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Attention: Environmental Impact Management Services (Pty) Ltd (EIMS)

RE: TERRESTRIAL BIODIVERSITY OFFSET STRATEGY

1 Introduction

The Biodiversity Company was requested to provide a terrestrial biodiversity offset strategy for the proposed Harmony West Wits Reclamation and Deposition Project, including the proposed Deelkraal II Tailings Storage Facility (TSF) and ancillary infrastructure, hereinafter referred to as the affected area.

A terrestrial biodiversity assessment was completed for the proposed project (De Villiers and Burger, 2026) which included the assessment of a larger Project Area of Influence (PAOI). The assessment indicates that the affected area overlaps with various terrestrial ecological features of importance including Critical Biodiversity Areas (CBAs), Gauteng Ridges, an Endangered (EN) ecosystem and areas rated as having High Site Ecological Importances (SEI).

The affected area will need to be cleared to accommodate the proposed project. Given the overlap with the features described above, an offset strategy letter has been prepared for submission to the Gauteng Department of Environment (GDEnv) for review and comment. The letter includes proposed offset configuration options that could serve as a basis for preparing a detailed terrestrial biodiversity offset report.

Wetlands/Freshwater Features have been excluded from the terrestrial offset calculations and considerations presented in this assessment and should be addressed separately through the applicable freshwater assessment and mitigation process.

1.1 National Guidelines

In 2023 the National Biodiversity Offset Guideline (NBOG) (Department of Forestry, Fisheries and the Environment (DFFE), 2023) was published. According to the DFFE, 2023 biodiversity offset is defined as "*the measurable outcome of compliance with a formal requirement contained in an environmental authorisation to implement an intervention that has the purpose of counterbalancing the residual negative impacts of an activity, or activities, on biodiversity, through increased protection and appropriate management, after every effort has been made to avoid and minimise impacts and rehabilitate affected areas."*

The South African Biodiversity Institute (SANBI, 2004) further defines biodiversity offset as "*measurable conservation outcomes resulting from actions designed to compensate for significant residual adverse biodiversity impacts arising from project development after appropriate prevention and mitigation measures have been taken*".

The National Biodiversity Offset Guideline (NBOG) also indicates that *"Offsets are the final option in the mitigation hierarchy – Biodiversity offsets must only be considered once all the foregoing steps in the mitigation hierarchy have been considered to their full and feasible extent. The mitigation hierarchy dictates that the degradation and loss of biodiversity must be avoided, or where impacts cannot altogether be avoided, they should be minimised, and the area adversely impacted by relevant activity should be rehabilitated. When, after taking the aforementioned mitigation measures, there are likely to be residual negative impacts on biodiversity of medium to high significance, they must be offset."*

Ecological equivalence (like-for-like) is the preferred offset type. If offsets are the only option to manage residual negative impacts, to counterbalance a residual impact, biodiversity offsets should comprise - or benefit - the same or similar biodiversity components as those components that would be negatively affected by the development. Trading up offset types which secure priority areas of greater importance or priority to biodiversity conservation than the area being impacted, may be considered under certain circumstances.

1.2 Gauteng Biodiversity Offsets Implementation Guideline

The Gauteng guideline is a provincial implementation guideline that operationalises the National Biodiversity Offset Guideline (NBOG) 2023 within Gauteng; it does not create a separate or alternative national offset framework. It must be read together with the National Environmental Management Act (NEMA), the Environmental Impact Assessment Regulations and the NBOG. Where there is a conflict, the applicable legislation and the NBOG take precedence, and the NBOG applies where the Gauteng guideline is silent. The Gauteng guideline therefore adds provincial detail, including responsibilities within the DDEnv, offset-site selection, management-plan requirements, environmental-authorisation conditions and implementation arrangements.

The NBOG 2023 distinguishes between CBA 1 areas, which are generally considered irreplaceable and therefore not suitable for offsetting where the feature supporting the designation would be compromised, and CBA 2 areas, where offsetting may be considered subject to the mitigation hierarchy, ecological equivalence and an adjusted offset ratio. The Gauteng Biodiversity Offsets Implementation Guideline adopts these national principles but applies a more precautionary, province-specific approach. It identifies Gauteng CBA 1 areas as irreplaceable sites where further biodiversity loss should not occur, while also treating CBA 2 areas as high-value areas requiring the retention of near-natural landscapes and limited loss of biodiversity patterns and ecological processes. The Gauteng guideline's inclusion of CBA 2 within its discussion of irreplaceable biodiversity may therefore result in a more restrictive assessment than the NBOG, although it does not expressly state that all CBA 2 impacts are automatically non-offsetable (NBOG, 2023). The treatment of Gauteng ridges is a further provincial refinement that is not expressly presented as a separate category in the NBOG. The Gauteng guideline identifies Ridge Classes 1, 2 and 3 as features associated with irreplaceable biodiversity and potential fatal-flaw impacts, while Ridge Class 4 is identified as biodiversity of potential concern. These classifications therefore provide Gauteng-specific triggers for avoidance, further assessment or, where appropriate, consideration of residual impacts under the offset framework (Gauteng Department of Environment, 2024).

2 Revised Development Layout

A revised development layout was received by EIMS on 29 September 2026 (Figure 1). The revised layout was developed to avoid and minimise impacts on biodiversity-priority areas and habitats that may trigger offset requirements. Certain areas of the revised layout extend beyond the PAOI assessed in the initial terrestrial biodiversity assessment (De Villiers and Burger, 2026). These areas were assessed at a Desktop level, with the assessment supported by the findings of the initial terrestrial biodiversity assessment.

This letter focuses on the biodiversity features affected by the revised layout, particularly those associated with development activities that will require clearing and are expected to result in moderate to high residual impacts, as identified in De Villiers and Burger (2026). These affected areas overlap with key biodiversity features relevant to the current terrestrial biodiversity offset discussion.

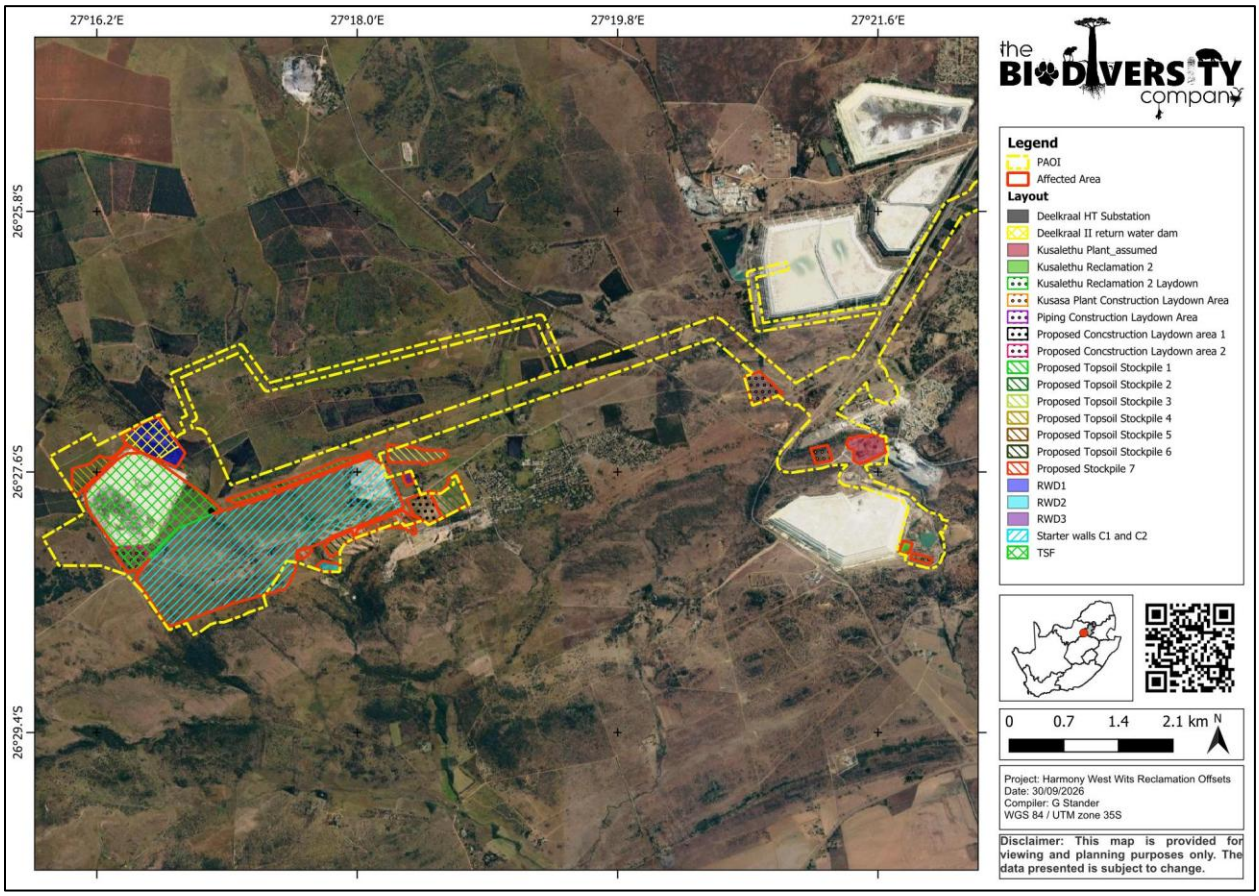


Figure 1 Revised development area.

3 Terrestrial Biodiversity Context

Based on the most recent available datasets, the affected area overlaps several terrestrial ecological features of importance. This overlap triggers the need to consider biodiversity offsets, particularly because the mitigation hierarchy has been exhausted and residual impacts ranging from medium to high remain within the affected area (De Villiers and Burger, 2026). The terrestrial biodiversity assessment (De Villiers and Burger, 2026) included the on-site verification and refinement of the relevant terrestrial ecological feature datasets. The refined datasets were used to calculate the indicative terrestrial biodiversity offset requirement.

The affected area overlaps the following terrestrial ecological features of importance:

1. Critical Biodiversity Area 2 (CBA 2), as identified in the Gauteng Conservation Plan (C-Plan) Version 4 (2024);
2. Class 1, Class 2 and Class 3 Gauteng Ridges, as identified by the Gauteng Department of Environment (2025);
3. Remnants of the Endangered (EN) Gauteng Shale Mountain Bushveld vegetation type, as identified in the National Biodiversity Assessment (NBA 2025); and
4. High Site Ecological Importance (SEI) areas, comprising Rocky Gauteng Shale Mountain Bushveld and Rocky Carletonville Dolomite Grassland habitats (De Villiers and Burger, 2026).

These terrestrial ecological features of importance are regarded as the key biodiversity features relevant to the current terrestrial biodiversity offset discussion. Table 1 presents the extent of each key biodiversity feature affected by the development.

The National Biodiversity Assessment 2025 dataset (Skowno et al., 2025) was used as the current national reference for the biodiversity status of the relevant ecosystem. The NBA 2025 represents the most recent national assessment and classifies the ecosystem as Endangered (EN), compared with its previous Least Concern (LC) classification. Given this material change in threat status, the specialist considers it appropriate, in accordance with the precautionary principle, to apply the NBA 2025 classification when assessing ecological sensitivity and potential impacts. The findings of the terrestrial biodiversity assessment were considered in relation to the EN ecosystem, including the presence, condition, structure, functionality, connectivity of intact ecosystem remnants, as well as refinement of remnants.

Impacts on wetlands and other freshwater features, together with any associated offset requirements, are excluded from this terrestrial biodiversity offset letter.

Table 1: Key biodiversity features and habitats within the affected areas and their respective offset potential.

Biodiversity feature impacted	Habitat / Ecosystem	SEI	Offset recommendation	Reason
CBA 2: Optimal	Irreversibly Modified	Very Low	No	Habitat exists in a transformed state with little to no function.
	Degraded Carletonville Dolomite Grassland	Low	Yes	Habitat exists in a degraded state, with reduced function. Still provides some ecosystem functions.
	Carletonville Dolomite Grassland	Medium	Yes	Habitat is largely functional, although fragmented
	Rocky Gauteng Shale Mountain Bushveld; EN Gauteng Shale Mountain Bushveld remnant	High	Yes	Exists in a natural state, providing important ecological functions
Class 1 Gauteng Ridges	Rocky Gauteng Shale Mountain Bushveld; EN Gauteng Shale Mountain Bushveld remnant	High	Possible. Dependent on consultation with GDEnv	Exists in a natural state, providing important ecological functions
Class 2 Gauteng Ridges	Rocky Gauteng Shale Mountain Bushveld; EN Gauteng Shale Mountain Bushveld remnant	High	Possible. Dependent on consultation with GDEnv	Exists in a natural state, providing important ecological functions
	Irreversibly modified; 'Built – up' (Gauteng Ridge dataset, 2024).	Very Low	No	Habitat exists in a transformed state with little to no function.
Class 3 Gauteng Ridges	Degraded Carletonville Dolomite Grassland; 'Plantation' (Gauteng Ridge dataset, 2024)	Low	Possible. Dependent on consultation with GDEnv	Habitat exists in a degraded state, with reduced function. Still provides some ecosystem functions.

Representative Endangered Gauteng Shale Mountain Bushveld Remnants	Rocky Gauteng Shale Mountain Bushveld; EN Gauteng Shale Mountain Bushveld remnant	High	Yes	Exists in a natural state, providing important ecological functions
Terrestrial High SEI	Rocky Gauteng Shale Mountain Bushveld; EN Gauteng Shale Mountain Bushveld remnant	High	Yes	Exists in a natural state, providing important ecological functions
	Rocky Carletonville Dolomite Grassland; LC Carletonville Dolomite Grassland remnant	High	Yes	Exists in a natural state, providing important ecological functions

4 Terrestrial Offset Requirements

For purposes of this initial terrestrial biodiversity offset proposal, the offset requirement has been considered with reference to the affected area on the key biodiversity features.

The determination of the starting biodiversity offset ratio is dependent on the biodiversity targets based on Ecosystem Extent, Remaining Ecosystem Extent (REE)/Ecosystem Protection Level (EPL) and Ecosystem Threat Status (ETS) of the various ecosystem types, as provided in the NBOG's look-up table. Following the precautionary approach, the highest of the ratios is selected as the starting ratio. For residual impacts occurring in a CBA 2: Optimal, the NBOG's 1.5 multiplier applies.

According to the National Biodiversity Assessment dataset (2025) the affected area overlaps with the poorly protected EN Gauteng Shale Mountain Bushveld ecosystem. However, the on-site verification concluded that large sections of the affected area are no longer representative of this ecosystem type. The ecological basis for areas which are no longer considered representative of the EN Gauteng Shale Mountain Bushveld ecosystem, was based on the habitat descriptions in the terrestrial assessment (De Villiers and Burger, 2026.). The ecological basis for these areas was adjusted to the LC Carletonville Dolomite Grassland which reduced the ETS ratio.

Table 2 below lists the indicative terrestrial offset requirement for the key biodiversity features within the affected area. These figures are presented as an initial indication of the likely terrestrial offset requirement associated with the revised layout.

It should be noted, however, that the impacted key biodiversity features overlap spatially. Where features overlap, the precautionary approach was applied, and the highest of the ratio was selected to avoid double counting impacted areas to be offset. Due to the degraded condition of the Degraded Carletonville Dolomite Grassland (De Villiers and Burger, 2026) overlapping CBA 2: Optimal, a reduced ratio of 0.75:1 is suggested.

A total of 70 ha (rounded up from 69.091 ha) impacted are considered for the terrestrial offset. The total area required as an offset is 282 ha (rounded up from 281.667 ha). Figure 2 illustrates the spatial distribution of the affected area and key terrestrial biodiversity features.

Table 2: Indicative terrestrial offset requirement

Habitat / biodiversity feature	Impact area (ha)	Applicable ratio	Indicative offset area (ha)
CBA 2 – Degraded Carletonville Dolomite Grassland	26.736	0.75:1	20.052
CBA 2 – Carletonville Dolomite Grassland	19.639	1:1	19.639
CBA 2, High SEI and EN ecosystem – Rocky Gauteng Shale Mountain Bushveld	6.898	15:1	103.47

High SEI and EN ecosystem – Rocky Gauteng Shale Mountain Bushveld outside CBA 2	13.632	10:1	136.32
High SEI – Rocky Carletonville Dolomite Grassland outside CBA 2	2.186	1:1	2.186
Total	**69.091**	**—**	**281.667**

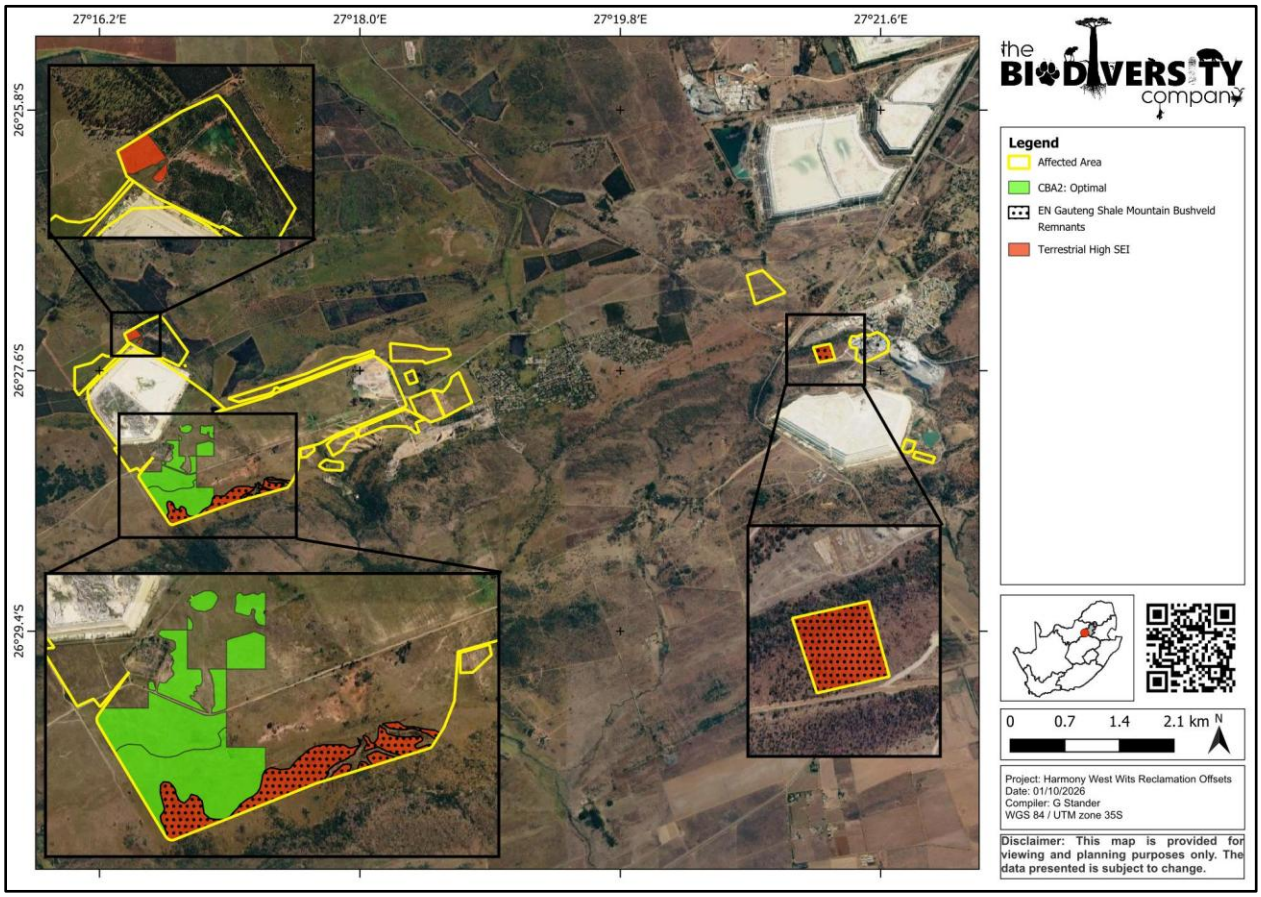


Figure 2: Spatial distribution of the affected area and key terrestrial biodiversity features, including CBA 2: Optimal areas, Endangered Gauteng Shale Mountain Bushveld remnants and terrestrial High Strategic Ecological Importance (SEI) areas

No specific offset ratios or guidelines are provided for Gauteng Ridges in either the NBOG or the Gauteng Biodiversity Offsets Implementation Guideline. Accordingly, the overlap with Gauteng Ridges has been excluded from the terrestrial biodiversity offset ratio. Nevertheless, Table 3 is included to identify and illustrate the extent of the affected area overlapping with Gauteng Ridges. The terrestrial biodiversity assessment (De Villiers and Burger, 2026) provides a refined habitat interpretation for the area overlapping with Class 1 Gauteng Ridges within the affected area. The on-site verification confirmed that 16.579 ha is representative of ridge habitat and delineated as Rocky Gauteng Shale Mountain Bushveld habitat (De Villiers and Burger, 2026). The affected area also overlaps Class 2 Gauteng Ridges within the Rocky Gauteng Shale Mountain Bushveld habitat type, as well as a small area of Class 3 Gauteng Ridges delineated as Degraded Carletonville Dolomite Grassland (De Villiers and Burger, 2026).

Table 3: Affected area overlapping with Gauteng Ridges

	Class 1	Class 2	Class 3
Total Area (ha)	16.579	18.581	0.172
Rocky Gauteng Shale Mountain Bushveld (ha)	16.579	3.941	0

Degraded Carletonville Dolomite Grassland (ha)	0	0	0.172
Degraded Gauteng Shale Mountain Bushveld (ha)	0	1.811	0
Irreversibly Modified (ha)	0	12.829	0

Consultation with GDEnv is therefore required to determine the appropriate way forward regarding the potential offsetting of Gauteng Ridges. This consultation should take into account the spatial overlap between the ridge features and other key biodiversity features within the affected area, as well as the refined habitat classifications confirmed through on-site verification.

5 Potential Terrestrial Offset Options

Two potential offset-receiving sites are proposed below as preliminary options. The client/developer has not identified any suitable existing properties; therefore, implementation of either option would require the acquisition or formal securing of additional land. The potential offset properties were identified through a desktop screening exercise and have not yet been field verified. The desktop assessment provides only an initial indication of potential ecological equivalence and spatial suitability. It does not confirm the presence, extent or condition of the relevant biodiversity features, the additionality of the proposed conservation outcome, landowner willingness, legal security, management feasibility or acceptance by GDEnv

The potential offset sites are therefore considered potentially suitable only, subject to field-based ecological assessment, verification of ecological condition and habitat extent, confirmation of landowner consent, property and legal due diligence, assessment of long-term management feasibility and GDEnv review and acceptance. The investigations undertaken to date are preliminary, and the proposed options remain subject to several potential constraints, including the financial implications of acquiring or securing the required land, uncertainty regarding the ecological condition and availability of suitable like-for-like habitat, and the possibility that the properties may not contain sufficient qualifying areas to meet the final offset requirement.

Additional potential offset sites may be identified as the offset process progresses, and the proposed options may be refined, replaced or combined. The current objective is to secure the required offset area, or a combination of suitable offset areas, through land acquisition, stewardship arrangements or another legally enforceable mechanism agreed with the relevant landowners and accepted by GDEnv. The proposed offset sites are presented as alternative preliminary options and are not listed in any order of preference.

A map of the Option A offset site can be found in Figure 3 and the offset evaluation criteria in Table 4.

Table 4: A summary of the offset parameters that should be considered for offset receiving site Option A.

Parameter	Farm Portion 142/40 Size (ha)	Offset requirement (ha)	Does it meet offset goals
Total Area (ha)	474	281.667	Yes, dependent on site verification and GDEnv consultation.
Area of CBA 2: Optimal	85	39.691	Yes, dependent on site verification and GDEnv consultation.
EN Gauteng Shale Mountain Bushveld remnant overlap CBA 2: Optimal	73	103.47	No, deficient of 30.773 ha. Dependent on site verification and GDEnv consultation.
EN Gauteng Shale Mountain Bushveld remnant outside CBA 2: Optimal	286	136.32	Yes, dependent on site verification and GDEnv consultation.

High SEI outside CBA 2	Dependent on site verification	2.186	Possibly, dependent on site verification and GDEnv consultation.
Class 1 Gauteng Ridges	104	Dependent on consultation with GDEnv.	Dependent on consultation with GDEnv.
Vegetation Type	Largely overlaps with Gauteng Shale Mountain Bushveld. Further overlaps with Andesite Mountain Bushveld and Rand Highveld Grassland.		
Location in NPAES Focus Areas	Yes		
Location in Protected Areas	No, does not overlap or border any protected areas.		
Advantages	It is located in close proximity to the affected area, and a like-for-like offset could be more likely compared to area located further away. There is no significant offset deficient (ha)		
Potential Challenges	Financial challenges with obtaining the land and possibility of site not being suitable.		
Is this recommended as an offset	Based on the above criteria, this is a suitable offset for the affected area depending on whether or not it is available as an offset, and the final determine ratios.		

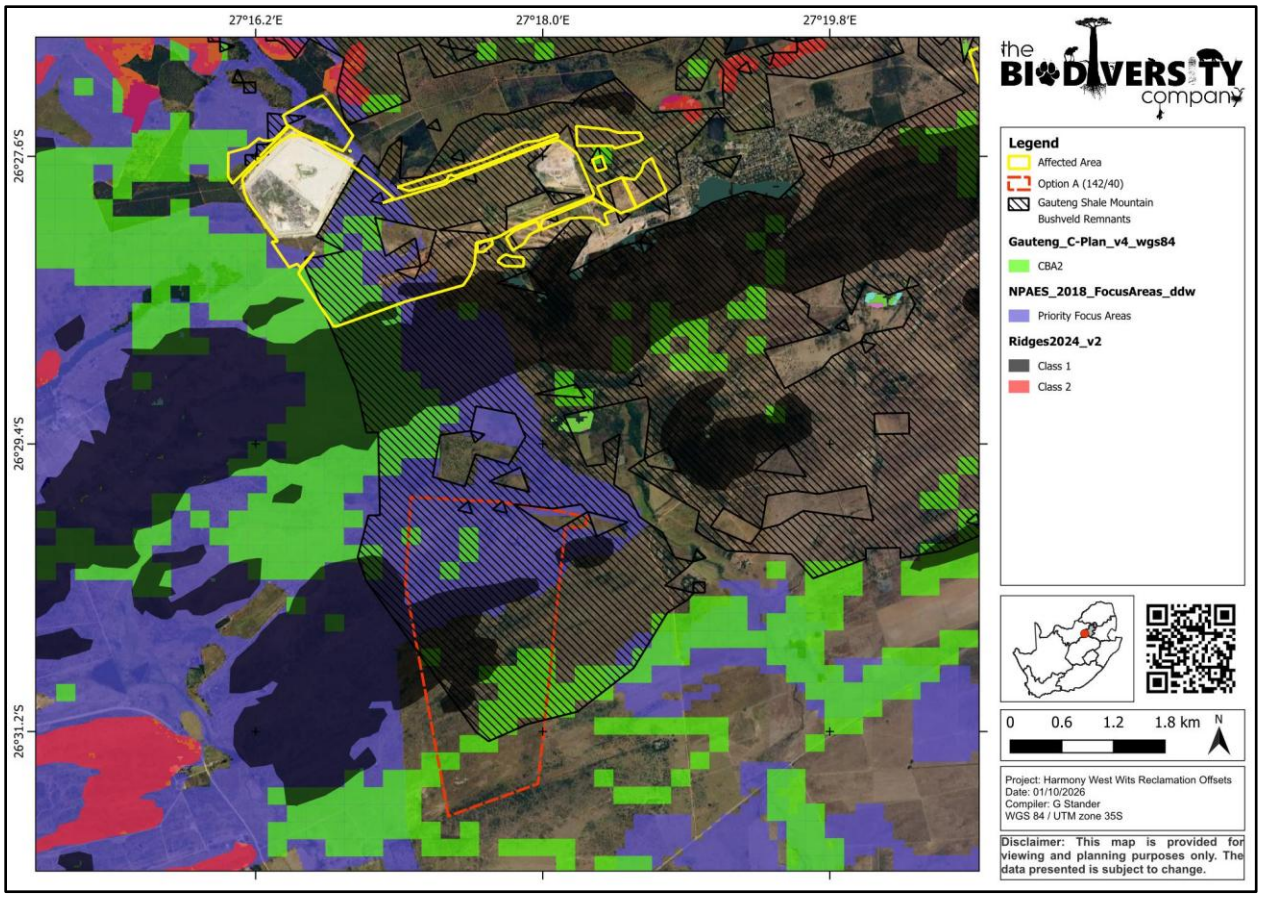


Figure 3: Map illustrating potential offset site A

Option B consists of three farm portions, but are assessed together. A map of the Option B offset site can be found in Figure 4 and the offset evaluation criteria in Table 5.

Table 5: A summary of the offset parameters that should be considered for offset receiving site Option B

Parameter	Farm Portions 573/7, 573/33, 572/34 Size (ha)	Offset requirement (ha)	Does it meet offset goals

Total Area (ha)	337	281.667	Yes, dependent on site verification and GDEnv consultation.
Area of CBA 2: Optimal	77.792	39.691	Yes, dependent on site verification and GDEnv consultation.
EN Gauteng Shale Mountain Bushveld remnant overlap CBA 2: Optimal	77.789	103.47	No, deficient of 25.681 ha. Dependent on site verification and GDEnv consultation.
EN Gauteng Shale Mountain Bushveld remnant outside CBA 2: Optimal	202.823	136.32	Yes, dependent on site verification and GDEnv consultation.
High SEI outside CBA 2	Dependent on site verification	2.186	Possibly, dependent on site verification and GDEnv consultation.
Class 1 Gauteng Ridges	139	Dependent on consultation with GDEnv.	Dependent on consultation with GDEnv.
Vegetation Type	Largely overlaps with Gauteng Shale Mountain Bushveld. Further overlaps with Rand Highveld Grassland.		
Location in NPAES Focus Areas	Yes		
Location in Protected Areas	No, does not overlap or border any protected areas.		
Advantages	There is no significant offset deficient (ha)		
Potential Challenges	Financial challenges with obtaining the land and possibility of site not being suitable.		
Is this recommended as an offset	Based on the above criteria, this is a suitable offset for the affected area depending on whether or not it is available as an offset, and the final determine ratios.		

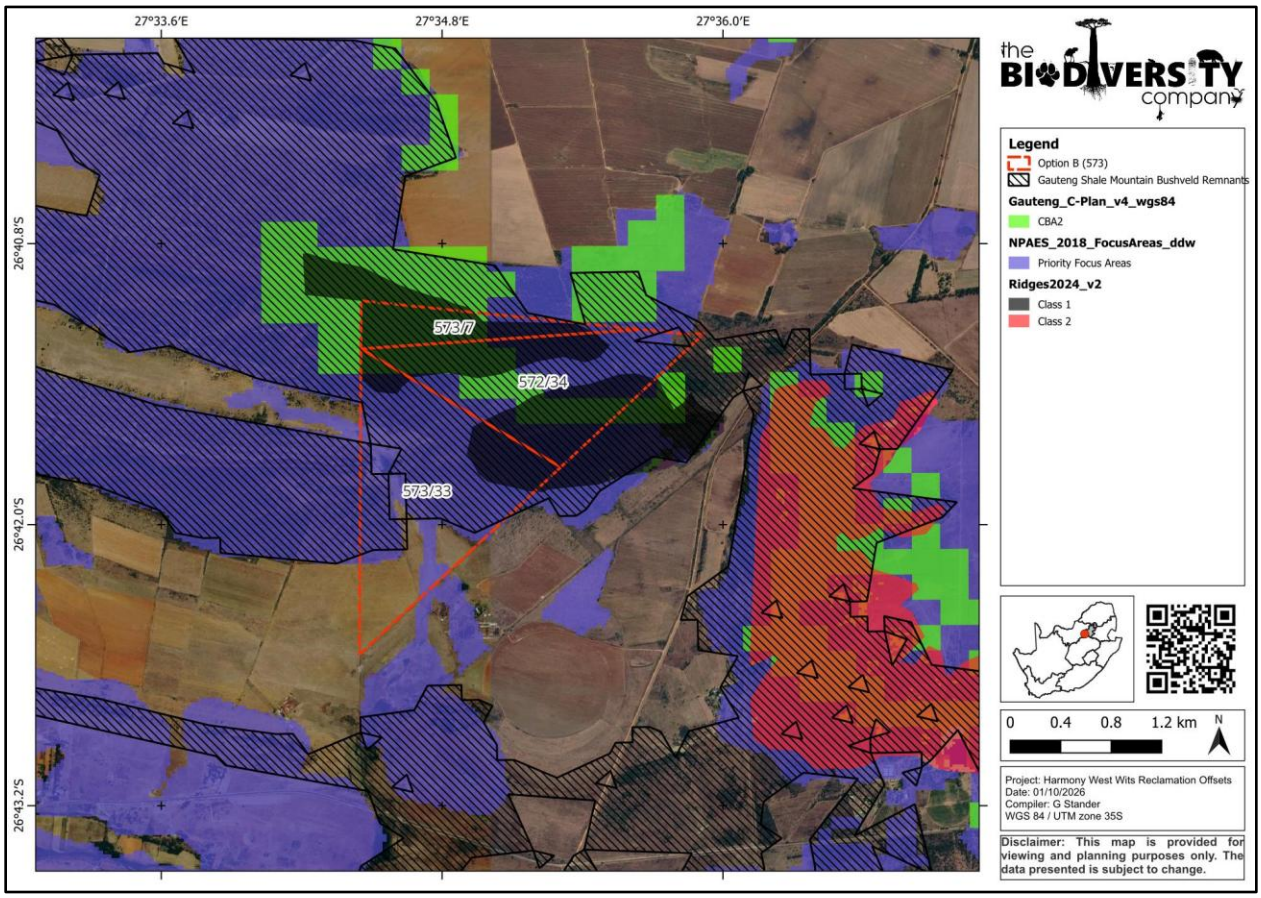


Figure 4: Map illustrating potential offset site B

6 Suggested Basis for the Detailed Terrestrial Offset Strategy

At this stage, The Biodiversity Company's preliminary view is that the most realistic and supportable basis for the detailed terrestrial biodiversity offset strategy would be a like-for-like off-site offset. This offset configuration option conserves the same or ecologically equivalent biodiversity components affected by the development.

An offset is required to be conserved in perpetuity (99 years) (DFFE 2023) and, as such, the mechanisms for securing a biodiversity offset can be one of three options:

- Procuring land and conserving it as part of a legally recognised protected area legislated under the National Protected Areas Act;
- Declaration of a Protected Environment with associated Management Plan; or
- Determining the offset site boundaries and entering into a Stewardship arrangement with the land owner to manage the land for conservation.

For either option, the land must be actively managed for conservation and biodiversity values maintained or enhanced where necessary. The implementation process is briefly discussed in Table 6.

Table 6: A summary of the offset implementation actions required.

Step	Action
1: Land procurement	Purchase of land, or a Stewardship agreement with landowners and registration of the Stewardship site with GDEnv would be required, provided all stakeholders agree with the offset implementation strategy.
2: Obtaining legal protection of the offset site	Once the land has been acquired, legal protection can be sought, this entails various steps including, but not limited to: a) a land surveyor delineating the offset site, b) Preparation of a Biodiversity Offset Management Plan c) Application for Protected Area or stewardship status including appropriate documents d) Registration of the relevant legal instruments and endorsements, where required, through the Deeds Office and/or applicable conservation-authority processes; e) Public participation as required for Protected Areas; and f) Final demarcation of the offset area
3: Monitoring	Monitoring of the offset must then be conducted as per the Biodiversity Offset Monitoring Plan in order to meet the requirement for the offset to be measurable and auditable for no net loss or net gain of biodiversity.

Once the offset site has been finalised, and implementation has commenced, it is important that the offset be properly managed according to an Offset Management Plan and the biodiversity monitored through a Monitoring Plan. Financial requirements will be determined at a later stage and included in future iterations of the Biodiversity Offset Report as these will be depended on the offset site selected and the type of agreement (protected area or stewardship arrangement). However, baseline financial figures are discussed below. It should be noted that these are indicative benchmark figures and final costs will depend on valuation, usable equivalent habitat, landowner negotiations and the area ultimately approved by GDEnv.

The potential offset receiving sites are located in the Potchefstroom-Parys-Carletonville-Westonaria area. Based on available agricultural land transaction data and comparable market listings from approximately 2021 to 2026, suitable undeveloped natural grazing or conservation land in the Potchefstroom-Parys-

Carletonville-Westonaria area is preliminarily estimated at approximately R12 000–R45 000/ha, with a recommended budgeting midpoint of R25 000/ha. Mixed agricultural land is estimated at approximately R20 000–R65 000/ha, while improved working farms with existing infrastructure may range from approximately R30 000–R80 000/ha. The final asking buying price is dependent on the final offset area, ecological condition, location, water availability, infrastructure and conservation value of the selected property. If the property contains significant infrastructure, established conservation facilities or a near-town/lifestyle premium, the land price could exceed the agricultural/conservation range substantially.

These estimates listed in Table 7 exclude transfer duty or VAT, conveyancing, valuation, environmental due diligence, legal-security costs, land surveys, fencing, rehabilitation, management, monitoring, auditing and long-term funding. These estimates are for the total property areas. The final financial implication may differ if only part of the property is suitable and legally securable as a biodiversity offset. Conversely, the total property may need to be acquired even if the approved offset area is smaller, depending on the property configuration and the terms negotiated with the landowner. The estimates are indicative only and should be refined through a formal valuation and site-specific due diligence once the preferred offset property has been identified.

Table 7: Estimate buying price for Option A and Option B

Option	Area	Recommended land-purchase budget at R25 000/ha
Option A	474 ha	R11 850 000
Option B	337 ha	R8 425 000

Table 8 and Table 9 illustrates the indicative benchmark financial figures for establishing and managing offset sites.

Table 8: Indicative benchmark financial figures for establishing offset sites

Establishment item	Indicative benchmark
Baseline surveys and management plan	R120 000–R300 000
Catch-up invasive-alien plant control	R180 000–R1 200 000
Fencing upgrades	R150 000–R500 000
Water-reticulation upgrades	R200 000–R600 000
Fire equipment and safety	R80 000–R200 000

Table 9: Indicative annual financial figures for managing offset sites

Annual management category	Indicative annual range
Biodiversity monitoring and compliance	R150 000–R300 000
Invasive-alien plant control and veld restoration	R150 000–R360 000
Fire management and security	R120 000–R220 000
Fencing, water points and roads	R190 000–R450 000
Grazing/wildlife management and labour	R280 000–R580 000

Management rates will vary depending on the intensity type of management:

- R1 300/ha/year for lower-intensity management;
- R1 800–R2 300/ha/year for typical management; and
- R2 800–R3 500/ha/year for high-touch or restoration-heavy management

The Table 10 below combines the recommended land-purchase budget, indicative establishment costs and indicative annual management costs. The total amount represents the estimated first-year cost, comprising land purchase, initial offset-site establishment and one year of management. It does not represent the total long-term cost of managing the site. The indicative total first-year cost is calculated as “Land-purchase budget + establishment cost + one year of management”.

Table 10: Preliminary benchmark financial figures for Option A and Option B

Option	Property area	Recommended land-purchase budget (R25 000/ha)	Indicative establishment cost	Low-intensity annual management	Typical annual management	High-touch annual management	Indicative total first-year cost
Option A	474 ha	R11 850 000	R730 000–R2 800 000	R616 000/year	R853 000–R1 090 000/year	R1 330 000–R1 660 000/year	R13 196 000–R16 310 000
Option B	337 ha	R8 425 000	R730 000–R2 800 000	R438 000/year	R607 000–R775 000/year	R944 000–R1 180 000/year	R9 593 000–R12 405 000

The indicative financial figures are preliminary planning estimates only and are not quotations, valuations, guarantees or binding commitments. Actual costs may vary depending on the final offset area, land value, ecological condition, site suitability, landowner negotiations, legal and registration requirements, infrastructure, restoration, invasive-plant control, fencing, fire and grazing management, monitoring, auditing, inflation and unforeseen constraints. These estimates were prepared using available information and comparable benchmarks and were not prepared, reviewed or certified by a professional financial adviser, registered valuer, quantity surveyor, accountant or other financial professional. Independent financial, legal and property advice should be obtained before the figures are relied upon.

7 Conclusion

Based on the currently available terrestrial biodiversity information, the revised development layout will result in impact to approximately 70 ha, overlapping CBA 2: Optimal, EN Gauteng Shale Mountain Bushveld remnants, High SEI areas and Gauteng Ridges. On this basis, terrestrial biodiversity offsets remain relevant to the revised proposal.

Using the ratios and areas currently presented, the indicative terrestrial offset requirement is approximately 281.667 ha, subject to the comments and consultation with GDEnv and DFFE. Gauteng Ridges have been excluded in the biodiversity offset ration calculation and the way forward regarding these key biodiversity features need to discussed with GDEnv and DFFE.

At this stage, The Biodiversity Company's view remains that the most realistic basis for the detailed terrestrial biodiversity offset strategy would be a like-for-like offsite offset area. GDEnv's comments on this proposed basis are respectfully requested so that the detailed terrestrial biodiversity offset strategy can be prepared accordingly.

We trust that the above is in order and remain available should any further clarification be required.

Kind Regards



Grietjie Stander

Pri Sci Nat 162039

8 References

Department of Forestry, Fisheries and the Environment (DFFE). 2023. National Environmental Management Act, 1998 (Act No 107 of 1998): The National Biodiversity Offset Guideline.

De Villiers, A. and Burger, C. 2026. Terrestrial Biodiversity Assessment for the Proposed Harmony West Wits Reclamation Project. The Biodiversity Company

Gauteng Conservation Plan (C-Plan) Version 4 (GDARD, 2024),

Gauteng Department of Environment. 2024. Gauteng Biodiversity Offsets Implementation Guideline. Final version, August 2024. Gauteng Province: Gauteng Department of Environment.

Gauteng Department of Environment. 2025. Gauteng Ridges Guideline. Final implementation guideline. Gauteng Province, South Africa: Gauteng Department of Environment.

Desmet, P.G., Kani, L. and Hawley, G. 2024. Revision of the Gauteng C-Plan (v4.0 2023) Technical Report. Final v1. Johannesburg: Gauteng Department of Environment (GDEnv).

Skowno, A.L. & Monyeki, M.S. 2021. South Africa's Red List of Terrestrial Ecosystems (RLEs). Land, 10, 1048, 1-14.

Skowno, A.L., Monyeki, M.S. & Khatieb, S. 2025. *Ecosystem protection level: Terrestrial realm*. National Biodiversity Assessment 2025. South African National Biodiversity Institute. https://nba.sanbi.org.za/content/terrestrial/ter_epl.html