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COMPLETION REPORT OF CIVIL SERVICES INSTALLATION - PHASE 10

FOR

OUTENIKUASBOSCH, FARMS OUTENIKUASBOSCH 149 AND HARTENBOSCH
217, HARTENBOS



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**COMPLETION REPORT OF CIVIL SERVICES INSTALLATION - PHASE 10
MAY 2022**

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COMPLETION REPORT OF CIVIL SERVICES INSTALLATION - PHASE 10

This report monitors compliance against the Environmental Management Plan (Ref.: MOS18/455/01). This monitoring report constitutes the 16th Environmental Monitoring Report and covers inspections done during May 2022 for the **civil services installation of Phase 10**.

Phase 10 Civil Services installation commenced on the **26th of February 2021** and was **completed** on the **15th of April 2022**.

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 of **phase 10**.

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 (**phase 10**) and monthly during individual **house** construction.

1. Environmental Induction

Environmental induction was done with the staff as follows:

Phase 10 contractor(s)	Date:
Move It Civils (Main contractor)	26 March 2021
LNJ (Sub-contractor)	14 October 2021

2. NO-GO Demarcation

No-Go areas were discussed during the environmental inductions.

Demarcating open trenches have been disused and the owner requires the following:

- *Game generally stays away from excavations and therefore the main focus regarding demarcation of excavations relates 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.*
- *The temporary construction haul road to phases 3 and 10 (next to **Mafunyane Street**) is demarcated with small piles of stones next to the road.*



2021.03.31 – No-Go demarcation for deep excavations

3. Fauna and Flora

The civil and building contractors have to 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.

A plant search and rescue are to be arranged with the ECO if there are any plants within the specific site that require rescue.

Ongoing eradication of listed invasive alien plants receives ongoing attention.

- Alien invasive plant species as a result of construction (all phases) activity must be removed. The developer/management team must ensure ongoing alien plant eradication.
- *Datura stramonium* (Stinkblaar) throughout the site is being targeted.
- *Lantana camara* was spotted in phase 10 near the stormwater outlet structure (between erf 7349 & 7350)



2021.11.18 – Stinkblaar which was found on the excavated soil, **was removed.**

4. Soil & Site Management

The contractors should note that the topsoil must be kept separate from any other subsoil or construction material to prevent contamination.

- No issues were noted during the reporting period.
- Topsoil was replaced and re-vegetation/seeding of the stormwater outlets **is now required** (refer to rehabilitation section)
- Steep slopes next to the new road have been shaped accordingly, raked (**horizontally**) and **must now be seeded with the indigenous grass seed mixture.**
- Dust mitigation measures (keeping the roads wet) were implemented when dust becomes an issue.

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 Camp

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 were available for all staff.

A fenced-off area must be created within the site camp for refuse and waste management as indicated above. ECO to inspect for compliance.

- Adequate litter bins are to be provided at the site camp; littering should be covered in regular "toolbox" talks with all staff members.

No accommodation of contractors or their staff except for a night watchman is permitted on site.

- No construction related accommodation on site.

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.

- Civil construction - No issues with regards to runoff water was noted.
- **Ready-mix trucks are not allowed to be washed on site.**

Any temporary diesel storage tanks are to be secured with adequate bunding to cater for spillage and leakage

- No fuel is being stored on site to the knowledge of the ECO.

There should be a secure access point to the construction site in order 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.

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

- The contractor is maintaining the current construction haul road. Please be reminded that driving off the designated haul roads or access roads **is not permitted**.
- Construction vehicles must **abide to the speed limit** as this is a wildlife estate with animals roaming freely.
- The temporary haul road is demarcated with painted stones.



2021.04.07 – The construction material storage area was located in a future development zone



2021.06.23 – Phase 10 contractor providing a portable chemical toilet for the staff.



2022.05.20 - The construction site camp was located in a future development zone

7. Construction

Civil services construction progress of **Phase 10** is reported in this section:



2021.12.09 – Temporary haul route during the construction of the main access road to Phase 10 (photo taken in December 2021)



2021.06.23 – The cement mixing area was within the proposed surfaced road section and no contaminated soil was noticed (photo taken June 2021).



2021.09.08 – Water was sprayed on the roads to minimize the dust (photo taken September 2021).



2021.10.22 – The progress on the installation of the curbs in phase 10 (photo was taken in October 2021).



2021.11.11 – Progress with the construction of the internal roads (left) and temporary haul road (right) (photos were taken in November 2021)



8. Rehabilitation at stormwater outlet structures and shaping of road verges

The following rehabilitation recommendation relates to the completed stormwater outlet structures within **phase 10** which were discussed and agreed upon at a previous site meeting – the estate management is busy with rehabilitation:

- Create small soil or stone berms across to slow the flow of the surface water;
- Sow the indigenous grass seed mixture on the side slopes and above the structure areas;
- Mulch filled onion bag (or similar) pegged along the contours, to the side slopes (where steep)
- Estate Management - ongoing maintenance of the stormwater outlets is to be done.

The steep road verges are to be shaped with horizontal grader lines to prevent vertical erosion and then seeded with the indigenous grass seed mixture.

Indigenous grass seed mixture:

Equal parts of: **2g/m²** Kweek grass (*Cynodon dactylon*) seed and **2g/m²** Oulandsgras/Weeping Love Grass (*Eragrostis curvula*) seed (approximately **4g/m²**) that is to be spread over loosely raked soil.





2022.04.29 – Vertical shaping was done as opposed to horizontal. This was reported to the contractor and **rectified** – the steep slopes **must now be seeded** with the indigenous grass seed mixture to prevent soil erosion.



2022.01.27 – Stormwater outlet in phase 10 requires additional rehabilitation (see Section 7) - **the estate management must continue with rehabilitation** (photo taken in January 2022)



2021.08.25 – Stormwater outlet (phase 10) in progress



2022.03.23 – Stormwater outlet in phase 10 (left) requires additional rehabilitation recommended (see Section 7) – (photo taken in March 2022)



The steep road verges were shaped with horizontal grader lines to prevent vertical erosion and must now be seeded with the indigenous grass seed mixture.



2022.04.20 – Progress with the construction of the stormwater channel of Mafunyane Street (photo taken April 2022)

9. Conclusion

No environmental damage or issues were noted during ECO site inspections.

The contractors are aware of the environmental requirements and are complying. The civil services installation of **Phase 10 is now complete** and final rehabilitation of the steep slopes are still to be done - steep slopes must be done with horizontal and not vertical grader marks and seeded with indigenous grass seed mixture.

ECO monitoring for during **May 2022**

Date:	Comment:
5 May 2022	ECO site inspection of the Civil contractor & House construction
10 May 2022	ECO site inspection of the Civil contractor
20 May 2022	ECO site inspection of the Civil contractor