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ENVIRONMENTAL COMPLIANCE MONITORING REPORT NO.25

FOR

OUTENIKUASBOSCH, FARMS OUTENIKUASBOSCH 149 AND HARTENBOSCH
217, HARTENBOS



OUTENIKUASBOSCH

The Wildlife Village

Compiled by:

HilLand Environmental

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OUTENIKUASBOSCH, FARMS OUTENIKUASBOSCH 149 AND HARTENBOSCH 217, HARTENBOS

ENVIRONMENTAL MONITORING REPORT NO 25

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Environmental Monitoring Report No. 25

This report monitors compliance against the Environmental Management Plan (Ref.: MOS22/455/48). This monitoring report constitutes the 25th Environmental Monitoring Report and covers inspections done during **July 2023** for the **civil services installation of Phases 12 & 14, and rehabilitation of phases 4, 11 & 13, as well as individual house** construction.

This ECO report covers compliance monitoring for all works to date in terms of the EMPr and the EA in relation to civil services installation.

Commencement of **all listed activities** for the development (including the Resort zone) has taken place in accordance with the EA. The main road to the resort area has been constructed and the decking at the first resort unit complies with the aesthetic requirements.

Weekly ECO monitoring takes place during civil services construction phase (**phases 12 & 14**) and monthly during individual **house** construction.

The **Operational phase has started** with some residents residing permanently within Outeniquasbosch. It is now important to ensure that all construction areas are demarcated appropriately to prevent any unauthorised entry or accidental injury (residents and animals). All effort should be made to ensure that the estate is always kept neat and tidy, this includes litter, construction rubble and management of invasive alien plants and weeds.

Garden and private rehabilitation areas of each erf must be approved by the landscaping committee (and ECO) to ensure compliance with the EMPr and EA. This is to avoid property owners planting exotic or invasive plants in their garden or private rehabilitation area.

The HOA's Landscaping committee will assist with and oversee the approval of individual home gardens as well as landscaping and rehabilitation of the development nodes internal green/open spaces. The ECO is part of this HOA committee to ensure that there is always compliance with the EMPr and EA.

1. Environmental Induction

Environmental induction is done on a regular basis with individual erf contractors and their construction teams.

- **Phase 4** - Oceanic Construction & Development will construct several houses within phase 4, environmental induction was done with the main contractor and sub-contractors on 20 July 2023.
- **Erven 6554, 6627 & 6628** – environmental induction was done on 27 July 2023

2. NO-GO Demarcation

In accordance with Section 5.3 of the EMPr for Outeniquasbosch the following is important in terms of Demarcation of No-Go areas:

- *Civil contractors - all areas outside that of the defined works (roads and pipeline routes) is deemed a no-go area.*
- *All construction activities must be restricted to the demarcated areas to ensure that no further disturbance into the surrounding vegetation. ECO to indicate the No-Go area applicable to each phase.*
- *No encroachment or activities may take place outside the work areas.*
- *No-Go areas will be required to be demarcated by the contractor to ensure that they are visible at all times, to all personnel.*

- Methods of demarcation will be agreed with the ECO and may include danger tape tied in a knot to a rod, rope, fencing, mulch bags, wire fencing, shade netting etc.
- In light of the above, should access be required through a no-go area, permission must be obtained from the ECO in writing prior to the use of such an area.
- The areas of special consideration may relate to the external service lines entering and leaving the property, e.g. the water pipes and storm water detention swales. All such activities must first be approved by the ECO prior to commencement of activities. Special conditions will be applied to each of these cases.
- Adjacent properties to the construction site may not be entered by any construction staff if permission is not granted by the owner.
- The ECO should monitor adherence to the No-Go area policy.
- Access into the No-Go areas by personnel is strictly forbidden (i.e. Work breaks such as lunch are not permitted outside the defined work area - no entry into the neighbouring properties or open space areas). A spot fine will be imposed against the contractor in the event of contravention of the no-go policy up to a maximum of R5 000 per incident).

Demarcating open trenches has been discussed and the owner is required to do the following:

- Game generally stays away from excavations and therefore the focus regarding demarcation of excavations (open holes / trenches) relate to person safety. Ongoing monitoring of the game movement and activity is the responsibility of the owner and demarcation must be installed upon instruction from the said owner - Health and Safety consultant to monitor person safety requirement.

Civil services installation of **phases 12 and 14** are well underway. It remains the continuous responsibility of the contractor to manage the secondary site camp and ensure that all excess construction materials (including equipment) are stored in the primary site camp (near phase 3).



The construction material stockpile area (near phase 4 and phase 12) **must** be rehabilitated to the satisfaction of the ECO before final handover to the developer.

Civil installations in **phase 4** are complete, with the main access route finished. No new construction routes may be established without approval from the ECO. Regular toolbox talks are required for drivers and machine operators to use existing temporary or new permanent roads.

Due to heavy rainfall, access to the construction site was challenging, but any deviations from approved routes must be rehabilitated before the final handover to the developer.

- It is required that the construction routes are demarcated to prevent any unnecessary deviation from the routes – **sales staff and residence must be made aware of the construction site and restricted access.**

Individual house construction is underway in Phases **1, 2, 3, 10, 11, and 13**. Each building site must be demarcated (including stockpile area), the Architectural Control Officer (ACO) monitors daily compliance. Demarcation around construction sites ensure that no construction activity is contained to the development zone and doubles as silt trap in times of heavy rain.



(2023.07.13) – Some erven in phase 11 have removed their demarcation too early. There is no barrier stopping construction site sprawl and disturbance. No-Go demarcation may only be removed once all physical construction activities are completed.

During environmental induction with Oceanic Construction & Development, it was discussed that a construction node will be demarcated, according to the following plan in **phase 4**.



Phase 4 site plan – Outeniquasbosch website

Individual erven must be demarcated independently. Where there are two or more houses adjacent to one another, a construction node demarcation may be followed.

All construction activities (building and storage) must be within the demarcated development area (of each erf) and not within the rehabilitation zone of the erf – **Construction material is not allowed to be stored outside of the house construction demarcation – ACO to monitor daily.**

3. Fauna and Flora

The civil and building contractors must ensure that no harm or damage is done to any fauna or flora during active construction periods. Harm or damage can be mitigated by surveying the area to be excavated or cleared to ensure that no animals or plants are affected.

Ongoing eradication of listed invasive alien plants (Stinkblaar etc.) must be done during construction, especially on the stockpiles.

Plant search and rescue **must** be done before any new construction (**building or civil**) starts, ECO to be contacted to confirm that plant search and rescue is complete before proceeding with construction.

The landscaping committee undertook the activity to enhance the aesthetic appeal of the phase entrance areas (in consultation with the ECO). The ECO is satisfied that green spaces have not been formally gardened, and that it remains the case.

- It is recommended that the landscape committee integrate this concept into the Landscaping Master plan for future phases.



2023.07.27 – phases 1 and 2 entrance



4. Soil & Site Management

Topsoil **must** be kept separate from any other subsoil or construction material to prevent contamination. The topsoil must be used for rehabilitation around the construction area. For civil construction this is the road verges, services etc. and home building this is the rehabilitation zone around the house and construction material storage area.

Dust mitigation measures (keeping the roads wet) are implemented when dust becomes an issue.
– the civil contractor is using a water truck on dry and hot days to water the construction haul routes – not necessary during this period due to high rainfall.

Only approved identified temporary construction roads in **phases 4 & 12 & 14** must be used to avoid damage to topsoil and vegetation. Regular toolbox talks must be done with all drivers and machine operators to remain on the existing temporary construction roads.

After and/or during ECO site inspections, disturbance areas/erosion etc. gets reported to the responsible contractor and fixed. See examples below:

The area received plenty of rain during May and June 2023 and it is therefore important to monitor the site(s) carefully as the areas will be susceptible to erosion that was **not** previously identified as high erosion risk areas have subsequently eroded during the heavy rainfall.

Effort towards mitigation has been implemented and recorded. The ECO will be monitoring the recorded events as stipulated below.



(2023.07.13) – Stormwater outlets in phase 4 has been shaped and silt fences have been cleared.



(2023.07.13) – Road verges have been reshaped in phase 4. Continuous monitoring is required.



(2023.07.20) – The landscape committee has started to rehabilitate the road verge along Mafunyane street.



(2023.07.20) – stormwater management – phase 11 to mitigate slope erosion.

5. Heritage Requirements

Should any heritage remains be exposed during excavations or any actions on the site, these must immediately be reported to the Provincial Heritage Resources Authority of the Western Cape, Heritage Western Cape (in accordance with the applicable legislation). Heritage remains uncovered or disturbed during earthworks must not be further disturbed until the necessary approval has been obtained from Heritage Western Cape. Heritage remains include archaeological remains (including fossil bones and fossil shells); coins; indigenous and/or colonial ceramics; any articles of value or antiquity; marine shell heaps; stone artifacts and bone remains; structures and other built features; rock art and rock engravings; shipwrecks; and graves or unmarked human burials.

A qualified archaeologist must be contracted where necessary (at the expense of the applicant and in consultation with the relevant authority) to remove any human remains in accordance with the requirements of the relevant authority.

- No heritage remains have been discovered to date.

6. Construction Site Management

Contractors (civil and house construction) must provide ablution facilities for all construction personnel working on the site. One facility for every 15 persons on site is required.

- Toilet facilities are available for the civil contractor's staff and at each home building site. Use of the toilet facility must be included as a toolbox talk topic.

Any concrete batching areas are to be approved by the ECO prior to utilization and must be equipped with suitable settling ponds and trapping mechanisms to ensure that contaminated water does not leave the restricted area or contaminate natural veld.

- Home construction – cement mixing must be contained within the disturbance footprint and on a non-permeable layer (wooden sheet/plastic etc) to prevent soil contamination.
- **Ready-mix trucks are not allowed to be washed on site.**
- The cement slab processing area is demarcated to prevent further encroachment into natural areas.

There should be a secure access point to the construction site to ensure that no unauthorized entry is permitted which may lead to a safety or security risk.

- Access to Outeniquasbosch Eco Estate is controlled through access-controlled gates/booms and via temporary construction haul routes.

Any temporary haul roads or access roads for construction need to be maintained at all times by the contractor.

- The contractor must maintain the current construction haul road. **Driving off the designated haul roads or access roads is not permitted.**
- Construction vehicles must **abide by the speed limit** as this is a wildlife estate with animals roaming freely.
- The temporary haul road next to phase 4 is demarcated with painted stones – **all haul roads must be demarcated.**
- *Singular temporary construction roads in **phases 4 & 12 & 14** must be used. Regular toolbox talks must be done with all drivers and machine operators to remain on the existing temporary construction roads.*

It has been previously identified that individual housing contractors receive their permission to store material on other erven from the ACO. It should continuously be noted that it remains the responsibility of the contractor to rehabilitate all used space outside that of the permitted erven boundary.

- All areas outside their erf boundary is considered NO-GO areas.



(2023.07.27) – All used areas outside dedicated site boundaries must be rehabilitated once construction is complete.



7. Civil Construction

- Construction and installation of services for **12 & 14** are ongoing. **Phase 4** is near completion and rehabilitation has started.
 - Topsoil and subsoil must be stored separately.
 - Minimal vegetation disturbance is allowed during civil services installation – as per the engineering design.
 - **No new temporary haul roads may be created without ECO approval.**
 - Toolbox talks must include use of toilet and littering as topics.

The contractor will be responsible for the full rehabilitation of all disturbed areas (including temporary construction haul routes) at the end of construction and before handing the services back to the developer/HOA.

Monitoring and rehabilitation are ongoing activities and are especially important after storm events. The initial rehabilitation for phase 4 is in progress, but now with the heavy rainfall and storms of the past few weeks, requires additional rehabilitation and/or erosion repairs.



(2023.07.13) – stormwater outlets have been shaped and topsoil is replaced.



(2023.07.13) – road verges were shaped and covered with topsoil.



(2023.07.13) – Large areas of compacted bare soil have been shaped and covered with topsoil – grass seeds and vegetation are now required.



(2023.07.13) – Berms were created on the western side to direct and manage stormwater.

Monitoring the effectiveness of the implemented rehabilitation will be the key to its success. The ECO did raise some concerns with regards to the rehabilitation in an email directed towards Charl and Petrie.

The following ECO site inspection feedback was sent to the civil contractor on 20th July 2023:

- **Erven** – erven rehabilitation – replacing topsoil – was completed, it is unsure if the grass seed mixture was spread.
- **Road verge** – there are a few spots where the slope of the road verge is steep. Erosion protection in these areas will be required to stabilise these slopes.
- **Inlet 1** – it appears as if the shaping around Inlet 1 is not yet complete. Recommend finalising the shaping and installing erosion protection of the sides to prevent erosion damage.
- **Berm/swale** – Main central berm shaping is complete, and topsoil must now be placed on top, seeded with the recommended seed mixture and vegetated (vygies etc.)
 - Fix, replace topsoil and vegetate the small berm below SW outlet 6 (MH41).
- **Stormwater outlets** – the shaping of the stormwater outlets is complete. Further rehabilitation required entails:
 - Replacing topsoil (in areas where bare ground is exposed)
 - Seed with grass seed mixture
 - Vegetate (vygies etc.)
 - Mulch bags or similar erosion protection on the **side slopes**.
 - Mulch bags/sandbags/silt fence (or similar) are to be placed perpendicular to the berm **in the stormwater channel**.
- **Sewer line** – there is a section of the sewer line between MH43 and MH44 that still needs to be rehabilitated – replace topsoil, grass seed, and erosion protection.
- **Stockpiles** – there are a few stockpiles on erven that must still be removed – Petrie will remove as soon as it is a bit more dried out.

 20 July 2023 11:20	 20 July 2023 11:20
Inlet 1	Inlet 1
 20 July 2023 11:18	 20 July 2023 11:25
Topsoil replaced on erven	Main berm – topsoil, grass seed, erosion protection and vegetation required



Stormwater outlets – topsoil, grass seed, erosion protection and vegetation. Silt fence can remain.



Sewer line – rehab required



Small berm below outlet 6 – fix, replace topsoil, spread seed mix and vegetate. Note the silt buildup during construction phase in front of the berm – to be cleaned



Few stockpiles still to be removed once soil is dried out a bit more.



Road verge - steeper sections require erosion protection.



Site camp – rehab the disturbed areas that will not be used during construction of future phase.

The topics were discussed at the site meeting and the contractor will attend to the matters.

8. Home and/or Unit Construction

Construction of individual houses within the development is ongoing and must comply with the EMP requirements (as well as with the Outeniquasbosch Construction Guidelines).

- The construction zone demarcation must be installed (recommended 1-2m around the house footprint) before construction commences and must be maintained throughout the entire construction period and the site must be fully closed off during inactive periods to prevent the animals from entering your site.
- Adequate litter and waste management (skip, container, bin, etc) must be available on site and must be closed or emptied before leaving the site (evenings/weekends).
- Cement contaminated runoff water must not be allowed to enter the adjacent properties, open/green corridor or stormwater network.
- Written confirmation must be obtained from the landowner of the Erf where you intend to stockpile your material if not on the same property as construction, please note that this area must also be demarcated and fully rehabilitated;
- Environmental Induction must be done with all staff members working on site before construction activity starts – it is the contractor's responsibility to notify the ECO at least one week in advance of when new staff is to start on site.
- All areas outside the construction zone boundary that is disturbed during construction must be rehabilitated before construction is completed and before the construction completion certificate can be issued.
- Please take note that all construction vehicles (including and especially delivery trucks) MUST abide by the speed limit. This is a game farm with animals roaming freely and any vehicle spotted that disobey the speed limit will be fined and/or asked to leave the site immediately.
- Please take note that all construction rubble and litter MUST be contained in a skip or suitable (and closable) container to ensure that NO litter or construction waste gets blown away by the wind. The ECO will monitor this, as this is an Eco estate with antelope roaming freely.

Operational phase - It is important to ensure that all construction areas are demarcated appropriately to prevent any unauthorised entry or accidental injury (residents and animals). All effort must be made to ensure that the estate is always kept neat and tidy, this includes litter, construction rubble and management of invasive alien plants and weeds.

Each contractor is responsible for the rehabilitation of all disturbed areas at the end of construction and before occupation is handed over.



(2023.07.13) – phase 10 – rehabilitation in progress.



(2023.07.13) – Green belts are well looked after in times of low rainfall.

9. Conclusion & Recommendations

The contractors are aware of the environmental regulations mentioned in the EMP (Environmental Management Plan). Both the civil and home building contractors are advised to conduct regular toolbox talks with their staff and remind them of these regulations. Additionally, the building contractors must maintain No-Go demarcation and safety netting.

Construction and installation of services in **phases 12 & 14** are being monitored by the ECO – the contractor is reminded to ensure that singular temporary construction haul routes are used.

Rehabilitation in **phase 4** is ongoing and must be completed before handover to the developer/HOA.

Silt fences at the stormwater outlet structures (phases 4, 12 & 14) must be maintained – remove silt and ensure bidim is upright.

ECO monitoring for during **July 2023**

Date:	Comment:
07 July	ECO visit to inspect required rehabilitation in phase 4
13 July	ECO visit while initial rehabilitation of phase 4 started
20 July	Phase 4 induction and site inspection
27 July	ECO visit throughout Outeniquasbosch – general visit