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## ENVIRONMENTAL MONITORING REPORT 4

FOR

*Maintenance to and Management of the stormwater infrastructure for  
Project 28(1) – Flood damage repair in George Municipal area*



Compiled by:

**HillLand Environmental**

Reference:

**GEO24/1252/18**

Report Period:

**October – 9 December 2024**

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**MAINTENANCE TO AND MANAGEMENT OF THE STORMWATER INFRASTRUCTURE FOR  
PROJECT 28(1) – FLOOD DAMAGE REPAIR IN GEORGE MUNICIPAL AREA**

**ENVIRONMENTAL MONITORING REPORT NO 4**

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**HillLand Environmental Internal review process:**

**Report compiled by:** Stefan Delport – HillLand Environmental

**Reviewed by:** Cathy Avierinos – HillLand Environmental

## **Environmental Monitoring Report No 4**

HilLand Environmental, the appointed Environmental Control Officer (ECO) compiled this report as the environmental monitoring report (No.4). This report monitors compliance against the Maintenance Management Plan (MMP) (Ref.: GEO24/1252/14 – 17 May 2024) and constitutes the 4<sup>th</sup> Environmental Monitoring Report and covers inspections done during October 2024 to 9 December 2024 for the implementation of the maintenance and management of flood damaged infrastructure in the George Municipal Area for portion 1 (non-NEMA sites), portion 2 (MMP sites) & portion 3(EA sites).

### **Portion 1 Sites:**

- 28(1).4 – construction/rehabilitation activity complete
- 28(1).7 – construction/rehabilitation activity complete
- 28(1).21 – construction/rehabilitation activity complete
- 28(1).47 -construction/rehabilitation activity complete

### **Portion 2 Sites:**

- 28(1).1
- 28(1).37 – construction complete – final rehabilitation in process
- 28(1).115-120

### **Portion 3 Sites:**

- 28(1).2 – construction complete – final rehabilitation in process
- 28(1).69
- 28(1).77

Notification of commencement of the portion 3 sites was sent to DEA&DP on the 17<sup>th</sup> September 2024.

No environmental induction sessions done during this reporting period.

Site inspection during **October to December 2024**

| Date             | Comment         |
|------------------|-----------------|
| 11 October 2024  | Site inspection |
| 18 October 2024  | Site inspection |
| 24 October 2024  | Site inspection |
| 7 November 2024  | Site inspection |
| 15 November 2024 | Site inspection |
| 15 November 2024 | Site inspection |
| 22 November 2024 | Site inspection |
| 28 November 2024 | Site inspection |
| 9 December 2024  | Site inspection |

## PHOTOGRAPHIC RECORD AND COMMENTS

### Site 28(1).21

- Construction completed.
- Rehabilitation - grass sods on the slope were planted.
- Compacted soil was loosened/ripped.
- Headwall construction completed and backfilled.



Shaping of the slope around the stormwater infrastructure and rehabilitation is complete.



Compacted soil was loosened.



Headwall construction completed



Compacted soil was loosened.

### Site 28(1).47

- Construction material stockpile area – previously transformed area – excess material has been removed.
- Construction completed. Slope shaping completed.



Construction progress of the stormwater outlet.



Working within the construction zone outside of the 32m buffer.



Construction progress – stormwater inlets.



Construction completed.

### Site 28(1).1

- Construction in progress.
- Access method statement was approved by the ECO.
- Slope/erosion protection to be used on the access track.



Construction progress. Gabion installation in progress.



Construction progress. Excavated soil consists of historic dumped material (litter/rubble etc).



Construction progress.



Construction progress.

**Site 28(1).37**

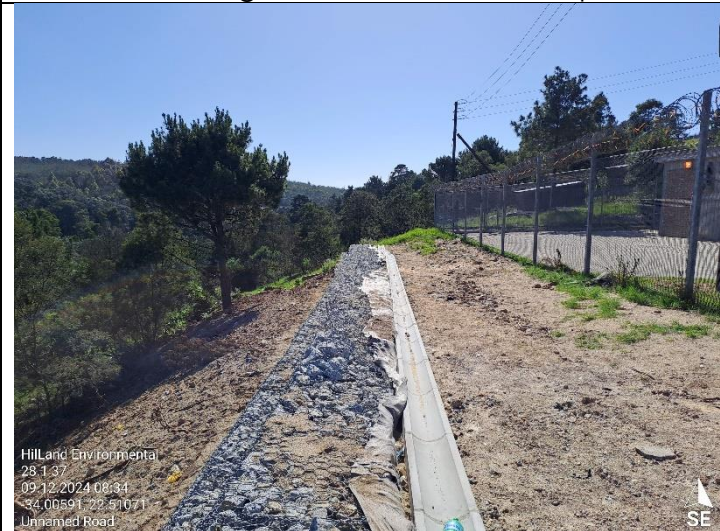
- Construction near completion and shaping/sloping still to be done – no environmental issues note.
- the slope below the gabion structure must be rehabilitated with grass seed/sods.



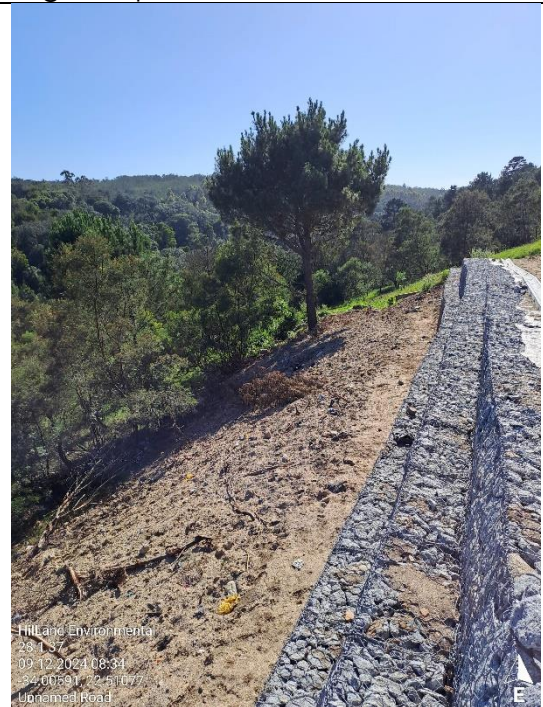
Gabion retaining wall construction completed.



Backfilling completed.



Topsoil to be replaced (behind the gabion structure).



Shaping/sloping below the gabion structure completed. Rehabilitate with grass seed/sod mix.

## Site 28(1).115-120

- Construction in progress.
- Sewage spill/leak was reported to the George Municipality and subsequently repaired.
- Silt fence to be used when working at the last gabion protection structure.
- Surveyor pegged the stormwater structure footprint.
- No environmental issues noted.
- Construction footprint to be kept as small as possible.



Construction progress – armorflex stormwater channel.



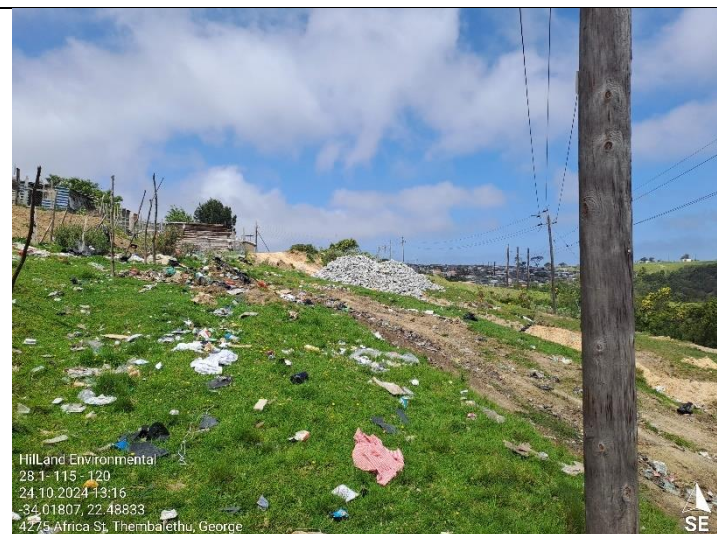
Construction progress.



Construction progress.



Construction site.



Construction material stockpile area – within development footprint zone.



Construction progress.

## Site 28(1).2

- Site preparation and excavation commenced in October 2024.
- Access method statement was approved by the ECO – minor deviation due to the steep slope and stability of the slope. The slope must be rehabilitated with grass seed/sods and small silt fences.
- Gabion installation completed and backfilled behind the gabions completed.
- Bidum silt fence/sandbags must be installed and maintained to prevent silt movement **into** the river.
- Final rehabilitation in process.



Gabion structure construction completed – final clean up to be done.



Gabion structure construction completed – final clean up to be done.



Access area to be rehabilitated with grass seed/sod mix and erosion protection (small silt fences).



Backfilling completed – final clean-up to be done.

**Site 28(1).69**

- Site preparation and excavation commenced in October 2024.
- Dumped rubble was removed to the municipal waste disposal site – ongoing during the construction phase.
- Bidum silt fence/sandbags must be installed and maintained to prevent silt movement into the stream – it must be noted that the stream is heavily degraded and filled with litter/trash. The contractor is constantly removing litter/trash from the site (working area) that is dumped after hours.
- Portable toilet is on site.



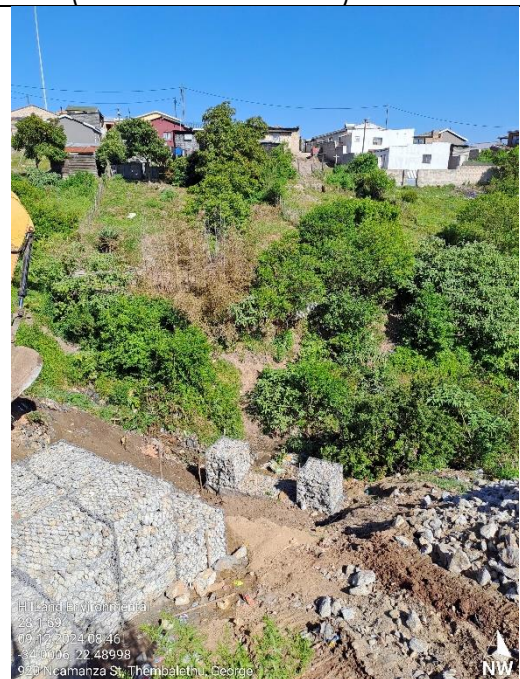
Construction material stockpile area – historic transformed area – no environmental issues.



Contractor progress – note litter/rubble dumped after hours (not the contractor).



Construction footprint – silt fence to be installed below the last gabion position to prevent silt movement into the stream, however, note the degraded condition of the stream prior to commencement.



Construction footprint.

### Site 28(1).77

- Site preparation and excavation commenced in October 2024.
- Surveyor pegged the stormwater outlet structure.
- Silt fence must be installed and maintained to prevent silt movement downstream - temporary stream diversion in place.
- Gabion installation commenced.



Existing services exposed and must be protected during construction phase.



Temporary stream diversion in place during gabion construction.



Temporary stream diversion in place.



Construction progress.

## CONCLUSION AND RECOMMENDATIONS

The contractor and George Municipality are compliant with the Duty of Care for portion 1, the MMP for portion 2 sites and the EA and MMP for the portion 3 sites.

There are portable toilets at each of the active sites. Construction working zone is pegged by the surveyor before commencement and demarcation is installed and maintained. Due to the nature of the sites (litter and dumped rubble), there is very limited topsoil to rescue.

Access to each of the sites was discussed with the ECO and engineer before commencement and is in line with the contractor's method statement. Practical access deviation(s), where required, are to be discussed and agreed upon with the ECO and Engineer prior to being implemented.

Silt curtain / fence is required at the portion 3 sites and must be maintained during the construction phase to prevent siltation or contamination downstream.

For the December break period, all construction activities **within** a watercourse must be completed and/or construction material and temporary diversion must be removed. The contractor must ensure that the side slopes are stable and protected against soil erosion.