/CONDITIONS OF APPROVAL

The following Development Controls are proposed in terms of the City of Johannesburg Land Use Scheme, 2018:

Erf 1 (Approximately 14 206 m²)

Use Zone	:	10: "SPECIAL"
Primary Rights		Boutique Hotel including an ancillary Caretakers Unit
Consent Uses	:	Dwelling units, Residential Buildings.
Uses Not Permitted	:	All other uses
Height	:	3 Storeys 2 Storeys - alongside and east of Erven 915-918 and 920-921, Boskruin X46
Coverage	:	50%
FAR	:	0,4
Parking	:	As per Scheme
Density	:	Not applicable
Building Lines	:	Street – 3 meters Along Erven 915-918 and 920-921, Boskruin X46 – 10 meters All other Boundaries – 3 meters

Erf 2 (Approximately 13 004 m²)

Use Zone	:	26: "Private Open Space"
Primary Rights	:	As per Scheme
Consent Uses	:	As per Scheme
Uses Not Permitted	:	As per Scheme
Height	:	N/A
Coverage	:	N/A
FAR	:	N/A
Parking	:	N/A
Density	:	N/A
Building Lines	:	N/A

Special Conditions

1. Development shall be restricted to Erf 1.

2. No development shall be allowed on Erf 2 (i.e. zoned "Private Open Space").

3. For the purpose of this scheme, a Boutique Hotel shall mean "a building/s used as a temporary residence for transient guests, where lodging and meals are provided, and may include:

   (i) A restaurant;
   (ii) Associated meeting rooms, conference and entertainment facilities, recreational and service facilities that are subservient and ancillary to the dominant use of the property as a Boutique Hotel
   (iii) A Spa;

(iv) Premises which are licensed to sell alcoholic beverages for consumption on the property; but does not include an off-sales facility; and

(v) However, it excludes self-catering suites/units for permanent residents; no suites/units may be sectionalized.

4. The developer shall develop and implement an Environmental Management Plan to maintain the ecological integrity of the remaining area (i.e. Private Open Space-erf).

5. All parking including manoeuvring space must be provided on site and as stipulated in the Town Planning Scheme.

6. Stormwater Management must be provided to JRA and EISD satisfaction.

7. The total width of the 5m private right-of-way servitude providing access to the township off Sherwell Avenue shall be paved to the satisfaction of JRA.

8. The erf lies in an area where soil conditions can affect buildings and structures and result in damage to them. Building Plans submitted to the Local Authority must indicate measures to be taken, in accordance with recommendations contained in the Engineering-Geological Report for the township, to limit possible damage to buildings and structures as a result of detrimental foundation conditions unless it is proved to the Local Authority that such measures are unnecessary or that the same purpose can be achieved by other more effective means

   NHBRC classification for foundations is considered as R.

9. A Site Development Plan and a landscape development plan, unless otherwise determined by the Municipality, compiled by a person suitably qualified to the satisfaction of the Municipality, shall be submitted to the Municipality for approval prior to the submission of building plans.

   i. The landscaping, in terms of the landscape development plan, shall be completed by completion of the development or any phase thereof. The continued maintenance of the landscape development shall be to the satisfaction of the Municipality.

   ii. When the Site Development Plan is evaluated, special attention must be given to elements such as exterior finishes, style, landscaping, boundary walls etc. in order to create a special character which is harmonious with the surrounding residential area.

   iii. An approved Site Development Plan shall only be amended with the permission of the Municipality and building plans which do not comply with the proposals and conditions as set out in the approved site development plan will not be approved by the Municipality.

10. Other Internal Requirements

    10.1 The township owner shall install and provide all internal services in and for the township at his/her own cost, subject to the approval of the Council.

    10.2 The township owner shall obtain clearance from City Power and Johannesburg Water with regard to the availability of electricity, water and sewerage, before the township register is opened.

10.3 If, by reason of the establishment of the township, it should become necessary to remove or replace any existing municipal services, the cost thereof shall be borne by the township owner.

10.4 Any matter pertaining to the installation of engineering services and implementation of land use rights as granted shall be implemented to the satisfaction of the Council upon township proclamation.

10.5 Contributions in respect of external sewerage, water, stormwater and electrical engineering services shall be payable to the Council in accordance with Section 47 of the City of Johannesburg Municipal Planning By-Law 2016.

10.6 The owner must ensure that any applicable existing restrictive conditions of title are removed, prior to proclamation of the township.

10.7 The following conditions must be included as conditions of title in respect of all erven in the township:

i. All erven to be subject to a servitude, 2 metres wide, in favour of the local authority, for sewerage and other municipal purposes, along any two boundaries other than a street boundary and in the case of a panhandle erf, an additional servitude for municipal purposes 2 metres wide across the access portion of the erf, if and when required by the local authority: Provided that the local authority may dispense with any such servitude.

ii. No building or other structure shall be erected within the aforesaid servitude area and no large-rooted trees shall be planted within the area of such servitude or within 2 metres thereof.

iii. The local authority shall be entitled to deposit temporarily on the land adjoining the aforesaid servitude such material as may be excavated by it during the course of the construction, maintenance or removal of such sewerage mains and other works as it, in its discretion may deem necessary and shall further be entitled to reasonable access to the said land for the aforesaid purpose subject to any damage done during the process of the construction, maintenance or removal of such sewerage mains and other works being made good by the local authority.

10.8 The requirements of the Council Departments and Municipal Owned Entities shall be complied with to the satisfaction of the Council.
City Power.
Environmental Management
Johannesburg Roads Agency.
Johannesburg Water.
Technical Support.
Pikitup.
Environmental Infrastructure Services Department.

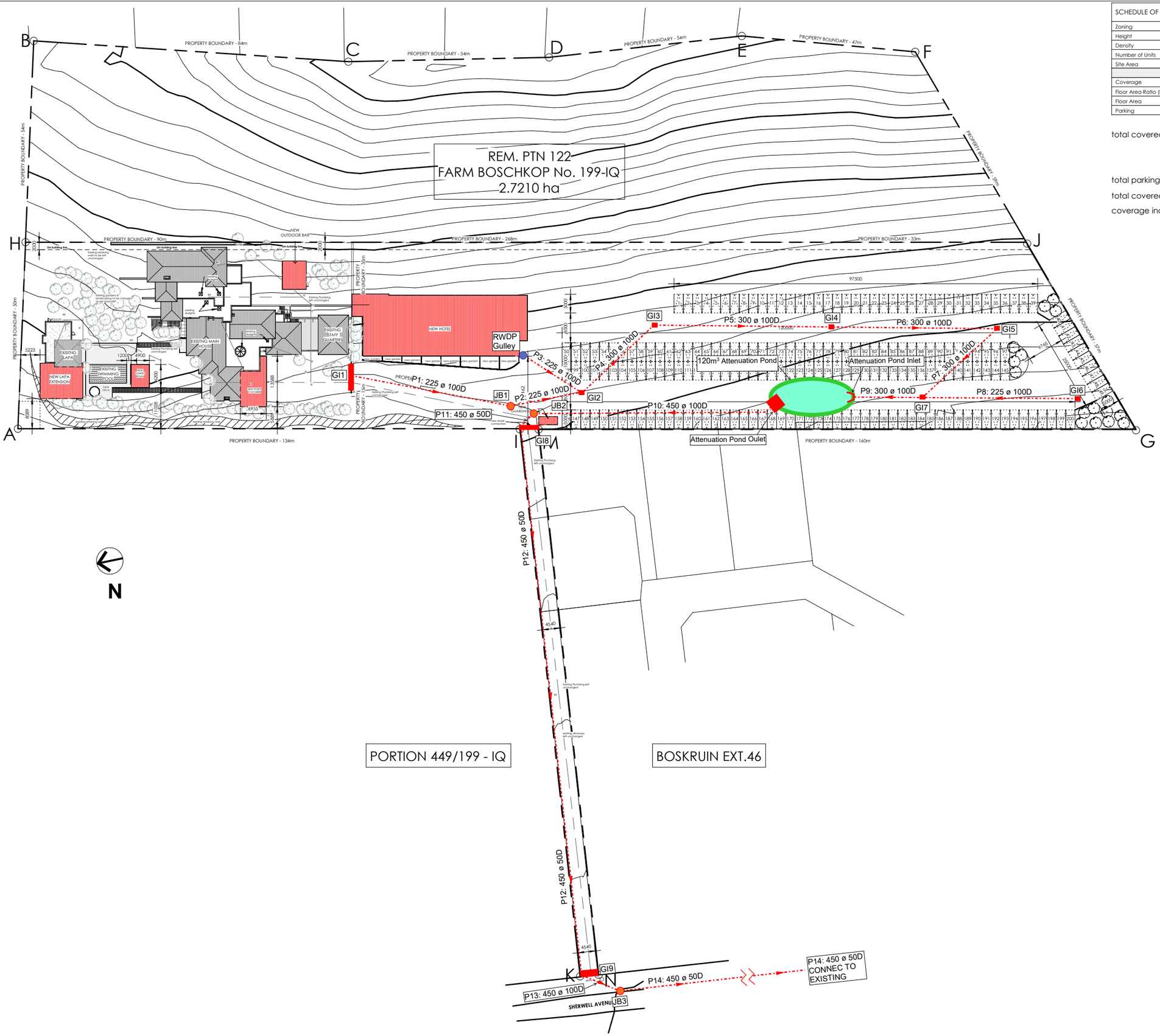
APPENDIX C – PROPOSED STORMWATER LAYOUT PLAN

Designed Engineering Solutions (Pty) Ltd
PO Box 90760
Garsfontein
0042

266 Sprite Avenue
Faerie Glen
Pretoria
0081

Edward Krause *Pr Tech Eng*
Mobile: 082 306 9830

SMP: Ptn 522 Boschkop 199-IQ, Boskruin



SCHEDULE OF RIGHTS	PORTION 556 OF 122, BOSCHKOP ERF 199	
Zoning	AGRICULTURAL	
Height	3 STOREYS	
Density	N/A	
Number of Units	N/A	
Site Area	8210 m²	
	Permitted	Actual
Coverage		**25.57%**
Floor Area Ratio (FAR)		**0.26**
Floor Area		**2155.556 m²**
Parking		**0**

excl. parking**

total covered area =2099.483 m² excl. possible covered parking

total parking @ 12.5m²/ bay= 2500m² total area

total covered area =4,599.483 m² incl. possible covered parking

coverage incl parking= 56,02%

DAFFONCHIO ARCHITECTS
www.daffonchio.co.za | tel: 011 447 8118

GENERAL NOTES

1. This drawing is protected under the copyright Act 1956, and cannot be used or reproduced in part or in whole without authors consent.

2. Read only figured dimensions.

3. All construction work is to comply with the latest S.A.B.S. standard codes of practice.

4. Contractors must verify all dimensions and levels on site before commencing work. Any discrepancies must be reported to the architect before work is put in hand.

5. All levels shown are finished levels unless otherwise stated.

6. All surface beds to be cast on well compacted and well consolidated filling.

7. Depth of foundation trenches to be minimum 550mm below reduced ground level.

8. All pipes and services to be minimum 450mm below reduced ground level.

REV	DATE	DESCRIPTION

PROJECT NAME
122 Sherwell Avenue, Boskruin

DRAWING NAME
Site Development Plan

scale	**1 : 500**
dwg #	**109**
drawn by	**SM**
revision	
date	**12/06/23**
status	**council**

APPENDIX D – RATIONAL METHOD CALCULATIONS & HYDROGRAPHS

RATIONAL METHOD (ALTERNATIVE 3)

Project	Portion 556 (a Ptn of Ptn 122) of the Farm Boschkop 199-IQ		
Description	Catchment 1, Pre-Development		
Calculated by	Tumelo Makubo	**Date**	2023/07/04

Physical characteristics				
Size of catchment (A)	0.0142	km^2	Weather Service Station	Summerhill
Longest watercourse (L)	0.170	km	Weather Service number	0475661_W
Average slope (S_{av})	0.1765	m/m	**Area distribution factors**	
Dolomite area ($D_{\%}$)	0	%	Rural (α) / Urban (β) / Lakes (γ)	
Mean annual precipitation (MAP)	659	mm	0.7 / 0.3 / 0	

Rural				**Urban**			
Surface slope	**%**	**Factor**	**C_s**	**Description**	**%**	**Factor**	**C_2**
Wetlands and pans	0	0.03	0	**Lawns**			
Flat areas	20	0.08	0.016	Sandy, flat (<2%)		0.10	0.000
Hilly	35	0.16	0.056	Sandy, steep (>7%)	50	0.20	0.100
Steep areas	45	0.26	0.117	Heavy soil, flat (<2%)		0.17	0.000
Total	100	-	0.189	Heavy soil, steep (>7%)		0.35	0.000
Permeability	**%**	**Factor**	**C_p**	**Residential areas**			
Very permeable	0	0.04	0	Houses	20	0.50	0.100
Permeable	35	0.08	0.028	Flats		0.70	0.000
Semi-permeable	60	0.16	0.096	**Industry**			
Impermeable	5	0.26	0.013	Light industry		0.80	0.000
Total	100	-	0.137	Heavy industry		0.90	0.000
Vegetation	**%**	**Factor**	**C_v**	**Business**			
Thick bush and plantation	0	0.04	0	City centre		0.95	0.000
Light bush and farm-lands	10	0.11	0.011	Suburban	15	0.70	0.105
Grasslands	70	0.21	0.147	Streets	15	0.95	0.143
No vegetation	20	0.28	0.056	Maximum flood		1.00	0.000
Total	100	-	0.214	Total (C_2)	100.00	-	0.448

Time of concentration (T_C)				Notes:	
Overland flow		Defined watercourse		~~Sparse Grass / compacted soil~~ / Medium grass cover	
$T_C = 0{,}604\left(\frac{rL}{\sqrt{S_{av}}}\right)^{0{,}467}$		$T_C = \left(\frac{0{,}87L^2}{1000S_{av}}\right)^{0{,}385}$		Value of r	0.4
0.2581	hours	-	hours	15.48	min

Run-off coefficient							
Return period (years), T	**2**	**5**	**10**	**25**	**50**	**100**	**Max**
Run-off coefficient, C_1 $(C_1 = C_s + C_p + C_v)$	0.540	0.540	0.540	0.540	0.540	0.540	
Adjusted for dolomitic areas, C_{1D} $\left(= C_1(1 - D_{\%}) + C_1 D_{\%}\left(\sum(D_{factor} \times C_{S\%})\right)\right)$	0.540	0.540	0.540	0.540	0.540	0.540	
Adjustment factor for initial saturation, F_t	0.63	0.68	0.73	0.79	0.89	1.00	
Adjusted run-off coefficient, C_{1T} $(= C_{1D} \times F_T)$	0.340	0.367	0.394	0.427	0.481	0.540	
Combined run-off coefficient C_T $(= \alpha C_{1T} + \beta C_2 + \gamma C_3)$	0.372	0.391	0.410	0.433	0.471	0.512	

Rainfall							
Return period (years), T	**2**	**5**	**10**	**25**	**50**	**100**	**Max**
Point rainfall (mm), P_T	19.56	26.02	30.46	36.21	40.24	44.38	
Point intensity (mm/hour), PiT (= P_T / T_C)	75.81	100.84	118.03	140.33	155.94	171.98	
Area reduction factor (%), ARF_T	100	100	100	100	100	100	
Average intensity (mm/hour), I_T $(= P_{iT} \times ARF_T)$	75.81	100.84	118.03	140.33	155.94	171.98	
Return Period (years), T	**2**	**5**	**10**	**25**	**50**	**100**	**Max**
Peak flow (m^3/s), $Q_T = \frac{C_T I_T A}{3{,}6}$	0.111	0.156	0.191	0.240	0.290	0.348	

RATIONAL METHOD (ALTERNATIVE 3)

Project	Portion 556 (a Ptn of Ptn 122) of the Farm Boschkop 199-IQ		
Description	Catchment 1, Post-development		
Calculated by	Tumelo Makubo	**Date**	2023/07/04

Physical characteristics					
Size of catchment (A)	0.0142	km^2	Weather Service Station		Summerhill
Longest watercourse (L)	0.170	km	Weather Service number		0475661_W
Average slope (S_{av})	0.1765	m/m	**Area distribution factors**		
Dolomite area ($D_{\%}$)	0	%	Rural (α)	Urban (β)	Lakes (γ)
Mean annual precipitation (MAP)	659	mm	0	1	0

Rural				**Urban**			
Surface slope	**%**	**Factor**	**C_s**	**Description**	**%**	**Factor**	**C_2**
Wetlands and pans		0.03	0	**Lawns**			
Flat areas		0.08	0	Sandy, flat (<2%)		0.10	0.000
Hilly		0.16	0	Sandy, steep (>7%)	5	0.20	0.010
Steep areas		0.26	0	Heavy soil, flat (<2%)		0.17	0.000
Total	0	-	0	Heavy soil, steep (>7%)		0.35	0.000
Permeability	**%**	**Factor**	**C_p**	**Residential areas**			
Very permeable		0.04	0	Houses	60	0.50	0.300
Permeable		0.08	0	Flats		0.70	0.000
Semi-permeable		0.16	0	**Industry**			
Impermeable		0.26	0	Light industry		0.80	0.000
Total	0	-	0	Heavy industry		0.90	0.000
Vegetation	**%**	**Factor**	**C_v**	**Business**			
Thick bush and plantation		0.04	0	City centre		0.80	0.000
Light bush and farm-lands		0.11	0	Suburban	15	0.70	0.105
Grasslands		0.21	0	Streets	20	0.95	0.190
No vegetation		0.28	0	Maximum flood		1.00	0.000
Total	0	-	0	Total (C_2)	100	-	0.605

Time of concentration (T_C)

Overland flow	Defined watercourse	Notes:	Tc < 0.25
$T_C = 0{,}604\left(\frac{rL}{\sqrt{S_{av}}}\right)^{0{,}467}$	$T_C = \left(\frac{0{,}87L^2}{1000S_{av}}\right)^{0{,}385}$	Paved areas	
		Value of r	0.02
		Tc min = 0.25hrs	
0.2500 hours	- hours	15.00 min	

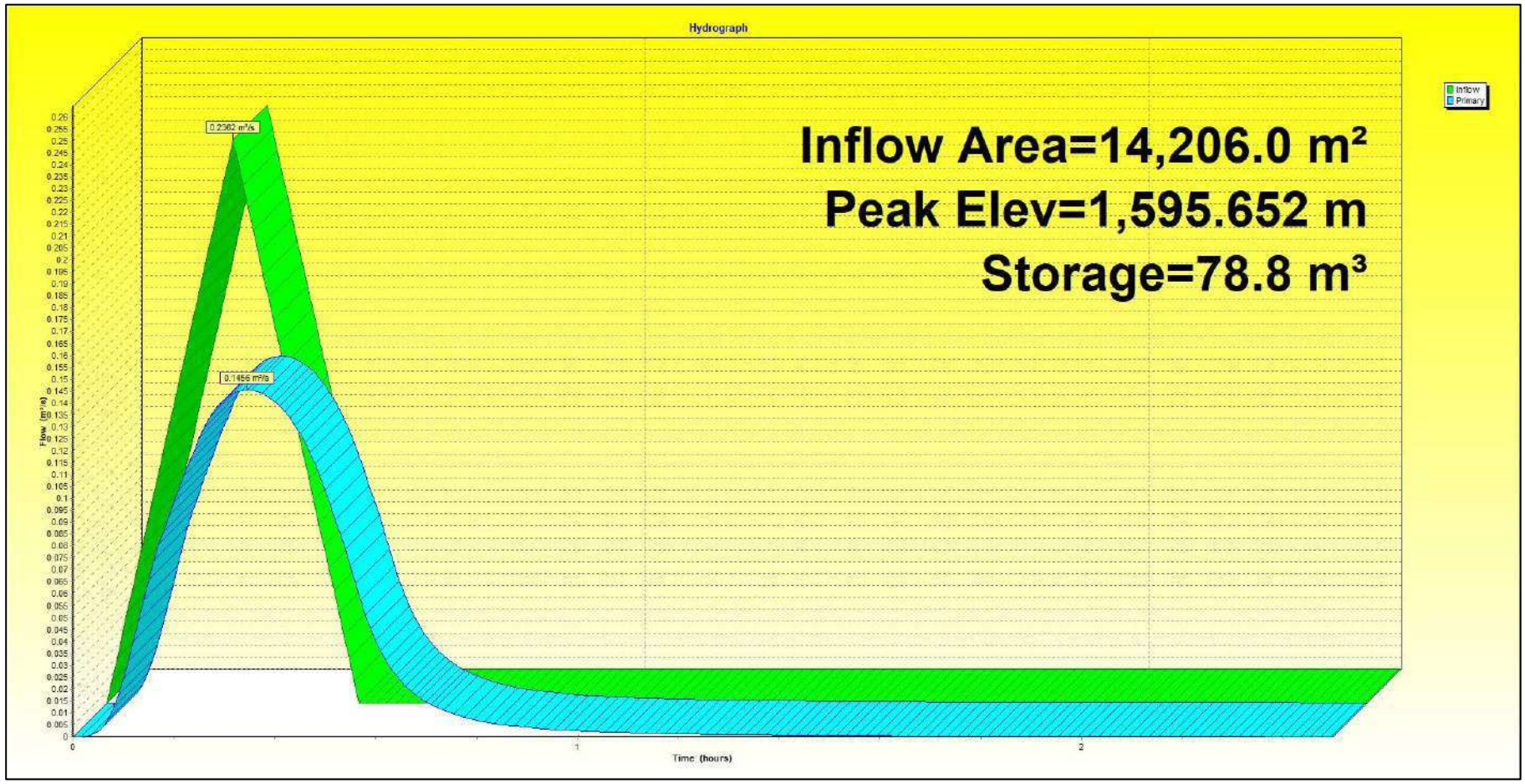
Run-off coefficient

Return period (years), T	**2**	**5**	**10**	**25**	**50**	**100**	**Max**
Run-off coefficient, C_1 $(C_1 = C_s + C_p + C_v)$	0.000	0.000	0.000	0.000	0.000	0.000	
Adjusted for dolomitic areas, C_{1D} $\left(= C_1(1 - D_{\%}) + C_1 D_{\%}\left(\sum(D_{factor} \times C_{S\%})\right)\right)$	0.000	0.000	0.000	0.000	0.000	0.000	
Adjustment factor for initial saturation, F_t	0.50	0.55	0.60	0.67	0.83	1.00	
Adjusted run-off coefficient, C_{1T} $(= C_{1D} \times F_T)$	0.000	0.000	0.000	0.000	0.000	0.000	
Combined run-off coefficient C_T $(= \alpha C_{1T} + \beta C_2 + \gamma C_3)$	0.605	0.605	0.605	0.605	0.605	0.605	

Rainfall

Return period (years), T	**2**	**5**	**10**	**25**	**50**	**100**	**Max**
Point rainfall (mm), P_T	19.4	25.8	30.2	35.91	39.9	44.0	
Point intensity (mm/hour), PiT (= P_T / Tc)	77.60	103.20	120.80	143.63	159.60	176.00	
Area reduction factor (%), ARF_T	100.00	100.00	100.00	100.00	100.00	100.00	
Average intensity (mm/hour), I_T $(= P_{iT} \times ARF_T)$	77.60	103.20	120.80	143.63	159.60	176.00	
Return Period (years), T	**2**	**5**	**10**	**25**	**50**	**100**	**Max**
Peak flow (m^3/s), $Q_T = \frac{C_T I_T A}{3{,}6}$	0.185	0.246	0.288	0.343	0.381	0.420	

1:5 POST DEVELOPMENT INFLOW AND OUTFLOW HYDROGRAPH:



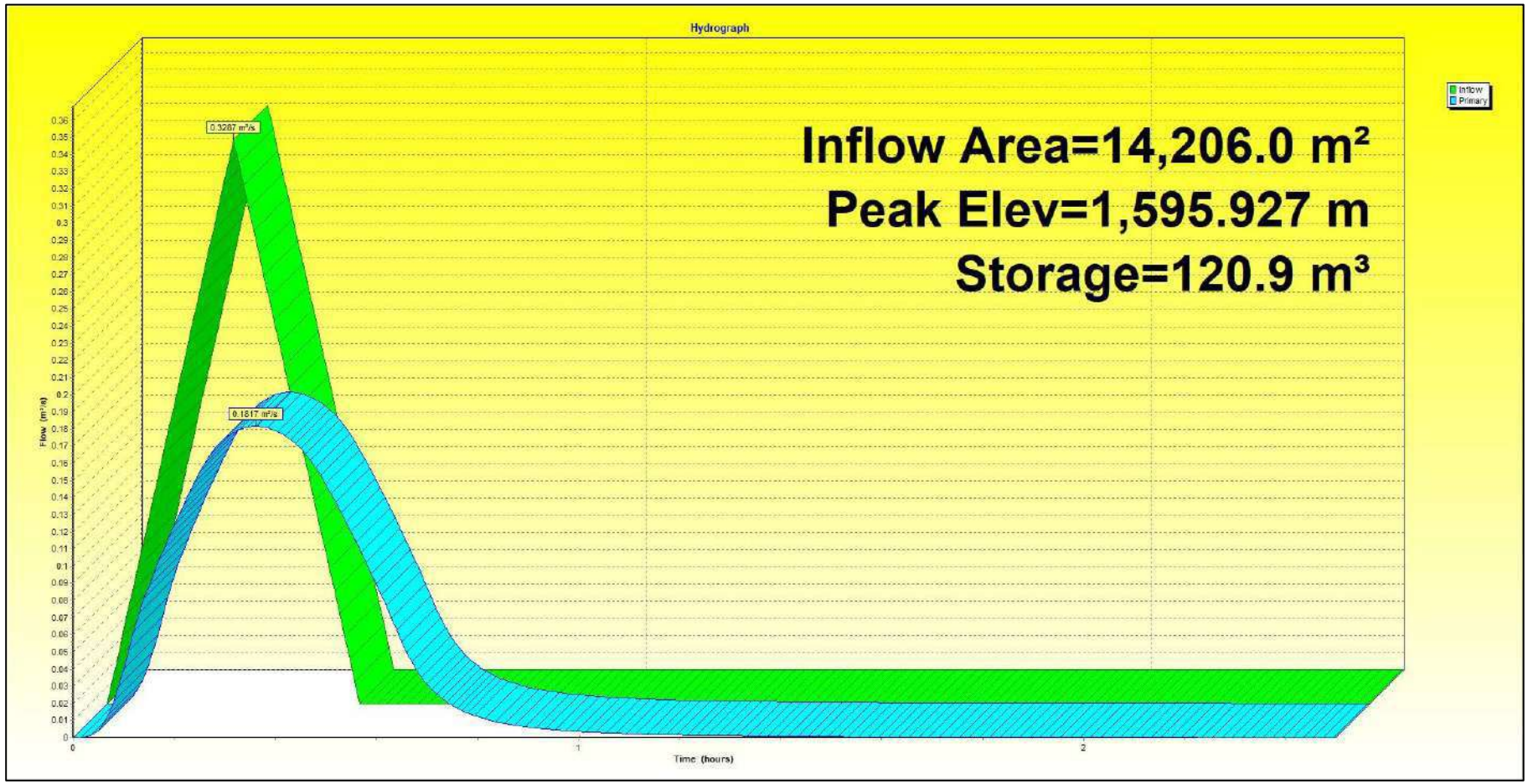
Designed Engineering Solutions (Pty) Ltd
PO Box 90760
Garsfontein
0042

266 Sprite Avenue
Faerie Glen
Pretoria
0081

Edward Krause *Pr Tech Eng*
Mobile: 082 306 9830

SMP: 122 Sherwell Avenue, Boskruin – Randburg

1:25 POST DEVELOPMENT INFLOW AND OUTFLOW HYDROGRAPH:



APPENDIX E – COST ESTIMATE

Designed Engineering Solutions (Pty) Ltd
PO Box 90760
Garsfontein
0042
– Randburg

266 Sprite Avenue
Faerie Glen
Pretoria
0081SMP: 122 Sherwell Avenue, Boskruin

Edward Krause *Pr Tech Eng*
Mobile: 082 306 9830

STORMWATER DRAINAGE, SITE CLEARANCE AND EXCAVATION

Item No	Payment	Description	Unit	Qty	Rate	Amount
		Clear Site				
		Excavate, select materials, backfill and dispose of surplus/unsuitable material				
1	SANS 1200 LE	PIPES				
	8.2.1	Supply, handle, lay, bed concrete pipes Class 50D				
1.1		450 mm diameter concrete pipes in accordance with SANS 677	m	265.00	430.00	113 950.00
	8.2.1	Supply, handle, lay, bed concrete pipes Class 100D				
1.3		225 mm diameter concrete pipes in accordance with SANS 677	m	80.00	470.00	37 600.00
1.3		300 mm diameter concrete pipes in accordance with SANS 677	m	110.00	470.00	51 700.00
1.4		450 mm diameter concrete pipes in accordance with SANS 677	m	60.00	695.00	41 700.00
	8.3.2	Excavate in all material for trenches for stormwater in depths not exceeding 2,5 m				
1.5		225 mm nominal diameter	m^3	120.00	95.00	11 400.00
1.5		300 mm nominal diameter	m^3	165.00	95.00	15 675.00
1.6		450 mm nominal diameter	m^3	487.50	95.00	46 312.50
1.7		Attenuation pond cut to stockpile or spoil	m^3	150.00	95.00	14 250.00
2	8.2.10	ACCESSORIES				
2.1		Junction Box	No	4.00	7 500.00	30 000.00
2.2		Heavy duty stormwater grid inlet 450x450 mm including frame	No	6.00	8 500.00	51 000.00
2.3		Heavy duty stormwater rectagrid 600x3500 mm including frame	No	3.00	9 500.00	28 500.00
2.4		Headwall structures complete with invert slabs according to headwall detail	No	1.00	9 600.00	9 600.00
2.5		Attenuation pond overflow structure, with 1200x2400 mm grid	No	1.00	10 500.00	10 500.00
	8.3.3.1	Backfilling				
2.7		At least G7 quality material compacted to 93% MOD AASHTO	m^3	800.00	110.00	88 000.00
Total						550 187.50

Appendix H: EMPr

+27(0)12 023 8543 | info@lexeco.co.za | lexeco.co.za
11 Alice Lane, Building 3, 5th Floor, Sandton, Johannesburg, 2196 | Registration Number 2020/642/160/07

LEXeco

LEGAL INSIGHT. SUSTAINABLE IMPACT.

Environmental Management Programme

DMFT Property Developers (Pty) Ltd

Proposed development of a Boutique Hotel on Portion 556 of the Farm Boschkop 199-IQ, situated at 122 Sherwell Avenue, Boskruin

27 August 2026

Where law meets sustainability.
Legal insight. Sustainable impact.

\1

info@lexeco.co.za | +27 (010) 023 8543 | www.lexeco.co.za

Report Title	Environmental Management Program
Report Date	27 August 2026
EAP Details	**LexEco (Pty) Ltd** 11 Alice Lane Building 3, 5th Floor Sandton, Johannesburg 2146 **Contact Person:** Riette Landsberg EAPASA Reg Nr: 2025/20547 Tel: 010 023 8543 Cell: 076 099 1290 Email: riette@lexeco.co.za
Applicant Details	**DMFT Property Developers (Pty) Ltd** Pieter Henning 18 Hume Road, Dunkeld West 2196 Tel: 071 337 4824 Cell: 071 337 4824 Email: pieter@dmft.co.za
Application Reference No:	002/26-27/E0054

ABREVIATIONS

BID	Background Information Document
CA	Competent Authority
CBA	Critical Biodiversity Area
DEA	Department of Environmental Affairs
DFFE	Department of Forestry, Fisheries and the Environment
DWAF	Department of Water Affairs and Forestry
DWS	Department of Water and Sanitation
EA	Environmental Authorisation
EAP	Environmental Assessment Practitioner
EAPASA	Environmental Assessment Practitioners Association of South Africa
ECO	Environmental Compliance Officer
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
EMPr	Environmental Management Programme Report
EPP	Emergency Response Plan
ESA	Ecological Support Areas
GIS	Geographic Information Systems
GN	Government Notice
GNR	Government Notice Regulations
I&APs	Interested and Affected Parties
IDP	Integrated Development Plan
IEO	Independent Environmental Officer
km	Kilometre
m	metre
NAEIS	National Atmospheric Emission Inventory System
NEM:AQA	National Environmental Management: Air Quality Act
NEM:WA	National Environmental Management: Waste Act
NEMA	National Environmental Management Act
NGOs	Non-Government Organisation
PPE	Personal Protective Equipment
PPP	Public Participation Process

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PM	Particulate Matter
SAHRA	South African Heritage Resources Agency
SDF	Spatial Development Plan
t/d	Tons per day
t/m	Tons per month
t/m³	Tons per cubic metre
µg/m³	micrograms per cubic meter
VOC	Volatile Organic Compound
WML	Waste Management License
WUL	Water Use License

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GN R982, APPENDIX 4 CONTENT OF THE ENVIRONMENTAL MANAGEMENT PROGRAMME			REFERENCE IN REPORT
(a)	details of—		
	i)	the EAP who prepared the EMPr; and	2
	ii)	the expertise of that EAP to prepare an EMPr, including a curriculum vitae;	2.1
(b)	a detailed description of the aspects of the activity that are covered by the EMPr as identified by the project description;		3
(c)	a map at an appropriate scale which superimposes the proposed activity, its associated structures, and infrastructure on the environmental sensitivities of the preferred site, indicating any areas that should be avoided, including buffers;		3
(d)	a description of the impact management outcomes, including management statements, identifying the impacts and risks that need to be avoided, managed and mitigated as identified through the environmental impact assessment process for all phases of the development including—		
	i)	planning and design;	6.2
	ii)	pre-construction activities;	6.2
	iii)	construction activities;	6.3
	iv)	rehabilitation of the environment after construction and in the case of a closure activity, closure; and	6.5
	v)	where relevant, operation activities;	6.4
(f)	a description of proposed impact management actions, identifying the manner in which the impact management outcomes contemplated in paragraph (d) will be achieved, and must, where applicable, include actions to—		
	i)	avoid, modify, remedy, control or stop any action, activity or process which causes pollution or environmental degradation;	6.2,6.3,6.4,
	ii)	comply with any prescribed environmental management standards or practices; and	6.2,6.3,6.4
	iii)	comply with any applicable provisions of the Act regarding closure, in the case of a closure activity;	6.2,6.3,6.4, 6.5
(g)	the method of monitoring the implementation of the impact management actions contemplated in paragraph (f);		6.2,6.3,6.4, 6.5

GN R982, APPENDIX 4 CONTENT OF THE ENVIRONMENTAL MANAGEMENT PROGRAMME		REFERENCE IN REPORT
(h)	the frequency of monitoring the implementation of the impact management actions contemplated in paragraph (f);	6.2,6.3,6.4,
(i)	an indication of the persons who will be responsible for the implementation of the impact management actions;	6.2,6.3,6.4,
(j)	the time periods within which the impact management actions contemplated in paragraph (f) must be implemented;	6.2,6.3,6.4,
(k)	the mechanism for monitoring compliance with the impact management actions contemplated in paragraph (f);	6.2,6.3,6.4,
(l)	a program for reporting on compliance, taking into account the requirements as prescribed by the Regulations;	6.2,6.3,6.4,
(m)	an environmental awareness plan describing the manner in which—	8.3
	i) the applicant intends to inform his or her employees of any environmental risk which may result from their work; and	8.3
	ii) risks must be dealt with in order to avoid pollution or the degradation of the environment; and	8.3
(n)	any specific information that may be required by the competent authority.	11

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1. INTRODUCTION

DMFT Property Developers (Pty) Ltd proposes the development of a Boutique Hotel on Portion 556 of the Farm Boschkop 199-IQ, situated at 122 Sherwell Avenue, Boskruin, within the City of Johannesburg Metropolitan Municipality, Gauteng Province.

The property measures approximately 2.72 hectares in extent and is currently zoned "Agricultural" in terms of the City of Johannesburg Land Use Scheme. The property is situated within an established residential area and borders the Boskruin Nature Reserve, also referred to as the Boshkop Municipal Nature Reserve along its eastern boundary. .

In support of the proposed development, an application for a township establishment was submitted to the City of Johannesburg Municipality with the intention of subdividing and rezoning the relevant property. As part of the application, the western portion of the property (Erf 1), covering a total of 1. 4206 ha in extent, will be zoned as "*Special*" and will be the designated erf for the planned development of a boutique hotel. The eastern portion (Erf 2), covering a total of 1.30 ha in extent, will be fenced off and re-zoned as "Private Open Space" with the intention of conservation. Erf 2 will in essence remain undeveloped and does not form part of the development footprint. The proposed Boutique Hotel is envisaged to consist of 20 on-suite bedrooms, which will include communal and recreational areas such as a swimming pool, dining hall, a spa and parking area.

Erf 1 currently holds a single dwelling. The house in question will be modified and upgraded to align with the proposed development layouts and designs as approved by the City of Johannesburg Metropolitan Municipality's Department of Development Planning Corporate Geo-Informatics. In November 2023, an application for an Environmental Authorisation was submitted to the Gauteng Department of Environment ("**GDE**") for the unlawful clearance of indigenous vegetation for the construction of a car park within the bounds of Erf 1. The application was approved and an Environmental Authorisation ("**EA**") issued in terms of Section 24G of the National Environmental Management Act, 107 of 1998 ("**NEMA**"). The authorisation in question however only covers the 300m^2 cleared for the development of the car parking area. Any additional development of the site would require prior authorisation for any additional development of the site.

The proposed site is located within a well-established residential neighbourhood, with easy access to main through-routes and within proximity to established social facilities and public amenities, contributing to the sought-after character of the area.

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The proposed development of a Boutique Hotel will align with the City of Johannesburg's aim to promote integrated land use planning which promotes social, economic and residential opportunities in the area which will as a result, positively benefit the local community.

By appropriately implementing this Environmental Management Programme ("EMPr"), the planned development can be undertaken sustainably by avoiding or reducing negative impact on the receiving environment.

2. EAP DETAILS AND EXPERTISE

LexEco (Pty) Ltd was appointed by DMFT Property Developers as an independent Environmental Assessment Practitioner ("**EAP**") to facilitate the application for an Environmental Authorisation ("**EA**") on behalf of DMFT Property Developers for the proposed development of a boutique hotel and associated infrastructure on Portion 556 of Farm199, located at 122 Sherwell Avenue, Randburg, Gauteng.

The section below includes details of the appointed EAP and a summary of their expertise.

Table 1: Author

Appointed EAP:	Riette Landsberg
EAPASA Reg Nr:	2025/20547
Tel:	076 099 1290
Email:	riette@lexeco.co.za
Address:	11 Alice Lane, Building 3, 5th Floor, Sandton, Johannesburg, 2196

Table 2: Co-Author

Candidate EAP:	Shaylen Ramsamy Naidoo
EAPASA Reg Nr:	2024/8707
Tel:	079 975 8942
Email:	shaylen@lexeco.co.za
Address:	11 Alice Lane, Building 3, 5th Floor, Sandton, Johannesburg, 2196

2.1. Environmental Assessment Practitioners' Experience

- ***Riette Landsberg (Author)***

Riette Landsberg is an experienced Environmental Consultant and Registered Environmental Assessment Practitioner with over 12 years' experience in environmental management. With an Honours degree in Environmental Sciences form the North West University, Riette is well equipped with a sound knowledge and understanding of the natural environment. Riette has successfully led and completed several applications and projects, including Full Scoping EIA's and Basic Assessments under NEMA and NEMWA and NEMAQA and developed and the implemented Environmental Management Programmes. Riette also has

extensive experience in the leading of environmental audits, including Water Use Licenses, Air Emissions Licenses, Waste Management Licenses, Environmental Authorisations and Environmental Management Programmes. Years of working in the consulting field have provided Riette with a good understanding of the working environment and how to link comprehensive management measures with the legislative world, ensuring sustainability and economic growth whilst protecting our natural resources and the environment.

Riette holds a valid registration with the Environmental Assessment Practitioners Association of South Africa (EAPASA) (registration number 2025/20547) and is also a registered member of the International Association for Impact Assessment South Africa (IAIASA) (Member number 7822)

- ***Shaylen Ramsamy Naidoo (Co-Author)***

Shaylen is a registered environmental scientist with the South African Council for Natural Scientific Professionals (Reg Nr: 130920). Shaylen is also registered as a Candidate EAP with the with the Environmental Assessment Practitioners Association of South Africa (EAPASA) (Reg Nr 2024/8707).

After completing his studies and obtaining an Honours Degree in Environmental Technology and Applied Sciences from the University of Pretoria, Shaylen has worked as an environmental scientist, GIS specialist, and climate data analyst. With a strong technical background in ArcGIS Pro, Python scripting, statistical analysis, air dispersion modelling, LiDAR data processing, and water-use GIS, Shaylen is equipped in delivering technically rigorous environmental assessments, geospatial analysis, and reporting across the mining, energy, industrial, water resource, and climate sectors in South Africa.

Shaylen also has experience in managing and compiling Environmental Impact Assessments (EIAs), Basic Assessments, Waste Management Licence applications, and environmental compliance documentation in accordance with the National Environmental Management Act (NEMA) and related legislation. Shaylen possesses a strong academic foundation supported by practical industry experience in environmental assessment and regulatory processes.

Refer to **Annexure A** of the Basic Assessment Report for a full copy of the EAP CVs.

3. PROJECT DESCRIPTION

The proposed development site, located at 122 Sherwell Avenue, Boskruin, Randburg, comprises Portion 556 of the Farm Boschkop 199-IQ and covers approximately 2.7210 ha. The property is currently zoned "*Agricultura*l" and contains an existing residential dwelling and associated infrastructure within the already disturbed western portion (approximately 1.4206 ha), which will accommodate the proposed Boutique Hotel development. The remaining eastern portion (approximately 1.30 ha) has remained largely undeveloped and will be retained as Private Open Space for conservation purposes, thereby protecting the site's ecological integrity and biodiversity.

Historically, the western portion of the property has been utilised for residential purposes and associated ancillary activities, resulting in limited disturbance of the eastern portion of the site. The property remains largely undeveloped, with substantial portions supporting indigenous vegetation and natural habitat associated with the surrounding Boschkop Nature Area.

The site currently does not contain any operational tourism, hospitality, commercial or industrial facilities. The proposed development and operation of a Boutique Hotel, therefore, represents a new land use activity on the property and will require the establishment of the necessary buildings, services and supporting infrastructure within the approved development footprint In support to the proposed development, an application for the establishment of a township on Portion 556 of the Farm Boschkop, 199-IQ was submitted to the City of Johannesburg Metropolitan Municipality. The proposed township will in question consist of two (2) erven, with one erf zoned "*Special*" for the purpose of a Boutique Hotel, and the other erf zoned "Private Open Space". The "Private Open Space" erf will ensure that the natural area is protected from development in the future. The proposed Boutique Hotel is envisaged to consist of 20 on-suite bedrooms, which include communal and recreational areas such as a swimming pool, dining hall, a spa and parking area.

The proposed development will comprise a small-scale hospitality facility designed to provide overnight accommodation, conferencing, wellness and recreational services within a landscaped environment. The development footprint has been intentionally concentrated within the western portion (Erf 1) of the property to minimise impacts on environmentally sensitive areas and to retain a substantial portion of the site as Private Open Space (Erf 2).

The proposed Boutique Hotel will consist of approximately twenty (20) en-suite guest rooms together with ancillary facilities required to support the operation of the establishment. These facilities will include a reception area, dining hall and restaurant, conference and meeting facilities, wellness spa, swimming pool, caretaker's flat, internal access roads, parking areas, pedestrian pathways, landscaped gardens and associated service infrastructure. Supporting engineering services will include potable water supply, wastewater management infrastructure, stormwater management systems, electricity supply, telecommunications infrastructure and solid waste storage facilities.

Construction activities will include site establishment, vegetation clearance within the approved development footprint, earthworks, excavation and foundation preparation, construction of buildings and associated infrastructure, installation of engineering services, landscaping and rehabilitation of disturbed areas. Construction equipment and vehicles will be utilised during the development phase and temporary construction laydown areas may be established within designated portions of the site. All construction activities are to be undertaken in accordance with the approved Environmental Management Programme (EMPr) and any conditions contained within the Environmental Authorisation.

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Operational activities will primarily comprise hospitality and accommodation services associated with the Boutique Hotel. Typical activities will include guest accommodation, restaurant and dining services, conferences and business meetings, wellness and spa services, recreational activities associated with the swimming pool and landscaped open spaces, routine maintenance of buildings and infrastructure, waste management, security operations and general property management. The facility is anticipated to operate throughout the year and provide short-term accommodation for business travellers, tourists and visitors to the area.

The proposed development therefore seeks to balance economic development and tourism opportunities with the conservation of environmentally sensitive portions of the property, thereby promoting sustainable land use and responsible environmental stewardship

3.1. Location and Property Description

The proposed Boutique Hotel development will be located on Portion 556 of the Farm Boschkop 199-IQ, situated at 122 Sherwell Avenue in the established suburb of Boskruin, Johannesburg, Gauteng Province. The property falls within the jurisdiction of the City of Johannesburg Metropolitan Municipality and measures approximately 2.72 hectares in extent. Access to the site is provided via a registered 5-metre-wide right-of-way servitude extending from Sherwell Avenue through Boskruin Extension 46, ensuring legal and practical access to the property.

The site is situated within a predominantly residential area characterised by low- and medium-density housing developments, educational facilities, private open spaces and supporting community infrastructure. The surrounding properties are primarily zoned "*Residential 1*" and "*Residential 2*", with isolated areas zoned for agricultural, municipal and special purposes. The property is well connected to the surrounding road network, with major routes such as Beyers Naudé Drive, President Fouche Drive, Malibongwe Drive and the N1 Western Bypass located within close proximity, providing convenient access to the site and surrounding amenities.

Portion 556 of the Farm Boschkop, 199-IQ occupies a unique location adjacent to the Boschkop Nature Area and contains areas of indigenous vegetation that contribute to the ecological character of the area. While portions of the property have experienced historical disturbance, the eastern section remains largely undeveloped and supports natural habitat associated with the broader ecological network. To balance development and conservation objectives, the applicant seeks to create a "*Special*" erf for the Boutique Hotel development and a separate "*Private Open Space*" erf, ensuring the long-term protection of approximately 1 3004 hectares of environmentally sensitive land

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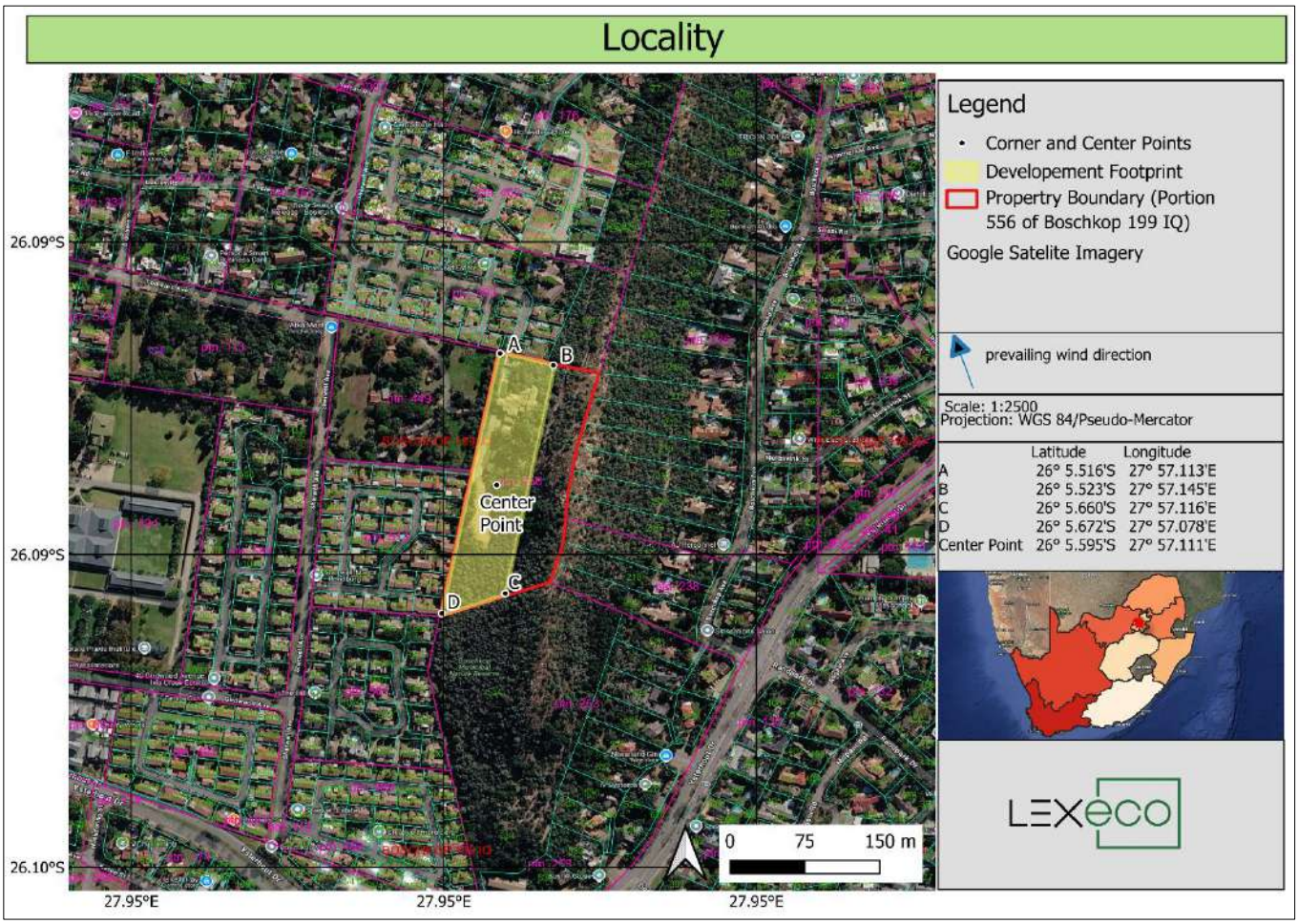


Figure 1: Locality

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CITY OF JOHANNESBURG: Corporate Geo-Informatics

Property Report

Reports generated from the website can be used for the purpose of zoning information. Zoning information must be read in conjunction with the applicable Town Planning Scheme clauses and Amendment Scheme relevant to the erf. More information can be obtained from the information desk on the upper ground level, Nedbank building, Newtown Junction Mall.

Status Subtype	1
Use Zone	ZAGR01
Tps Name	RANDBURG
Zone Desc	Agricultural
Shape	Polygon
Shape.STArea()	49969,481813
Shape.STLength()	1094,337695

Map of the location

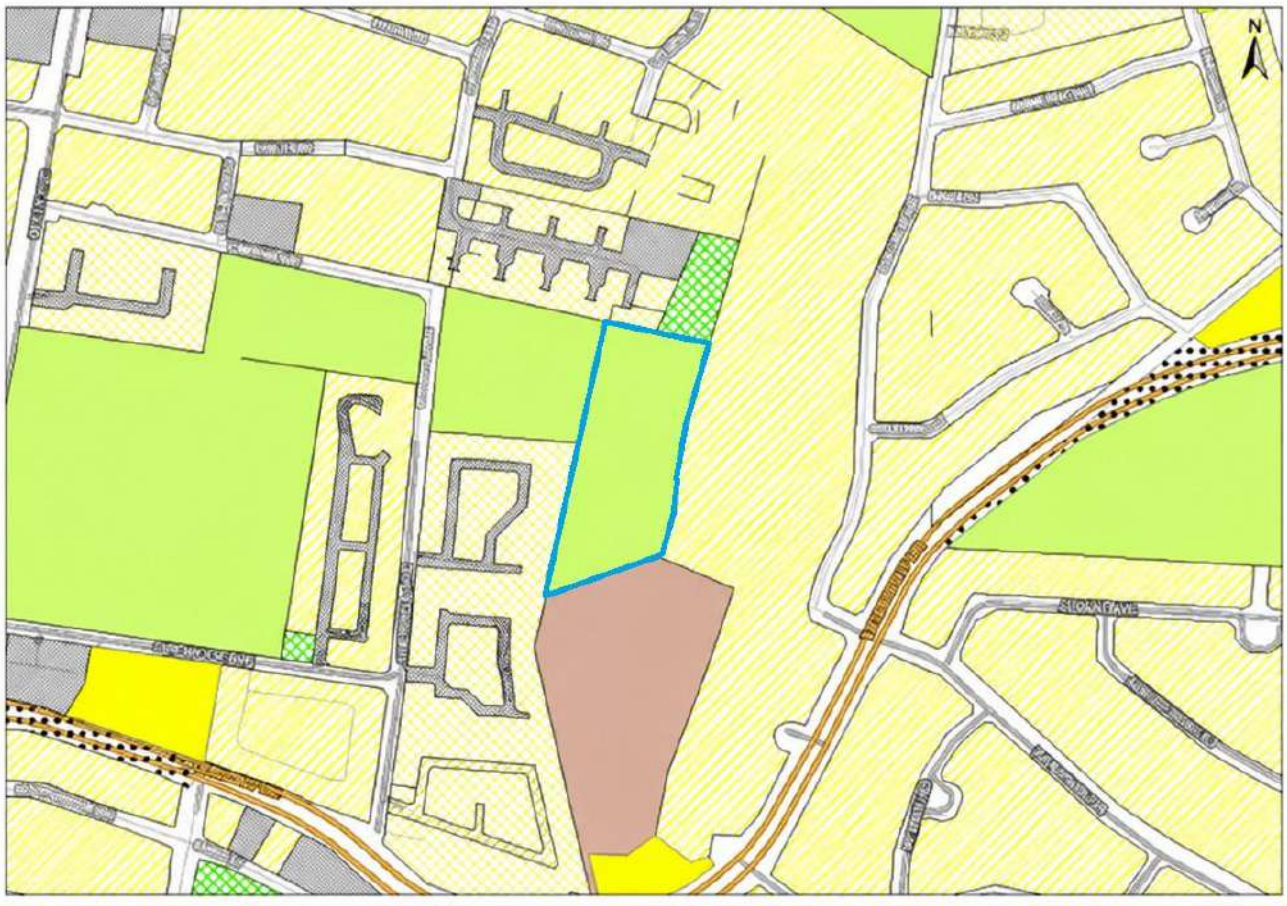


Figure 2: Proposed Boutique Hotel site, Johannesburg Property Zoning

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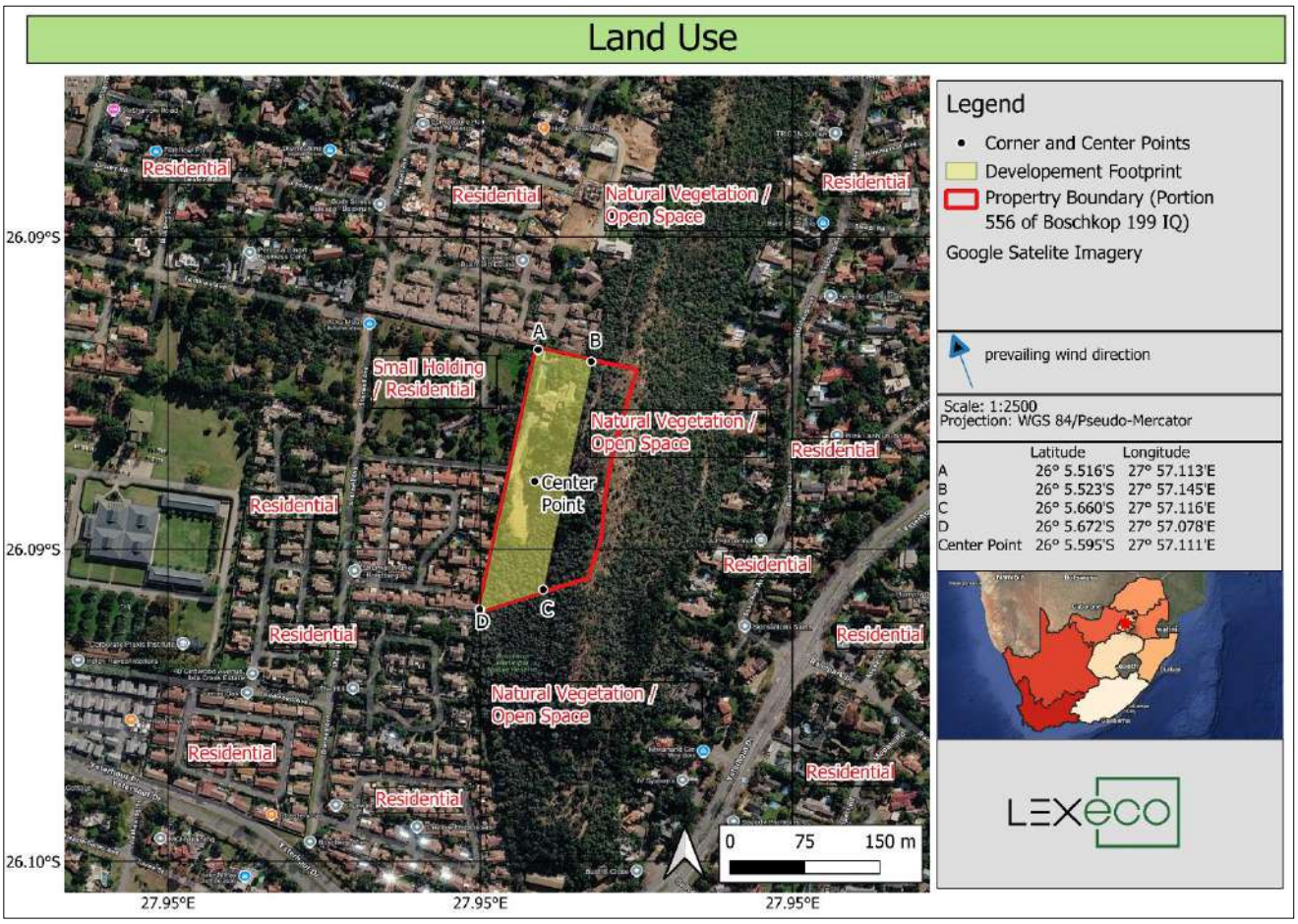


Figure 3: Proposed Boutique Hotel, Johannesburg Surrounding Land Use

4. OBJECTIVE OF THE EMPR

The objective of the EMPr is to provide DMFT with practical guidance for the environmentally and socially responsible management of the approved Environmental Authorisation, i.e., the construction and development of the boutique hotel

This document provides appropriate mitigation measures designed to prevent or minimise adverse effects on the environment, reduce the risk of natural resource contamination and limit impacts on the surrounding community.

The specific objectives of this EMPr are to:

- Describe actions for implementing and maintaining mitigation measures to address the potential impacts identified in the EIA process.

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- Define organisational and administrative arrangements for environmental management and monitoring of the activities as undertaken by the boutique hotel.
- Ensure that site supervisory staff understand the recommended pro-active environmental management measures, so that potential problems can be identified, and mitigation measures implemented, and
- Define actions for environmental control, in the event of unexpected pollution.

4.1. Identified Environmental Aspects addressed in the EMPr

➢ Air Quality

Mitigation and monitoring measures with the objective to achieve adequate control of fugitive dust emission associated with on-site activities.

➢ Waste Management

Implementation of effective waste management practices to prevent environmental pollution and to promote sustainable waste management practices to avoid the unnecessary disposal of waste that can otherwise be recycled, recovered or re-used.

➢ Water and Soil Pollution

Measures to prevent the pollution of water and soil resources.

➢ Natural Resources

Adequate management measures to minimise the use of natural resources.

➢ Socio-economics

Measures to reduce the negative and enhance the positive socio-economic impacts during the construction, operational phases of the project as described.

➢ Noise

Measures to effectively manage and mitigate the impacts of noise generating activities on site with the aim of reducing potential nuisance conditions **to surrounding lan owners and occupants.**

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➢ Storm Water

Measures to effectively contain, divert and manage storm water both during the development and operational phases of the project.

➢ Biodiversity and Vegetation

Measures to manage and mitigate the impacts on biodiversity and vegetation.

➢ Health and Safety

Measures to reduce the risk for personal injuries and to promote a safe working environment.

5. OBLIGATIONS AND RESPONSIBILITIES

The obligations and responsibilities of DMFT, its contractors and its agents are described in this section.

It remains the responsibility of DMFT to ensure that all activities undertaken as part of the approved project scope is in accordance with the recommendations of the EMPr and that the EMPr is amended as and when necessary, during the life cycle of the project.

It is the responsibility of DMFT to ensure that all contractors and agents are made aware of and adhere to the stipulations of the approved EMPr.

DMFT undertakes to manage all operations in such a manner as to prevent or minimise adverse effects on the environment, reduce the risk of natural resource contamination and limit impacts on the surrounding community. In addition, DMFT must strive to maximise socio-economic benefits for the area and protect the health and safety of employees, contractors, visitors, and the general public.

To this end, DMFT must:

- Ensure that the EMPr forms an integral part of the contract documents entered into with all contractors.
- Educate personnel, contractors, and visitors with regards to general environmental, health and safety requirements applicable to the operations as undertaken by DMFT and the content of the EMPr.
- Provide professional staff to give effect to its environmental management commitments.
- Appoint/designate a competent Environmental Control Officer (ECO) to oversee the implementation of the EMPr.

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5.1. Implementation of EMPr

The EMPr should not be seen as an additional requirement separate from the day-to-day activities of the site and associated responsibilities. The EMPr must be integrated with routine operations and responsibilities, which requires commitment from management and the workforce alike (DEAT, 2004).

An Environmental Management Programme (EMPr) alters the operational focus by placing greater emphasis on environmental responsibility and accountability within day-to-day activities. Employees are therefore required not only to perform their conventional duties, but also to actively identify, minimise, and where possible prevent potential environmental impacts associated with operations (EPA Australia, 1995)

5.2. Responsibilities

5.2.1 Applicant / Project Developers (DMFT Property Developers)

The project developers must be familiar with the content of the EMPr and ensure that awareness of certain specifications, standards and procedures, pertaining to the site, are fully understood by the personnel in charge of the site and associated operations.

The project developers must also ensure that all the requirements of this EMPr are communicated to the employees / contractors and implemented accordingly.

DMFT remains responsible for ensuring that all activities are implemented according to the provisions of the EMPr and conditions of the approved EA, throughout all phases of the project. Although specific role-players will be appointed by DMFT to perform certain functions on its behalf, the ultimate responsibility cannot be delegated. DMFT must ensure that sufficient resources (time, financial, human, equipment, etc.) are available to these other parties and or employees to efficiently perform their tasks in accordance with the requirements of the approved EMPr and associated authorisations.

5.2.2 Project Manager

The Project Manager must ensure that environmental commitments, legal requirements, and mitigation measures are effectively implemented and maintained at an operational level.

- Ensure that all activities undertaken at the facility comply with the requirements of the EMPr, environmental legislation, permit conditions, and authorisation requirements.
- Promote a culture of environmental responsibility. .
- Ensure compliance with relevant authorisations as applicable.
- Appoint an Environmental Control Officer (ECO) to assist with day-to-day EMP implementation and monitoring duties associated with the EMPr and approved authorizations.

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- Ensure that the necessary environmental authorization and permits have been obtained and are maintained.
- Review operational procedures in conjunction with the ECO.
- Oversee the implementation of all mitigation and management measures contained within the EMPr.
- Ensure that environmental controls are incorporated into daily operations and maintenance activities.
- Allocate sufficient resources, personnel, and equipment for environmental management.

5.2.3 Environmental Control Officer (ECO)

The Environmental Control Officer (ECO) is responsible for monitoring, auditing, and reporting on compliance with the Environmental Management Programme (EMPr), environmental authorisations, and applicable environmental legislation. The ECO is responsible in ensuring that environmental commitments are effectively implemented and maintained throughout the project lifecycle.

This role may be fulfilled by any suitably qualified and responsible representative involved with daily on-site operations.

In particular, the ECO shall:

- Monitor compliance with the EMPr and authorisations on an ongoing basis.
- Undertake regular site inspections and compile Environmental Inspection Reports as required.
- Identify environmental non-compliances and risks.
- Keep record of all activities on-site, problems identified and transgressions noted.
- Keep records relating to monitoring, reporting and auditing on-site and make them available for inspection to any relevant Authorities.
- Continually advise the license holder and project manager on all environmental issues.
- Facilitate internal auditing and reporting.
- Arrange and assist with external auditing and reporting to relevant Authorities.
- Keep records of all activities/incidents concerning environment performance.
- Keep a register of complaints from IAPs.
- Facilitate ongoing training and awareness of staff with regards to regulatory compliance.
- Liaise with relevant authorities.
- Liaise with contractors regarding environmental management and implementation of the EMPr.

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6 ENVIRONMENTAL MANAGEMENT PROGRAMME

The project will follow a life cycle consisting of two phases, namely the construction and operational phase. Should closure and possible decommissioning become evident, the applicant will be required to apply for the relevant activities in support thereto.

The different activities associated with the project, identified during the Impact Assessment, as well as the corresponding proposed mitigation measures are discussed in the following sections.

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6.2 Planning Phase

Table 3: Planning Phase Management Measures

MITIGATION: ACTION OR CONTROL MEASURE	DURATION	FREQUENCY	RESPONSIBILITY
AUTHORISATIONS			
The EMPr must be seen as a legal and active document. Any changes to the EMPr, which are environmentally defendable, must be submitted to the relevant authorities for approval before such changes are implemented.	Throughout project	When necessary	ECO/ License Holder
A copy of the approved Environmental Authorisation (EA), approved EMPr and all relevant permits shall be kept on site at all times and made available to any authorised official upon request.	Throughout project	Throughout Construction	ECO
No site establishment, vegetation clearing, earthworks or construction activities shall commence until the Environmental Authorisation has been issued, the appeal period has expired (where applicable), and all conditions of authorisation have been satisfied.	Prior to commencement	Once-off	ECO/ License Holder
All contractors and subcontractors appointed to the project shall sign an undertaking confirming that they have read, understood and will comply with the requirements of the EMPr and all conditions of the Environmental Authorisation.	Prior to commencement	Once-off	ECO/ Contractors
Copies of all specialist reports, approved plans, permits and environmental approvals shall be available on site throughout the construction period	Throughout project	Throughout Construction	ECO
SITE PLANNING AND ENVIRONMENTAL PROTECTION			

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MITIGATION: ACTION OR CONTROL MEASURE	DURATION	FREQUENCY	RESPONSIBILITY
The final development footprint shall be clearly demarcated prior to construction. Environmentally sensitive areas, including the proposed Private Open Space and all "No-Go" areas identified by the Biodiversity Specialist, shall be fenced or demarcated to prevent accidental disturbance.	Prior to construction	Once-off with weekly inspections	ECO / Contractor
The footprint of construction activities shall be limited to the approved development area. No encroachment into the retained conservation area or surrounding natural vegetation shall be permitted.	Throughout Construction	Weekly	ECO
A pre-construction walk-through shall be undertaken by the ECO together with the Contractor to identify environmentally sensitive features and confirm site boundaries prior to commencement of works.	Prior to construction	Once-off	ECO / Contractor
Temporary construction camps, laydown areas, material storage areas and vehicle parking areas shall be established only within approved disturbed areas.	Prior to construction	Throughout Construction	ECO / Contractor
WASTE MANAGEMENT			
Suitable waste receptacles shall be provided for the separation of general, recyclable and hazardous waste streams. Good housekeeping practices shall be maintained at all times.	Throughout construction	Daily	Contractor
HEALTH AND SAFETY			
All personnel shall undergo environmental, health and safety induction training before entering the construction site. Training shall include environmental sensitivities, biodiversity protection, emergency procedures and responsibilities as set out in terms of the approved EMPr.	Prior to construction	Once-off with refresher training as required	Contractor / ECO

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MITIGATION: ACTION OR CONTROL MEASURE	DURATION	FREQUENCY	RESPONSIBILITY
All contractors shall comply with the Occupational Health and Safety Act, the Construction Regulations and the project's Emergency Preparedness and Response Plan.	Throughout construction	Throughout Construction	Contractor / ECO
Appropriate Personal Protective Equipment (PPE) shall be provided and used by all personnel working on site.	Throughout construction	Daily	Contractor
CONSTRUCTION PHASE PLANNING			
The ECO shall ensure that all construction personnel are familiar with the requirements of the EMPr prior to commencement of works and shall conduct toolbox talks where necessary.	Prior to construction	Once-off with monthly toolbox talks	ECO
A complaints register shall be established prior to construction to record, investigate and respond to complaints received from Interested and Affected Parties (I&APs) throughout the construction period.	Prior to construction	Throughout Construction	ECO
Emergency contact details, incident reporting procedures and evacuation plans shall be displayed prominently at the site office and construction entrance.	Prior to construction	Throughout Construction	Contractor / ECO

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6.3 Environmental Management Programme - Construction Phase

Table 4: Construction Phase EMPr

IDENTIFIED IMPACT		OBJECTIVES	PERFORMANCE CRITERIA (TARGETS)	REF NR	MITIGATION MEASURES	MONITORING AND INSPECTIONS	RESPONSIBLE PARTY	FREQUENCY
1.	**ASPECT:** **AIR QUALITY** **Activity:** - Release of greenhouse gas emissions from construction vehicles, trucks, generators, and heavy machinery due to fossil fuel combustion - Vegetation clearing, excavation earth works, movement of construction vehicles - Burning of waste & open fires							
Temporary reduction in ambient air quality within the project area Contribution to regional greenhouse gas emissions and climate change Nuisance impacts to nearby receptors due to		Prevent deterioration of ambient air quality and minimise nuisance dust and exhaust emissions.	Compliance with the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004), as amended	1.1	Construction vehicles and machinery shall be serviced and maintained in accordance with manufacturer specifications	Service records and logs	ECO/ Contractor	Throughout the construction phase
				1.2	Limit vehicle and equipment idling times when not in use.	Site inspections	ECO/ Contractor	Throughout the construction phase

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IDENTIFIED IMPACT	OBJECTIVES	PERFORMANCE CRITERIA (TARGETS)	REF NR	MITIGATION MEASURES	MONITORING AND INSPECTIONS	RESPONSIBLE PARTY	FREQUENCY
exhaust emissions, odours and dust		National Ambient Air Quality Standards (GN 1210) as amended National Dust Control Regulations, GN 7335 of 31 March 2026 City of Johannesburg Air Pollution Control By-Law (Provincial Gazette No: 349 dated 13 October 2021) as amended - - Chapter 2: Prohibition and Application (Reasonable measures to prevent air pollution). - Chapter 6: Emissions caused by open burning - Chapter 2: Emissions that cause a nuisance (Prohibition and application).	1.3	Dust generated from earthworks and exposed surfaces shall be controlled through water spraying or other suitable dust suppression methods.	Daily Inspections	ECO/ Contractor	Throughout the construction phase
			1.4	Construction materials likely to generate dust shall be covered during transport and storage.	Site inspections	ECO / Contractor	Throughout the construction phase
			1.5	Open burning of vegetation, waste or construction material shall be strictly prohibited.	Site Inspections	ECO/ Contractor	Throughout the construction phase

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IDENTIFIED IMPACT		OBJECTIVES	PERFORMANCE CRITERIA (TARGETS)	REF NR	MITIGATION MEASURES	MONITORING AND INSPECTIONS	RESPONSIBLE PARTY	FREQUENCY
2.	**ASPECT:** **WASTE MANAGEMENT**							
	Activity: - Generation of construction and demolition waste. - Vegetation clearing and green waste. - Packaging waste from construction materials. - Storage of waste on-site - Generation of hazardous waste (e.g. waste oils, fuels, paints, solvents, chemical containers and contaminated materials). - Waste removal and transportation of waste. - Poor housekeeping practices.							
Littering, visual impacts and attraction of pests and vermin. Pollution of soil, stormwater and groundwater through poor waste handling. Hydrocarbon spills and fire hazards. Windblown litter affecting adjacent residential properties and the		Minimise waste generation through the application of the waste hierarchy (avoid, reduce, reuse and recycle). Prevent pollution of land, water resources and biodiversity. • Maintain good housekeeping throughout the construction phase.	National Environmental Management: Waste Act (Act 59 of 2008) and associated regulations, as amended City of Johannesburg Waste Management Bylaw	2.1	An integrated Waste Management approach based on Waste Minimization must be implemented prior to commencement of construction. Waste Minimization efforts focused on re-use, recycling and recovery of waste in terms of Section 26 of NEMWA must be implemented throughout the construction phase	Site inspections Waste records and documentation	ECO/ Contractor	Throughout the construction phase

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IDENTIFIED IMPACT	OBJECTIVES	PERFORMANCE CRITERIA (TARGETS)	REF NR	MITIGATION MEASURES	MONITORING AND INSPECTIONS	RESPONSIBLE PARTY	FREQUENCY
retained Private Open Space. Illegal dumping within environmentally sensitive areas.	Promote responsible waste management through environmental awareness and training. Ensure safe storage, handling and disposal of all waste streams.		2.2	Suitable receptacles must be provided for general, recyclable, green and hazardous waste.	Weekly site inspections. Housekeeping inspections. Waste records and documentation	Contractor/ ECO	Weekly
			2.3	Waste shall be removed regularly by appropriately licensed waste service providers and disposed of or recycled at authorised facilities only.	Waste manifests. Disposal certificates. Waste contractor register.	Contractor / ECO	As required
			2.4	Records of all waste removed from site, including waste manifests, weighbridge tickets and disposal certificates, shall be maintained and made available during environmental audits	Waste register. Internal and External Audits.	Contractor / ECO	Throughout construction

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IDENTIFIED IMPACT	OBJECTIVES	PERFORMANCE CRITERIA (TARGETS)	REF NR	MITIGATION MEASURES	MONITORING AND INSPECTIONS	RESPONSIBLE PARTY	FREQUENCY
			2.5	Hazardous substances including oils, paints, fuels and chemicals shall be stored within bunded, covered and secure areas away from drainage lines and environmentally sensitive areas.	Site inspections. Internal and External Audits.	Contractor / ECO	Weekly
			2.6	No waste, surplus material or construction rubble shall be disposed of within the retained Private Open Space, or adjacent properties	ECO inspections	Contractor / ECO	Continuous
			2.7	Construction areas shall be kept clean at all times. Windblown litter shall be collected daily and all waste containers shall remain covered when not in use.	ECO inspections	Contractor / ECO	Daily

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IDENTIFIED IMPACT	OBJECTIVES	PERFORMANCE CRITERIA (TARGETS)	REF NR	MITIGATION MEASURES	MONITORING AND INSPECTIONS	RESPONSIBLE PARTY	FREQUENCY
			2.8	Green waste generated from vegetation clearing shall be chipped for reuse where feasible or removed to an approved green waste recycling facility. Burning of vegetation is prohibited	ECO inspections	Contractor / ECO	As required
			2.9	Environmental awareness training shall be provided to all personnel regarding waste segregation, pollution prevention, spill response and housekeeping requirements.	Training registers. Induction records.	Contractor / ECO /Site Manager	Prior to commencement and refresher training as required
3.	**ASPECT:** **WATER AND SOIL IMPACTS** **Activity:** - Earthworks, excavation and foundation construction. - Vegetation clearing. - Stockpiling of topsoil and construction materials. - Hydrocarbon spills and leaks from construction vehicles, equipment and machinery. - Storage and handling of fuels, oils, paints and chemicals. - Hazardous substances entering stormwater systems. - Inadequate stormwater management.						
Soil contamination. Pollution of stormwater	Prevent contamination of soil, stormwater, groundwater and	Compliance with: National Environmental	3.1	Construction vehicles, equipment and machinery that are no	Site inspections. Maintenance records.	Contractor / ECO	Throughout construction

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IDENTIFIED IMPACT	OBJECTIVES	PERFORMANCE CRITERIA (TARGETS)	REF NR	MITIGATION MEASURES	MONITORING AND INSPECTIONS	RESPONSIBLE PARTY	FREQUENCY
and downstream surface water resources. Sedimentation and erosion. Potential groundwater contamination. Degradation of ecological functioning within the retained Private Open Space and adjacent environmentally sensitive areas.	surrounding water resources. Minimise erosion and sedimentation. Maintain natural drainage patterns where practical. Prevent pollution associated with fuels, chemicals and construction activities.	Management Act (Act 107 of 1998). National Water Act (Act 36 of 1998). City of Johannesburg Stormwater management Bylaw, (Provincial Gazette 181, 25 October 2010) Environmental Authorisation and approved EMPr.		longer operational or are leaking fluids shall be removed from site immediately			
			3.2	Construction activities shall be confined to the approved development footprint. No disturbance shall occur within the retained Private Open Space or environmentally sensitive "No-Go" areas.	ECO inspections. Site inspections	Contractor / ECO	Continuous
			3.3	Temporary erosion and sediment control measures (e.g. silt fences, berms, sediment traps and diversion channels) shall be installed before earthworks commence and maintained throughout construction.	Weekly inspections, particularly after rainfall events.	Contractor / ECO	Weekly and after rainfall
			3.4	All hydrocarbon spills, fuel leaks or chemical spills shall be contained and cleaned immediately using provided spill kits.	Spill register. Incident reports. Waste records.	Contractor / ECO	As required

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IDENTIFIED IMPACT	OBJECTIVES	PERFORMANCE CRITERIA (TARGETS)	REF NR	MITIGATION MEASURES	MONITORING AND INSPECTIONS	RESPONSIBLE PARTY	FREQUENCY
				Contaminated soil shall be removed and disposed of at an authorised facility and records of waste removed kept on file for auditing purposes			
			3.5	A Spill Prevention and Emergency Response Procedure shall be implemented. A spill kit shall be readily available on site.	Spill kit inspections. Emergency response audits.	Contractor / ECO	Throughout construction
			3.6	All vehicles and or equipment must be maintained in accordance with manufacturer specifications to minimise the risk of leaks and equipment failure.	Service records. Equipment inspections.	Contractor / ECO	Throughout construction
			3.7	Equipment or vehicles that are not in use are to be equipped with drip trays.	Site inspections. Maintenance records.	Contractor	Continuous
			3.8	Topsoil stockpiles shall be protected from	Site inspections. ECO audits.	Contractor / ECO / project Manager	Throughout construction

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IDENTIFIED IMPACT	OBJECTIVES	PERFORMANCE CRITERIA (TARGETS)	REF NR	MITIGATION MEASURES	MONITORING AND INSPECTIONS	RESPONSIBLE PARTY	FREQUENCY
				erosion and shall not obstruct natural drainage paths. Exposed areas shall be stabilized as soon as practical to minimize sediment transport.			
			3.9	Stormwater drains shall be kept free of construction debris, cement washings, sediment and waste. Concrete batching and washout activities shall not occur where runoff may enter the stormwater system	Site inspections. Stormwater inspections.	Contractor / ECO	Throughout construction
			3.10	Environmental awareness training shall be provided to all construction personnel on pollution prevention, spill response, stormwater protection and erosion control measures.	Training registers. Induction records.	ECO / Contractor / Project Manager	Prior to commencement and refresher training as required
4.	**ASPECT:** **NOISE**						
	Activity: - Vegetation clearing, earthworks and excavation						

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IDENTIFIED IMPACT	OBJECTIVES	PERFORMANCE CRITERIA (TARGETS)	REF NR	MITIGATION MEASURES	MONITORING AND INSPECTIONS	RESPONSIBLE PARTY	FREQUENCY
- Construction activities generating elevated noise levels. - Operation of construction equipment and machinery (excavators, graders, compactors, concrete mixers, generators, angle grinders, welding equipment, etc.). - Delivery vehicles and movement of heavy construction vehicles.							
Temporary nuisance to neighbouring residential properties and sensitive receptors. Occupational exposure of workers to elevated noise levels. Disturbance to local fauna within the retained Private Open Space.	Minimise construction noise affecting neighbouring residents and environmentally sensitive areas. Protect workers from excessive occupational noise exposure. Ensure construction activities comply with applicable legislation and municipal by-laws.	Compliance with the National Noise Control Regulations (GNR 154) Compliance with the Noise Exposure Regulations published in terms of the Occupational Health and Safety Act (Act No. 85 of 1993)	4.1	Construction activities generating excessive noise shall be limited to normal working hours No high-noise activities shall be undertaken outside approved working hours.	Site inspections. Complaints register. Construction programme review.	ECO / Contractor / Site Manager	Throughout construction
			4.2	Personnel exposed to elevated noise levels shall be provided with appropriate hearing protection, and its use shall be enforced in accordance with the Occupational Health and Safety Act.	PPE registers. Site inspections and audits.	Contractor / ECO / Project Manager	Daily
			4.3	Stationary plant, generators and compressors shall, where practical, be positioned away from neighbouring residential properties and environmentally	Site inspections. ECO audits.	Contractor / ECO / Project Manager	Throughout construction

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IDENTIFIED IMPACT	OBJECTIVES	PERFORMANCE CRITERIA (TARGETS)	REF NR	MITIGATION MEASURES	MONITORING AND INSPECTIONS	RESPONSIBLE PARTY	FREQUENCY
				sensitive areas. Temporary acoustic barriers shall be utilised where required.			
			4.4	Construction vehicle movements shall be managed to minimise unnecessary reving, engine braking, hooting and prolonged idling within and adjacent to the site.	Site inspections.	Contractor / ECO / Project Manager	Continuous
			4.5	An external complaints register shall be maintained. All noise-related complaints shall be investigated promptly, corrective measures implemented where necessary, and feedback provided to the complainant.	Complaints register. Corrective action register	ECO / Site Manager	Throughout construction
5.	**ASPECT:**	**TRAFFIC**					
	Activity:	- Increased number of vehicles traveling to and from site - Movement of construction vehicles both on and around the site					

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IDENTIFIED IMPACT	OBJECTIVES	PERFORMANCE CRITERIA (TARGETS)	REF NR	MITIGATION MEASURES	MONITORING AND INSPECTIONS	RESPONSIBLE PARTY	FREQUENCY
Increased traffic congestion. Possible degradation of roads and traffic infrastructure I the immediate area	Ensure the safe and efficient movement of construction vehicles. Minimise disruption to surrounding road users and neighbouring residents. Prevent damage to public infrastructure and private property. Maintain safe access to adjoining properties throughout construction.	National Traffic Regulations Occupational Health and Safety Regulations	5.1	No parking of trucks or vehicles outside the boundary of the site is permitted	Site inspections. Daily housekeeping inspections.	Contractor	Daily
			5.2	All vehicles are to be road worthy and comply with the National Traffic Regulations.	Vehicle inspection records. Driver licences. Maintenance records.	Contractor / Site Manager	Throughout construction
			5.3	Vehicles transporting raw materials, goods or waste to or from the site are not to be overloaded.	Vehicle inspections. Delivery records.	Contractor / ECO / Project Manager	Throughout construction
			5.4	All drivers are to be licensed in accordance with the vehicle and or equipment being driven	Delivery schedules. Permits and licenses Traffic observations.	Contractor / ECO / Project Manager	Throughout construction
6.	**ASPECT:**	**HEALTH AND SAFETY**					
	Activity:	- Vegetation clearing, earthworks, excavation and construction activities - Movement and operation of construction vehicles, heavy machinery and equipment. - Material handling, lifting, stacking and working at heights - Electrical installation and associated construction activities. - Exposure to dust, noise, hazardous substances and general construction hazards, including uneven surfaces and excavations.					
Personal injury Slips, trips and falls. Falling objects.	Prevent accidents, injuries and occupational illnesses. Maintain a safe and	Compliance with the Noise Exposure Regulations published in terms of the Occupational Health	6.1	All equipment used on site may only be operated by appropriately trained and / or licensed personnel.	Competency certificates. Operator licences. Equipment inspections	Contractor / ECO / Project Manager	Throughout construction

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IDENTIFIED IMPACT	OBJECTIVES	PERFORMANCE CRITERIA (TARGETS)	REF NR	MITIGATION MEASURES	MONITORING AND INSPECTIONS	RESPONSIBLE PARTY	FREQUENCY
Vehicle and plant collisions. Noise-induced hearing loss. Respiratory irritation due to dust exposure. Fire and emergency incidents. Public safety risks associated with construction activities. Unauthorised access to civilians	healthy working environment. Protect construction personnel, visitors and the public. Ensure compliance with all applicable occupational health and safety legislation.	and Safety Act (Act No. 85 of 1993)	6.2	PPE and safety gear appropriate to the task being undertaken is to be provided to all site personnel (e.g., hard hats, safety boots, reflective vests, masks etc.).	PPE register. Daily site inspections. Audits.	Contractor / ECO / Project Manager	Daily
			6.3	Access to the site must be maintained to restrict unauthorized entry	Health and Safety File reviews. Contractor audits. Risk assessment records.	Contractor / ECO / Project Manager	Prior to commencement and throughout construction
			6.4	Appropriate signage must be displayed on site to indicate the minimum PPE requirements for entry	Site inspections. Safety audits	ECO / Project Manager	Throughout construction
ASPECT:	**BIODIVERSITY AND VEGETATION**						
Activity:	- Vegetation clearing, grubbing, excavation and construction activities - Movement of construction vehicles and machinery. - Temporary stockpiling of materials and topsoil. - Disturbance of indigenous vegetation.						
Loss of indigenous vegetation. Habitat fragmentation.	Minimise disturbance to indigenous vegetation and ecological processes.	Compliance with: National Environmental Management Act, 1998 (Act No. 107 of 1998).	7.1	The approved development footprint shall be clearly demarcated prior to construction. No	ECO inspections. Demarcation verification.	ECO Principal Contractor	Prior to commencement and throughout construction

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IDENTIFIED IMPACT	OBJECTIVES	PERFORMANCE CRITERIA (TARGETS)	REF NR	MITIGATION MEASURES	MONITORING AND INSPECTIONS	RESPONSIBLE PARTY	FREQUENCY
Disturbance to fauna. Introduction and spread of alien invasive plant species Degradation of the ecological functioning of the Critical Biodiversity Area (CBA).	Protect environmentally sensitive areas and retained open space. Prevent unnecessary vegetation loss and habitat degradation. Control the spread of alien invasive plant species. Promote rehabilitation of disturbed areas.	National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004). Environmental Authorisation and approved EMPr. Specialist Biodiversity Assessment recommendations.		construction activities shall occur outside the approved footprint.			
			7.2	Vegetation clearing shall be limited to the minimum area required for construction. Clearing shall proceed progressively to minimize unnecessary disturbance	Site inspections. Audits.	Contractor / ECO / Project Manager	Throughout construction
			7.3	No stockpiling of construction materials, topsoil, waste, machinery or hazardous substances shall occur within the retained Private Open Space or any designated No-Go Area.	Site inspections.	Contractor	Continuous
			7.5	All construction personnel shall receive environmental awareness training on biodiversity protection, No-Go Areas, protected vegetation, wildlife protection and reporting procedures for environmental incidents	Training registers. Induction records.	ECO	Prior to commencement and refresher training as required

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6.4 Environmental Management Programme - Operational Phase

Table 5: Operational Phase EMPr

IDENTIFIED IMPACT		OBJECTIVES	PERFORMANCE CRITERIA (TARGETS)	REF NR	MITIGATION MEASURES	MONITORING AND INSPECTIONS	RESPONSIBLE PARTY	FREQUENCY
1.	**ASPECT:** **AIR QUALITY** **Activity:** - Vehicle movements by guests, staff and service providers - Operation of standby generators during power outages. - Kitchen extraction systems and cooking activities. - Waste storage areas. - Maintenance activities involving paints, solvents and cleaning chemicals.							
Generation of nuisance odours from waste storage areas		Minimise greenhouse gas emissions associated with hotel operations. Maintain acceptable ambient air quality within and around the property. Prevent nuisance odours affecting neighbouring residential properties and guests. Promote energy-efficient operational practices.	Compliance with the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004), as amended National Ambient Air Quality Standards (GN 1210) as amended National Dust Control Regulations, GN 7335 of 31 March 2026 City of Johannesburg Air Pollution Control By-Law (Provincial Gazette No:	1.1	All standby generators shall be serviced and maintained in accordance with manufacturer specifications to minimise exhaust emissions.	Maintenance records. Site inspections.	Facilities Manager ECO	Throughout the operational phase
				1.2	Waste storage areas shall be enclosed, maintained in a clean and hygienic condition.	Housekeeping inspections. Waste audits.	Housekeeping Manager	Daily
				1.4	Kitchen extraction and ventilation shall be maintained regularly to ensure efficient operation and minimise odour emissions.	Maintenance records. Equipment inspections.	Facilities Manager	Quarterly

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IDENTIFIED IMPACT	OBJECTIVES	PERFORMANCE CRITERIA (TARGETS)	REF NR	MITIGATION MEASURES	MONITORING AND INSPECTIONS	RESPONSIBLE PARTY	FREQUENCY
		349 dated 13 October 2021) as amended - - Chapter 2: Prohibition and Application (Reasonable measures to prevent air pollution). - Chapter 6: Emissions caused by open burning Chapter 2: Emissions that cause a nuisance (Prohibition and application).					
2.	**ASPECT:** **WASTE MANAGEMENT** **Activity:** - Generation of general domestic waste from guest accommodation, conference facilities, restaurants and offices. - Garden waste from landscape maintenance. - Storage of waste on-site. - Generation of hazardous waste (e.g. waste oils, paints, solvents, fluorescent lamps, batteries, cleaning chemicals and contaminated materials) during maintenance activities. - Waste collection, removal and transportation. - Poor housekeeping and waste management practices.						
Littering, visual impacts and generation of nuisance odours.	Minimise waste generation through the implementation of the waste hierarchy (avoid,	National Norms and Standards for the Storage of Waste	2.1	Recyclable, organic (food and garden waste) shall be separated at source using clearly labelled waste receptacles.	Waste segregation inspections. Housekeeping audits.	Housekeeping Manager	Daily

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IDENTIFIED IMPACT	OBJECTIVES	PERFORMANCE CRITERIA (TARGETS)	REF NR	MITIGATION MEASURES	MONITORING AND INSPECTIONS	RESPONSIBLE PARTY	FREQUENCY
Attraction of pests and vermin. Fire risks associated with waste accumulation. Potential disposal of recyclable material	reduce, reuse, recycle and recover). Promote waste separation at source and maximise recycling. Prevent pollution of land and water resources. Maintain high standards of housekeeping throughout the property. Ensure the safe storage, handling and disposal of all waste streams. Promote environmental awareness amongst staff, contractors and guests.	National Environmental Management: Waste Act (Act 59 of 2008) and associated regulations, as amended Municipal bylaws and regulations – City of Johannesburg Municipality Environmental Authorisation and approved EMPr.	2.2	All waste shall be removed by appropriately licensed waste service providers and transported only to authorised recycling, or disposal facilities.	Waste manifests. Service provider records.	Facilities Manager	As required
			2.3	Waste storage areas shall be secure, covered, well ventilated and maintained in a clean and hygienic condition. Waste receptacles shall be clearly labelled to facilitate source separation and prevent cross-contamination.	Site inspections. Housekeeping inspections.	Housekeeping Manager	Daily
			2.5	Garden waste generated during landscape maintenance shall be chipped, composted or removed to an approved green waste recycling facility. Open burning of garden waste shall not be permitted.	Landscape maintenance records. Site inspections.	Landscape Contractor	As required
			2.6	Good housekeeping practices shall be maintained throughout the hotel property to prevent	Housekeeping inspections. Complaints register.	Housekeeping Manager ECO	Daily

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IDENTIFIED IMPACT	OBJECTIVES	PERFORMANCE CRITERIA (TARGETS)	REF NR	MITIGATION MEASURES	MONITORING AND INSPECTIONS	RESPONSIBLE PARTY	FREQUENCY
				littering, pest infestations, odour generation and pollution. Any illegal dumping or waste-related incidents shall be investigated and corrective actions implemented immediately.	Corrective action register.		
3.	**ASPECT:** **WATER AND SOIL POLLUTION** **Activity:** - Illegal dumping of waste - Hydrocarbon spills - Oil leaks from vehicles, equipment and machinery - Hazardous waste coming into contact with storm water leading to leachate generation - Maintenance of equipment machinery and vehicles - Vehicle or machinery malfunction						
Contamination of soil, stormwater and groundwater. Pollution of downstream water resources through contaminated runoff. Hydrocarbon spills and chemical leaks. Degradation of the retained	Prevent contamination of soil, stormwater and groundwater. Protect surrounding water resources and environmentally sensitive areas. Prevent hydrocarbon spills and chemical pollution.	National Environmental Management Act, 1998 (Act No. 107 of 1998). National Water Act, 1998 (Act No. 36 of 1998). National Environmental Management: Waste Act, 2008 (Act No. 59 of	3.1	Operations should be confined to the boundaries of the developed area.	Site inspections. Maintenance records	Facilities Manager ECO	Throughout the operational phase
			3.2	Waste collection areas to be equipped with concreted or impermeable surfaces	Site inspections. Maintenance records.	Facilities Manager	Throughout the operational phase

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IDENTIFIED IMPACT	OBJECTIVES	PERFORMANCE CRITERIA (TARGETS)	REF NR	MITIGATION MEASURES	MONITORING AND INSPECTIONS	RESPONSIBLE PARTY	FREQUENCY
Private Open Space and surrounding environmentally sensitive areas. Sediment and pollutant transport into municipal stormwater infrastructure.	Ensure environmentally responsible maintenance and operational practices.	2008). Environmental Authorisation and approved EMPr.					
			3.3	Convey stormwater to the proposed attenuation pond before discharge,as per SWMP	Site inspections. Maintenance records.	Facilities Manager	Throughout the operational phase
			3.4	Capture runoff through the internal piped stormwater network to prevent uncontrolled overland flow and soil erosion,as per SWMP	Site inspections. Maintenance records.	Facilities Manager	Throughout the operational phase
4.	**ASPECT:** **NOISE**						
	Activity: - Operational activities generating high noise levels - Use of machinery and equipment (grinders, welding, landscaping equipment)						
Nuisance noise affecting neighbouring residential properties.	Minimise operational noise affecting neighbouring landowners, guests and	Compliance with the National Noise Control Regulations (GNR 154)	4.1	Activities likely to generate elevated noise levels, including maintenance works, landscaping and refuse collection, shall be	Site inspections. Operational reviews. Complaints register.	Hotel Manager Facilities Manager ECO	Throughout the operational phase

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IDENTIFIED IMPACT	OBJECTIVES	PERFORMANCE CRITERIA (TARGETS)	REF NR	MITIGATION MEASURES	MONITORING AND INSPECTIONS	RESPONSIBLE PARTY	FREQUENCY
Occupational exposure of maintenance personnel to elevated noise levels. Temporary increases in noise during maintenance activities.	the surrounding community. Prevent excessive occupational noise exposure to employees. Ensure compliance with applicable noise legislation and municipal by-laws.	Compliance with municipal by-laws regulating noise Compliance with the Noise Exposure Regulations published in terms of the Occupational Health and Safety Act (Act No. 85 of 1993)		restricted to normal operating hours where reasonably practicable. Outdoor events and functions shall comply with approved operating hours and applicable municipal requirements.			
			4.2	Employees undertaking maintenance activities involving elevated noise levels shall be provided with appropriate hearing protection and other required PPE in accordance with the Occupational Health and Safety Act.	PPE register. Health and Safety inspections.	Facilities Manager SHEQ Officer	Throughout the operational phase
			4.3	An external complaints management procedure and complaints register shall be maintained. All noise-related complaints shall be investigated promptly, corrective actions implemented where necessary, and feedback provided to the complainant.	Complaints register. Corrective action register.	Hotel Manager ECO	Throughout the operational phase

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IDENTIFIED IMPACT		OBJECTIVES	PERFORMANCE CRITERIA (TARGETS)	REF NR	MITIGATION MEASURES	MONITORING AND INSPECTIONS	RESPONSIBLE PARTY	FREQUENCY
5.	**ASPECT:**	**HEALTH AND SAFETY**						
	Activity:	- Landscaping and maintenance activities. - Use of maintenance equipment and machinery. - Manual handling and lifting of equipment and supplies. - Slippery surfaces, uneven walkways and trip hazards. - Exposure to cleaning chemicals, dust and noise during maintenance activities						
General occupation exposures Site Fires		Minimise the risk of injuries and occupational illnesses. Maintain a safe and healthy environment for guests, staff, contractors and visitors. Prevent excessive occupational noise exposure. Ensure compliance with occupational health and safety legislation and emergency preparedness requirements.	Compliance with the Noise Exposure Regulations published in terms of the Occupational Health and Safety Act (Act No. 85 of 1993)	5.1	Suitable and sufficient fire-fighting equipment shall be provided throughout the hotel, including guest accommodation, kitchens, conference facilities, plant rooms and service areas. Fire equipment shall be inspected, serviced and maintained by a competent service provider.	Fire extinguisher inspections. Maintenance records. Fire safety audits.	Facilities Manager	Throughout the operational phase
				5.2	Emergency evacuation procedures shall be implemented and displayed as per relevant guidelines. Fire drills and emergency response training shall be conducted regularly for all employees as per relevant guidelines.	Emergency drill records. Training registers.	Facilities Manager SHEQ Officer	Annually

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			5.3	Adequate first aid equipment and trained first aid personnel shall be available at all times. All incidents, injuries shall be recorded and managed in accordance with OHSA	First aid inspections. Incident register. Corrective action records.	SHEQ Officer Facilities Manager	Throughout the operational phase
ASPECT:	**BIODIVERSITY AND VEGETATION**						
Activity:	- Routine landscape and garden maintenance. - Management of the retained Private Open Space. - Irrigation and grounds maintenance.						
Disturbance of indigenous vegetation. Introduction and spread of alien invasive plant species. Encroachment into the retained Private Open Space and environmentally sensitive areas. Long-term degradation of the ecological functioning of the Critical Biodiversity Area (CBA).	Protect indigenous vegetation and ecological processes. Maintain the ecological integrity of the retained Private Open Space. Prevent habitat degradation and unnecessary disturbance to flora and fauna. Control and eradicate alien invasive plant species.	Compliance with: National Environmental Management Act, 1998 (Act No. 107 of 1998). National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004). Environmental Authorisation and approved EMPr. Specialist Biodiversity Assessment recommendations.	6.1	The retained Private Open Space and all environmentally sensitive areas shall remain protected throughout the operational life of the development. No infrastructure, storage of materials, dumping or unauthorised access shall be permitted within designated No-Go Areas.	ECO inspections. Environmental audits	Property Owner Facilities Manager ECO	Throughout the operational phas
			6.2	Existing demarcation, fencing and signage identifying environmentally sensitive areas and No-Go Areas shall be maintained	Site inspections.	Facilities Manager	Quarterly

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IDENTIFIED IMPACT	OBJECTIVES	PERFORMANCE CRITERIA (TARGETS)	REF NR	MITIGATION MEASURES	MONITORING AND INSPECTIONS	RESPONSIBLE PARTY	FREQUENCY
	Promote long-term ecological rehabilitation and biodiversity conservation.			in good condition and repaired where necessary.			
			6.3	Landscaping shall utilise indigenous, locally occurring and water-wise plant species compatible with the surrounding Egoli Granite Grassland vegetation. Ornamental invasive plant species shall not be introduced onto the property.	Landscape inspections. Planting records.	Landscape Contractor Facilities Manager	Throughout the operational phase
			6.4	Irrigation systems shall be managed efficiently to maintain landscaped areas while avoiding excessive runoff, erosion or unnecessary water consumption.	Irrigation inspections. Maintenance records.	Facilities Manager Landscape Contractor	Monthly
ASPECT:	**OWNERSHIP AND RESPONSIBILITY**						
Activity:	- Construction, operation and future ownership or management of the proposed Boutique Hotel Development. - Potential subdivision of the property and transfer of ownership or operational responsibilities.						
Non-compliance with the conditions of the Environmental Authorisation (EA) and approved Environmental Management Programme (EMPr).	Failure to maintain compliance with the Environmental Authorisation (EA) and approved EMPr following changes in ownership,	Ensure continuous compliance with the Environmental Authorisation, approved EMPr and all applicable environmental	7.1	Where ownership of the property or management of the development changes, the Competent Authority shall be notified and any required	Review of correspondence and approvals from the Competent Authority.	Property Owner	As required

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IDENTIFIED IMPACT	OBJECTIVES	PERFORMANCE CRITERIA (TARGETS)	REF NR	MITIGATION MEASURES	MONITORING AND INSPECTIONS	RESPONSIBLE PARTY	FREQUENCY
Failure to clearly assign environmental responsibilities following changes in ownership, management or operation of the development. Reduced environmental performance and ineffective environmental management throughout the construction and operational phases of the development.	management or subdivision of the property. Uncertainty regarding environmental responsibilities and legal accountability.	legislation throughout the project lifecycle. Clearly define environmental responsibilities following any change in ownership or subdivision of the property.		amendment to the Environmental Authorisation shall be submitted in accordance with the Environmental Impact Assessment Regulations.			
			7.2	All contractors, operators and future property managers shall be provided with a copy of the approved Environmental Authorisation and EMPr and shall be made aware of their environmental responsibilities before commencing any activities.	Induction records. Training registers. Contractor agreements.	Property Owner	As required
ASPECT:	**SAFETY AND SECURITY**						
Activity:	- Daily hotel operations. - Accommodation of guests, staff, contractors and visitors. - Use and storage of cleaning chemicals, fuels and other hazardous substances.						

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IDENTIFIED IMPACT	OBJECTIVES	PERFORMANCE CRITERIA (TARGETS)	REF NR	MITIGATION MEASURES	MONITORING AND INSPECTIONS	RESPONSIBLE PARTY	FREQUENCY
- Fire safety and emergency response activities. - Security and access control. - Vehicle and pedestrian movement - Operation of hotel facilities and services.							
Personal injury or illness to guests, employees, contractors or visitors. Fire, spills, environmental contamination and other emergency incidents. Unauthorised access, theft, vandalism and criminal activity. Exposure to hazardous substances. Non-compliance with health, safety and environmental legislation.			8.1	Maintain and regularly update emergency procedures, emergency contact details, responsible personnel and evacuation plans. Updated information shall be communicated to all relevant personnel.	Emergency contact lists. Emergency plan reviews.	Hotel Manager	Quarterly and as required
			8.2	Maintain emergency signage, evacuation plans, fire escape signage and hazard warning signs in good condition.	Site inspections. Maintenance records.	Facilities Manager	As required
			8.3	Conduct regular emergency response exercises, including fire evacuation drills, first aid response and spill response training, to evaluate the effectiveness of emergency procedures and identify opportunities for continual improvement.	Emergency drill reports. Attendance registers	Facilities Manager	As required

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			8.4	Maintain records of all safety incidents, emergency events, training, inspections and monitoring activities for auditing purposes and to demonstrate compliance with the Environmental Authorisation and approved EMPr	Incident register. Monitoring reports. Audit reports	Hotel Manager Health & Safety Officer	Throughout the operational phase
ASPECT:	**ECOLOGICALLY SENSITIVE AND FLORA MANAGEMENT**						
Activity:	- Landscaping and maintenance of gardens and open space areas. - Routine maintenance within the retained Private Open Space. - Movement of guests, staff and visitors within landscaped and conservation areas. - Operation and maintenance of outdoor recreational facilities. - Alien invasive plant control and vegetation management.						
Disturbance or damage to indigenous vegetation and ecological habitats. Disturbance to fauna utilising the retained Private Open Space. Introduction and spread of alien invasive plant species. Degradation of the ecological		Protect the ecological integrity of the retained Private Open Space and environmentally sensitive areas. Minimise disturbance to indigenous flora and fauna. Prevent the establishment and	9.1	Indigenous plant species appropriate to the local Egoli Granite Grassland vegetation type shall be utilised within landscaped areas wherever practicable to promote biodiversity and reduce water requirements	Landscaping inspections. Maintenance records	Facilities Manager Landscape Contractor	Throughout the operational phase
			9.2	The retained Private Open Space and environmentally sensitive areas shall be	Routine site inspections. Security patrol reports	Hotel Manager	Monthly

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IDENTIFIED IMPACT	OBJECTIVES	PERFORMANCE CRITERIA (TARGETS)	REF NR	MITIGATION MEASURES	MONITORING AND INSPECTIONS	RESPONSIBLE PARTY	FREQUENCY
integrity of the retained conservation area due to inappropriate landscaping or maintenance activities. Fire risk associated with uncontrolled ignition sources.		spread of alien invasive plant species. Promote indigenous landscaping and biodiversity conservation throughout the operational phase.		protected from unauthorised access, vegetation disturbance, dumping and inappropriate recreational activities.			
			9.3	No dumping of garden refuse, construction materials, waste or hazardous substances shall be permitted within the retained Private Open Space or landscaped areas	Site inspections. Waste management audits	Facilities Manager	Throughout the operational phase
			9.4	Any damage to indigenous vegetation or environmentally sensitive areas resulting from operational activities shall be rehabilitated as soon as reasonably practicable using indigenous vegetation appropriate to the surrounding ecosystem	Rehabilitation inspections. Maintenance records.	Facilities Manager Landscape Contractor	As required
ASPECT:	**FAUNAL MANAGEMENT**						
Activity:	- Routine hotel operations within landscaped and conservation areas. - Landscape maintenance and groundskeeping - Operation and maintenance within the retained Private Open Space. - Maintenance of internal roads and parking areas.						

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IDENTIFIED IMPACT	OBJECTIVES	PERFORMANCE CRITERIA (TARGETS)	REF NR	MITIGATION MEASURES	MONITORING AND INSPECTIONS	RESPONSIBLE PARTY	FREQUENCY
Disturbance and displacement of indigenous fauna due to routine hotel operations and human activity. Injury or mortality of fauna resulting from vehicle movements within the development. Disturbance of reptiles, birds and small mammals during landscape maintenance and routine maintenance activities. Loss or degradation of habitat resulting from inappropriate maintenance or encroachment into the retained Private Open Space. Increased human-wildlife interactions leading to disturbance, injury or displacement of indigenous fauna.	Disturbance, injury or mortality of indigenous fauna. Loss or degradation of habitat within the retained Private Open Space. Vehicle collisions with wildlife. Disturbance of reptiles, birds and other fauna utilising the site. Encroachment into environmentally sensitive areas.	Protect indigenous fauna and their habitats. Minimise disturbance to wildlife during hotel operations and maintenance activities. Prevent unnecessary encroachment into environmentally sensitive areas. Promote biodiversity conservation throughout the operational phase	10.1	Vehicle movement shall be restricted to parking areas and approved access routes. No off-road driving shall be permitted within the retained Private Open Space or environmentally sensitive areas	Site inspections	Hotel Manager	Throughout the operational phase
			10.2	Guests, staff and contractors shall not intentionally disturb, capture, feed, hunt or harm indigenous fauna occurring within the retained Private Open Space or landscaped areas. Appropriate signage shall be installed where necessary.	Site inspections	Hotel Manage	Throughout the operational phase
			10.3	Any injured or distressed wildlife encountered on-site shall be reported immediately to the Hotel Manager and, where required, an appropriately qualified wildlife rehabilitator or conservation authority	Incident register	Hotel Manage	Throughout the operational phase

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IDENTIFIED IMPACT	OBJECTIVES	PERFORMANCE CRITERIA (TARGETS)	REF NR	MITIGATION MEASURES	MONITORING AND INSPECTIONS	RESPONSIBLE PARTY	FREQUENCY
Disturbance to nocturnal fauna resulting from external lighting and increased night-time activity.				shall be contacted for assistance.			
			10.4	Outdoor lighting shall be appropriately directed and maintained to minimise unnecessary disturbance to nocturnal fauna within the retained Private Open Space.	Site inspections.	Facilities Manager	Throughout the operational phase
ASPECT:	**STORMWATER MANAGEMENT**						
Activity:	- Operation and maintenance of the hotel's stormwater drainage system. - Maintenance of landscaped areas, parking areas and internal roads. - Runoff from roofs, paved surfaces and open spaces. - Routine maintenance of stormwater attenuation infrastructure.						
Pollution of stormwater runoff due to litter, hydrocarbons, cleaning chemicals or other contaminants. Localised flooding resulting from blocked, damaged or poorly maintained stormwater infrastructure.	Blockage or failure of stormwater infrastructure resulting in localised flooding. Sediment, litter and pollutants entering the stormwater system. Erosion of landscaped areas and disturbance of	Maintain an effective stormwater management system that promotes infiltration, controls runoff and prevents pollution of downstream water resources. Prevent erosion, sediment transport and	11.1	Stormwater infrastructure shall be kept free of litter, sediment, vegetation and other debris that may obstruct the natural flow of stormwater or reduce system capacity.	Routine site inspections. Maintenance records	Facilities Manager	Monthly
			11.2	Landscaping and maintenance activities shall be undertaken in a manner that promotes infiltration,	Maintenance records	Facilities Manager	Throughout the operational phase

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Soil erosion and sediment transport from landscaped areas, embankments and stormwater discharge points. Damage to stormwater attenuation infrastructure reducing its effectiveness. Degradation of the ecological integrity of the retained Private Open Space and surrounding environmentally sensitive areas due to uncontrolled stormwater discharge. Increased maintenance requirements and potential damage to hotel infrastructure resulting from ineffective stormwater management	natural drainage patterns. Pollution of downstream water resources due to contaminated stormwater runoff	flooding. Maintain stormwater infrastructure in a safe and functional condition throughout the operational phase.		minimises sediment transport and protects the integrity of the approved stormwater management system			
			11.3	Oils, fuels, cleaning chemicals, waste, garden refuse and other pollutants shall not be discharged into the stormwater drainage system.	Site inspections.	Hotel Manager Facilities Manager	Throughout the operational phase
			11.4	All stormwater shall be captured through a piped internal stormwater network within the development, which will then be conveyed to the	Inspection reports. Maintenance records.	Facilities Manager	Throughout the operational phase

IDENTIFIED IMPACT	OBJECTIVES	PERFORMANCE CRITERIA (TARGETS)	REF NR	MITIGATION MEASURES	MONITORING AND INSPECTIONS	RESPONSIBLE PARTY	FREQUENCY
				outlet point from the attenuation pond, as per requirements in the SWMP			
ASPECT:	**VISUAL IMPACT MANAGEMENT**						
Activity:	- Operation and maintenance of the Boutique Hotel and associated infrastructure. - External lighting of buildings, parking areas and landscaped areas. - Landscape maintenance and gardening activities. - Waste storage and housekeeping. - General maintenance of the hotel and surrounding grounds.						
Light pollution affecting neighbouring properties and environmentally sensitive areas. Degradation of the visual character of the site due to poor housekeeping, litter or inadequate maintenance. Establishment and spread of alien invasive plant species. Visual impacts from the development impacting the aesthetic of the areawaste	Visual intrusion associated with buildings, lighting and infrastructure. Light pollution affecting neighbouring properties and environmentally sensitive areas. Poor site appearance resulting from inadequate maintenance, litter or overgrown vegetation. Spread of alien invasive vegetation reducing the	Maintain a visually attractive, clean and well-maintained hotel environment that complements the surrounding landscape. Minimise light spill onto neighbouring properties and environmentally sensitive areas. Maintain landscaped areas using indigenous vegetation and prevent the establishment of alien invasive plant species.	12.1	External lighting shall be directed downward and shielded where practicable to minimise light spill onto adjacent properties and the retained Private Open Space	Maintenance records	Facilities Manager	Quarterly and as required
			12.2	Energy-efficient lighting, including LED luminaires or equivalent technology, shall be utilised throughout the development wherever practicable to minimise electricity consumption and greenhouse gas emissions.	Maintenance records.	Facilities Manager	Throughout the operational phase
			12.3	Landscaped areas shall be maintained using	Maintenance records	Facilities Manager	Monthly

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storage or unauthorised dumping	aesthetic and ecological value of the site. Negative visual impacts affecting the character of the surrounding area	Promote energy-efficient lighting and minimise unnecessary energy consumption.		predominantly indigenous vegetation suited to local climatic conditions. Dead or damaged vegetation shall be replaced where necessary to maintain the visual quality of the site			
			12.4	The site, parking areas, landscaped areas and surrounding open spaces shall be kept free of litter and waste. Routine housekeeping and litter collection shall be undertaken to maintain a high standard of cleanliness	Site inspections	Hotel Manager / Facilities Manager	Daily
ASPECT:	**TRAFFIC**						
Activity:	- Movement of guests, staff, visitors and service vehicles - Deliveries and refuse collection. - Use of internal access roads and parking areas. - Operation of drop-off and pick-up areas						
Noise nuisance resulting from vehicle movements and unnecessary hooting.	Increased traffic volumes resulting in congestion at the site entrance and surrounding road network.	Ensure the safe and efficient movement of vehicles and pedestrians. Minimise traffic congestion and nuisance	13.1	All guests, staff, contractors and service providers shall utilise designated access routes and parking areas. Unauthorised vehicle	Site inspections	Facilities Manager	Continuous

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	Vehicle and pedestrian safety risks within the development. Noise nuisance associated with unnecessary hooting and vehicle movements. Damage to internal roads, parking areas and traffic infrastructure. Restricted access for emergency vehicles.	to surrounding road users. Maintain safe access for guests, staff, visitors, service providers and emergency services. Promote compliance with the National Road Traffic Act and applicable municipal by-laws.		access into landscaped or environmentally sensitive areas shall be prohibited			
			13.2	Unnecessary hooting and reckless driving within the property shall be prohibited to minimise noise disturbance to guests and neighbouring properties.	Site inspections.	Facilities Manager	Throughout the operational phase
			13.3	Delivery vehicles, refuse collection vehicles and service providers shall utilise designated loading and service areas and, where practicable, deliveries shall be scheduled outside peak guest activity periods	Site inspections.	Facilities Manager	Throughout operational phase
ASPECT:	**SOCIO-ECONOMIC**						
Activity:	- Operation of the Boutique Hotel. - Employment of hotel staff and service providers - Procurement of goods and services						
Positive contribution to local employment and economic development.	Positive contribution to local employment opportunities and economic growth.	Maximise local socio-economic benefits through employment and procurement	14.1	Preference shall, where practicable, be given to local suppliers, contractors and service providers for	Procurement records	Hotel Manager	Throughout the operational phase

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Increased demand for local goods and services, benefiting the local economy. Increased local socio-economic benefits where local employment and procurement opportunities are maximised Heightened tax benefit due to increased property value and associated taxes	Increased local economic benefits if employment and procurement opportunities are awarded to local communities.	opportunities.		the procurement of goods and services.			
			14.2	Employment opportunities shall where possible be given to local residents	Procurement records	Hotel Manager	Throughout the operational phase

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6.5 Environmental Management Programme - Decommissioning Phase

The proposed Boutique Hotel Development is intended to operate as a long-term hospitality establishment and there are currently no plans to close or decommission the facility. Consequently, decommissioning activities are not anticipated during the foreseeable life of the development. However, should the permanent closure or decommissioning of the Hotel become necessary in the future, a detailed Decommissioning and Rehabilitation Plan shall be prepared prior to the commencement of any decommissioning activities. The plan shall outline the procedures for the safe decommissioning and removal of buildings, infrastructure and services; the management, recycling and disposal of demolition materials and waste; the protection of soil, surface water and groundwater resources; and the rehabilitation of disturbed areas to achieve a stable, safe and environmentally acceptable condition.

In addition, where required by the applicable environmental legislation in force at the time, the Applicant or Property Owner shall submit an application for the closure or decommissioning of the development to the relevant Competent Authority and obtain all necessary approvals prior to the commencement of decommissioning activities. The decommissioning process shall be undertaken in accordance with the conditions of the Environmental Authorisation, the approved Environmental Management Programme (EMPr) and any other applicable legislative or permit requirements, ensuring that environmental impacts are minimised and that the site is rehabilitated to the satisfaction of the relevant authorities.

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7 DOCUMENT RETENTION AND RECORD KEEPING

According to accepted international standards sufficient records shall be established and maintained to provide evidence of conformity to requirements and the effective operation of the relevant management systems throughout each phase of operation.

Records shall remain legible, readily identifiable, and retrievable in all appropriate areas to demonstrate conformance to requirements and to have an audit trail, which to verify the effective operation of Environmental Management.

Documents generated and used during each phase of operation as set out in tables Table 3- Table 5 above must be managed in accordance with the proposed measures set out below.

7.2 Hard Copy Retention Schedule

Table 6: Document Retention Schedule

IDENTIFICATION OF RECORDS	RETENTION SCHEDULE		
	ACTIVE	HISTORY	RECORDS
Monitoring and measuring data	All phases	10 years	10 years
Disposal Certificates	All phases	10 years	10 years
Reports with State Departments	All phases	Indefinite	Indefinite
Corrective Action & Verification Forms	All phases	13 – 24 Months	5 years
Internal Audit Reports	All phases	13 – 24 Months	5 years
External Audit Reports	All phases	5 years	5 years
Copies of legal appointment letters	All phases	5 years after cancellation	5 years after cancellation
Documents demonstrating compliance to EMPr conditions	All phases	5 years	5 years

7.3 General Requirements

- Any non-compliances to the requirements of the EMPr or Legal Authorisations held by DMFT Property Developers must be reported to the relevant authorities within 48 hours.
- All documents shall be kept on site and be available for monitoring and auditing purposes.
- An Environmental Audit Team may require access to documentation for auditing purposes when site visits are conducted.

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- Regular monitoring of all site works by the ECO, contractor and project manager (as applicable) is imperative to ensure that any problems encountered are resolved punctually and amicably.

8 ENVIRONMENTAL AWARENESS AND TRAINING PROGRAM

The objectives of an Environmental Awareness Plan are:

- To inform employees and or contractors of any environmental risks which may result from their work;
- To inform employees and contractors of the manner in which the identified possible risks must be dealt with in order to prevent degradation of the environment; and
- To optimise the awareness of those involved in the waste management activities which have the potential to impact negatively on the environment and in doing so, promote the global goal of sustainable development.

8.2 Implementation

Environmental principles will be communicated to contractors, any newly appointed employees and visitors entering the site.

It is critical that all employees and contractors on site be aware of the requirements of the EMPr conditions. Incidents or impacts usually arise where people have not been made aware or educated about possible impacts their activities can have on site.

It is therefore recommended that an Environmental Training program be designed and implemented in line with the following;

- All construction as well as boutique hotel staff members and employees must be trained in Environmental Management principals and be made aware of the requirements in the EMPr.
- New employees must complete an induction when appointed.
- Records must be kept on site of any training undertaken
- The training material can be in any format as deemed appropriate by the ECO as long as it is easily understandable and fit for the target audience.
- All contractors who may be appointed to undertake work on site must be provided with a copy of the approved EMPr and sign a contractor's agreement, indicating that they have received copies of the relevant authorisations and undertake to comply with the content and conditions as set out therein.
- All visitors and contractors are to undertake the site-specific induction and sign a register of attendance prior to entering the operational areas.

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8.3 Content of Environmental Awareness Plan

Key elements of the environmental awareness plan that should be addressed in the form of training:

- An explanation of sustainability;
- Water management and the importance of conservation;
- Air quality and odour management;
- Energy conservation;
- Waste management;
- The community and interested and affected parties;
- Reporting incidents; and
- Employee responsibilities.

9 MONITORING PROGRAMME

The monitoring programme allows for baseline monitoring prior to construction, monitoring during construction and monitoring during the operational phase of the operations. Minimum monitoring requirements are not addressed for closure, which must be expanded on when a detailed closure plan is developed prior to the closure and decommissioning of the boutique hotel.

The objective of the monitoring programme is to ensure that the environmental management systems perform according to specifications, to act as an early warning system for pollution, to check compliance with licence requirements and for reporting purposes.

The following monitoring and auditing schedule is proposed for the operations of the Boutique hotel facility;

Table 7: Monitoring and Reporting Programme

FREQUENCY	MONITORING APPLICABLE	DETAILS OF MONITORING
DAILY	Health and Safety	- Register all incidents - Register all complaints
MONTHLY	Site checks and inspections Waste Inventory updates	- Monitoring of general housekeeping and overall operations
BI-ANNUALLY	EMPr Internal Audit	- Compliance monitoring and report compilation
ANNUALLY	EMPr External Audit	- Compliance monitoring and report compilation

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10 EMERGENCY RESPONSE & ENVIRONMENTAL INCIDENTS

10.2 Emergency Response Plan

An Emergency Response Plan must be developed and implemented prior to the approved projects commencement.

The plan must be updated on an annual basis, and the reader should always ensure that they have the latest copy on hand. The emergency preparedness plan must also be reviewed after each major incident.

10.3 MAJOR INCIDENT REPORTING (NEMA S30)

In terms of NEMA, an "***incident***" is an unexpected, sudden and uncontrolled release of a hazardous substance, including from a major emission, fire or explosion, that causes, has caused or may cause significant harm to the environment, human life or property.

Should a reportable incident occur, the protocol as set out in terms of Section 30 of the National Environmental Management Act (Act 107 of 1998), as amended, will apply and must be followed.

All records pertaining to the recording, reporting and conclusion to the incident must be kept in accordance with the hard copy retention schedule set out under section 7.1 of the approved EMPr.

11 CONCLUSION

The successful implementation of this EMPr and its management actions will ensure that compliance with the environmental legislative requirements are achieved and that the likelihood of impacts occurring is reduced sufficiently. This EMPr also outlines the required environmental awareness training of employees, supervisors, contractors and visitors, which will ensure that management of the environment will occur through cooperation.

The success of this EMPr and overall sustainability of the project will further increase as a result of the defined organisational and administrative arrangements for environmental management and monitoring of the proposed project as well as procedures for environmental control, in the event of pollution or similar events requiring action.

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Appendix I: Impact Tables

IMPACT ASSESSMENT - CONSTRUCTION PHASE															
ASPECT	**ACTIVITY**	**IDENTIFIED IMPACT**	**DURATION**	**PROBABILITY**	**EXTENT**	**SEVERITY**	**SIGNIFICANCE RATING BEFORE MITIGATION**		**MITIGATION**	**MITIGATION – ENGINEERING (-10%), ADMINISTRATIVE (-5%)**		**DEGREE TO WHICH THE IMPACT CAN BE REVERSED**	**SIGNIFICANCE RATING AFTER MITIGATION**	
Air Quality	Release of greenhouse gas emissions from construction vehicles, trucks, generators, and heavy machinery due to fossil fuel combustion	Temporary reduction in ambient air quality within the project area	5	8	6	6	114	Moderate	Construction vehicles and machinery shall be serviced and maintained in accordance with manufacturer specifications	10%	40%	6%	61.56	Low
		Contribution to regional greenhouse gas emissions and climate change							Limit vehicle and equipment idling times when not in use.	5%				
	Vegetation clearing, excavation earth works, movement of construction vehicles	Nuisance impacts to nearby receptors due to exhaust emissions, odours and dust generation activities							Dust generated from earthworks and exposed surfaces shall be controlled through water spraying or other suitable dust suppression methods.	10%				
	Burning of waste & open fires								Construction materials likely to generate dust shall be covered during transport and storage	10%				
									Open burning of vegetation, waste or construction material shall be strictly prohibited.	5%				
Waste Management	Generation of construction and demolition waste.	Littering, visual impacts and attraction of pests and vermin.	8	6	5	8	152	High	An integrated Waste Management approach based on Waste Minimization must be implemented prior to commencement of construction. Waste Minimization efforts focused on re-use, recycling and recovery of waste in	10%	50%	6%	66.88	Low
	Vegetation clearing and green waste.	Pollution of soil, stormwater and groundwater through poor waste handling.							Suitable receptacles must be provided for general, recyclable, green and hazardous waste.	5%				
	Packaging waste from construction materials.	Hydrocarbon spills and fire hazards.							Waste shall be removed regularly by appropriately licensed waste service providers and disposed of or recycled at authorised facilities only.	5%				
	Storage of waste on-site	Windblown litter affecting adjacent residential properties and the retained Private Open Space.							Records of all waste removed from site, including waste manifests, weighbridge tickets and disposal certificates, shall be maintained and made available during environmental audits	5%				
	Generation of hazardous waste (e.g. waste oils, fuels, paints, solvents, chemical containers and contaminated materials).								Hazardous substances including oils, paints, fuels and chemicals shall be stored within bunded, covered and secure areas away from drainage lines and environmentally sensitive areas.	5%				
	Waste removal and transportation.	Illegal dumping within environmentally sensitive areas.							No waste, surplus material or construction rubble shall be disposed of within the retained Private Open Space, surrounding natural vegetation or adjacent properties	5%				
	Poor housekeeping practices.								Construction areas shall be kept clean at all times. Windblown litter shall be collected daily and all waste containers shall remain covered when not in use.	5%				
									Green waste generated from vegetation clearing shall be chipped for reuse where feasible or removed to an approved green waste recycling facility. Burning of vegetation is prohibited	5%				
									Environmental awareness training shall be provided to all personnel regarding waste segregation, pollution prevention, spill response and housekeeping requirements.	5%				

Water and Soil Pollution	Earthworks, excavation and foundation construction.	Soil contamination.	5	6	5	7	112	Moderate	Construction vehicles, equipment and machinery that are no longer operational or are leaking fluids shall be removed from site immediately	5%	85%	6%	10.08	Insignificant
	Vegetation clearing	Pollution of stormwater and downstream surface water resources							Construction activities shall be confined to the approved development footprint. No disturbance shall occur within the retained Private Open Space or environmentally sensitive "No-Go" areas.	5%				
	Stockpiling of topsoil and construction materials.	Sedimentation and erosion							Temporary erosion and sediment control measures (e.g. silt fences, berms, sediment traps and diversion channels) shall be installed before earthworks commence and maintained throughout construction.	10%				
	Hydrocarbon spills and leaks from construction vehicles, equipment and machinery.	Potential groundwater contamination.							Construction vehicles, equipment and machinery that are no longer operational or are leaking fluids shall be removed from site immediately.	5%				
	Storage and handling of fuels, oils, paints and chemicals	Degradation of ecological functioning within the retained Private Open Space and adjacent environmentally sensitive areas.							Construction activities shall be confined to the approved development footprint. No disturbance shall occur within the retained Private Open Space or environmentally sensitive "No-Go" areas.	5%				
	Hazardous substances entering stormwater systems.								Temporary erosion and sediment control measures (e.g. silt fences, berms, sediment traps and diversion channels) shall be installed before earthworks commence and maintained throughout construction.	10%				
	Inadequate stormwater management.								All hydrocarbon spills, fuel leaks or chemical spills shall be contained and cleaned immediately using provided spill kits.	5%				
									Contaminated soil shall be removed and disposed of at an authorised facility and records of waste removed kept on file for auditing purposes	5%				
									A Spill Prevention and Emergency Response Procedure shall be implemented. Spill kits shall be readily available on site	5%				
									All vehicles and or equipment must be maintained in accordance with manufacturer specifications to minimise the risk of leaks and equipment failure.	10%				
									Equipment or vehicles that are not in use are to be equipped with drip trays.	5%				
									Topsoil stockpiles shall be protected from erosion and shall not obstruct natural drainage paths. Exposed areas shall be stabilized as soon as practical to minimize sediment transport.	5%				
									Stormwater drains shall be kept free of construction debris, cement washings, sediment and waste. Concrete batching and washout activities shall not occur where runoff may enter the stormwater system	5%				
									Environmental awareness training shall be provided to all construction personnel on pollution prevention, spill response, stormwater protection and erosion control measures.	5%				

IMPACT ASSESSMENT - CONSTRUCTION PHASE														
ASPECT	**ACTIVITY**	**IDENTIFIED IMPACT**	**DURATION**	**PROBABILITY**	**EXTENT**	**SEVERITY**	**SIGNIFICANCE RATING BEFORE MITIGATION**		**MITIGATION**	**MITIGATION – ENGINEERING (-10%), ADMINISTRATIVE (-5%)**		**DEGREE TO WHICH THE IMPACT CAN BE REVERSED**	**SIGNIFICANCE RATING AFTER MITIGATION**	
Noise	Vegetation clearing, earthworks and excavation	Temporary nuisance to neighbouring residential properties and sensitive rec	7	7	5	8	152	High	Construction activities generating excessive noise shall be limited to normal working hours. No high-noise activities shall be undertaken outside approved working hours. No high-noise activities shall be undertaken outside approved working hours unless authorised	5%	25%	6%	104.88	Moderate
	Construction activities generating elevated noise levels.	Occupational exposure of workers to elevated noise levels.							Personnel exposed to elevated noise levels shall be provided with appropriate hearing protection, and its use shall be enforced in accordance with the Occupational Health and Safety Act	5%				
	Operation of construction equipment and machinery (excavators, graders, compactors, concrete mixers, generators, angle grinders, welding equipment, etc.).	Disturbance to local fauna within the retained Private Open Space							Stationary plant, generators and compressors shall, where practical, be positioned away from neighbouring residential properties and environmentally sensitive areas. Temporary acoustic barriers shall be utilised where required.	5%				
	Delivery vehicles and movement of heavy construction vehicles.								Construction vehicle movements shall be managed to minimise unnecessary reving, engine braking, hooting and prolonged idling within and adjacent to the site.	5%				
									An external complaints register shall be maintained. All noise-related complaints shall be investigated promptly, corrective measures implemented where necessary, and feedback provided to the complainant	5.00%				
Traffic	Increased number of vehicles traveling to and from site	Increased traffic congestion	3	6	3	5	60	Low	No parking of trucks or vehicles outside the boundary of the site is permitted	5%	20%	6%	44.40	Insignificant
									All vehicles are to be road worthy and comply with the National Traffic Regulations.	5%				
									Vehicles transporting raw materials, goods or waste to or from the site are not to be overloaded	5%				
	Movement of construction vehicles both on and around the site	Degradation of road and traffic infrastructure							All drivers are to be licensed in accordance with the vehicle and or equipment being driven	5%				
Health and Safety	Vegetation clearing, earthworks, excavation and construction activities	Personal injury	5	6	4	7	105	Moderate	All equipment used on site may only be operated by appropriately trained and / or licensed personnel.	10%	25%	8%	70.35	Low
	Movement and operation of construction vehicles, heavy machinery and equipment	Slips, trips and falls							PPE and safety gear appropriate to the task being undertaken is to be provided to all site personnel (e.g., hard hats, safety boots, reflective vests, masks etc.).	5%				
	Material handling, lifting, stacking and working at heights	Falling objects												
	Electrical installation and associated construction activities.	Vehicle and property collisions												
		Noise-induced hearing loss							Appropriate signage must be displayed on site to indicate the minimum PPE requirements for entry	5%				
		Respiratory irritation due to dust exposure												
		Fire and emergency incidents												
		Public safety risks associated with construction activities												
	Exposure to dust, noise, hazardous substances and general construction hazards, including uneven surfaces and excavations.	Unauthorized access to civilians							Access to the site must be managed during all hours of operation	5%				
		A site fence must be maintained to restrict unauthorized entry												
Biodiversity and Vegetation	Vegetation clearing, grubbing, excavation and construction activities	Loss of indigenous vegetation.	7	7	6	8	160	High	The approved development footprint shall be clearly demarcated prior to construction. No construction activities shall occur outside the approved footprint.	5%	20%	8	120	Moderate
	Movement of construction vehicles and machinery	Habitat fragmentation							Vegetation clearing shall be limited to the minimum area required for construction. Clearing shall proceed progressively to minimize unnecessary disturbance	5%				
	Temporary stockpiling of materials and topsoil.	Disturbance to fauna							No stockpiling of construction materials, topsoil, waste, machinery or hazardous substances shall occur within the retained Private Open Space or any designated No-Go Area.	5%				
		Introduction and spread of alien invasive plant species												
	Disturbance of indigenous vegetation.	Degradation of the ecological functioning of the Critical Biodiversity Area (CBA).							All construction personnel shall receive environmental awareness training on biodiversity protection, No-Go Areas, protected	5%				

IMPACT ASSESSMENT - OPERATIONAL PHASE														
ASPECT	**ACTIVITY**	**IDENTIFIED IMPACT**	**DURATION**	**PROBABILITY**	**EXTENT**	**SEVERITY**	**SIGNIFICANCE RATING BEFORE MITIGATION**		**MITIGATION**	**MITIGATION – ENGINEERING (-10%), ADMINISTRATIVE (-5%)**		**DEGREE TO WHICH THE IMPACT CAN BE REVERSED**	**SIGNIFICANCE RATING AFTER MITIGATION**	
Air Quality	Vehicle movements by guests, staff and service providers	Generation of greenhouse gas emissions associated with fuel combustion and electricity consumption	7	8	3	5	90	Low	All standby generators shall be serviced and maintained in accordance with manufacturer specifications to minimise exhaust emissions.	10%	25%	6%	62.1	Low
	Operation of standby generators during power outages.													
	Kitchen extraction systems and cooking activities and Waste Storage Areas	Temporary release of Greenhouse gas emissions from stanby generator							Waste storage areas shall be enclosed, maintained in a clean and hygienic condition	5%				
	Waste Storage Areas								Kitchen extraction and ventilation shall be maintained regularly to ensure efficient operation and minimise odour emissions.	10%				
	Maintenance activities involving paints, solvents and cleaning chemicals													
Waste Management	Generation of general domestic waste from guest accommodation, conference facilities, restaurants and offices	Littering, visual impacts and generation of nuisance odours	7	6	5	8	144	Moderate	Recyclable, organic (food and garden waste) shall be separated at source using clearly labelled waste receptacles.	5%	25%	6%	99.36	Low
	Garden waste from landscape maintenance.	Attraction of pests and vermin.							All waste shall be removed by appropriately licensed waste service providers and transported only to authorised recycling or disposal facilities.	5%				
	Storage of waste on-site.	Fire risks associated with waste accumulation.												
	Generation of hazardous waste (e.g. waste oils, paints, solvents, fluorescent lamps, batteries, cleaning chemicals and contaminated materials) during maintenance activities	Potential disposal of recyclable material							Waste storage areas shall be secure, covered, well ventilated and maintained in a clean and hygienic condition. Waste receptacles shall be clearly labelled to facilitate source separation and prevent cross-contamination.	5%				
	Waste collection, removal and transportation.								Garden waste generated during landscape maintenance shall be chipped, composted or removed to an approved green waste recycling facility. Open burning of garden waste shall not be permitted.	5%				
	Poor housekeeping and waste management practices.								Good housekeeping practices shall be maintained throughout the hotel property to prevent littering, pest infestations, odour generation and pollution. Any illegal dumping or waste-related incidents shall be investigated and corrective actions implemented immediately.	5%				

IMPACT ASSESSMENT - OPERATIONAL PHASE														
ASPECT	**ACTIVITY**	**IDENTIFIED IMPACT**	**DURATION**	**PROBABILITY**	**EXTENT**	**SEVERITY**	**SIGNIFICANCE RATING BEFORE MITIGATION**		**MITIGATION**	**MITIGATION – ENGINEERING (-10%), ADMINISTRATIVE (-5%)**		**DEGREE TO WHICH THE IMPACT CAN BE REVERSED**	**SIGNIFICANCE RATING AFTER MITIGATION**	
Water and Soil Pollution	Illegal dumping of waste	Contamination of soil, stormwater and groundwater	7	6	5	7	126	Moderate	Operations should be confined to the boundaries of the developed area.	5%	35%	6%	74.34	Low
	Hydrocarbon spills	Pollution of downstream water resources through contaminated runoff.							Waste collection areas to be equipped with concreted or impermeable surfaces	10%				
	Oil leaks from vehicles, equipment and machinery	Hydrocarbon spills and chemical leaks.							Convey stormwater to the proposed attenuation pond before discharge, as per SWMP	10%				
	Hazardous waste coming into contact with storm water leading to leachate generation	Degradation of the retained Private Open Space and surrounding environmentally sensitive areas												
	Maintenance of equipment machinery and vehicles	Sediment and pollutant transport into municipal stormwater infrastructure.								10%				
	Vehicle or machinery malfunction								Capture runoff through the internal piped stormwater network to prevent uncontrolled overland flow and soil erosion					
Noise	Operational activities generating high noise levels	Nuisance noise affecting neighbouring residential properties.	7	6	4	6	102	Moderate	Activities likely to generate elevated noise levels, including maintenance works, landscaping and refuse collection, shall be restricted to normal operating hours where reasonably practicable. Outdoor events and functions shall comply with approved operating hours and applicable municipal requirements.	5%	15%	6%	80.58	Low
	Use of machinery and equipment and machinery (grinders, welding machines, etc.	Occupational exposure of maintenance personnel to elevated noise levels.							Employees undertaking maintenance activities involving elevated noise levels shall be provided with appropriate hearing protection and other required PPE in accordance with the Occupational Health and Safety Act.	5%				
		Temporary increases in noise during maintenance activities							An external complaints management procedure and complaints register shall be maintained. All noise-related complaints shall be investigated promptly, corrective actions implemented where necessary, and feedback provided to the complainant.	5%				

IMPACT ASSESSMENT - OPERATIONAL PHASE															
ASPECT	**ACTIVITY**	**IDENTIFIED IMPACT**	**DURATION**	**PROBABILITY**	**EXTENT**	**SEVERITY**	**SIGNIFICANCE RATING BEFORE MITIGATION**		**MITIGATION**	**MITIGATION – ENGINEERING (-10%), ADMINISTRATIVE (-5%)**		**DEGREE TO WHICH THE IMPACT CAN BE REVERSED**	**SIGNIFICANCE RATING AFTER MITIGATION**	
Health and Safety	landscaping and maintenance activities.	Personal injuries	7	6	3	5	80	Low	Suitable and sufficient fire-fighting equipment shall be provided throughout the hotel, including guest accommodation, kitchens, conference facilities, plant rooms and service areas. Fire equipment shall be inspected, serviced and maintained by a competent service provider.	5%	20%	6%	59.2	Low
	Use of maintenance equipment and machinery.	Noise induced hearing loss												
	Manual handling and lifting of equipment and supplies.	Tripping hazards (Slips, trips and falls)												
	Slippery surfaces, uneven walkways and trip hazards.	Falling objects												
	Exposure to cleaning chemicals, dust and noise during maintenance activities	Exposure to fine dust												
	Use and handling of heavy machinery and equipment								Emergency evacuation procedures shall be implemented and displayed as per relevant guidelines. Fire drills and emergency response training shall be conducted regularly for all employees as per relevant guidelines	5%				
									Adequate first aid equipment and trained first aid personnel shall be available at all times.	5%				
									•All incidents, injuries shall be recorded and managed in accordance	5%				
Biodiversity and Vegetation	Routine landscape and garden maintenance.	Disturbance of indigenous vegetation	7	8	6	8	168	High	The retained Private Open Space and all environmentally sensitive areas shall remain protected throughout the operational life of the development. No infrastructure, storage of materials, dumping or unauthorised access shall be permitted within designated No-Go Areas.	5%	20%	6%	124.32	Moderate
	Management of the retained Private Open Space.	Introduction and spread of alien invasive plant species.							Existing demarcation, fencing and signage identifying environmentally sensitive areas and No-Go Areas shall be maintained in good condition and repaired where necessary.	5%				
	Irrigation and grounds maintenance.	Encroachment into the retained Private Open Space and environmentally sensitive areas.							Landscaping shall utilise indigenous, locally occurring and water-wise plant species compatible with the surrounding Egoli Granite Grassland vegetation.	5%				
		Long-term degradation of the ecological functioning of the Critical Biodiversity Area (CBA).							Irrigation systems shall be managed efficiently to maintain landscaped areas while avoiding excessive runoff, erosion or unnecessary water consumption.	5%				
Ownership and Responsibility	Construction, operation and future ownership or management of the proposed Boutique Hotel Development.	Non-compliance with the conditions of the Environmental Authorisation (EA) and approved Environmental Management Programme (EMPr).	7	3	3	5	65	Low	Where ownership of the property or management of the development changes, the Competent Authority shall be notified and any required amendment to the Environmental Authorisation shall be submitted in accordance with the Environmental Impact Assessment Regulations.	5%	10%	6%	54.6	Low
	Potential subdivision of the property and transfer of ownership or operational responsibilities.	Failure to clearly assign environmental responsibilities following changes in ownership, management or operation of the development.												
		Regulatory non-compliance resulting from failure to notify the Competent Authority of changes requiring amendment to the Environmental Authorisation.							All contractors, operators and future property managers shall be provided with a copy of the approved Environmental Authorisation and EMPr and shall be made aware of their environmental responsibilities before commencing any activities.	5%				
		Reduced environmental performance and ineffective environmental management throughout the construction and operational phases of the development												
Safety and Security	Daily hotel operations.	Personal injury or illness to guests, employees, contractors or visitors.	7	3	3	10	130	Moderate	Maintain and regularly update emergency procedures, emergency contact details, responsible personnel and evacuation plans. Updated information shall be communicated to all relevant personnel.	5%	20%	6%	96.2	Low
	Accommodation of guests, staff, contractors and visitors.	Fire, spills, environmental contamination and other emergency incidents.							Maintain emergency signage, evacuation plans, fire escape signage and hazard warning signs in good condition.	5%				
	Use and storage of cleaning chemicals, fuels and other hazardous substances	Unauthorised access, theft, vandalism and criminal activity							Conduct regular emergency response exercises, including fire evacuation drills, first aid response and spill response training, to evaluate the effectiveness of emergency procedures and identify opportunities for continual improvement.	5%				
	Fire safety and emergency response activities.	Exposure to hazardous substances							Maintain records of all safety incidents, emergency events, training, inspections and monitoring activities for auditing purposes and to demonstrate compliance with the Environmental Authorisation and approved EMPr	5%				
	Security and access control.	Non-compliance with health, safety and environmental legislation.												
	Vehicle and pedestrian movement													
	Operation of hotel facilities and services.													
Ecologically Sensitive and Flora Management	Landscaping and maintenance of gardens and open space areas.	Disturbance or damage to indigenous vegetation and ecological habitats.	7	6	6	10	190	High	Indigenous plant species appropriate to the local Egoli Granite Grassland vegetation type shall be utilised within landscaped areas wherever practicable to promote biodiversity and reduce water requirements	10%	40%	8%	98.8	Low
	Routine maintenance within the retained Private Open Space.	Disturbance to fauna utilising the retained Private Open Space.							The retained Private Open Space and environmentally sensitive areas shall be protected from unauthorised access, vegetation disturbance, dumping and inappropriate recreational activities	10%				
	Movement of guests, staff and visitors within landscaped and conservation areas.	Introduction and spread of alien invasive plant species.							No dumping of garden refuse, construction materials, waste or hazardous substances shall be permitted within the retained Private Open Space or landscaped areas	10%				
	Operation and maintenance of outdoor recreational facilities.	Degradation of the ecological integrity of the retained conservation area due to inappropriate landscaping or maintenance activities.							Any damage to indigenous vegetation or environmentally sensitive areas resulting from operational activities shall be rehabilitated as soon as reasonably practicable using indigenous vegetation appropriate to the surrounding ecosystem	10%				
	Alien invasive plant control and vegetation management.	Fire risk associated with uncontrolled ignition sources												

Faunal Management	Routine hotel operations within landscaped and conservation areas.	Disturbance and displacement of indigenous fauna due to routine hotel operations and human activity.	7	6	5	10	180	High	Vehicle movement shall be restricted to designated parking areas and approved access routes. No off-road driving shall be permitted within the retained Private Open Space or environmentally sensitive areas	10%	40%	8%	93.6	Low
	Landscape maintenance and groundskeeping	Injury or mortality of fauna resulting from vehicle movements within the development.							Guests, staff and contractors shall not intentionally disturb, capture, feed, hunt or harm indigenous fauna occurring within the retained Private Open Space or landscaped areas. Appropriate signage shall be installed where necessary	10%				
	Operation and maintenance within the retained Private Open Space.	Disturbance of reptiles, birds and small mammals during landscape maintenance and routine maintenance activities.							Any injured or distressed wildlife encountered on-site shall be reported immediately to the Hotel Manager and, where required, an appropriately qualified wildlife rehabilitator or conservation authority shall be contacted for assistance.	10%				
	Maintenance of internal roads and parking areas.	Loss or degradation of habitat resulting from inappropriate maintenance or encroachment into the retained Private Open Space							Outdoor lighting shall be appropriately directed and maintained to minimise unnecessary disturbance to nocturnal fauna within the retained Private Open Space.	10%				
		Increased human-wildlife interactions leading to disturbance, injury or displacement of indigenous fauna.												
		Disturbance to nocturnal fauna resulting from external lighting and increased night-time activity.												
Stormwater Management	Operation and maintenance of the hotel's stormwater drainage system.	Pollution of stormwater runoff due to litter, hydrocarbons, cleaning chemicals or other contaminants.	7	6	3	10	160	High	Stormwater infrastructure shall be kept free of litter, sediment, vegetation and other debris that may obstruct the natural flow of stormwater or reduce system capacity.	10%	40%	6%	86.4	Low
	Maintenance of landscaped areas, parking areas and internal roads	Localised flooding resulting from blocked, damaged or poorly maintained stormwater infrastructure.							Landscaping and maintenance activities shall be undertaken in a manner that promotes infiltration, minimises sediment transport and protects the integrity of the approved stormwater management system	10%				
	Runoff from roofs, paved surfaces and open spaces.	Soil erosion and sediment transport from landscaped areas, embankments and stormwater discharge points.							Oils, fuels, cleaning chemicals, waste, garden refuse and other pollutants shall not be discharged into the stormwater drainage system. Any spills shall be managed in accordance with the approved Spill Response Procedure	5%				
	Routine maintenance of stormwater attenuation infrastructure.	Damage to stormwater attenuation infrastructure reducing its effectiveness.							Routine inspections shall be undertaken following significant rainfall events to identify blockages, erosion, flooding or damage to the stormwater management infrastructure, and corrective actions shall be implemented where necessary	5%				
		Degradation of the ecological integrity of the retained Private Open Space and surrounding environmentally sensitive areas due to uncontrolled stormwater discharge.							All stormwater shall be captured through a piped internal stormwater network within the development, which will then be conveyed to the outlet point from the attenuation pond, as per requirements in the SWMP	10%				
		Increased maintenance requirements and potential damage to hotel infrastructure resulting from ineffective stormwater management												
Visual Impact Management	Operation and maintenance of the Boutique Hotel and associated infrastructure	Light pollution affecting neighbouring properties and environmentally sensitive areas.	7	6	4	6	102	Moderate	External lighting shall be directed downward and shielded where practicable to minimise light spill onto adjacent properties and the retained Private Open Space	5%	25%	6%	70.38	Low
	External lighting of buildings, parking areas and landscaped areas.	Degradation of the visual character of the site due to poor housekeeping, litter or inadequate maintenance.							Energy-efficient lighting, including LED luminaires or equivalent technology, shall be utilised throughout the development wherever practicable to minimise electricity consumption and greenhouse gas emissions.	10%				
	Landscape maintenance and gardening activities	Establishment and spread of alien invasive plant species							Landscaped areas shall be maintained using predominantly indigenous vegetation suited to local climatic conditions. Dead or damaged vegetation shall be replaced where necessary to maintain the visual quality of the site	5%				
	Waste storage and housekeeping.	Visual impacts from the development impacting the aesthetic of the area							The site, parking areas, landscaped areas and surrounding open spaces shall be kept free of litter and waste. Routine housekeeping and litter collection shall be undertaken to maintain a high standard of cleanliness	5%				
	General maintenance of the hotel and surrounding grounds.													
Traffic	Movement of guests, staff, visitors and service vehicles	Noise nuisance resulting from vehicle movements and unnecessary hooting.	7	3	3	5	65	Low	All guests, staff, contractors and service providers shall utilise designated access routes and parking areas. Unauthorised vehicle access into landscaped or environmentally sensitive areas shall be prohibited	5%	15%	6%	51.35	Low
	Deliveries and refuse collection.								Unnecessary hooting and reckless driving within the property shall be prohibited to minimise noise disturbance to guests and neighbouring properties.	5%				
	Use of internal access roads and parking areas.								Delivery vehicles, refuse collection vehicles and service providers shall utilise designated loading and service areas and, where practicable, deliveries shall be scheduled outside peak guest activity periods	5%				
	Operation of drop-off and pick-up areas													
Socio-Economic	Operation of the Boutique Hotel.	Positive contribution to local employment and economic development.	7	8	5	5	100	Positive	Preference shall, where practicable, be given to local suppliers, contractors and service providers for the procurement of goods and services.	5%	10%	4%	86	Low
	Employment of hotel staff and service providers	Increased demand for local goods and services, benefiting the local economy.												
	Procurement of goods and services	Increased local socio-economic benefits where local employment and procurement opportunities are maximised												
		Heightened tax benefit due to increased property value and associated taxes							Employment opportunities shall where possible be given to local residents	5%				

IMPACT ASSESSMENT - DECOMMISSIONING PHASE																
ASPECT	**ACTIVITY**	**IDENTIFIED IMPACT**	**DURATION**	**PROBABILITY**	**EXTENT**	**SEVERITY**	**SIGNIFICANCE RATING BEFORE MITIGATION**		**MITIGATION**	**MITIGATION – ENGINEERING (-10%), ADMINISTRATIVE (-5%)**		**DEGREE TO WHICH THE IMPACT CAN BE REVERSED**	**SIGNIFICANCE RATING AFTER MITIGATION**	
Air Quality	Demolition of buildings and infrastructure; movement of trucks and heavy machinery; handling and transport of rubble	Temporary deterioration in local air quality due to dust, exhaust emissions and greenhouse gas emissions; nuisance dust affecting neighbouring residential properties	5	8	6	6	114	Moderate	Apply dust suppression measures (e.g. water spraying) where required	10%	55%	5%	45.6	Insignificant
									Maintain good housekeeping and remove demolition waste regularly	10%				
									Minimise vehicle and equipment idling times	5%				
									Service and maintain demolition equipment and vehicles regularly	5%				
									Use fuel-efficient machinery and equipment where feasible or alternatively promote the use of low sulphur containing fuels	10%				
									Open burning of waste or vegetation is prohibited	5%				
									Gas cutting and or grinding must be undertaken in well-ventilated areas or in open air	10%				
Waste Management	Demolition of structures.	Littering, visual impacts on surrounding landowners and occupants	6	6	5	10	170	High	Waste to be removed from site with the purpose of recycling, recovery, treatment and or disposal by licensed service providers	5%	30%	8%	105.4	Moderate
	Dismantling of machines and equipment	Visual degradation of the site leading to nuisance conditions to surrounding land users							Waste removed for the purpose of recycling recovery, treatment or disposal is only to be diverted to licensed facilities authorized to accept the waste for the intended recycling, recovery, treatment or disposal.	10%				
	Generation of building rubble	Risk of hydrocarbon spills, leaks & site fires when decommissioning machinery and equipment							Contractors shall be inducted on the approved EMPr and Closure Plan	5%				
	Storage of waste on-site													
	Generation of hazardous waste (e.g., waste oils, contaminated rags, solvents, hydrocarbons) from decommissioning machinery and equipment								Waste generated during the decommissioning phase is to be separated at source in order to limit cross contamination between general and hazardous waste	10%				
Water and Soil Pollution	Illegal dumping of waste	Soil, surface water and potentially ground water contamination	3	6	5	10	140	Moderate	Concrete or impermeable surfaces are to be kept intact as far as reasonably possible before being removed as part of decommissioning operations	10%	55%	5%	56	Low
	Hydrocarbon spills	Potential storm water contamination							A spill response procedure is to be implemented throughout the decommissioning phase	5%				
	Oil leaks from vehicles, equipment and machinery	Machinery malfunction posing a risk of hydrocarbon spills or leaks leading to soil or potential surface water or storm water contamination							A spill response kit to be kept on site and used for the cleanup of spills as and when they occur	10%				
	Hazardous waste coming into contact with storm water leading to leachate generation								An incident register must be maintained throughout the decommissioning phase	5%				
									Vehicles and equipment stored on site for periods exceeding 24 hours are to be equipped with drip trays	10%				
	Vehicle or machinery malfunction								Use of drip trays a, tarps and absorbent material must be promoted and kept on hand when manually decommissioning or disassembling equipment and or machinery that may contain hydrocarbon fluids or hydraulics	10%				
									Vehicles and equipment used for decommissioning activities must be well maintained and serviced in accordance with manufacturer specifications	5%				
Noise	Decommissioning activities generating high noise levels	Personal exposure to high noise levels over an extended period of time leading to noise induced hearing loss	7	8	5	8	160	High	All personnel undertaking high noise activities or that are working in high noise areas must be equipped with appropriate hearing protection.	10%	25%	6%	110.4	Moderate
	Use of heavy machinery and equipment (grinders, welding machines, etc.)	Nuisance conditions to surrounding landowners and occupants due to high noise levels during the decommissioning phase							Employees are to be made aware of noise induced hearing loss and appropriate prevention measures	10%				
									An external complaints register is to be maintained and all complaints relating to excessive noise recorded and appropriately addressed before feedback is provided to the complaining party	5%				
Socio Economic	Loss of employment opportunities due to site closure and decommissioning	Loss of employment opportunities when site closes	8	9	7	8	192	High	Engagement with employees in advance whilst following legal requirements.	5%	5%	5%	172.8	High

IMPACT ASSESSMENT - "NO-GO" ALTERNATIVE														
ASPECT	**ACTIVITY**	**IDENTIFIED IMPACT**	**DURATION**	**PROBABILITY**	**EXTENT**	**SEVERITY**	**SIGNIFICANCE RATING BEFORE MITIGATION**		**MITIGATION**	**MITIGATION – ENGINEERING (-10%), ADMINISTRATIVE (-5%)**		**DEGREE TO WHICH THE IMPACT CAN BE REVERSED**	**SIGNIFICANCE RATING AFTER MITIGATION**	
Socio Economic	Proposed boutique hotel development does not proceed	Loss of direct and indirect employment opportunities during construction and operation.	10	10	5	10	250	Severe	Explore alternative development or investment opportunities on the local area that may contribute to local job creation.	5%	10%	0%	225	Severe
		Loss of skills development and training opportunities for local communities							None	0%				
		Reduced economic growth and investment within the local area.							Explore alternative development or investment opportunities on the local area that may contribute to local job creation.	5%				
Biodiversity and Vegetation	No vegetation clearing or construction activities take place.	Positive impact through the avoidance of habitat disturbance and loss of indigenous vegetation	8	10	3	8	168	Positive	None	0%	0%	0%	168	Posetive
	Possible encraoachment of alien invasive species into the Boschkop Nature Reserve	Possible encroachment of alien invasive species into the Boschkop Nature Reserve due to lack of vegetation maintenance and implementation of control measures from the residential property	10	8	5	8	184	High	None - Without prior approval, no further development within the designated site will be authorised. Restricting possible upgrades to existing infrastructure	0%	5%	0%	18395%	High
	Increased potential for future development within the Boschkop Nature Reserves footprint	Inaccurate zoning of the property may result in the potential for future encroachment into the Boschkop Nature Reserve along the portion of the proposed site which may result in unofficial or unregulated development within the 1.3 ha which would otherwise be protected	10	10	5	10	250	Severe	None	0%	0%	0%	250	Severe
Storm Water	Sedimentation of municipal storm water infrastructure downstream of the site	Sedimentation of municipal storm water infrastructure downstream of the site due to lack of storm water control implementation that would have been associated with the development of the site	7	7	8	6	132	Moderate	None	0%	0%	0%	132	Moderate
Noise	No construction or operational hotel activities occur	Positive impact through the avoidance of construction and operational noise impacts.	10	0	3	5	65	Positive	No mitigation required. Existing ambient noise conditions will be maintained	5%	5%	0%	61.75	Positive
Traffic	No increase in construction or visitor traffic occurs	Positive impact through the avoidance of additional traffic volumes and associated road impacts	10	0	3	5	65	Positive	No mitigation required. Existing traffic conditions will remain unchanged.	5%	5%	0%	61.75	Positive
Health and Safety	No Construction Activities occure	Positive impact through the avoidance of construction-related injuries, dust exposure, noise exposure and other occupational risks	10	0	3	5	65	Positive	No mitigation required. Construction-related occupational health and safety risks will not arise.	5%	5%	0%	64.95	Positive
Air Quality	No construction or operational activities associated with the hotel occur.	Positive impact through the avoidance of construction dust, vehicle emissions and increased energy consumption	10	0	3	5	65	Positive	No mitigation required. Existing air quality conditions will remain unchanged and no additional emissions will be generated.	5%	5%	0%	6495%	Positive

IMPACT ASSESSMENT - DECOMMISSIONING PHASE																
ASPECT	**ACTIVITY**	**IDENTIFIED IMPACT**	**DURATION**	**PROBABILITY**	**EXTENT**	**SEVERITY**	**SIGNIFICANCE RATING BEFORE MITIGATION**		**MITIGATION**	**MITIGATION – ENGINEERING (-10%), ADMINISTRATIVE (-5%)**		**DEGREE TO WHICH THE IMPACT CAN BE REVERSED**	**SIGNIFICANCE RATING AFTER MITIGATION**	
Air Quality	Demolition of buildings and infrastructure; movement of trucks and heavy machinery; handling and transport of rubble	Temporary deterioration in local air quality due to dust, exhaust emissions and greenhouse gas emissions; nuisance dust affecting neighbouring residential properties	5	8	6	6	114	Moderate	Apply dust suppression measures (e.g. water spraying) where required	10%	30%	5%	74.1	Low
									Maintain good housekeeping and remove demolition waste regularly	10%				
									Minimise vehicle and equipment idling times	5%				
									Open burning of waste or vegetation is prohibited	5%				
Waste Management	Demolition of structures.	Littering, visual impacts on surrounding landowners and occupants	6	6	5	10	170	High	Waste removed for the purpose of recycling recovery, treatment or disposal is only to be diverted to licensed facilities authorized to accept the waste for the intended recycling, recovery, treatment or disposal.	10%	20%	8%	122.4	Moderate
	Dismantling of machines and equipment	Visual degradation of the site leading to nuisance conditions to surrounding land users												
	Generation of building rubble	Risk of hydrocarbon spills, leaks & site fires when decommissioning machinery and equipment												
	Storage of waste on-site													
	Generation of hazardous waste (e.g., waste oils, contaminated rags, solvents, hydrocarbons) from decommissioning machinery and equipment								Waste generated during the decommissioning phase is to be separated at source in order to limit cross contamination between general and hazardous waste	10%				
Water and Soil Pollution	Illegal dumping of waste	Soil, surface water and potentially ground water contamination	3	6	5	10	140	Moderate	Concrete or impermeable surfaces are to be kept intact as far as reasonably possible before being removed as part of decommissioning operations	10%	30%	5%	91	Low
		Potential storm water contamination												
	Oil leaks from vehicles, equipment and machinery	Machinery malfunction posing a risk of hydrocarbon spills or leaks leading to soil or potential surface water or storm water contamination							A spill response kit to be kept on site and used for the cleanup of spills as and when they occur	10%				
	Hazardous waste coming into contact with storm water leading to leachate generation								Vehicles and equipment stored on site for periods exceeding 24 hours are to be equipped with drip trays	10%				
Noise	Decommissioning activities generating high noise levels	Personal exposure to high noise levels over an extended period of time leading to noise induced hearing loss	7	8	5	8	160	High	All personnel undertaking high noise activities or that are working in high noise areas must be equipped with appropriate hearing protection.	10%	25%	6%	110.4	Moderate
	Use of heavy machinery and equipment (grinders, welding machines, etc.)	Nuisance conditions to surrounding landowners and occupants due to high noise levels during the decommissioning phase							Employees are to be made aware of noise induced hearing loss and appropriate prevention measures	10%				
									An external complaints register is to be maintained and all complaints relating to excessive noise recorded and appropriately addressed before feedback is provided to the complaining party	5%				
Socio Economic	Loss of employment opportunities due to site closure and decommissioning	Loss of employment opportunities when site closes	8	9	7	8	192	High	Engagement with employees in advance whilst following legal requirements.	5%	5%	5%	172.8	High

Appendix J: Screening Tool Report

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11 Alice Lane, Building 3, 5th Floor, Sandton, Johannesburg, 2196 | Registration Number 2020/642/160/07

SCREENING REPORT FOR AN ENVIRONMENTAL AUTHORIZATION AS REQUIRED BY THE 2014 EIA REGULATIONS – PROPOSED SITE ENVIRONMENTAL SENSITIVITY

EIA Reference number: 002/26-27/E0054

Project name: Application for an Environmental Authorisation for the Development of a Boutique Hotel

Project title: Proposed Development of a Boutique Hotel at 122 Sherwell Avenue, Randburg

Date screening report generated: 27/07/2026 09:58:02

Applicant: DMFT Property Developers (Pty) Ltd

Compiler: LexEco (Pty) Ltd

Compiler signature: .....

Application Category: Transformation of land|Indigenous vegetation

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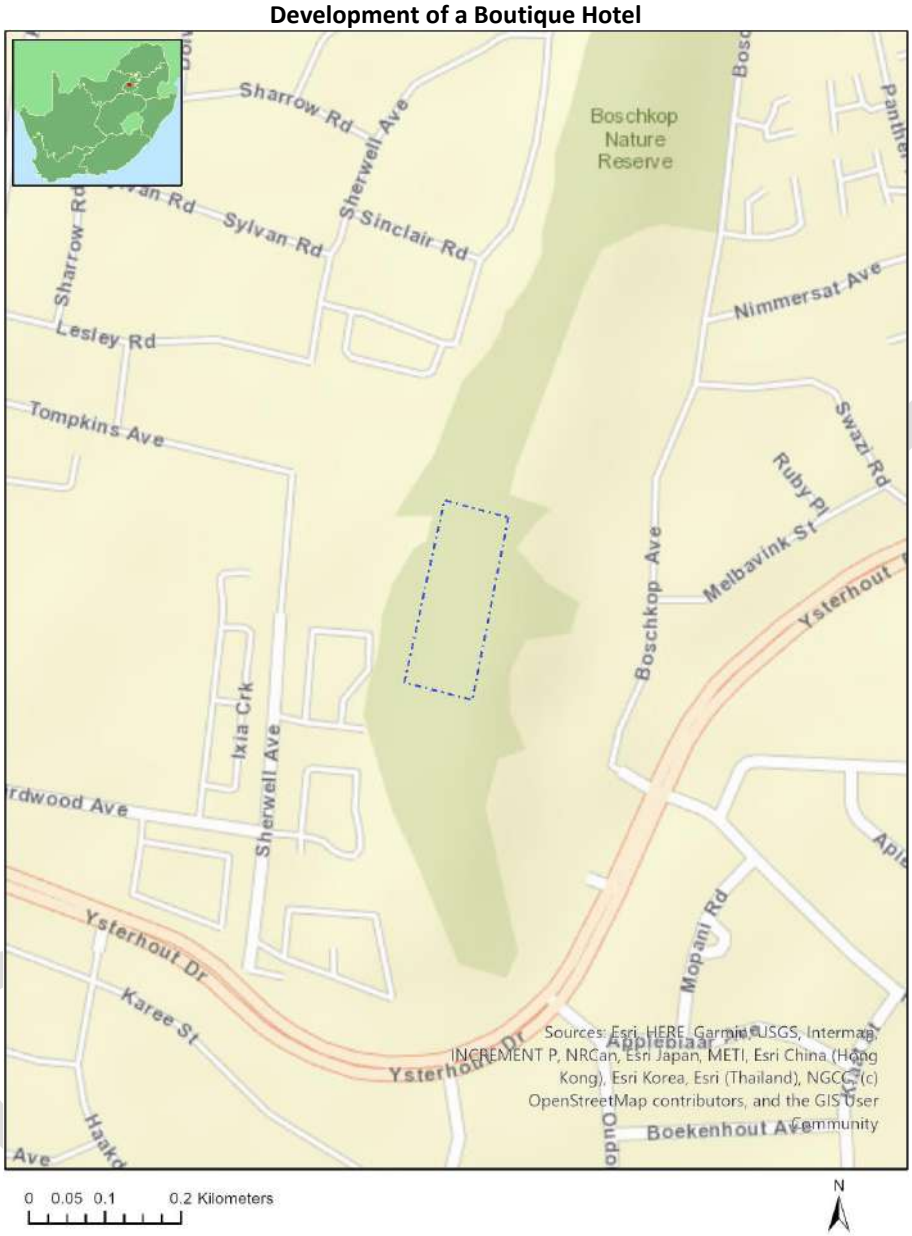
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Proposed Project Location

Orientation map 1: General location

General Orientation: Application for an Environmental Authorisation for the Development of a Boutique Hotel



Map of proposed site and relevant area(s)



Cadastral details of the proposed site

Property details:

No	Farm Name	Farm/ Erf No	Portion	Latitude	Longitude	Property Type
1	BOSKRUIN	1180	0	26°5'30.76S	27°57'7.78E	Erven
2	BOSCHKOP	199	0	26°5'10.45S	27°57'0.9E	Farm
3	BOSCHKOP	199	603	26°5'28.67S	27°57'5.4E	Farm Portion
4	BOSCHKOP	199	556	26°5'34.93S	27°57'7.64E	Farm Portion

Development footprint[1] vertices:
No development footprint(s) specified.

Wind and Solar developments with an approved Environmental Authorisation or applications under consideration within 30 km of the proposed area

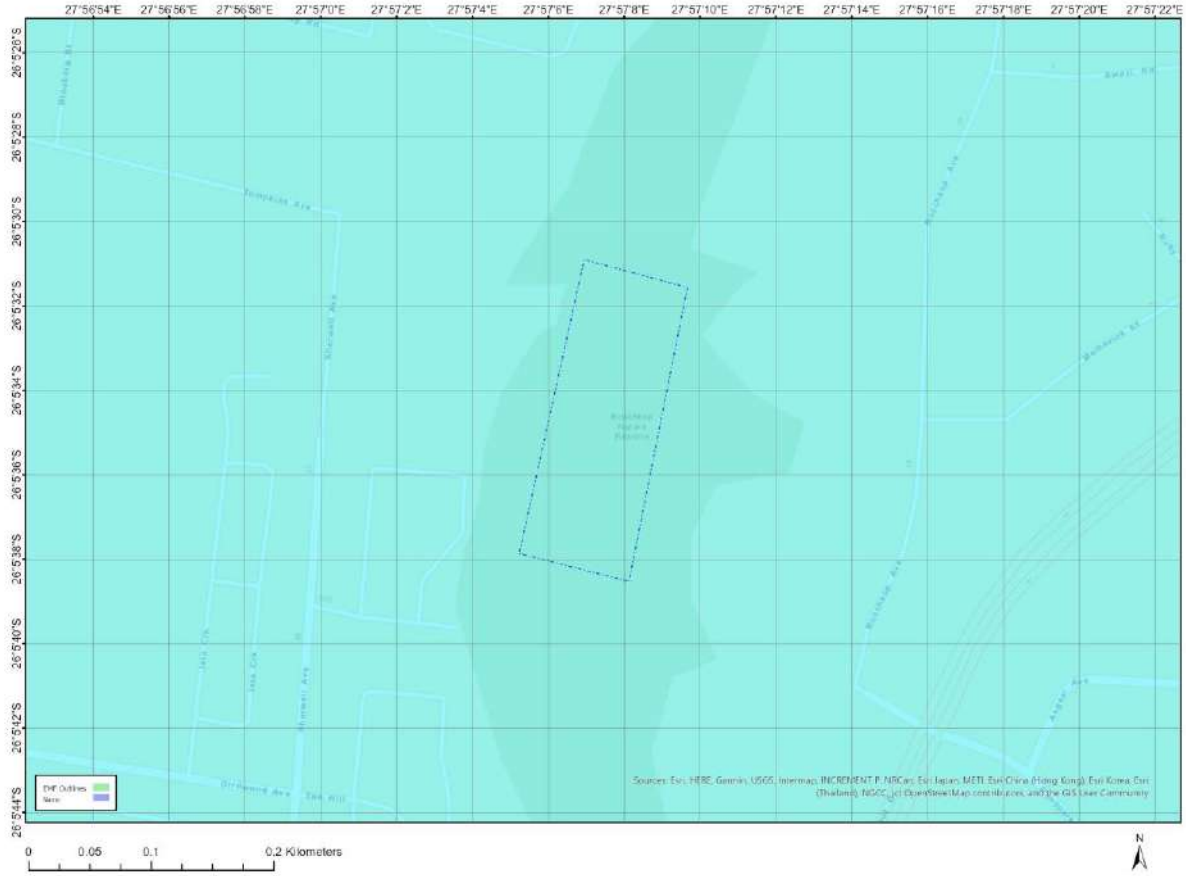
No	EIA Reference No	Classification	Status of application	Distance from proposed area (km)
1	002/15-16/E0152	Solar PV	Approved	26.6
2	12/12/20/2537	Solar PV	Approved	28.8
3	12/12/20/2537/AM1	Solar PV	Approved	23.2
4	12/12/20/2530	Solar PV	Approved	15.3

[1] "development footprint", means the area within the site on which the development will take place and incudes all ancillary developments for example roads, power lines, boundary walls, paving etc. which require vegetation clearance or which will be disturbed and for which the application has been submitted.

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5	12/12/20/2539	Solar PV	Approved	22.8
6	12/12/20/2539/AM1	Solar PV	Approved	22.8
7	12/12/20/2551	Solar PV	Approved	17.1
8	12/12/20/2537/AM3	Solar PV	Approved	23.2

Environmental Management Frameworks relevant to the application



Environmental Management Framework	LINK
Gauteng EMF	https://screening.environment.gov.za/ScreeningDownloads/EMF/GPEMF_2021_Gazette_and_summary.pdf

Environmental screening results and assessment outcomes

The following sections contain a summary of any development incentives, restrictions, exclusions or prohibitions that apply to the proposed development site as well as the most environmental sensitive features on the site based on the site sensitivity screening results for the application classification that was selected. The application classification selected for this report is: **Transformation of land|Indigenous vegetation**.

Relevant development incentives, restrictions, exclusions or prohibitions

The following development incentives, restrictions, exclusions or prohibitions and their implications that apply to this site are indicated below.

Incentive, restriction or prohibition	Implication
Strategic Transmission Corridor-Central corridor	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_EGI.pdf
Strategic Gas Pipeline Corridors-Phase 3: Richards Bay to Gauteng	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_GAS.pdf

Proposed Development Area Environmental Sensitivity

The following summary of the development site environmental sensitivities is identified. Only the highest environmental sensitivity is indicated. The footprint environmental sensitivities for the proposed development footprint as identified, are indicative only and must be verified on site by a suitably qualified person before the specialist assessments identified below can be confirmed.

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

Specialist assessments identified

Based on the selected classification, and the known impacts associated with the proposed development, the following list of specialist assessments have been identified for inclusion in the assessment report. It is the responsibility of the EAP to confirm this list and to motivate in the assessment report, the reason for not including any of the identified specialist study including the provision of photographic evidence of the site situation.

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

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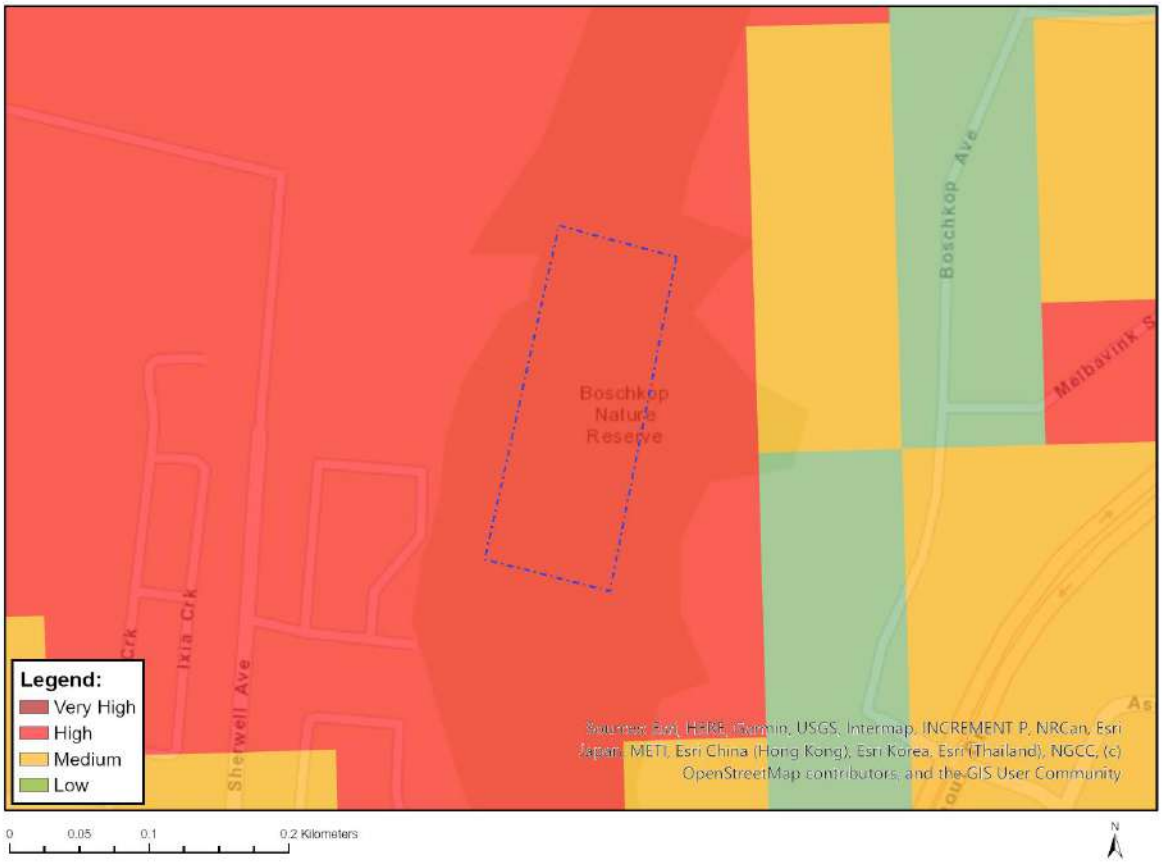
6	Socio-Economic Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
7	Plant Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Plant_Species_Assessment_Protocols.pdf
8	Animal Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Animal_Species_Assessment_Protocols.pdf

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Results of the environmental sensitivity of the proposed area.

The following section represents the results of the screening for environmental sensitivity of the proposed site for relevant environmental themes associated with the project classification. It is the duty of the EAP to ensure that the environmental themes provided by the screening tool are comprehensive and complete for the project. Refer to the disclaimer.

MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity Features:

Sensitivity	Feature(s)
High	09. Moderate-High
High	08. Moderate

MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY



Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at eiadatarequests@sanbi.org.za listing all sensitive species with their unique identifiers for which information is required. The name has been withheld as the species may be prone to illegal harvesting and must be protected. SANBI will release the actual species name after the details of the EAP or specialist have been documented.

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Medium	Mammalia-Chrysospalax villosus
Medium	Mammalia-Crocidura maquassiensis
Medium	Mammalia-Dasymys robertsii
Medium	Mammalia-Ourebia ourebi ourebi
Medium	Invertebrate-Clonia uvarovi

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MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity

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MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity

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MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Medium	Between 15 and 35 km from a civil aviation radar
Medium	Between 15 and 35 km from a major civil aviation aerodrome
Medium	Between 8 and 15 km of other civil aviation aerodrome

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MAP OF RELATIVE DEFENCE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity

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MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY



Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at eiadatarequests@sanbi.org.za listing all sensitive species with their unique identifiers for which information is required. The name has been withheld as the species may be prone to illegal harvesting and must be protected. SANBI will release the actual species name after the details of the EAP or specialist have been documented.

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity

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MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Very High	National Protected Area Expansion Strategy (NPAES)
Very High	CR_Egoli Granite Grassland

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Appendix K: Site Verification Report

LEXeco

LEGAL INSIGHT. SUSTAINABLE IMPACT.

Site Verification Report

DMFT Property Developers (Pty) Ltd

Application for the Proposed Development of a Boutique Hotel at 122 Sherwell Avenue, Randburg within the City of Johannesburg Metropolitan Municipality.Application Ref No: 002/26-27/E0054

21 August 2026

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Report Title	Site Verification Report in Support of the Environmental Authorization Application for the proposed Boutique Hotel situated on Portion 556 of Farm Boschkop 199-IQ
Report Date	21 August 2026
EAP Details	**LexEco (Pty) Ltd** 11 Alice Lane Building 3, 5th Floor Sandton, Johannesburg 2146 **Contact Person:** Riette Landsberg EAPASA Reg Nr: 2025/20547 Tel: 010 023 8543 Cell : 076 099 1290 Email: riette@lexeco.co.za
Applicant Details	**DMFT Property Developers (Pty) Ltd** Pieter Henning 18 Hume Road, Dunkeld West 2196 Tel: 071 337 4824 Cell: 071 337 4824 Email: pieter@dmft.co.za
Application Reference No:	002/26-27/E0054

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1. INTRODUCTION AND PROJECT BACKGROUND

DMFT Property Developers (Pty) Ltd proposes the development of a Boutique Hotel on Portion 556 of the Farm Boschkop 199-IQ, located at 122 Sherwell Avenue, Boskruin, which falls within the jurisdiction of the City of Johannesburg Metropolitan Municipality in the Gauteng Province.

The proposed site covers a total area of approximately 2.72 ha, half of which forms part of the Boschkop Nature Reserve which lies to the east of the site. An application for the establishment of a township on Portion 556 of the farm Boschkop, 199-IQ (proposed site) to be known as Boskruin Extension 64 is currently underway. The purpose of the application is to establish a township consisting of two erven, with one erf, covering 1.42 ha in extent, to be zoned "*Special*" for the purpose developing a Boutique Hotel, and the second erf, covering 1.30 ha in extent to be zoned "*Private Open Space*" for the purpose of conservation of the natural area associated with the Boschkop nature reserve. the "*Private Open Space*" erf, covering an extent of a will ensure that the natural area is protected from development in the future.

The proposed township will result in the subdivision of Portion 566 into two erven. The first, to be referred to as Erf 1, (covering approximately 1.4206 ha), will be rezoned to "Special" for the development of the boutique hotel, and Erf 2 (covering approximately 1.30 ha), will be rezoned to "Private Open Space" and retained for conservation purposes. The proposed hotel will comprise 20 en-suite guest rooms, together with associated hospitality facilities including a reception area, dining facilities, swimming pool, spa, parking areas and supporting infrastructure. Development will be concentrated within the already disturbed portion of the property occupied by the existing dwelling, which will be upgraded and incorporated into the overall hotel design, while the undeveloped greenfield portion will remain protected to maintain ecological functioning and biodiversity.

1.1. Purpose of this Report

On the 20th March 2020, the Department of Forestry, Fisheries and the Environment (DFFE) published GN 320, setting out "*Procedures for the Assessment and Minimum Criteria for Reporting on Identified Environmental Themes in terms of Section 25(5)(a) an (h) and 44 of the National Environmental Management Act, 1998, when applying for an Environmental Authorisation*". These regulations require that an applicant must conduct an environmental sensitivity assessment of the site by utilising the Departments national web based Environmental Screening Tool ("**Screening Tool**").

The National Web based Environmental Screening Tool is a geographically based web-enabled application which allows a proponent intending to submit an application for an Environmental Authorisation in terms of the Environmental Impact Assessment (EIA) Regulations 2014, as amended to screen their proposed site for any environmental sensitivity. The Screening Tool identifies related exclusions and/ or specific

requirements including specialist studies applicable to the proposed site and/or development, based on the national sector classification and the environmental sensitivity of the site.

Prior to undertaking a specialist assessment, the current use of the land and the environmental sensitivity of the site under consideration identified by the Screening Tool, must be confirmed by undertaking a site sensitivity verification.

A site sensitivity verification must be undertaken by an environmental assessment practitioner or a specialist. The aim of the site sensitivity verification is to confirm or dispute the current use of the proposed project site and associated environmental sensitivity as identified by the screening tool. In summary the site sensitivity report must;

- Verify land use and theme sensitivities as identified by the DFFE Screening Tool;
- Confirm or disconfirm the need for a particular specialist assessment(s) as indicated by the DFFE Screening Tool; and
- Provide a motivation as to why the proposed a particular theme(s) is not applicable to the proposed development.

1.2. EAP DETAILS AND EXPERTISE

LexEco (Pty) Ltd was appointed by DMFT Property Developers as an independent Environmental Assessment Practitioner to facilitate the application for an Environmental Authorisation on behalf of DMFT Property Developers.

The section below includes details of the appointed EAP and a summary of their expertise.

Table 1: Author

Appointed EAP:	Riette Landsberg
EAPASA Reg Nr:	2025/20547
Tel:	076 099 1290
Email:	riette@lexeco.co.za
Address:	11 Alice Lane, Building 3, 5th Floor, Sandton, Johannesburg, 2196

Table 2: Co-Author

Candidate EAP:	Shaylen Ramsamy Naidoo
EAPASA Reg Nr:	2024/8707
Tel:	079 975 8942
Email:	shaylen@lexeco.co.za
Address:	11 Alice Lane, Building 3, 5th Floor, Sandton, Johannesburg, 2196

1.3. Environmental Assessment Practitioners' Experience

- ***Riette Landsberg (Author)***

Riette Landsberg is an experienced Environmental Consultant and Registered Environmental Assessment Practitioner with over 12 years' experience in environmental management. With an Honours degree in Environmental Sciences form the North West University, Riette is well equipped with a sound knowledge and understanding of the natural environment. Riette has successfully led and completed several applications and projects, including Full Scoping EIA's and Basic Assessments under NEMA and NEMWA and NEMAQA and developed and the implemented Environmental Management Programmes. Riette also has extensive experience in the leading of environmental audits, including Water Use Licenses, Air Emissions Licenses, Waste Management Licenses, Environmental Authorisations and Environmental Management Programmes. Years of working in the consulting field have provided Riette with a good understanding of the working environment and how to link comprehensive management measures with the legislative world, ensuring sustainability and economic growth whilst protecting our natural resources and the environment.

Riette holds a valid registration with the Environmental Assessment Practitioners Association of South Africa (EAPASA) (registration number 2025/20547) and is also a registered member of the International Association for Impact Assessment South Africa (IAIASA) (Member number 7822)

- ***Shaylen Ramsamy Naidoo (Co-Author)***

Shaylen is a registered environmental scientist with the South African Council for Natural Scientific Professionals (Reg Nr: 130920). Shaylen is also registered as a Candidate EAP with the with the Environmental Assessment Practitioners Association of South Africa (EAPASA) (Reg Nr 2024/8707).

After completing his studies and obtaining an Honours Degree in Environmental Technology and Applied Sciences from the University of Pretoria, Shaylen has worked as an environmental scientist, GIS specialist, and climate data analyst. With a strong technical background in ArcGIS Pro, Python scripting, statistical analysis, air dispersion modelling, LiDAR data processing, and water-use GIS, Shaylen is equipped in delivering technically rigorous environmental assessments, geospatial analysis, and reporting across the mining, energy, industrial, water resource, and climate sectors in South Africa.

Shaylen also has experience in managing and compiling Environmental Impact Assessments (EIAs), Basic Assessments, Waste Management Licence applications, and environmental compliance documentation in accordance with the National Environmental Management Act (NEMA) and related legislation. Shaylen possesses a strong academic foundation supported by practical industry experience in environmental assessment and regulatory processes.

2. SITE LOCATION AND DESKTOP ASSESSMENT

The proposed Boutique Hotel development will be located on Portion 556 of the Farm Boschkop 199-IQ, situated at 122 Sherwell Avenue in the established suburb of Boskruin, Johannesburg, Gauteng Province. The property falls within the jurisdiction of the City of Johannesburg Metropolitan Municipality and measures approximately 2.72 hectares in extent. Access to the site is provided via a registered 5-metre-wide right-of-way servitude extending from Sherwell Avenue through Boskruin Extension 46, ensuring legal and practical access to the property.

The site is situated within a predominantly residential area characterised by low- and medium-density housing developments, educational facilities, private open spaces and supporting community infrastructure. The surrounding properties are primarily zoned “Residential 1” and “Residential 2”, with isolated areas zoned for agricultural, municipal and special purposes. The property is well connected to the surrounding road network, with major routes such as Beyers Naudé Drive, President Fouche Drive, Malibongwe Drive and the N1 Western Bypass located within close proximity, providing convenient access to the site and surrounding amenities.

Portion 556 of the Farm Boschkop, 199-IQ occupies a unique location adjacent to the Boschkop Nature Area and contains areas of indigenous vegetation that contribute to the ecological character of the area. While portions of the property have experienced historical disturbance, the eastern section remains largely undeveloped and supports natural habitat associated with the broader ecological network. To balance development and conservation objectives, the applicant seeks to create a “Special” erf for the Boutique Hotel development and a separate “Private Open Space” erf, ensuring the long-term protection of approximately 1.30 hectares of environmentally sensitive land.

CITY OF JOHANNESBURG: Corporate Geo-Informatics

Property Report

Reports generated from the website can be used for the purpose of zoning information. Zoning information must be read in conjunction with the applicable Town Planning Scheme clauses and Amendment Scheme relevant to the erf. More information can be obtained from the information desk on the upper ground level, Nedbank building, Newtown Junction Mall.

Status Subtype	1
Use Zone	ZAGR01
Tps Name	RANDBURG
Zone Desc	Agricultural
Shape	Polygon
Shape.STArea()	49969,481813
Shape.STLength()	1094,337695

Map of the location

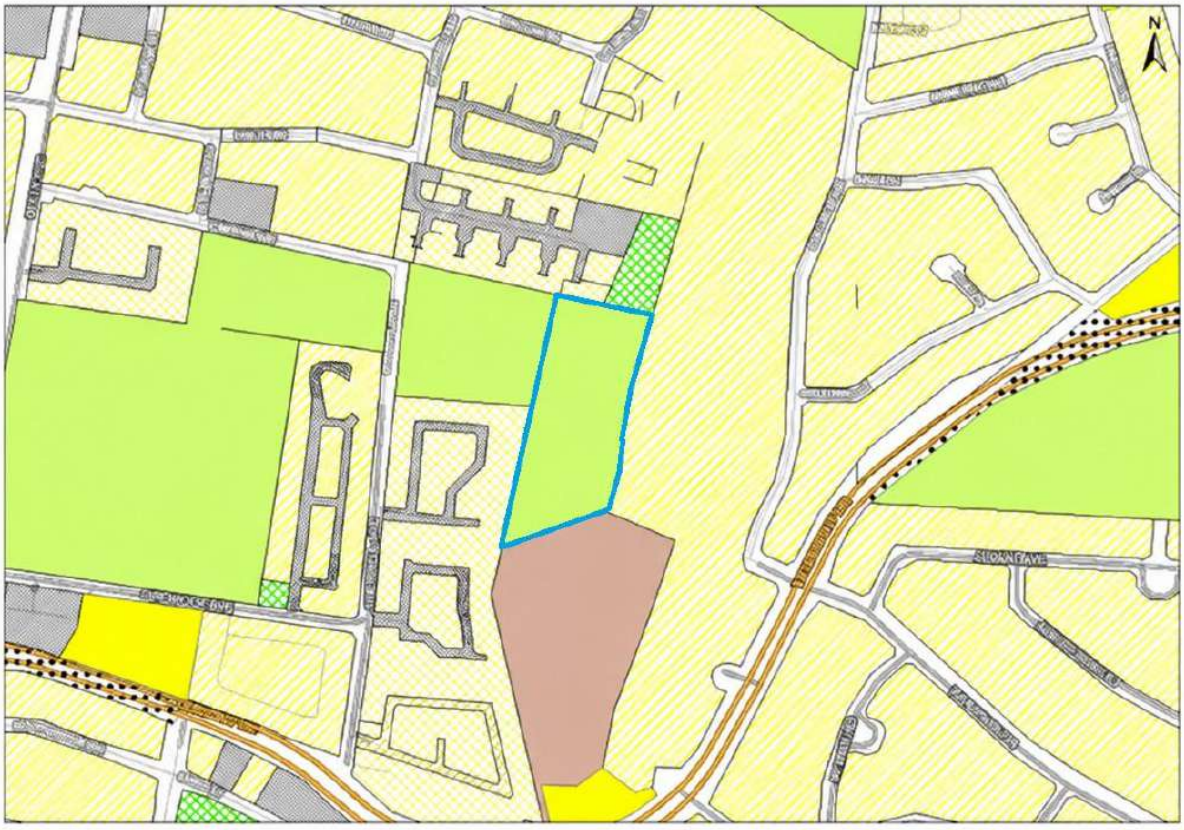


Figure 1: City of Johannesburg Zoning

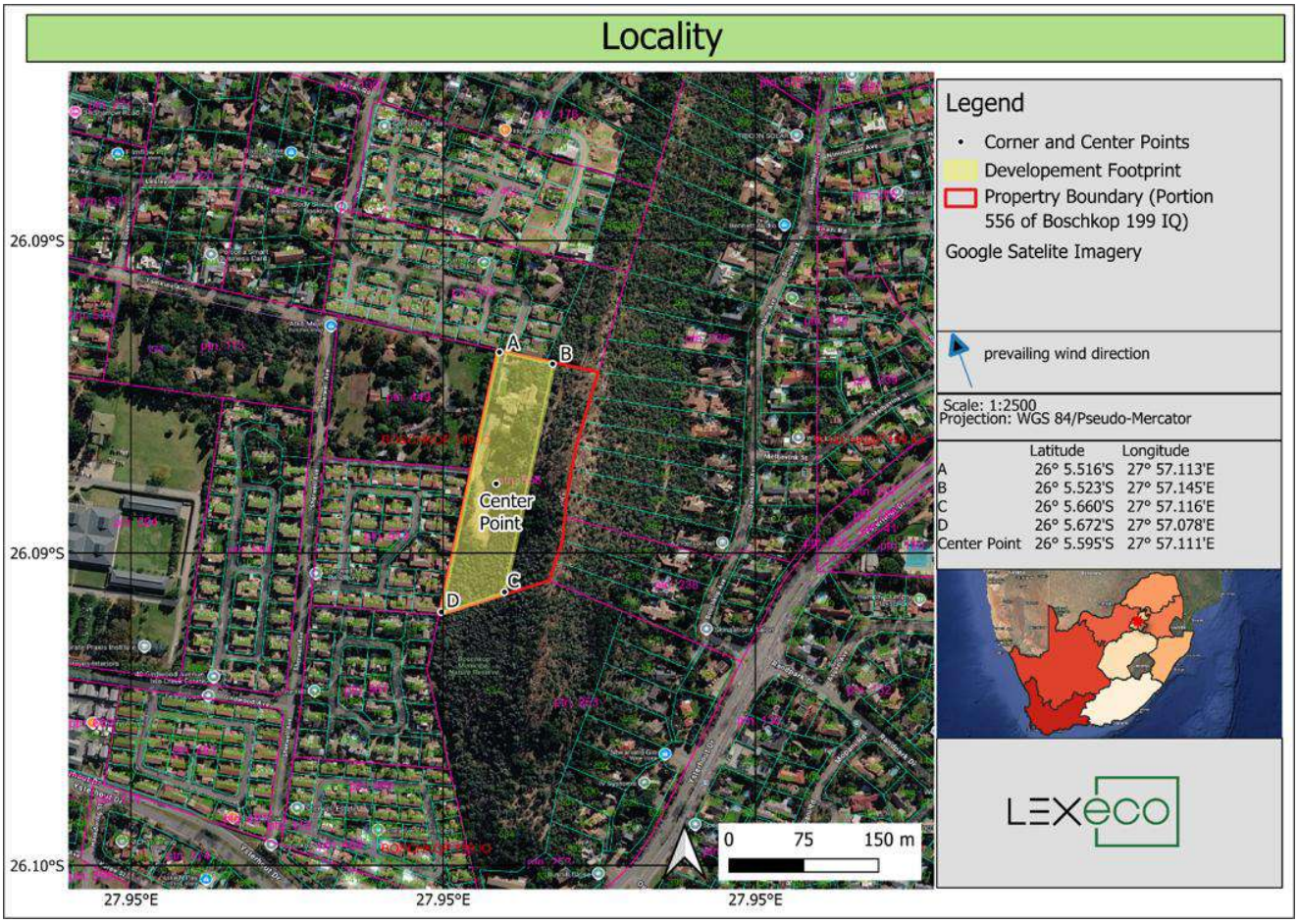


Figure 2: Locality

3. SCREENING TOOL IDENTIFIED SENSITIVITIES

The DFFE National Screening Tool was used to identify environmental sensitivities associated with the proposed project site and to identify the need for specialist studies.

According to the DFFE National Screening Tool, the following environmental sensitivities were identified;

Table 3: National Screening Tool Site Sensitivities

Theme	Very High Sensitivity	High Sensitivity	*Medium Sensitivity*	*Low Sensitivity*
Agricultural Theme		×		
Animal Species Theme			×	
Aquatic Biodiversity Theme				×
Archaeological and Cultural Heritage Theme				×
Civil Aviation Theme			×	
Defence Theme				×
Plant Species Theme			×	
Terrestrial Biodiversity Theme	×			

While the Screening Tool identified relevant sensitivities for certain themes, a site verification was undertaken to confirm actual site conditions and the nature of the proposed activities. The Screening Tool provides a conservative, desktop-based assessment, however professional judgement is required to determine the applicability of the identified sensitivities and current land use specific to the site.

3.1. Agricultural Theme Sensitivity

The Screening Tool identifies the property as having a "*High*" Agricultural Sensitivity. This sensitivity is largely associated with the broader agricultural potential of the area and not necessarily the current land use of the property.

The site is located within an established urban environment and is surrounded by residential developments, roads and associated infrastructure. The development property, measuring approximately 2.72 ha in extent is however zoned as agricultural, although no agricultural activities have been undertaken.

A large portion of the property remains undeveloped and is covered by natural vegetation. An application for the establishment of a township consisting of two erven, with one erf zoned "Special" for the purpose of a Boutique Hotel, (Erf 1) and the other erf zoned "Private Open Space" (Erf 2) is currently underway.

The division of the property and associated re-zoning is mainly by a need for relevant development which in turn will support the local community on a social and economic level, whilst also supporting localised conservation efforts.

The proposed development area, referred to as Erf 1 has been subject to general urbanisation and associated clearance of vegetation in preparation to the planned development of a car parking area. The proposed development area, covering approximately 1.42 ha in extent is not considered supportive in terms of any form of agricultural undertaking. Natural sloping in combination with existing development and disturbance of the area reduces the potential for successful agricultural cultivation. The property also dwelling house and associated infrastructure (refer to photos 1 to 14 below) which further reduces the possibility for agricultural development.

Additionally surrounding land use also restricts such activities as surrounding properties are all fully developed for residential, social or special uses.



Photo 1: Areas of the existing guesthouse



Photo 2: Areas of the existing guesthouse



Photo 3: Areas cleared for parking



Photo 4: Areas cleared for parking



Photo 5 : Driveway

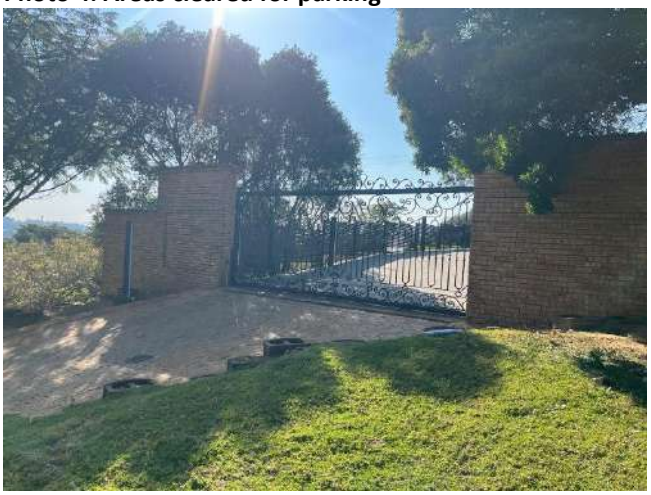


Photo 6: Drive way and exitsing guesthouse entrance



Figure 3: Locality

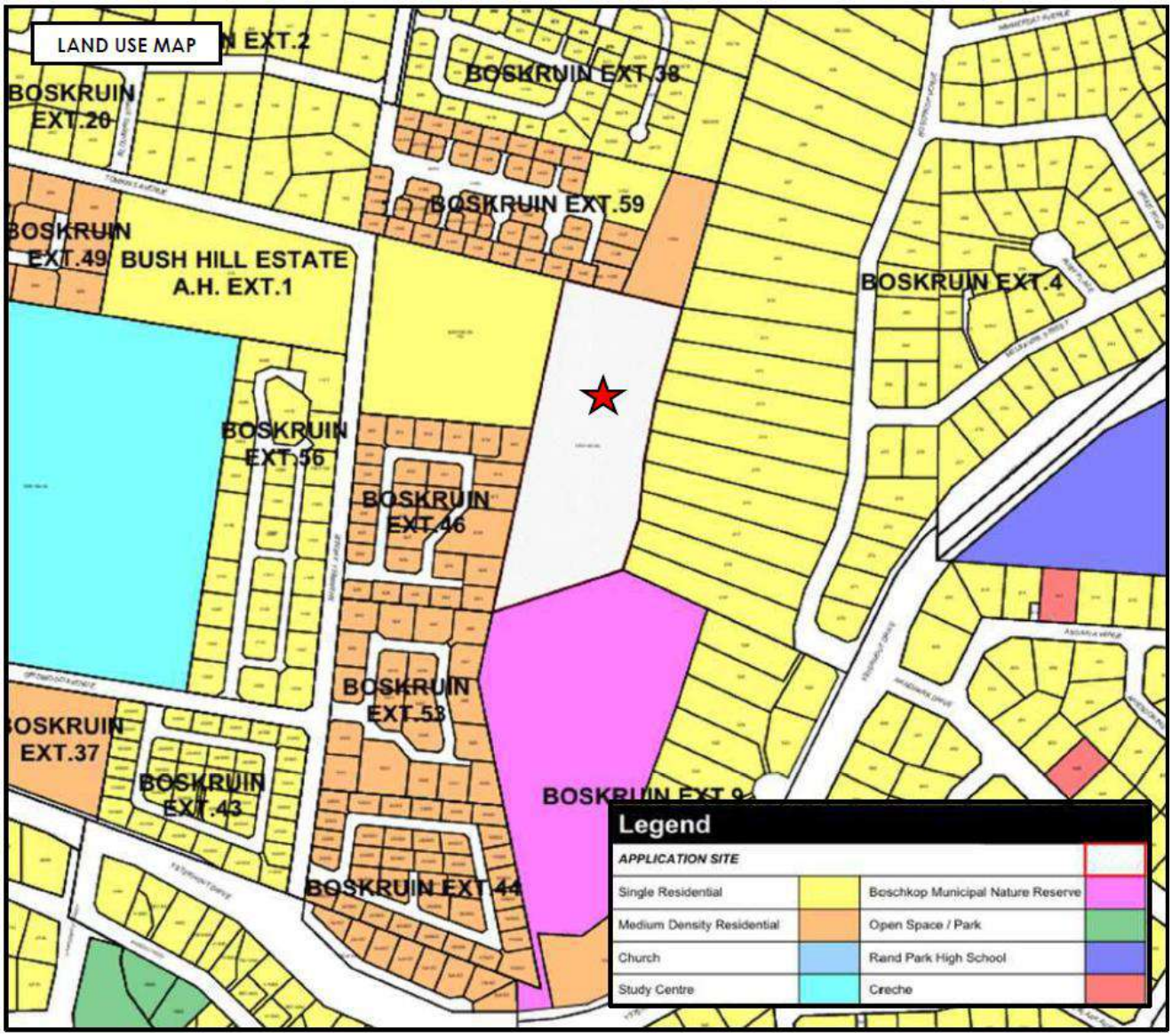


Figure 4: Locality and Land Use

Although portions of the property remain vegetated, the site is not currently utilised for agricultural purposes and no cultivated agricultural land occurs within the proposed development footprint.

The agricultural sensitivity is therefore not considered relevant from a planning perspective; however, the proposed development will not result in the loss of actively cultivated agricultural land. The sensitivity is verified to a Low Sensitivity.

3.2. Animal Species Sensitivity

The Screening Tool identified the site as having a "*Medium*" sensitivity toward the Animal Species Theme.

According to the screening tool the following species were identified with having potential presence within the project site and surrounding area;

Screening Tool Identified Species	Screening Tool Sensitivity Rating	Conclusion	Verified Sensitivity Rating
Mammalia-Chrysospalax villosus	"*Medium*"	*Chrysospalax villosus*, commonly known as the Giant Golden Mole, is endemic to South Africa and is primarily associated with grasslands, moist soils, forest margins, and areas with deep, friable soils suitable for burrowing. The species typically occurs in relatively undisturbed habitats where soil conditions support its subterranean lifestyle and where sufficient invertebrate prey is available. The Giant Golden Mole is considered sensitive to habitat transformation, particularly where natural vegetation is replaced by urban development, agriculture or other intensive land uses. The proposed boutique hotel development site is located within a predominantly urban and residential environment in Boskruin, Johannesburg. Although portions of the property retain indigenous vegetation associated with the Egoli Granite Grassland ecosystem, much of the site has already been influenced by historical development activities, including the existing residential dwelling , access roads, parking areas and associated infrastructure. The surrounding area is similarly characterised by residential development, road networks and other urban land uses, resulting in a fragmented landscape with reduced habitat suitability for species such as the Giant Golden Mole. No evidence of Giant Golden Mole burrows, foraging activity or confirmed records of the species were observed during the site assessment. Given the extent of existing disturbance, habitat fragmentation and urbanisation surrounding the property, the likelihood of	"*Low*"

Screening Tool Identified Species	Screening Tool Sensitivity Rating	Conclusion	Verified Sensitivity Rating
		the species occurring within the proposed development footprint is considered to be low. However, the retention of the undeveloped eastern portion of the property as Private Open Space will assist in conserving the remaining natural habitat and maintaining ecological connectivity within the broader landscape	
Mammalia-Crocidura maquassiensis	Medium	*Crocidura maquassiensis*, commonly known as the Maquis Four-toed Shrew, is a small insectivorous mammal endemic to southern Africa. The species is typically associated with moist grasslands, dense ground vegetation, forest margins and well-vegetated habitats that provide suitable cover and foraging opportunities. Due to its small size and secretive nature, the species is seldom observed directly and is dependent on intact ground-layer vegetation for shelter and protection from predators. The proposed boutique hotel development site is situated within an established urban and residential area in Boskruin, Johannesburg. While portions of the property remain vegetated and support indigenous grassland habitat associated with the Egoli Granite Grassland ecosystem, the site has been partially transformed by the existing residential dwelling, access roads, parking areas and associated infrastructure. The surrounding landscape is characterised by residential development and urban infrastructure, which has resulted in habitat fragmentation and reduced the extent of suitable natural habitat available to small mammal species. No direct evidence of *Crocidura maquassiensis*, including sightings or signs of activity, was recorded during the site assessment. Given the existing disturbance within the proposed development footprint and the urbanised nature of the surrounding area, the likelihood of the species occurring within the development area is	"*Low*"

Screening Tool Identified Species	Screening Tool Sensitivity Rating	Conclusion	Verified Sensitivity Rating
		considered to be low to moderate. The retention of the undeveloped portion of the property as Private Open Space will assist in maintaining remaining habitat and ecological connectivity, thereby reducing potential impacts on small mammal species that may utilise the site.	
Mammalia-Dasymys robertsii	Medium	*Dasymys robertsii*, commonly known as Roberts' Vlei Rat, is a semi-aquatic rodent species that occurs in parts of Southern Africa. The species is typically associated with wetlands, marshes, riparian zones, dense grasslands and areas with permanent or seasonal surface water. Roberts' Vlei Rat relies on dense vegetation cover and moist habitats for shelter, breeding and foraging and is therefore generally associated with relatively intact aquatic and wetland ecosystems. The proposed boutique hotel development site is located within an established residential area in Boskruin, Johannesburg which is also located on a ridge. The site comprises a combination of previously disturbed areas associated with an existing residential dwelling and relevant landscaping. No wetlands, rivers, drainage lines or other aquatic habitats were identified within the proposed development footprint during the site assessment. Furthermore, the surrounding area is characterised by urban development and associated infrastructure, which has reduced the availability of suitable habitat for wetland-dependent species. No evidence of *Dasymys robertsii*, including burrows, tracks or sightings, was observed during the site assessment. Given the absence of suitable wetland habitat within the development footprint and the urbanised nature of the surrounding environment, the likelihood of the species occurring within the proposed development area is considered to be low. The proposed	***"Low"***

Screening Tool Identified Species	Screening Tool Sensitivity Rating	Conclusion	Verified Sensitivity Rating
		development is therefore not expected to result in significant impacts on Roberts' Vlei Rat or its preferred habitat.	
Mammalia-Ourebia ourebi ourebi	*"Medium"*	*Ourebia ourebi ourebi*, commonly known as the Southern Oribi, is a small antelope species associated with open grassland habitats, particularly areas characterised by tall, nutritious grasses and relatively low levels of disturbance. Historically, the species occurred across extensive grassland regions of Southern Africa; however, habitat loss, fragmentation, agricultural expansion and urban development have resulted in significant reductions in suitable habitat and population numbers. Oribi typically occur in larger, relatively intact grassland systems where sufficient forage, cover and connectivity between habitat patches are available. The proposed boutique hotel development site is situated within an established urban and residential environment in Boskruin, Johannesburg. Although portions of the property retain indigenous grassland vegetation associated with the Egoli Granite Grassland ecosystem, the site is surrounded by residential developments, roads and other urban infrastructure. The property has also been partially transformed by an existing residential dwelling and associated facilities, resulting in a fragmented habitat that is unlikely to support viable populations of large grassland-dependent mammals such as the Southern Oribi. No evidence of *Ourebia ourebi ourebi*, including sightings, tracks, dung or other signs of activity, was recorded	*"Low"*

Screening Tool Identified Species	Screening Tool Sensitivity Rating	Conclusion	Verified Sensitivity Rating
		during the site assessment. Given the limited extent of suitable habitat, the high degree of urbanisation in the surrounding area and the species' preference for larger, connected grassland systems, the likelihood of the Southern Oribi occurring within the proposed development footprint is considered to be **very low**. The retention of the undeveloped portion of the property as Private Open Space will nevertheless contribute to the conservation of the remaining grassland habitat and ecological functioning of the site.	
Invertebrate-Clonia uvarovi	*"Medium"*	*Clonia uvarovi* is a species of armoured ground cricket (Family: Tettigoniidae) that occurs within grassland and savanna ecosystems of Southern Africa. The species is generally associated with natural grassland habitats where sufficient ground cover, indigenous vegetation and suitable microhabitats are available for feeding, breeding and shelter. Like many grassland-dependent invertebrates, *Clonia uvarovi* may be sensitive to habitat transformation, vegetation clearing and the fragmentation of natural ecosystems. The proposed boutique hotel development site is located within a predominantly urban and residential environment in Boskruin, Johannesburg. While portions of the property remain vegetated and support indigenous grassland associated with the Egoli Granite Grassland ecosystem, sections of the site have already been transformed through historical development activities, including an existing residential dwelling , access roads and associated infrastructure. The surrounding area is similarly characterised by residential development and urban land uses, which have reduced the extent and connectivity of natural habitat available to grassland invertebrates.	*"Low"*

Screening Tool Identified Species	Screening Tool Sensitivity Rating	Conclusion	Verified Sensitivity Rating
		No individuals or signs of *Clonia uvarovi* were recorded during the site assessment. However, the remaining undeveloped grassland areas on the property may provide marginal habitat for the species and other grassland-associated invertebrates. The proposed development has been designed to concentrate infrastructure within already disturbed portions of the site while retaining the undeveloped eastern portion as Private Open Space for conservation purposes. Consequently, the likelihood of *Clonia uvarovi* occurring within the proposed development footprint is considered to be low to moderate, and significant impacts on the species are not anticipated provided that the retained natural areas are protected and appropriately managed	

A Terrestrial Biodiversity Assessment was undertaken by Ramaro E & G Services (Pty) Ltd to assess the potential impacts of the proposed development on ecological resources within and surrounding the site. The assessment incorporated findings and requirements associated with the Animal Species Theme, Plant Species Theme and Terrestrial Biodiversity Theme identified through the DFFE Environmental Screening Tool and site verification process.

The study evaluated the ecological sensitivity of the site, identified species and habitats of conservation importance, potential development-related impacts, and provided appropriate mitigation and management measures to avoid, minimise or offset adverse biodiversity impacts where necessary.

The National Environmental Screening Tool classifies the proposed development footprint as having Medium Animal Species Sensitivity, indicating that faunal species of conservation importance may occur within the broader area. However, the field assessment did not identify any Species of Conservation Concern or significant faunal habitat within the proposed development footprint. The site has been largely disturbed by previous development and surrounding urban land uses, reducing its suitability for sensitive animal species. As a result, the specialist concluded that, with the implementation of the recommended mitigation measures, the proposed development is expected to have a low residual impact on terrestrial fauna (Ramathieledza , 2026). Refer to Appendix G in the Basic Assessment.

3.3. Aquatic Biodiversity Theme

No wetlands, rivers, drainage lines or other aquatic features were identified within the proposed development footprint during the site inspection. The development area is located outside of identified aquatic features and associated riparian zones.

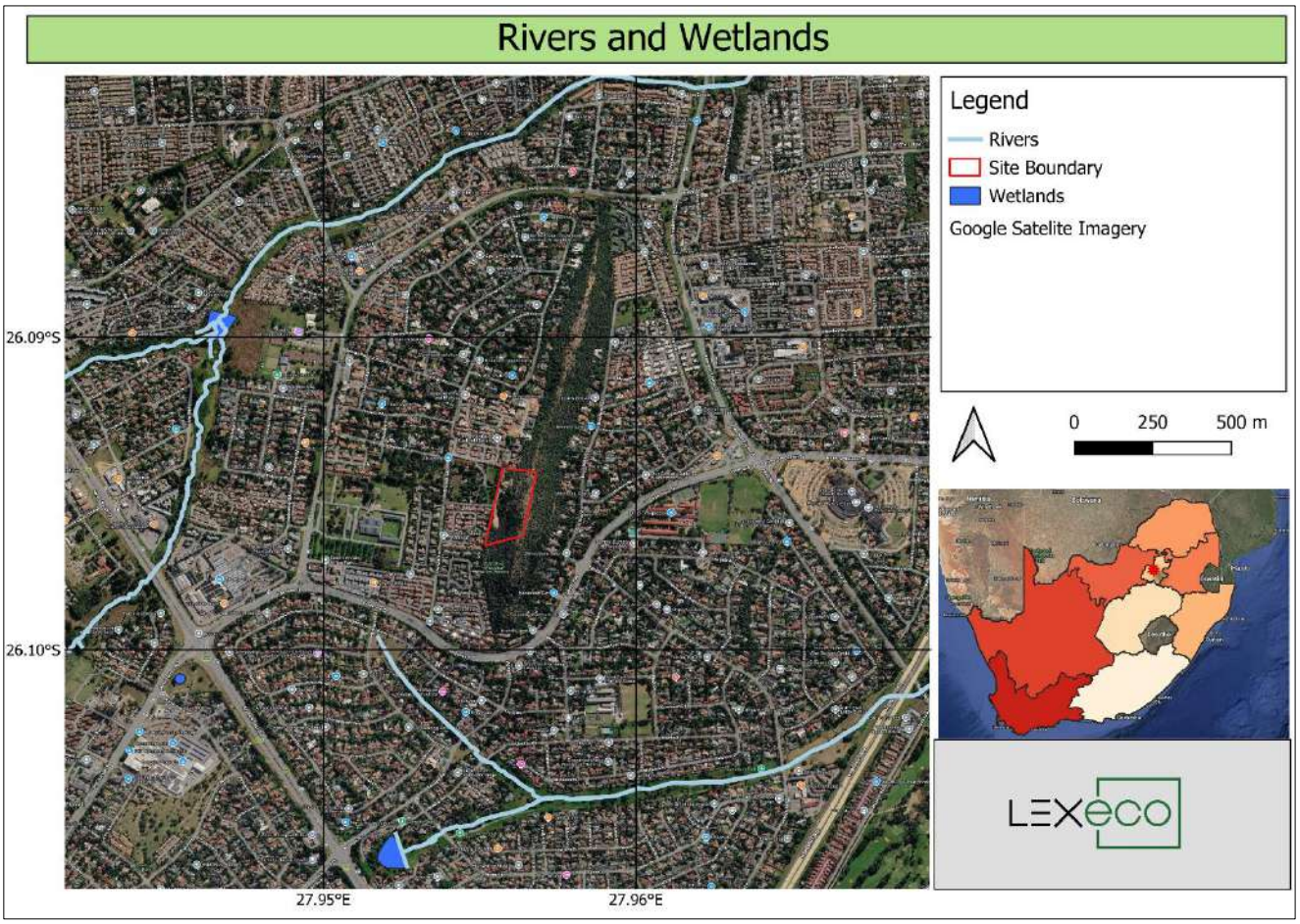


Figure 5: Rivers and Wetlands

Stormwater management infrastructure will be incorporated into the development design to ensure that runoff is appropriately managed and does not adversely affect downstream environments.

The site sensitivity verification confirms the Screening Tool's "Low" sensitivity rating for the aquatic biodiversity theme.

No aquatic biodiversity assessment or compliance statement is therefore required and will not be undertaken as part of the impact assessment in support of the application.

3.4. Archaeological and Cultural Heritage Theme

The DFFE Screening Tool Report results shows that the site has a "*low*" sensitivity in terms of heritage and cultural importance.

The proposed development is located in the Randburg area which according to the South African Heritage and Resource Information System ("**SAHRIS**") does not include any registered heritage or archaeological sites within a 5 km radius. The closest registered heritage site is the Grave of Solomon Mahlangu which is located approximately 19km south west of the site.

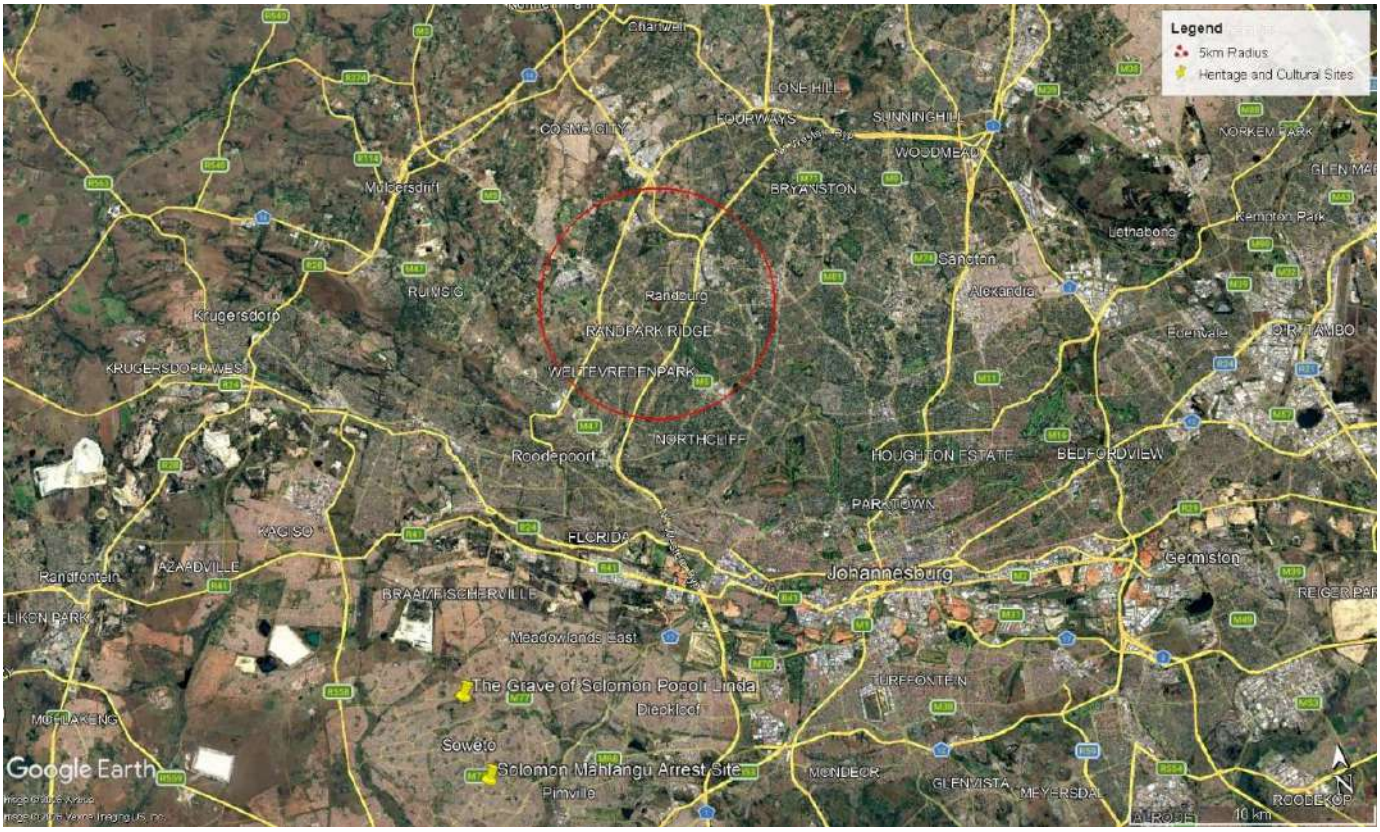


Figure 6: Aerial view of local heritage sites

The development and operation of the boutique hotel will have no impact on local or regional heritage or cultural aspects.

The site sensitivity verification <u>confirms</u> the Screening Tool's "Low" sensitivity rating for the aquatic archaeological and cultural heritage theme. No archaeological and cultural heritage assessment or compliance statement is therefore required and will not be undertaken as part of the impact assessment in support of the application.

3.5. Civil Aviation Theme

The DFFE Screening Tool Report results shows that the site has a "Medium" sensitivity in terms of the Civil Aviation Theme.

The "Medium" rating assigned by the National Screening tool has been contributed to the fact regarding the broader influence area of aviation infrastructure. The proposed boutique hotel development will comprise of low-rise buildings and associated infrastructure and will not introduce structures of a height likely to interfere with aviation operations. The nearest airport (Lanseria Airport) is located approximately 18km north from the site.

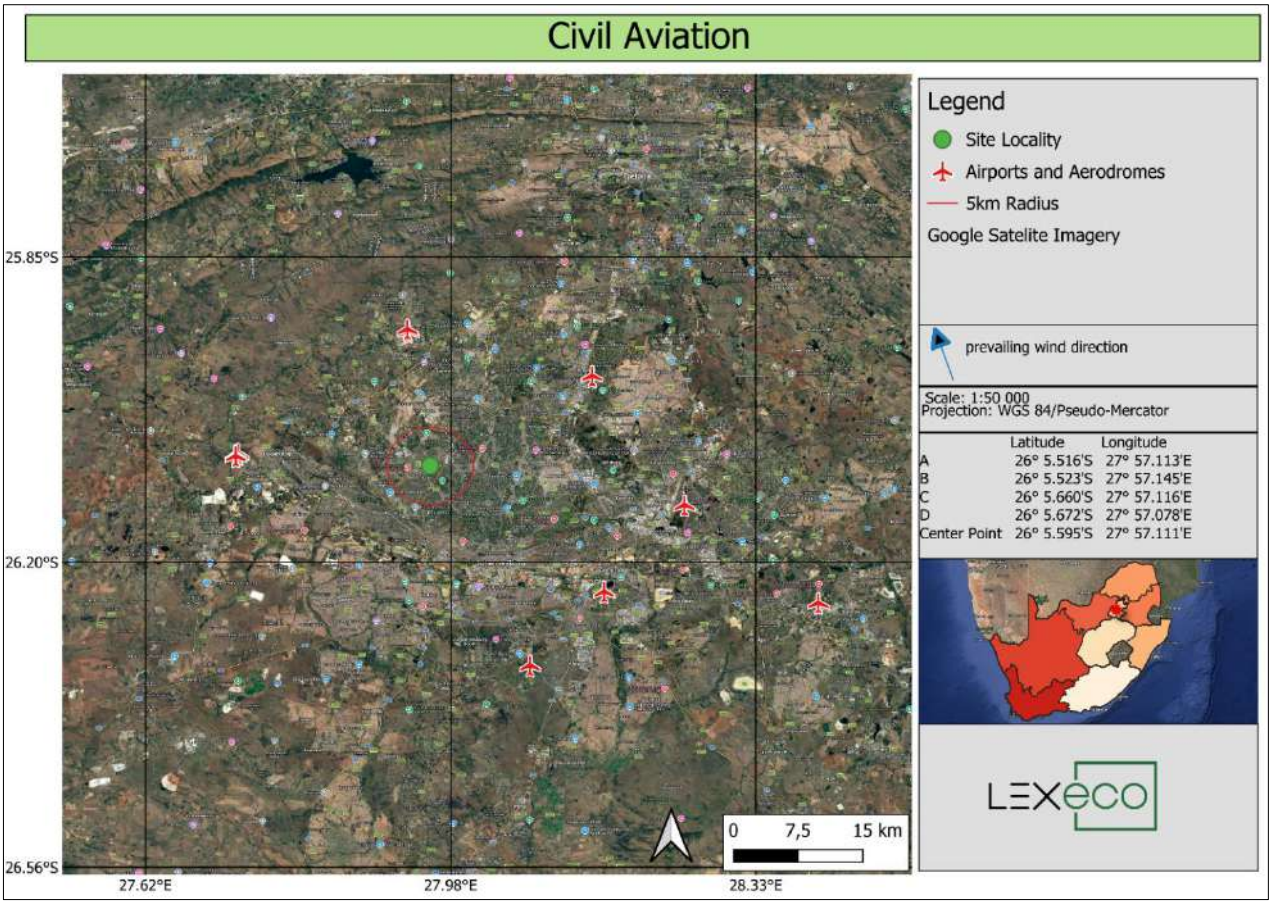


Figure 7: Airports and Aerodomes

The site sensitivity verification disputes the Screening Tool's "Medium" sensitivity rating for the civil aviation theme and confirms the civil aviation theme to be "*Low*".

No assessment or compliance statement is therefore required and will not be undertaken as part of the impact assessment in support of the application.

3.6. Relative Defence Theme

The DFFE Screening Tool Report results shows that the site has a "Low" sensitivity towards the Relative Defence Theme.

The proposed Boutique Hotel Development is located on Portion 556 of the Farm Boschkop 199 IQ within an established urban and residential area of Boskruin, Johannesburg. The development comprises the establishment of a boutique hotel with associated hospitality facilities and infrastructure. Given the nature, scale and location of the proposed development, no impacts on defence-related infrastructure or operations are anticipated.

The site sensitivity verification confirms the Screening Tool's "*Low*" sensitivity rating for the relative defence theme and confirms the relative defence theme to be "*Low*".

No assessment or compliance statement is therefore required and will not be undertaken as part of the impact assessment in support of the application.

3.7. Plant Species Theme

The DFFE Screening Tool Report results shows that the site has a "Medium" sensitivity towards the Plant Species Theme. This sensitivity rating reflects the occurrence of indigenous vegetation and the potential presence of plant species of conservation importance associated with the broader Egoli Granite Grassland ecosystem, which is classified as a threatened vegetation type within Gauteng.

The proposed boutique hotel development site comprises a combination of previously disturbed areas associated with the existing guest house and associated infrastructure, as well as undeveloped portions that retain indigenous grassland vegetation. While sections of the property have been transformed through historical development activities, including buildings, access roads, parking areas and landscaped areas, the eastern portion of the site remains relatively natural and contributes to the ecological functioning of the surrounding open-space network.

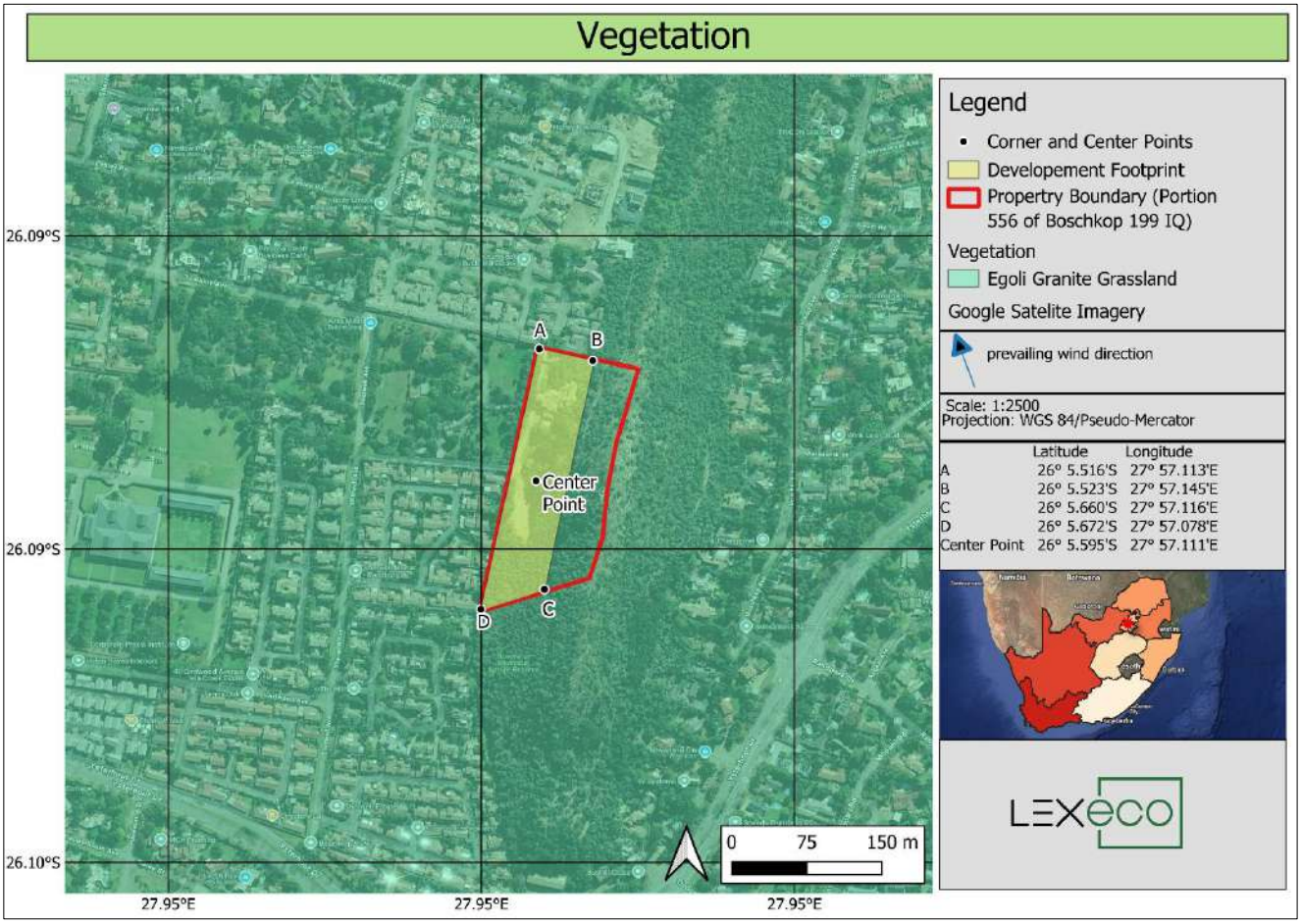


Figure 8: Area Vegetation Map

In response to the ecological sensitivities identified on the property, the proposed development has been designed to focus development within the already disturbed portions of the site, while the undeveloped greenfield areas will be retained as Private Open Space for conservation purposes. This approach will minimise vegetation loss and disturbance to natural habitat.



Photo 7: Areas to be cleared for construction purposes



Photo 8: Areas to be cleared for construction purposes



Photo 9: Areas to be cleared for construction purposes



Photo 10: Areas to be cleared for construction purposes



Photo 11: Areas to be cleared for construction purposes



Photo 12: Areas to be cleared for construction purposes

A Biodiversity Impact Assessment will be undertaken by Ramaro E & G Services (Pty) Ltd to assess the potential impacts of the proposed development on ecological resources within and surrounding the site. The assessment will incorporate the findings and requirements associated with the Animal Species Theme, Plant Species Theme and Terrestrial Biodiversity Theme identified through the DFFE Environmental Screening Tool and site verification process.

The National Environmental Screening Tool classifies the proposed development footprint as having Low Plant Species Sensitivity, indicating a low potential for the occurrence of Plant Species of Conservation Concern. This was confirmed during the field assessment, which found that the vegetation is mainly composed of common indigenous species together with several alien invasive species, with no threatened or protected plant species recorded within the development footprint. Based on the desktop assessment and field verification, the specialist concluded that the proposed development is unlikely to result in significant impacts on plant species of conservation importance, provided that the recommended mitigation measures are implemented during construction. (Ramathieledza , 2026).

3.8. Terrestrial Biodiversity Theme

The DFFE Screening Tool Report results shows that the site has a "Very High" sensitivity in terms of the Terrestrial Biodiversity Theme.

This sensitivity is primarily associated with the presence of indigenous vegetation, the occurrence of the Egoli Granite Grassland ecosystem, and the site's location within a broader ecological network that includes Critical Biodiversity Areas (CBAs), ecological open spaces and the Boschkop Nature Reserve. The site also forms part of a ridge system that contributes to ecological connectivity and biodiversity conservation within the northern Johannesburg region.

Although portions of the property have been transformed through historical development activities associated with the existing guest house, access roads, parking areas and associated infrastructure, significant portions of the site remain undeveloped and retain indigenous grassland vegetation. These natural areas continue to provide ecological value and contribute to the functioning of the surrounding biodiversity network. Previous environmental reviews and comments from the City of Johannesburg have highlighted the ecological importance of the site and the need to protect the undeveloped portions from unnecessary disturbance.

To minimise impacts on terrestrial biodiversity, the proposed development has been designed to focus on the already disturbed portions of the property, while the undeveloped greenfield areas will be retained as Private Open Space and managed for conservation purposes. This approach will reduce habitat loss, maintain ecological connectivity and preserve the biodiversity value of the site

A Biodiversity Impact Assessment will be undertaken by Ramaro E & G Services (Pty) Ltd to assess the potential impacts of the proposed development on ecological resources within and surrounding the site.

The National Environmental Screening Tool classifies the site as having Very High Terrestrial Biodiversity Sensitivity because it forms part of the Egoli Granite Grassland ecosystem and is located within a Critical Biodiversity Area (CBA), both of which are important for regional biodiversity conservation. However, the field assessment confirmed that the proposed development footprint has been significantly altered by previous disturbance, vegetation clearing and the presence of alien invasive plant species. As a result, the ecological condition of the development footprint is lower than the regional sensitivity indicated by the screening tool (Ramathieledza , 2026). Refer to Appendix G in the Basic Assessment Report.



Photo 13: Areas to be cleared for construction purposes



Photo 14: Areas to be cleared for construction purposes

4. SITE VERIFICATION OUTCOMES AND CONCLUSION

The site verification assessment confirmed that the proposed development area is characterised by a number of environmental sensitivities, the most notable being the Terrestrial Biodiversity Theme, Plant Species Theme and Animal Species Theme. The DFFE Environmental Screening Tool identified the site as having Very High Terrestrial Biodiversity Sensitivity, Low Plant Species Sensitivity, and Medium Animal Species Sensitivity. These sensitivities are associated with the site's location within the Endangered Egoli Granite Grassland ecosystem, its occurrence within a Critical Biodiversity Area (CBA), and its proximity to the Boschkop Nature Reserve and surrounding ecological open-space network.

To verify these sensitivities, a Biodiversity Impact Assessment was undertaken. The specialist assessment confirmed that, although the broader area is environmentally sensitive, the proposed development footprint has been substantially modified by previous disturbance, historical development and the presence of alien invasive plant species. The assessment further confirmed that no Plant Species of Conservation Concern or significant faunal habitat were identified within the proposed development footprint. The proposed development has therefore been designed to utilise the already disturbed portion of the property, while retaining the undeveloped greenfield area as Private Open Space for long-term conservation. This design approach minimises vegetation loss, maintains ecological connectivity and protects the most environmentally sensitive areas of the site.

Based on the findings of the site verification and specialist studies, the proposed Boutique Hotel Development is considered environmentally acceptable, provided that the recommendations contained in the Biodiversity Impact Assessment, together with the mitigation measures identified during the impact assessment process, are fully implemented. These measures have been incorporated into the Environmental Management Programme (EMPr) to ensure that potential environmental impacts are avoided, minimised and appropriately managed throughout the construction and operational and phases of the development.

Appendix L: NEMA S24G Environmental Authorisation

GAUTENG PROVINCE
ENVIRONMENT
REPUBLIC OF SOUTH AFRICA

Umnotho House 56 Eloff Street Johannesburg 2001
Office of the Head of Department: Department of Environment
Enquiries: Tshifhiwa Munzhelele/Omolayo Ilemobade
Tel: +27 (0)11 240 3003/3022
Tshifhiwa.Munzhelele@gauteng.gov.za
Omolayo.Ilemobade@gauteng.gov.za
Reference: S24G/03/23-24/0624

BY ELECTRONIC MAIL

Attention: Mr. John Mothibi

Vharanani Properties (Pty) Ltd
122 Sherwell Avenue
Boskruin
Randburg
2196

Tel: (083) 554 3277
Email: john@vharanani.com

Dear Sir

ENVIRONMENTAL AUTHORISATION IN TERMS OF SECTION 24G OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 107 OF 1998: PROJECT REFERENCE S24G/03/23-24/0624: UNLAWFUL CLEARANCE OF INDIGENOUS VEGETATION FOR THE CONSTRUCTION OF A CAR PARKING AREA AT 122 SHERWELL AVENUE BOSKRUIN, RANDBURG, CITY OF JOHANNESBURG METROPOLITAN MUNICIPALITY

Your application for authorisation dated 31 May 2023, in terms of Section 24G of the National Environmental Management Act 107 of 1998 ("NEMA, as amended"), read with the Environmental Impact Assessment Regulations Listing Notice 3 of 08 December 2014, as amended ("Listing Notices 3 of 2014, as amended"), promulgated in terms of the NEMA refer.

ENVIRONMENTAL AUTHORISATION

1. DESCRIPTION OF THE ACTIVITY

The activity applied for entails the unlawful clearance of an area of more than 300m^2 of indigenous vegetation for the construction of a car parking area at 122 Sherwell Avenue Boskruin, Randburg, City of Johannesburg Metropolitan Municipality.

The total footprint of the area to be used as a car park is approximately 0.1447 hectares. The car park will be used to service customers who will make use of the boutique hotel located beside the car park area.

This authorisation is solely applicable to the abovementioned activity commenced with on the premises indicated. It does not include any activity not indicated above, not listed in the table below, or any proposed activity(ies), process(es) or infrastructure that would require additional authorisation from the Gauteng Department of Environment.

The activity is identified in terms of Listing Notice 3 of 2014 (as amended) as follows:

Activity listed in terms of Listing Notice 3 of 2014 (as amended) promulgated in terms of NEMA	**Activity Description**
Activity 12	The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan. **c. Gauteng** (i) (Within any critical endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004. (ii) Within Critical Biodiversity Areas or Ecological Support Areas identified in the Gauteng Conservation Plan or Bioregional plans.

*Hereafter referred to as **"the activity"**.*

2. LOCATION

The property on which the activity took place and is continuing is located at 122 Sherwell Avenue Boshruin, Randburg, City of Johannesburg Metropolitan Municipality.

Co-ordinates:

Latitude: 26° 05' 33.80" S
Longitude: 27° 57' 07.35" E

*Hereafter referred to as **"the location/ the site"**.*

3. THE HOLDER OF THE ENVIRONMENTAL AUTHORISATION

Vharanani Properties (Pty) Ltd
Mr. John Mothibi
122 Sherwell Avenue,
Boskruin
Randburg
2196

Cell: (083) 554 3277
Email: john@vharanani.com

4. ENVIRONMENTAL ASSESSMENT PRACTITIONER

MM Emporium Consulting Environmental Engineers (Pty) Ltd
% Mr. Lavhelesani Nelwamondo
P.O. Box 1318
Fauna Park
0787

Tell: (073) 2789 684
E-mail: lavhelesani@mmeporium.co.za

5. SITE INSPECTION

Site inspections were conducted by Environmental Management Inspectors ("EMIs") and Biodiversity Management officials from this Department on 20 July 2023 and 03 August 2023.

5.1. The following were observed during the inspections:

a) The area of more than 300m^2 of indigenous vegetation has been cleared.
b) The area that has been cleared is located within the Ridge and beside a recently renovated residential house which was converted into a hotel.
c) The ridge was excavated to form a part of the parking area.
d) The cleared area is going to be used as a parking area for the cars visiting the hotel.
e) The area that has been backfilled around the newly created parking area showed signs of soil erosion.

5.2. Further to the above, the Applicant and the Environmental Assessment Practitioner ("EAP") confirmed that:

a) The activity commenced for the first time in January 2022.
b) The area that has been cleared will be used as a parking area for the cars visiting the hotel.

5.3. The Department's information base, (Geographical Information System) indicates the site is falls within an Ecological Support Area. The site also falls within a Ridge.

5.4. It was further confirmed by the Department"s Biodiversity Specialist that the area cleared is dominated by Brachylaena Roundata which is not endemic to South Africa, however, the vegetation cleared on the site is considered to be indigenous vegetation.

6. DECISION

In terms of Section 24G (2)(b) of the NEMA, as amended, Vharanani Properties (Pty) Ltd is hereby granted authorisation subject to the conditions contained in this Environmental Authorisation, for the continuation of the activity in respect of the abovementioned application. Authorisation is only granted in terms of Section 24G of NEMA, read with Listing Notice 3 of 2014 (as amended) promulgated in terms of the NEMA.

This Environmental Authorisation is granted solely for the purpose of undertaking the activity referred to in paragraph one above. It does not include any proposed activities, processes or infrastructure that would require additional authorisation from the Gauteng Department of Environment and does not exempt the Holder of the Authorisation hereof, from complying with any other statutory requirements applicable to undertaking the activity. This environmental authorisation shall only take effect from the date of signature of this authorisation.

7. CONDITIONS

7.1. Approvals and Submissions

7.1.1. The Environmental Management Programme ("EMPr") dated November 2023 submitted as part of the Environmental Impact Report compiled by MM Emporium Consulting Environmental Engineers (Pty) Ltd received by the Department 31 January 2024 is approved and considered an extension of this authorisation. All mitigation measures and recommendations outlined therein must be implemented and adhered to.

7.1.2. The revised Biodiversity Impact Assessment Report (Revised Biodiversity Risk Assessment Study - April 2024) prepared by RAMARO Environmental & Geological Services (Pty) Ltd and submitted as part of the Environmental Impact Report received by the Department on 31 January 2024 is approved. All recommendations and mitigation measures contained therein is considered an extension of this authorisation and must be adhered to.

7.1.3. The Emergency Response Plan ("ERP") dated November 2023 prepared and submitted by MM Emporium Consulting Environmental Engineers (Pty) Ltd as part of the Environmental Impact Report received by the Department on 31 January 2024 is noted. The plan must be submitted to the relevant municipal office for approval. Once approved, the approved plan will form an extension of this authorisation, and all procedures contained therein must be adhered to.

7.1.4. The Stormwater Management Plan ("SWMP") dated 1 November 2023 prepared by Dalimede Projects (Pty) Ltd read with the Civil Engineering Services Report dated August 2023 prepared by Designed Engineering Solutions and submitted as part of the Environmental Impact Report received by the Department on 31 January 2024 is noted. The SWMP must be submitted to the relevant Municipal Office for approval within three (03) months of receipt of this authorisation. Once approved, a copy of the approved SWMP must be submitted to this Department within three (3) months of receipt. The approved plan will form an extension of this authorisation, and all recommendations contained therein must be adhered to. To this effect, the Holder of the Authorisation shall remain responsible for ensuring the implementation and compliance with the approved SWMP.

7.1.5. The Holder of the Authorisation must, within thirty (30) days from the date of this Environmental Authorisation, submit a signed submission, in the form of a Sworn Affidavit, from Mr. John Mothibi indicating that no unlawful activity would be undertaken in future within Gauteng Province without prior written approval from the Gauteng Department of Environment as well as his commitment to comply with South African environmental legislation.

7.1.6. Should the Holder of the Authorisation wish to amend or update any of the approved plans indicated in paragraph 7.1, an application for amendment and the amended plan(s) must be submitted to the Department for approval. To this effect, the existing reports and plans will remain applicable until such time that the amendment is approved. Further, the reports/plans that require an approval from other organs of state must be submitted to such organs of state and once approved, the Holder of the Authorisation must submit an approved copy to this Department within three (3) months of receipt of the approval.

7.1.7. The Holder of the Authosriation must, within thirty (30) days from the date of this Environmental Authorisation, submit a signed submission, in a form of a Sworn Affidavit, from Mr. John Mothibi, in his capacity as the representative of Vharanani Properties (Pty) Ltd indicating that no unlawful activity would be undertaken in future within Gauteng Province without prior written approval from the Gauteng Department of Environment as well as their commitment to comply with South African environmental legislation.

7.2. Appointment of Environmental Control Officer

7.2.1. An Environmental Control Officer ("ECO") must be appointed to monitor compliance to the issued Environmental Authorisation. The name and contact details of the ECO must be submitted to the Department within ninety (90) days of receipt of this Authorisation. The duties of the appointed ECO must include, but not be limited to the following:

a) Monitor compliance to the conditions of the issued Environmental Authorisation.
b) Undertake training sessions on the contents, requirements and implementation of the approved EMPr with all contractors and staff working on-site, prior to such persons being allowed to continue with the activities on site. Proof of all trainings conducted must be retained on site and must be presented upon request by the Environmental Management Inspectors ("EMIs") or any other official from relevant authorities.
c) Determine and facilitate the appointment of any additional relevant specialist to assist in achieving mitigation, decommissioning and rehabilitation activities on site when required.
d) Compilation and submission of monitoring and audit reports, when required.

7.3. Management of Activity: Construction (Completion) of the Parking Area

7.3.1. No surface or ground water may be polluted as a result of any activity on the site. "Pollution" in relation to a water resource is defined in the National Water Act, 1998 (Act 36 of 1998) is defined as the direct or indirect alteration of the physical, chemical or biological properties of a water resource so as to make it –

(a) Less fit for any beneficial purpose for which it may reasonably be expected to be used;

(b) Harmful or potentially harmful-

(i) to the welfare, health or safety of human beings;
(ii) to any aquatic or non-aquatic organisms;
(iii) to the resource quality; or
(iv) to property.

7.3.2. The Holder of the Authorisation must ensure that all the guidelines and recommendations for stormwater control as indicated in the approved reports in paragraph 7.1 above are adhered to.

7.3.3. The Holder of the Authorisation must ensure that the stormwater attenuation ponds proposed in the report is not developed on the ridge. Further clearance of vegetation on the ridge must be avoided.

7.3.4. Measures to ensure that soil erosion is minimized around the site must be employed. To this effect, the soils around the site must be stabilized using indigenous ground cover to reduce erosion due to heavy stormwater velocity.

7.3.5. It must be ensured that the excavated portion of the ridge is rehabilitated in order to protect and prevent the ridge from erosion.

7.3.6. In order to minimize artificially generated surface stormwater runoff and for the construction of the parking lot to be compatible with the biodiversity features around the site, the parking lot must not be totally sealed. Rather, ecologically friendly/permeable material must be utilized.

7.3.7. The Holder of the Authorisation must ensure that the development of the parking takes place within the area that has already transformed.

7.3.8. Undisturbed sensitive areas around the site must be designated as 'No-Go' areas to prevent activities which may result in degradation during the construction of the parking Area. Areas still in their natural state must be maintained and protected.

7.3.9. Dust suppression measures must be employed to reduce the effect of air pollution resulting from dust during construction of a parking area.

7.3.10. The Holder of the Authorisation must ensure that all alien invasive vegetation is removed from the site.

7.3.11. The Holder of the Authorisation must ensure that indigenous plants and groundcover endemic to the site are maintained, and previously disturbed areas are designed to blend in with the natural landscape of the area.

7.3.12. The Department encourages separation of waste at source prior to diversion of waste to landfill site in order to promote waste minimisation. Therefore, an Integrated Waste Management Approach based on waste minimisation must be implemented and must incorporate reduction, re-use, recycling and recovery of waste in terms of Section 26 of the National Environmental Management: Waste Act 59 2008 ("NEM:WA"), where appropriate.

7.3.13. Litter bins, with appropriate liners, must be provided and placed in accessible areas to store waste generated on the site before final disposal. The litter bins must be properly covered.

7.3.14. There must be no burying, burning, or disposal of waste on site or in any unauthorised open area outside of the property.

7.3.15. Access roads for vehicles and personnel must be restricted to areas that have already been disturbed or with relatively very low ecological value.

7.3.16. All vehicles and equipment used on site must be adequately maintained to ensure that fumes, noise, oil/chemical spillages and fuel leakages are kept to a minimum. Drip trays must be used where necessary.

7.3.17. Adequate safety signs, including all relevant emergency contact numbers must be identified and visually displayed at appropriate points on site.

7.3.18. The Holder of the Authorisation must institute a 'Complaint' and 'Incident' register for the site within **seven (07) days of receipt** of this environmental authorisation. All complaints and incidents resulting from the construction of the parking area and actions taken to remediate the incidents must be recorded in this register. The register must include the following information on the complainant: the name, physical address, telephone number, date and time of the incident and when the complaint was registered.

7.3.19. Further to Condition 7.3.18 above, the Holder of the Authorisation must investigate the complaint and incident reported, thereafter provide in a report, the type of incident or complaint, the source, root cause analysis, measures implemented or to be implemented to prevent the recurrence and the date by which the measure will be/were implemented. The register with this report must be kept on-site and be made available to the EMIs and any other relevant official upon request.

7.4. Operation and Management of the Activity.

7.4.1. The Holder of the Authorisation must ensure that no further development is undertaken on the site without prior consultation with and approval from this Department.

7.4.2. The Holder of the Authorisation must ensure that all areas that are still in their natural state are maintained and protected.

7.4.3. Measures to control and/or prevent further spread of alien species must be put in place. It must be ensured that the control of invasive alien species is undertaken in a manner that will not impact on or destroy existing indigenous species or any species of conservation value.

7.4.4. No surface or ground water may be polluted as a result of any activity on the site. "Pollution" in relation to a water resource is defined in the National Water Act, 1998 (Act 36 of 1998) is defined as the direct or indirect alteration of the physical, chemical or biological properties of a water resource so as to make it –

(b) Less fit for any beneficial purpose for which it may reasonably be expected to be used;

(b) Harmful or potentially harmful-
(v) to the welfare, health or safety of human beings;
(vi) to any aquatic or non-aquatic organisms;
(vii)to the resource quality; or
(viii) to property.

7.4.5. It must be ensured that all stormwater channels and drains are kept clean and unblocked (free of debris) to facilitate proper flow of storm water from the site.

7.4.6. Adequate prohibition signs specifying unauthorised activities or actions that may disturb fauna or result in possible degradation and pollution of the environment or any other undesirable incident such as fire outbreaks must be identified and visually displayed at appropriate points on the site.

7.4.7. Dust suppression measures must be employed to reduce the effect of air pollution resulting.

7.4.8. The "Complaint' and 'Incident' register for the site instituted by the Holder of the Authorisation during the construction phase must be maintained. All complaints and incidents resulting from the constructed parking area and actions taken to remediate the incidents must be recorded in this register.
(a) The register must include the following information on the complainant: the name, physical address, telephone number, date and time of the incident and when the complaint was registered.
(b) Further the Holder of the Authorisation must investigate the complaint and incident reported, thereafter provide in a report, the type of incident or complaint, the source, root cause analysis, measures implemented or to be implemented to prevent the recurrence and the date by which the measure will be/were implemented.
(c) The register with this report must be kept on-site and be made available to the EMIs and any other relevant official upon request.

7.4.9. It is the responsibility of the Holder of the Authorisation to ensure that the contractors, construction workers, site personnel, and local communities are aware of the contents and provisions of this Environmental Authorisation and the approved Reports.

7.4. Compliance with Legislation and other Licenses/Permits

7.4.1. The Holder of the Authorisation must obtain an authorisation from this Department for any further proposed activity(ies) listed in terms of Section 24 and 24D of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended, prior to commencement thereof.

7.4.2. Permits should be obtained for any restricted activities in relation to non-native (alien or listed invasive) species as required in terms of the National Environmental Management: Biodiversity Act, 2004, as amended and the relevant regulations, where applicable.

7.4.3. All relevant approvals pertaining to the Spatial Planning and Land Use Management Act, 16 of 2013 (SPLUMA) must be obtained from the relevant competent Authority.

7.4.4. The Holder of the Authorisation must ensure that employees are provided with adequate PPE to mitigate exposure to hazards on the site. The Holder of the Authorisation must further ensure compliance with the requirements of the Occupational Health and Safety Act, 1993 85 of 1993.

7.4.5. All operations must be conducted in line with the Noise Regulations promulgated in terms of the Environment Conservation Act 73 of 1989, as amended.

7.4.6. The Holder of the Authorisation is responsible for compliance with the provisions for duty of care and remediation of environmental damage as contained in Section 28 of the National Environmental Management Act, 1998 (Act 107 of 1998).

7.4.7. This authorisation does not exempt the holder thereof from complying with any other relevant legislation and requirements of other governmental Departments (*i.e.*, National, Provincial and Local). The Holder of the Authorisation must ensure that all necessary permits and/or authorisations are obtained from the relevant authorities.

7.5. Decommissioning, Closure and Rehabilitation

7.5.1. Should the Holder of the Authorisation plan to decommission this activity for any reason, necessary steps need to be taken to prevent any environmental damage that can be caused during the decommissioning phase. Please note that should this be considered a listed activity in future; the necessary authorisation must be obtained prior to decommissioning and/or site closure.

7.5.2. The Holder of the Authorisation must, at least, 60 days prior to decommissioning of this activity submit the decommissioning and rehabilitation plan to this Department. The plan shall provide, amongst others, the intention to decommission, the steps to be taken to prevent environmental damage and the steps to be taken to rehabilitate the site.

7.5.3. The decommissioning of the activities must be done in accordance with the applicable legislation standards and should ensure the protection of all the sensitive features, minimisation of pollution as well as prevention of soil erosion. A decommissioning environmental audit must be undertaken to ensure that the site where the activities were constructed is free from pollution, that all structures on site are removed, and that the area has been satisfactorily rehabilitated.

7.5.4. The Holder of the Authorisation shall remain responsible for the site, and/or any of its impacts on the environment, after operations on the site have ceased.

7.6. General Conditions

7.6.1. The activity which is authorised in terms of Section 24G of NEMA already exists on the property indicated above.

7.6.2. The Holder of the Authorisation must take reasonable steps to minimize or prevent any activity in violation of this authorisation which has a reasonable likelihood of adversely affecting human health or the environment.

7.6.3. The Holder of the Authorisation shall be responsible for ensuring compliance with the conditions contained in this Authorisation by any person acting on his behalf, including but not limited to, an agent, servant, or employee or any person rendering a service to the Holder of the Authorisation in respect of the activity, including but not limited to, contractors and consultants.

7.6.4. Any changes to, or deviations from, the project description set out in this authorisation must be approved, in writing, by the Department before such changes or deviations may be affected. In assessing whether to grant such approval or not, the Department may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations and it may be necessary for the Holder of the Authorisation to apply for further authorisation in terms of the regulations.

7.6.5. The Holder of the Authorisation must, within twenty-four (24) hours, notify the Department of the occurrence or detection of any incident on the site, or incidental to the operation of the site, which has the potential to cause, or has caused pollution of the environment, health risks, nuisance conditions or water pollution.

7.6.6. The Department places on record that it exonerates itself from any liability that is related to any unforeseen activities or incidents that may occur on site as a result of the activities undertaken on site.

7.6.7. The Holder of the Authorisation must –

(a) Notify the Department in writing, at least fourteen (14) days prior to the change of the Holder of the Authorisation's name, registered name or registered physical/postal address and/or telephonic details.

(b) Notify the Department in writing, at least fourteen (14) days prior to the change of project developer/manager for the activity described in this Environmental Authorisation.

(c) Submit an amendment application in terms of Part 1 of Chapter 5 of the Environmental Impact Assessment Regulations (GNR 982 dated 08 December 2014) for a change of ownership or transfer/alienation of rights and obligations for the activities described in terms of this Environmental Authorisation.

7.6.8. Should the new information indicated in paragraph 7.6.7 above not be known to the Holder of the Authorisation prior to the change, the Department must be informed within fourteen (14) days of the new details being known to the Holder of the Authorisation.

7.6.9. The Holder of the Authorisation must furnish a copy of this authorisation to the new owner, developer or person to whom the rights accrue and inform the new owner, developer or person to whom the rights accrue that the conditions contained herein are binding on them.

7.6.10. The Applicant must within fourteen (14) days of receiving this Environmental Authorisation ensure that –

(a) All registered interested and affected parties are provided with access to the Environmental Authorisation; and

(b) All registered interested and affected parties are notified of the fact that an appeal may be lodged against the decision in terms of the National Appeals Regulations, 2014 as indicated in paragraph 9 below.

7.6.11. Departmental officials shall be given access to the property referred to in paragraph 2 above for the purpose of assessing and/or monitoring compliance with the conditions contained in this document at all reasonable times.

7.6.12. A copy of this authorisation must be kept at the property where the activity is being undertaken. The authorisation must be produced to any official of the Department who requests to see it and must be made available for inspection by employees or agents of the Holder of the Authorisation who undertakes work at the property.

7.6.13. This authorisation shall not be construed as exempting the Holder of the Authorisation from compliance with the provisions of any other National and Provincial Legislation, and any relevant Ordinance, Regulation, by-laws and National Norms and Standards.

8. KEY FACTORS INFORMING THE DECISION

8.1. In reaching its decision in respect of the application, the Gauteng Department of Environment ("the Department") has taken, *inter alia,* the following into consideration:

8.1.1. The Section 24G application dated 31 May 2023.

8.1.2. Information obtained from the Department's Geographic Information System Data Base *i.e.,* the Gauteng Conservation Plan (Version 3).

8.1.3. The findings of the site inspection conducted by officials of this Department on 20 July 2023 and 03 August 2023.

8.1.4. The Environmental Impact Assessment Report received by the Department on 31 January 2014, compiled by MM Emporium Consulting Environmental Engineering (Pty) Ltd.

8.1.5. The administrative fine letter issued by the Department on 21 June 2024.

8.1.6. The appeal to the MEC for the review of the administrative fine dated 11 July 2024.

8.1.7. The MEC's appeal decision dated 26 November 2024, reducing the issued administrative fine.

8.1.8. The payment and proof thereof of the administrative fine of R 75 000.00 (Seventy-Five Thousand Rand) received by the Department on 29 November 2024.

8.1.9. The findings of the compliance monitoring inspection conducted on 13 December 2024, in which the following were observed:

(a) The area cleared of indigenous vegetation was observed on the site.

(b) The cleared area is located within a ridge and beside a recently renovated residential house which was converted into a hotel.

(c) The ridge was excavated to form a part of the parking area for the cars visiting the hotel.

(d) The area that was backfilled around the area cleared for the parking of cars showed signs of soil erosion.

8.2. In reviewing this information, the Department made the following findings:

8.2.1. **Biophysical**.

(i) The Departmental information base indicates that the site falls within an Ecological Support Area. The site falls within a ridge and it was further confirmed by the Departments' Biodiversity Specialists that the area cleared is dominated by Brachylaena rotundata which is not endemic to South Africa and the vegetation cleared on the site is considered to be indigenous vegetation.

(ii) The Department is however of the view that the impacts from the activity can be mitigated to acceptable levels and will not contravene its policy on the protection of non-renewable resources, provided the conditions of this environmental authorisation are strictly adhered to.

8.2.2. Public Participation

(i) The unlawful activity was advertised in the Star on 17 April 2023.
(ii) Site notices were put at the entrance of the site.
(iii) Neighbouring landowners and occupiers of land in close proximity to the site and the relevant authorities received written notices and comment forms.
(iv) Interested and Affected Parties were given a thirty (30) day period to lodge any objections and/or comments.
(v) Proof of publication of the advertisement, site notices, notification to the adjacent landowners and other Interested and Affected Parties were submitted to the Department as required.

8.2.3. Other Considerations/Reports

(i) The Environmental Impact Report dated 25 January 2024, submitted to the Department provides mitigation measures for the impacts that could result from the activity.
(ii) The comments received from the Department's Biodiversity Specialists dated 15 May 2024.
(iii) The compliance monitoring site inspection conducted by the EMIs on 13 December 2024 in compliance with section 24G (5) of the NEMA confirmed that the Applicant, Vharanani Proprties (Pty) Ltd, has fully complied with the Directive dated 30 August 2023 issued by the Department in terms of section 24G (1) of NEMA, as amended.
(iv) The Applicant did not in any way expand or make changes to the activities unlawfully commenced with on site.
(v) Sufficient information was submitted to enable the Department to make an informed decision regarding this application.

In view of the above, this Department is satisfied that, subject to compliance with the conditions stipulated in this decision, the activity does not conflict with the general objectives of integrated environmental management laid down in Chapter 5 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) and that any potentially detrimental environmental impacts resulting from the activity can be mitigated to acceptable levels. Further, the Department is of the view that the mitigation measures provided in the submitted Environmental Impact Report will ensure that activity/ies conducted on site will be operated in a manner that will not cause significant harm to the environment once implemented and that the impacts will be mitigated to acceptable levels, thus, not contravene the principles of the NEMA and the Department's policy on the protection of environment, provided the conditions of this Environmental Authorisation are strictly adhered to.

Therefore, the Department is satisfied that, on the basis of the information available to it and subject to the compliance with the conditions of this environmental authorisation, that the applicant be authorised to continue with the activities applied for in terms of S24G of NEMA. Therefore, the environmental authorisation is accordingly granted in terms of Section 24G (2)(b) of the NEMA, as amended.

9. APPEALS

9.1 Any affected person who wishes to appeal against this decision must lodge such appeal in accordance with the procedure stipulated in The National Appeals Regulations of 08 December 2014 (as amended). An Appellant must submit the appeal to the Department's Appeal Administrator, and a copy of the appeal to the Holder of the Authorisation, any Registered Interested and Affected Party, and any organ of state interested in the matter, within 20 days from:

(a) The date that the notification of the decision for an application for an environmental authorisation or a waste management licence was sent to the registered interested and affected parties by the Applicant; or

(b) The date that the notification of the decision was sent to the Applicant by the competent authority, issuing authority or licensing authority, in the case of decisions other than those referred to in paragraph (a).

9.2 Further, an appeal submission must be-

(a) done in writing in the form obtainable from the Department's Appeal Administrator at telephone number 011 240 3236 or email address appeals@gauteng.gov.za or the Department's website: www.gauteng.gov.za; and

(b) accompanied by-

(i) a statement setting out the grounds of appeal;

(ii) supporting documentation which is referred to in the appeal submission; and

(iii) a statement, including supporting documentation, by the Appellant to confirm compliance with section 4(1) of the National Appeals Regulation of 08 December 2014 (as amended).

9.3 Appeals can be submitted through the following means:

Postal Address:
By hand: Umnotho House, 56 Eloff Street, Marshalltown, Johannesburg
By post: MEC: Gauteng Department of Environment
P. O. Box 8769
Johannesburg
2000.

All interested and affected parties that wish to appeal must serve on the Holder of the Application a copy of their notice of intention to appeal as well as a notice indicating where, and for what period the appeal submission will be available for inspection by the Holder of the Application. Also, If the Holder of the Authorisation should decide to appeal, the Holder of the Application must serve a copy of the notice of intention to appeal on all registered interested and affected parties as well as a notice indicating where and for what period the appeal submission will be available for inspection.

Should an appeal be submitted in relation to this Environmental Authorisation, please note that section 43(7) of the NEMA, which provides for suspension of the Environmental Authorisation pending the finalisation of such appeal, will be applied.

10. CONSEQUENCES OF NON-COMPLIANCE

10.1. The Holder of the Authorisation must comply with the conditions set out in this authorisation. Failure to comply with any of the above conditions may result in, *inter alia*, the institution of criminal proceedings and/or issuing a compliance notice. Furthermore, the Department may also choose to withdraw the authorisation, issue a directive to address any environmental damage as well as institute civil proceedings where necessary.

10.2. Please note that designated Environmental Management Inspectors from this Department are given wide powers in terms of the NEMA to investigate whether or not you are complying with the conditions of this authorisation, and to enforce any contravention, including the power to seize items used in the commission of the offence as well as the power of arrest.

10.3. Further note that failure to comply with a condition of this environmental authorisation is an offence in terms of Section 49A read with Section 49B of NEMA. A person convicted of this offence is liable to a fine not exceeding R10 million or to imprisonment for a period not exceeding 10 years, or to both such fine or imprisonment.

10.4. Furthermore, failure to comply with the Section 28 of NEMA is a breach of duty of care, thus the Holder of the Authorisation shall be subjected to the sanctions set out in Section 49A read with Section 49B of NEMA.

10.5. In a case were, the Holder of the Authorisation, have,

10.5.1. Any previous administrative action taken against them, as applicant, or against a firm(s) on which they sit or sat board members, and/or they were directors at the relevant time when the administrative action was taken.

10.5.2. Any convictions in terms of section 24F (1) of the National Environmental Management Act and/or section 20(b) of the National Environmental Management Waste Act.

10.5.3. Any previous S24G applications submitted by the applicant; and,

10.5.4. Any previous S24G application(s) submitted by a firm(s) on whose board one or more of the directors sit or sat at the relevant time and decides to submit an application for authorisation in terms of Section 24G of the National Environmental Management Act 107 of 1998 ("NEMA, as amended"), the Holder of the Authorisation shall be considered a repeat contravener, thus Regulation 4(i)(e) read with Regulation 9 of the Section 24G Fine Regulations, 2017, shall be applied in respect of such application.

11. SUSPENSION AND WITHDRAWAL OF ENVIRONMENTAL AUTHORISATION

The Environmental Impact Assessment Regulations of 08 December 2014, (as amended), issued in terms of NEMA, provide for the Department to suspend, partially suspend, with immediate effect, the environmental authorization should there be a reason to believe that the authorization was obtained through fraud, non-disclosure of material information or misrepresentation of material fact. To this effect the Department may direct the Holder of the Authorisation to cease any activities that have been commenced pending the decision to withdraw the environmental authorisation.

In the event that the Department decides to withdraw, or partially withdraw, the environmental authorization, and the activity or activities have commenced, the Department may direct the Holder of the Authorisation to rehabilitate the effects of the activity or activities on the environment.

12. AMENDMENT TO ENVIRONMENTAL AUTHORISATION

The Environmental Impact Assessment Regulations of 08 December 2014 (as amended) issued in terms of NEMA provide for the amendment of an environmental authorisation by the Holder of the Authorisation and on the initiative of the Department. Please take note of the provisions set out in Chapter 5 of these regulations should you wish to apply for an amendment to this authorisation.

In terms of regulation 31 of the NEMA EIA Regulations, "[a]n environmental authorisation may be amended by following the process prescribed in [Part 2] if the amendment will result in a change to the scope of a valid environmental authorisation where such change will result in an increased level or change in the nature of impact where such level or change in nature of impact was not— (a) assessed and included in the initial application for environmental authorisation; or (b) taken into consideration in the initial environmental authorisation; and **the change does not, on its own, constitute a listed or specified activity.**"(emphasis mine).

Further note that making use of the amendment process *ex post facto* or retrospectively to seek authorisation for activities conducted illegally is not possible as non-compliance to an issued EA cannot be rectified though an amendment of the EA or the S24G NEMA application process.

Should the Holder of the Authorisation wish to amend the environmental authorisation, the amendment must be done in writing on the form obtainable from the GDARDE Section 24G Sub-Directorate via email or the Department's website: www.gauteng.gov.za.

-

Signed on this 06 day of FEBRUARY 2025, at JOHANNESBURG

MR. BLAKE MOSLEY-LEFATOLA
HEAD OF DEPARTMENT: GAUTENG DEPARTMENT OF ENVIRONMENT

CC:	Department of Environment: Environmental Compliance Monitoring	**Attn:** **Ms. Nomsa Sekhotha** **Email:** sasa.sekhotha@gauteng.gov.za **Fax:** (086) 420 2110
CC:	MM Emporium Consulting Environmental Engineering (Pty) Ltd	**Attn:** **Mr. Nelwamondo Lavhelesani** **Email** lavhelesani@mmemporium.co.za

ACKNOWLEDGEMENT OF RECEIPT:

Received by Mr/Ms: _____ **I.D. No.** _____ **on behalf of the Company** _____ **on this** _____ **day of** _____ **2025, at** _____

Signature: _____

Appendix M: Record of Township Application

+27(0)12 023 8543 | info@lexeco.co.za | lexeco.co.za
11 Alice Lane, Building 3, 5th Floor, Sandton, Johannesburg, 2196 | Registration Number 2020/642/160/07

LANDMARK PLANNING TOWN & REGIONAL PLANNERS
75 Jean Avenue, Doringkloof, Centurion
Postnet Suite #108, Private Bag x 1028, Lyttelton, 0140
info@land-mark.co.za | www.landmarkplanning.co.za
(012) 667 4773 | 082 371 5770

CoJ Ref: 20-04-6237
Our Ref: T-23-238

2 July 2026

Attention: **Mr Pieter Henning**

By e-mail

Dear Sir,

STATUS OF THE APPLICATION FOR THE ESTABLISHMENT OF A TOWNSHIP ON PORTION 556 OF THE FARM BOSCHKOP, 199-IQ TO BE KNOWN AS BOSKRUIN EXTENSION 64

With reference to the above-mentioned application and our Progress Report dated 10 April 2026, we hereby wish to report as follows:

1. THE APPLICATION

Application was made to the City of Johannesburg Metropolitan Municipality in terms of the provisions of Section 26 of the City of Johannesburg Municipal Planning By-Law, 2016 (as Amended 2023) for the establishment of a township on Portion 556 of the farm Boschkop, 199-IQ to be known as **Boskruin Extension 64**.

The purpose of the application is to establish a township consisting of two erven, with one erf zoned ***"Special" for the purpose of a Boutique Hotel***, and the other erf zoned ***"Private Open Space"***. The "*Private Open Space*" erf will ensure that the natural area is protected from development in the future.

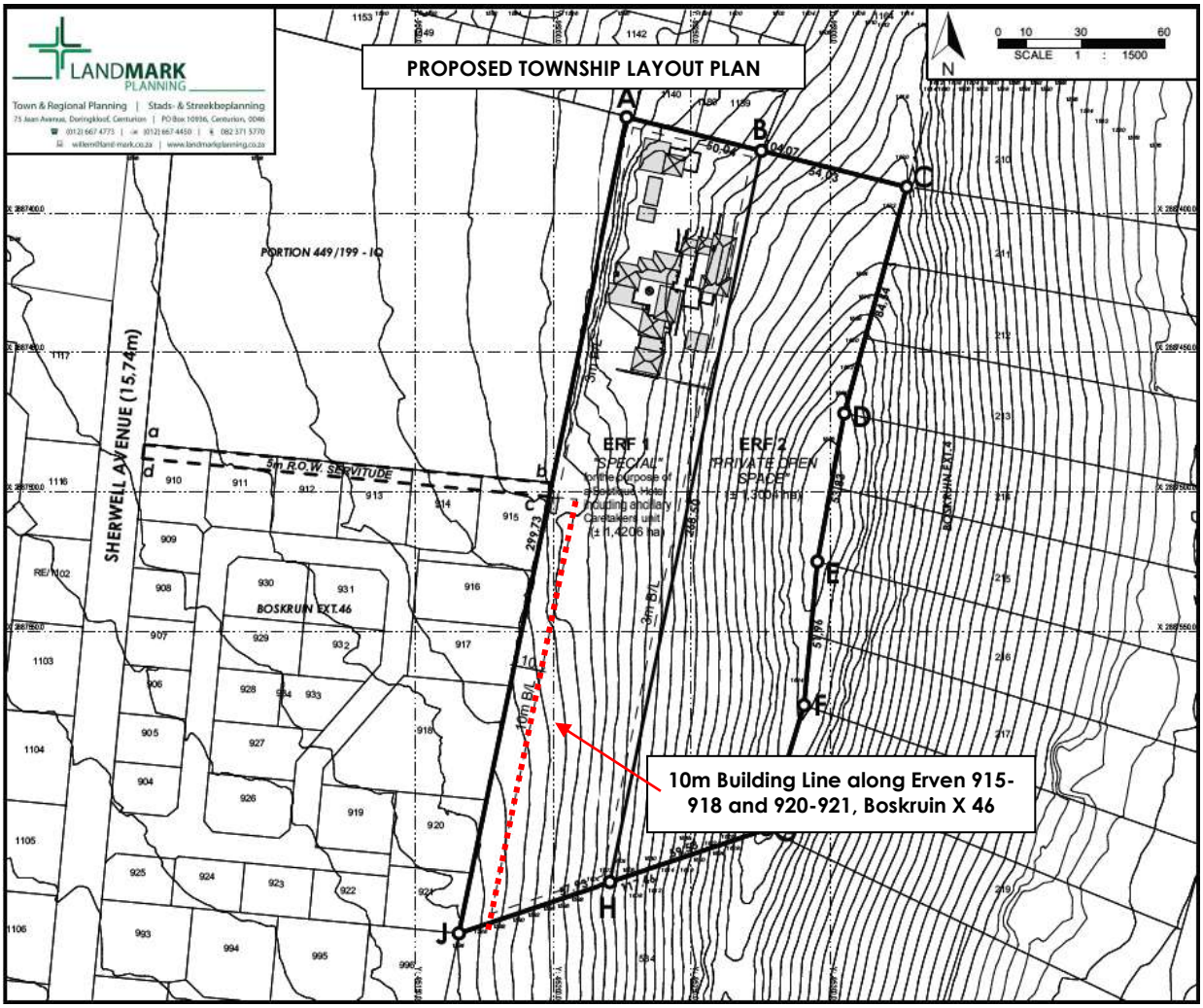
The proposed Boutique Hotel is envisaged to consist of **20 on-suite bedrooms**, which include communal and recreational areas such as a swimming pool, dining hall, conference facility, spa and caretaker's flat.

The following table summarises the proposed Land Uses/Zoning in terms of the Johannesburg Land Use Scheme, 2018:

BOSKRUIN EXTENSION 64					
Use Zone/Zoning:	**Erven:**	**Area:**	**FAR:**	**Coverage:**	**Height:**
10: "Special", for the purpose of a Boutique Hotel (20 on-suite Guest Rooms), including an ancillary Caretaker's Flat	Erf 1	1,4206 ha	0,4	50%	3 Storeys 2 Storeys alongside and east of Erven 915-918 and 920-921, Boskruin X 46
26: "Private Open Space"	Erf 2	1,3004 ha	N/A	N/A	N/A
TOTAL:	**2 Erven**	**2,7210 ha**			

For the purpose of this scheme, a **Boutique Hotel** shall mean "a building/s used as a temporary residence for transient guests, where lodging and meals are provided, and may include:

(i) A restaurant;
(ii) Associated meeting rooms, conference and entertainment facilities, recreational and service facilities that are subservient and ancillary to the dominant use of the property as a Boutique Hotel;
(iii) A Spa;
(iv) Premises which are licensed to sell alcoholic beverages for consumption on the property; but does not include an off-sales facility; and
(v) However, it excludes self-catering suites/units for permanent residents; no suites/units may be sectionalized.



2. ADVERTISEMENT PROCEDURE AND OBJECTIONS RECEIVED

The required advertisement process commenced on 16 July 2025. The 28-day objection period on 13 August 2025 and a total of eighty-one (81) objections were received.

3. COMMENTS RECEIVED FROM THE CITY OF JOBURG'S UTILITIES

Prior to the application being evaluated and decided on by the CoJ Municipal Planning Tribunal, all comments from CoJ's Utilities need to be positive and in support of the application.

The following comments have been received from CoJ's utilities to date:

No.	Department	Comment	Action/Notes/Responsible party
1	City Power	An **Engineer must confirm the required capacity** for the development.	***To be provided to City Power*** Mr. Connie Truter (Electrical Engineer) requires the following:

			1. The sizes of the existing guestrooms to calculate the required capacity. 2. City Power account. 3. Confirmation of the existing electrical connection type and current.
2	Johannesburg Roads Agency (JRA)	**No objection** to the township application. Access shall be obtained from the existing road, Sherwell Avenue, via the 5m wide panhandle or right-of-way servitude, to the satisfaction of JRA. A Site Development Plan (SDP) is required prior to development on site. A **Stormwater Management Plan (SMP)** is required and an **Outline Scheme Report (OSR)** with cost estimates is required.	Noted – In order The required Roads and Stormwater Services Report has been compiled by DES Engineers and have been resubmitted to JRA (April 2026) for comments. ***A further request has been submitted to JRA for their comments/approval of the SMP and OSR.***
3	Pikitup	**No objection** to the application subject to the following: 1. The developer shall be responsible for the design and construction of the refuse area and associated infrastructure in accordance with the "Pikitup Waste Management Guidelines". 2. The developer to follow the guidelines as issued by Pikitup with regards to refuse area storage capacity and supporting infrastructure. The refuse area must be located within an acceptable minimum distance. 3. The collection layby for the trucks must be designed to avoid any obstruction to the traffic flow and to conform to JRA standards.	Noted – In order
4	Johannesburg Water SOC Ltd (JW)	**Approval of the Water & Sewer Outline Scheme Report** (01.07.2026)	Noted – In order Refer to the attached comments from JW.

5	Environment and Infrastructure Services Department (EISD)	The site is located on a Ridge. An Environmental Authorization (EA) with reference S24G/03/23-24/0624 was granted in terms of Section 24G of NEMA for the unlawful clearance of indigenous vegetation for the construction of car parking area (see Annexure A). The authorization is granted solely for the undertaking of the unlawful clearance of an area of more than 300m2 of indigenous vegetation for the construction of a car parking area. The layout plan (Drawing number: A1-WD-000) indicates that proposed units will be developed on the site, which is not in compliance with the authorization. Having noted the above factors the **Environmental Department objects to this application.** An amended layout plan is required which excludes the 8 proposed new units adjacent to the car parking.	***Environmental Authorisation to be provided to EISD.*** LexEco (Riette Landsberg - Environmental Assessment Practitioner) was appointed to undertake the Environmental Authorisation process.

We trust that the above information is found in good order. Kindly contact our office if any additional information is required.

Yours faithfully,

Cecile Augustyn
LANDMARK PLANNING CC

Appendix N: EAP Qualifications and CV

LEXECO

LEGAL INSIGHT. SUSTAINABLE IMPACT.

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riette@lexeco.co.za
+27(0) 10 023 8543

11 Alice Lane
Building 3, Sandhurst
Sandton 2196

Riette Janica Landsberg

ENVIRONMENTAL ASSESSMENT PRACTITIONER

Riette joined the LexEco team in 2025 and was successfully registered as an Environmental Assessment Practitioner in 2026. With over 12 years of consulting experience, working in the legislative environment, Riette is equipped to successfully translate regulation to industry implementation.

Riette's focus areas include environmental management, regulatory compliance, environmental auditing, monitoring and reporting. Riette has successfully led several EIA's and Basic Assessments and compiled multiple EMPr's for a range of projects linked to the manufacturing, mining, energy and construction sectors.

Education & Memberships

- EAPASA Registered - 2025/20547
- IAIA Member - 7822
- BSc, Hons in Environmental Science – Northwest University, 2013
- BSc, Environmental Science – Northwest University, 2012

Key Expertise

- National Environmental Management Act and EIA Regulations and related SEMA's
- Land Management, Licensing, EIA's and Permitting
- ECO functions
- Impact Assessment and Scoping Processes
- Monitoring and Reporting
- Water, waste and air quality management
- Public Participation
- Air Quality Management and Reporting
- Land contamination assessments
- Waste classifications and Management

Notable Experience

- Undertaking and successfully completing basic to complex Full Scoping EIA, Basic Assessment and or S24 Rectification Applications in terms of NEMA, NEMWA and NEMAQA.
- Drafting and implementation of Environmental Management Programs (EMPr's).
- Maintenance of client's environmental management systems by ensuring ongoing compliance and regulatory accuracy.
- Undertaking and assisting clients in environmental compliance audits.

Employment History

LEXECO - ENVIRONMENTAL ASSESSMENT PRACTITIONER & CONSULTANT | 2025 – PRESENT

Planning, managing, and coordinating environmental impact assessments (EIAs), Environmental Management Programs, Environmental Monitoring and Investigations, Environmental Compliance Auditing and Compliance Functions.

ZANTOW ENVIRONMENTAL CONSULTING SERVICES - ENVIRONMENTAL CONSULTANT | 2013 - 2025

Environmental Monitoring, Auditing and Reporting and Laboratory Manager. Planning, managing, and coordinating environmental impact assessments (EIAs), Environmental Management Programs.

Environmental Assessment Practitioners Association of South Africa

Registration No. 2025/20547

Herewith certifies that

RIETTE JANICA LANDSBERG

is registered as an

Environmental Assessment Practitioner

Registered in accordance with the prescribed criteria of Regulation 15. (1) of the Section 24H Registration Authority Regulations (Regulation No. 849, Gazette No. 40154 of 22 July 2016, of the National Environmental Management Act (NEMA), Act No. 107 of 1998, as amended).

Effective: 01 April 2026

Expires: 31 March 2027

Chairperson

Registrar

SAQA
SOUTH AFRICAN QUALIFICATIONS AUTHORITY

NORTH-WEST UNIVERSITY ®
YUNIBESITI YA BOKONE-BOPHIRIMA
NOORDWES-UNIVERSITEIT

HONOURS BACHELOR OF SCIENCE

in

ENVIRONMENTAL SCIENCES

awarded to

RIETTE JANICA LANDSBERG

after complying with all the requirements

GESERTIFISEER 'N WARE AFSKRIF
CERTIFIED A TRUE COPY
KOMMISSARIS VAN EDE
COMMISSIONER OF OATHS
CHARLES MARTIN PEARSON
Kommissaris van Ede / Commissioner of Oaths
Praktiserende Prokureur / Practising Attorney
RSA
F W Beyerstraat / F W Beyers Street
Omegagebou / Building Vanderbijlpark
DE KLERK VERMAAK & VENNOTE

4 March 2014

Dr T Eloff
Vice-Chancellor

Prof M Verhoef
Registrar

University number: 21697418
Serial number: 179697

This is an English translation of the content of the original certificate issued in Afrikaans and conferred at a graduation ceremony held on 4 March 2014.

LEXECO

LEGAL INSIGHT. SUSTAINABLE IMPACT.

Shaylen Ramsamy Naidoo

ENVIRONMENTAL ASSESSMENT PRACTITIONER AND GIS SPECIALIST

Environmental scientist, GIS specialist, and climate data analyst with 5+ years of experience delivering technically rigorous environmental assessments, geospatial analysis, and data-driven reporting across the mining, energy, industrial, water resource, and climate sectors in South Africa. Registered with SACNASP (Candidate Natural Scientist: 130920) and EAPASA (Candidate EAP: 2024/8707). Strong technical background in ArcGIS Pro, Python scripting, statistical analysis, air dispersion modelling, LiDAR data processing, and water-use GIS — all directly applicable to climate data analysis, value-added climate service delivery, and environmental informatics.

Education & Memberships

- EAPASA Candidate Registered - 2024/8707
- SACNASP Candidate - 130920
- BSc, Hons in Environmental Technology – University of Pretoria, 2019
- BSc, Environmental Science – University of Pretoria, 2018

Key Expertise

- National Environmental Management Act and EIA Regulations and related SEMA's
- Land Management, Licensing, EIA's and Permitting
- ECO functions
- Impact Assessment and Scoping Processes
- Monitoring and Reporting
- Water, waste and air quality management
- Air Quality Management and Reporting
- Geographic Information Science (GIS)
- Artificial Intelligence (AI)
- Waste classifications and Management

Notable Experience

- Undertaking and successfully completing basic to complex Full Scoping EIA, Basic Assessment and Atmospheric Impact Reports in terms of NEMA, NEMWA and NEMAQA.
- Drafting and implementation of Environmental Management Programs (EMPr's).
- Maintenance of client's environmental management systems by ensuring ongoing compliance and regulatory accuracy.
- Undertaking and assisting clients in environmental compliance audits.
- Liaison between clients, industry and relevant authorities whilst focusing on regulatory requirement, need and compliance.

Employment History

LEXECO - Environmental Assessment Practitioner & GIS Specialist | 2026 – PRESENT

Drafting environmental impact assessments (EIAs), Environmental Management Programs, Environmental Monitoring and Investigations, Environmental Compliance Auditing and Compliance Functions. Environmental Permitting

ESCIENCE ASSOCIATES - ENVIRONMENTAL CONSULTANT | 2023 - 2026

Environmental permitting, including EIAs, Basic Assessments, AQMPs, AQIAs, AELs, and WML applications, as well as advanced GIS analysis, air quality modelling, and ESG data management.

Employment History (Continued)

WOOLPERT AFRICA – GIS TECHNICIAN | 2021 – 2023

Managed project workstreams, delivery schedules, and quality assurance milestones for large-scale international geospatial programs. Processed and analyzed LiDAR point-cloud datasets to produce validated Digital Elevation Models (DEMs), while conducting QA/QC, hydro-flattening, and terrain corrections using ArcGIS, Global Mapper, and LP360. Contributed to workflow optimization, standard operating procedure development, technical training, and the resolution of complex spatial analysis challenges to ensure accurate, high-quality, and timely project delivery.

COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH (CSIR) – WATER RESOURCE SPECIALIST | 2021 - 2021

Managed Water Use Verification and Validation project tasks — coordinating data collection schedules, maintaining GIS output timelines, and ensuring verified data was captured and submitted to the WARMS database within regulatory requirements .Produced GIS mapping outputs, analyzed water body characteristics, and prepared technical reports and spatial data products for DWAF regulatory compliance, maintaining data integrity throughout.

NATIONAL DEPARTMENT OF ENVIRONMENT, FORESTRY & FISHERIES (DFFE) – ENVIRONMENTAL OFFICER| 2019 - 2020

Managed a personal portfolio of waste management license reviews, environmental standards assessments, and tyre abatement plan evaluations — coordinating documentation, maintaining progress tracking, and escalating critical findings to senior officers within established reporting cycles .Led the public participation process for the national phasing-out of plastic straws under South Africa's national single-use plastic reduction initiative coordinating stakeholder communication, facilitating engagement sessions with industry, municipalities, and civil society groups, and compiling consolidated public inputs into formal regulatory reporting for the Department. Conducted site inspections, environmental audits, and investigations supporting enforcement actions and public health protection across the waste management sector preparing investigation reports and compliance recommendations • Developed IWMP support documentation, waste tariff models, and municipal performance reports improving regulatory implementation clarity and enabling measurable compliance tracking across local government.

MVLOGIC IT SOLUTIONS – COMPUTER TECHNICIAN SUPPORT| 2018 - 2019

Installed, maintained, and troubleshot computer systems and networks, ensuring operational continuity for business clients; maintained data records with 99% accuracy and documented IT processes to support system stability

Environmental Assessment Practitioners Association of South Africa

Registration No. 2024/8707

Herewith certifies that

SHAYLEN RAMSAMY NAIDOO

is registered as an

Candidate Environmental Assessment Practitioner

Registered in accordance with the prescribed criteria of Regulation 15. (1) of the Section 24H Registration Authority Regulations (Regulation No. 849, Gazette No. 40154 of 22 July 2016, of the National Environmental Management Act (NEMA), Act No. 107 of 1998, as amended).

Effective: 01 April 2026

Expires: 31 March 2027

Chairperson

Registrar

SAQA
SOUTH AFRICAN QUALIFICATIONS AUTHORITY

SACNASP

South African Council for Natural Scientific Professions

herewith certifies that

Shaylen Ramsamy Naidoo

Registration Number: 130920

is a registered scientist

in terms of section 20(3) of the Natural Scientific Professions Act, 2003
(Act 27 of 2003)
in the following field(s) of practice (Schedule 1 of the Act)

Environmental Science (Candidate Natural Scientist)

Effective **9 September 2020** Expires **31 March 2027**

President of Council

Chief Executive Officer

To verify this certificate scan this code

14016852

University of Pretoria

The Council and Senate hereby declare that
at a congregation of the University the degree

Bachelor of Science
in
Environmental Sciences

with all the associated rights and privileges was conferred on

Shaylen Ramsamy Naidoo

in terms of the Higher Education Act, 1997 and the
Statute of the University

On behalf of the Council and Senate

T. Kupe

Vice-Chancellor and Principal

Registrar

00063396

2019-04-11

00233650-01-RJKW

14016852

University of Pretoria

The Council and Senate hereby declare that
at a congregation of the University the degree

Bachelor of Science Honours

Applied Science
Environmental Technology

with all the associated rights and privileges was conferred on

Shaylen Ramsamy Naidoo

in terms of the Higher Education Act, 1997 and the
Statute of the University

On behalf of the Council and Senate

T. Kupe

Vice-Chancellor and Principal

Registrar

00081372

00332573-01-YLQ3

2020/05/05

University of Pretoria

Faculty of Law

Department of Law General

This is to certify that

SR Naidoo

has successfully completed the

Short Course in
Environmental Law

16 to 20 March 2020

This certificate is awarded with distinction

SACNASP Validation Number: 2020-0115-001282 (5 CPD Points)

Course Leader

Executive Manager: Training Solutions
Enterprises University of Pretoria

0321452 2020-07-23 ID/Passport: 9507165071080 P001105-001-2020