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FINAL ENVIRONMENTAL MONITORING REPORT 7

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:

GEO25/1252/21

Report Period:

April to October 2025

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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 7

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Environmental Monitoring Report No 7

HillLand Environmental, the appointed Environmental Control Officer (ECO) compiled this report as the final environmental monitoring report (No.7). This report monitors compliance against the EMPr and MMP (Ref.: GEO24/1252/14 – 6 June 2024 as approved – condition 9) and constitutes the 7th and final Environmental Monitoring Report and covers inspections done from March to October 2025 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) and subsequent rehabilitation.

Portion 1 Sites - construction work completed 28 October 2025:

- 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 - construction work completed 17 July 2025:

- 28(1).1 - construction/rehabilitation activity complete.
- 28(1).37 – construction/rehabilitation activity complete.
- 28(1).115-120 - construction/rehabilitation activity complete.

Portion 3 Sites - construction work completed 17 July 2025:

- 28(1).2 – construction/rehabilitation activity complete.
- 28(1).69 - construction/rehabilitation activity complete.
- 28(1).77 - construction/rehabilitation activity complete.

The construction activities to date complied with the approved EMPr and MMP & EA. Any changes to design / additional work, related to the sites detected during construction and detail survey, required to protect riverbanks or municipal infrastructure is discussed with the Engineers and ECO on-site.

The municipality and engineers have decided to shotcrete the gabion structures to prevent future vandalism and theft. The ongoing long-term maintenance implications of changing the permeability of the structures is unknown. It is anticipated that the municipality will need to inspect the structures more often to ensure that any undermining erosion at the termination points of each structure is detected and repaired before it can affect the stability of the structures themselves.

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

This report (dated 23 October 2025) serves as the 7-day written notification of completion as require in terms of Condition 8 of the EA – completion inspection was done on 22nd October 2025.

The construction footprint of each site has been pegged by the surveyor prior to commencement.

There was no noticeable topsoil to rescue prior to commencement with construction activities for the sites in portion 1 and portion 2.

Construction activities, snags and related rehabilitation are now complete – completion inspections done on 13th & 22nd October 2025.

Site monitoring during this period:

Date	Comment
14 March 2025	Site inspection
19 March 2025	Site inspection
26 March 2025	Site inspection
2 April 2025	Site inspection
14 April 2025	Site inspection
14 May 2025	Site inspection
19 May 2025	Practical completion inspection
4 July 2025	Snags / Rehabilitation phase inspection
13 October 2025	Completion inspection
22 October 2025	Completion inspection

PHOTOGRAPHIC RECORD AND COMMENTS

Site 28(1).1

- Construction is complete.
- The ECO approved access method statement.
- Due to the historic dumped material, the side slopes are not stable and therefore the excavation and stockpile area was larger than anticipated. The stockpile area was directly next to the stormwater outlet structure on previously distributed area and has been shaped and rehabilitated to natural slope.
- A section of the existing damaged stormwater pipe in the road had to be replaced.
- Regular dumping (local residents) within the construction site remains an ongoing issue.
- Portable toilet is on site.
- Backfilling and shaping have been completed and grass seed spread – although we had litter rain during this period, there are some spots without any grass growth.

 NEW: 22 Oct 2025 at 08:16:40 SAST Loc: 22 Oct 2025 at 08:16:40 SAST S 33° 56' 15.632" E 29° 26' 6.143" UTM: NS Remarks: 25.1 #Hiland Environmental	 NEW: 22 Oct 2025 at 08:25:01 SAST Loc: 22 Oct 2025 at 08:25:01 SAST S 33° 56' 15.632" E 29° 26' 6.143" UTM: SE Remarks: 25.1 #Hiland Environmental Completed gabion structure
 NEW: 19 Oct 2025 at 12:48:51 SAST Loc: 19 Oct 2025 at 12:48:51 SAST S 33° 56' 15.632" E 29° 26' 6.143" UTM: NS Remarks: 25.1 #Hiland Environmental Litter and "dumping" remains and ongoing issue	 NEW: 19 Oct 2025 at 12:50:16 SAST Loc: 19 Oct 2025 at 12:50:16 SAST S 33° 56' 15.632" E 29° 26' 6.143" UTM: NS Remarks: 25.1 #Hiland Environmental Stockpile area and access tracks were shaped and rehabilitated (seed mix). Note that this area has high pedestrian traffic, which limits regrowth
 NEW: 19 Jul 2025 at 12:57:09 SAST Loc: 19 Jul 2025 at 12:57:09 SAST S 33° 56' 15.632" E 29° 26' 6.143" UTM: NS Remarks: 25.1 #Hiland Environmental Grass seed growing	

Site 28(1).37

- Construction (gabion wall) and shaping/sloping completed.
- The slope below and backfilling above the gabion structure was rehabilitated with grass seed, however, continual dumping (local residents) of litter and waste remains an ongoing issue and limiting the grass growth.
- Access was gained via the existing municipal road.
- The gabion baskets were stockpiled in the Municipal sewage pump station site camp.
- Construction material was stockpiled next to the existing municipal road.



Gabion retaining wall construction completed. Continual dumping of waste and litter remains an ongoing issue.



Backfilling completed – rehabilitation (shaping) has been done.



Final shaping and tie in at the ends of the gabion structure have been finalised.



Construction completed.

Site 28(1).115-120

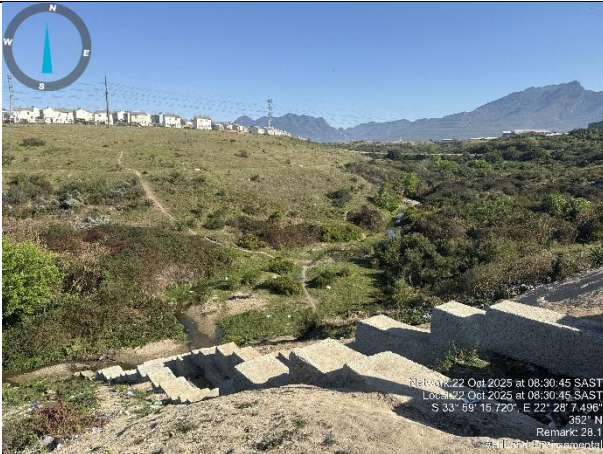
- Construction and shaping/sloping are complete, and grass seed was spread – follow up was required in July 2025 and are now growing.
- Surveyor pegged the stormwater structure (gabion and armorflex blocks) footprint.
- Construction footprint was kept as small as possible, but due to continual blockage and overflow of the municipal sewer manhole, the contractor had to move outside the footprint area – all disturbed areas have been shaped/sloped and seeded.

- Blockage and overflow of the sewer manhole(s) remain an ongoing issue and may lead to undercutting of the armorflex channel(s).



Site 28(1).2

- Construction of the main gabion structure is complete.
- Shaping and backfilling have been done, however, local residents tend to use the side slope to access the river which impacts the rehabilitation.
- The ECO approved access method statement – minor deviation due to the steep slope and stability of the slope. The slope is currently overgrown with invasive alien vegetation which will have to be removed.



Gabion structure construction is completed.



Erosion damage on the sides of the gabion structure has been backfilled and rehabilitated. Additional erosion protection has been installed (soil berms).



There are bare spots next to the gabion structure. Rehabilitation was damaged possibly due to high pedestrian traffic. The municipality can use excess topsoil from similar projects to replace on these bare spots.

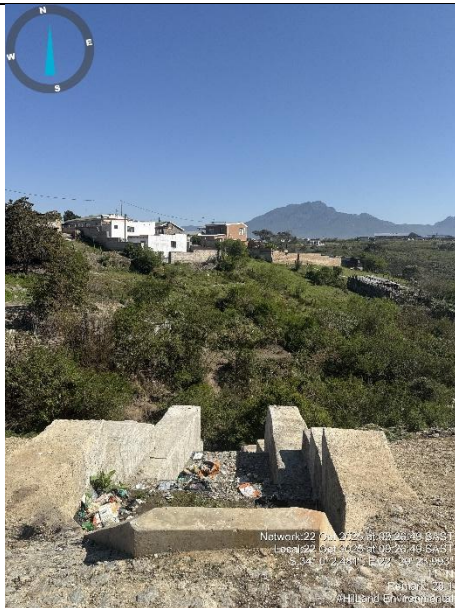


Litter in the stormwater network remains a problem

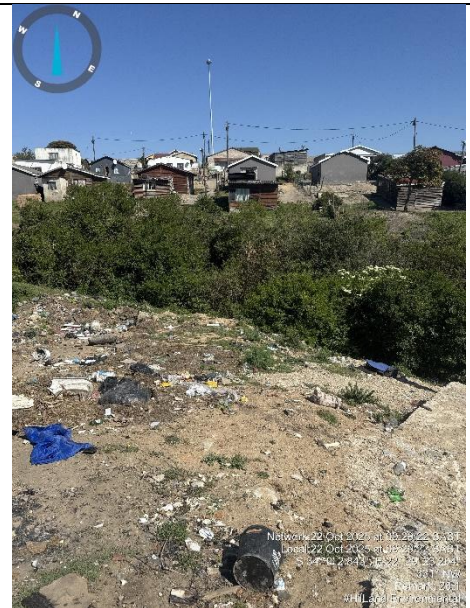
Site 28(1).69 (a & b)

- Construction of both structures is complete. Additional erosion protection - small soil berm - were used.
- Ongoing dumping of waste and litter (local residents) remains an issue.
- Construction stockpile area is the existing transformed area next to the municipal road.
- Access to the site via the existing municipal road.

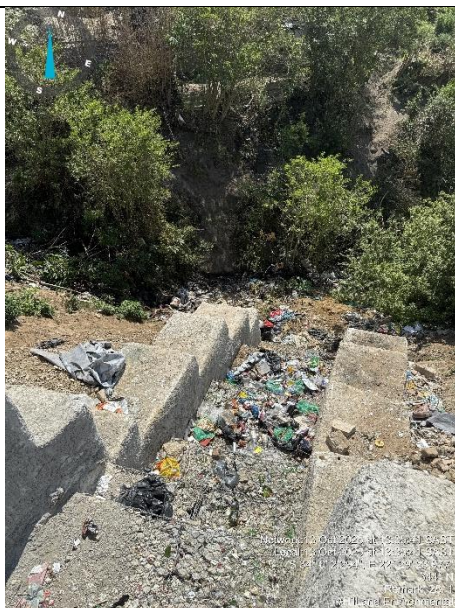
- Portable toilet was on site.
- There are no signs of soil erosion on the sides of the new gabion outlet structures.



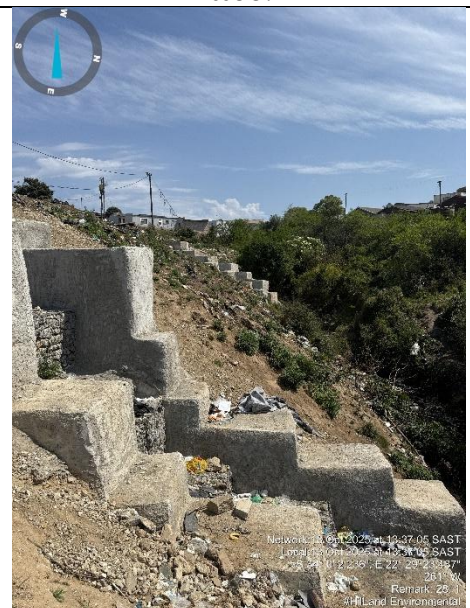
Construction of 69a & 69b is complete.



Ongoing dumping and littering remain an ongoing issue.



Construction of the gabion structure is complete.



No new erosion noted on the side slopes.

Site 28(1).77

- Construction of the gabion structure and headwall is complete. Shaping and sloping was done, and a soil berm was created to divert surface water away from the slope. Grass seed was spread on the side slopes. There are signs of grass growth.
- Surveyor pegged the stormwater outlet structure.
- Construction material stockpiled next to the municipal road.
- Access to the site was gained via the existing track to the municipal pump station.



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 EMP/MMP for the portion 3 sites.

All construction activities, snags and required rehabilitation are now complete.

Due to the nature of the sites (litter and dumped rubble), there is very limited topsoil to rescue.

Ongoing dumping of waste and litter (local residents) remain an ongoing issue at all sites. The George Municipality will need to continue with ongoing litter picking. Skips have been placed at some of the sites and are being used by the locals.

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

The George Municipality must continue with the operational phase / implementation phase monitoring of all these structures. Any damage to the gabion structures (including soil erosion damage on the side slopes) must be fixed immediately to prevent excessive damage further downstream.

This report serves as the 7-day written notification of completion as required in terms of the EA.

The external environmental auditor has been appointed and conducted their site inspection on 13 October 2025.