

Date: **22 August 2022**

Our Ref: Method Statement for Construction of Erosion Protection - Rosemoor.docx

George Municipality
71 York Street,
George
6529

ATTENTION: Mrs Melanie Geyer

Dear Sir

ERF 21150 AND 21151, ROSEMOOR – METHOD STATEMENT FOR CONSTRUCTION OF EROSION PROTECTION

Construction Method for Gabion Wall

Gabion wall design and planning for installation is carried out in the following stages for successful construction:

- Competent site investigation, sampling and relevant testing to build up an informed picture of the task.
- Adequate design of all the stages of the construction.
- Channelization of the stream with the minimum possible alteration to the natural stream flow in order to enable construction work to proceed. This is only done where necessary and if there are no alternative solutions.
- It is suggested that the construction takes place during the summer months.
- Proper alignment of the gabion boxes with the stream channel to prevent erosion and also to facilitate fish and wildlife migrations.
- All Environmental as well as Health and Safety requirements and good practice must strictly be adhered to.

Construction equipment

- Excavator.
- Reno mattresses.
- Gabion baskets.
- Stormwater pipe.
- Geofabrics.
- Rocks for filling the gabions.
- Compacting equipment.
- Formwork, reinforcing steel, and the necessary tools for assembly.
- Equipment for construction of foundations where required.
- Equipment for construction of inlet and outlet end walls.

T 0214432601, 0214432606 E capetown@nadeson.net, 125 Buitengracht Street, Cape Town, 8001
PO Box 51121, V&A Waterfront, Cape Town, 8002. GPS 33° 55'26.195", 18 °24'49.9' 9 (Cnr Pepper Street)

NADESON CONSULTING SERVICES (PTY) LTD

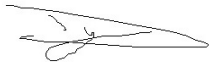
REGISTRATION NO: 2010/005226/07 VAT NO: 4180256564

DIRECTORS: Hassen Adams, Faldi Samaai, Bruce Erlangsen, Aziz Deshmook, Andre Dyers

Construction procedure

- Partially divert the stream flow to facilitate construction of the gabion boxes in dry conditions within the defined watercourse where possible. Stormwater can be diverted by placing sand bags in the proposed area of construction which prevent the area from being saturated before placing gabions.
- Set out gabion boxes in relation to construction drawings.
- Trim the bed of the water course to the desired levels and to create a suitable platform for construction.
- Loose material, vegetation and all foreign matter shall be removed from the foundation area.
- The foundation should be level and free of mounds.
- Place and compact bedding in accordance with specifications and drawings.
- The platform shall be checked to ensure it has been compacted to 95% Mod Aashto. In wet conditions 19mm stone to be placed to create a stable platform.
- Levels shall be checked prior to placement of the gabions / gabion mattresses.
- Assembly of the gabions units as per the drawings and details.
- Place gabion boxes to correct levels and falls and secure.
- Ensure adequate anchorage of the gabion boxes components against flood forces.
- Backfill in accordance with the specifications.
- Relocate channelization back to original stream channel.
- Re-instate stream bed and embankments as well as possible.

Yours faithfully



A Dyers – Pr Techni Eng

Nadeson Consulting Services

Date: **30 August 2022**

Our Ref: Operation & Maintenance - Rosemoor Gabions.docx

George Municipality
71 York Street,
George
6529

ATTENTION: Mrs Melanie Geyer

Dear Sir

ERF 21150 AND 21151, ROSEMOOR GABIONS – OPERATION & MAINTENANCE

1. Introduction

The gabion retaining wall was specified for embankment protection against erosion at Erf 21150 and 21151, Rosemoor. The retaining wall system comprises of steel welded mesh cages coated with corrosion coating laced together and filled with granular material. Please refer to drawings for the detailed design and specifications.

2. Maintenance procedures

Gabions should be inspected annually and after every large storm, to detect damages or abnormalities such as bulging, broken components, corrosion of mesh baskets, vegetation growth or vandalism.

Any vegetation growing out of the gabion boxes should be removed.

Broken or damaged panels will not affect the structural integrity of the wall and can be repaired on site with extra rock and mesh panels reattached onto older baskets. If several gabion baskets are broken advice should be sought from the Engineer.

Gabion baskets should be inspected for differential settlement caused by major storm events.

Yours faithfully



A Dyers – Pr Techni Eng

Nadeson Consulting Services