

18/10/2024

### ERF 1216 ST FRANCIS BAY 24G REHABILITATION CLOSURE SITE INSPECTION

As part of a section 24G process, rehabilitation of Erf 1216 has been undertaken. In order to finalise the process, an inspection by a SACNASP registered specialist is required in order to determine if determine if ecological functioning has been restored.

Vegetation that occurred on site was cleared for the development of a residential dwelling without obtaining the relevant environmental authorisations. As such, a Section 24G rectification process is required for the unlawful commencement of listed activities in terms of the Environment Conservation Act, 1989 (Act No. 73 of 1989) (ECA) and the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA).

### S I T E L O C A L I T Y A N D C O N T E X T

The site (Erf 1216) is situated in St Francis Bay, Kouga Municipality, Eastern Cape province with an area of approximately 730m<sup>2</sup>. The site is located on the seaward edge of an urban area, with the sea on the eastern side and developed erven on the north and south sides. The western side is bounded by a surfaced (tarred) road (Carlos De Wolfe Rd) on the western side, with undeveloped and developed erven on the opposite side of the road.



Figure 1: Site locality & Aerial Photo.

The site is situated in an elevated position above the high-water mark, on an old coastal sand (aeolian) dune. The site is likely to have been historically vegetated with degraded St Francis Dune Thicket, and there is evidence of alien invasion with *Acacia cyclops* (Rooikrantz), based on site observations and analysis of historical aerial photographs. Some remnant dune thicket remains along the north boundary, comprised of *Brachylaena* and *Searsia* spp trees and shrubs. The remainder of the site would be considered to be secondary vegetation. The site is also situated outside of any designated Critical Biodiversity or Ecological Support Areas, and the vegetation unit has a Least Concern status, indicating low conservation priority. This is further illuminated by the fact that the site is surrounded by developed erven within an urban area (coastal village).

Vegetation of St Francis Dune Thicket is typically comprised of small bush clumps dominated by small trees and woody shrubs, in a mosaic of low (1 - 2 m) asteraceous coastal fynbos.

## E C O L O G I C A L F U N C T I O N I N G

Ecological function refers to the biological, physical, and geochemical processes that occur within an ecosystem. It's also known as ecosystem function or ecosystem processes. Ecological functions are a result of the complex interactions between the biotic (living organisms) and abiotic (chemical and physical) components of an ecosystem. These interactions include the activities of plants, animals, and microbes, such as feeding, growing, moving, and excreting waste.

## F I N D I N G S

Plant species observed on site during the inspection include *Ehrharta villosa*, *Panicum maximum* (grasses), *Osteospermum* (*Chrysanthemoides*) *moniliferum* (shrub) *Searsia crenata*, *Searsia glauca* (small trees/shrubs) and numerous herbs and climbers including *Asparagus aethiopicus*, *Asparagus asparagoides*, *Cynanchum obtusifolium*, *Felicia echinata*, *Helichrysum teretifolium*, *Pelargonium capitatum*, *Senecio oederiifolius* & *Tetragonia decumbens*. There is no evidence of the invasive species *Acacia cyclops* (Rooikrantz) present on the site.

There is also evidence noted on the site of faunal activity including insects & invertebrates (spider nest observed), small mammals (duiker droppings observed) and birds (observed foraging on the site), which are indicative of ecological functioning. Plant species observed on site were flowering (*Osteospermum moniliferum* & *Felicia echinata*), which is indicative of active reproduction and also a source of nectar for bees (foraging). Seed production was noted on *Searsia crenata* & *Searsia glauca*. Seedlings of several plants (including *Osteospermum moniliferum*, *Asparagus asparagoides*, *Cynanchum obtusifolium*, *Helichrysum teretifolium*, *Senecio oederiifolius*) were also noted, which indicates active regeneration, required for healthy ecosystem function. Dense coverage and growth by *Osteospermum moniliferum*, would be indicative of production of leaf litter, which would decompose to form compost and improve soil conditions and presence of microbes, which are further indicative of ecological processes and functioning. All of the above are evidence that the site is ecologically functional.

I thus confirm, in my opinion, that ecological functioning has been restored on the site and the rehabilitation objective has thus been met.

Kind Regards



Mr Jamie Pote BSc (Hons) Pr. Sci. Nat (115233)



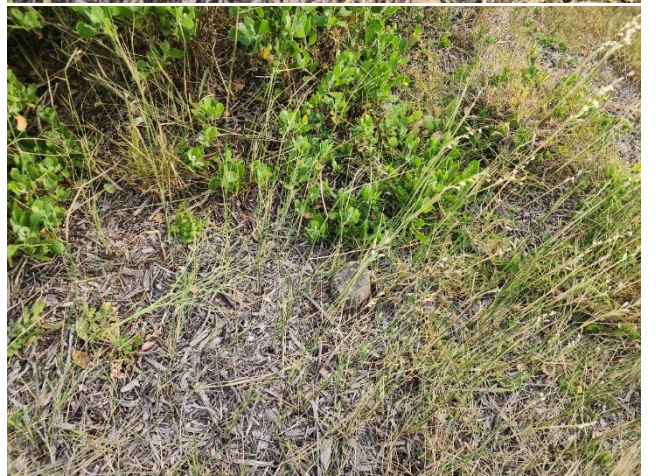
ANNEXURE A: SITE PHOTOS















**herewith certifies that**  
**Jamie Robert Claude Pote**  
Registration Number: 115233  
**is a registered scientist**

in terms of section 20(3) of the Natural Scientific Professions Act, 2003  
(Act 27 of 2003)  
in the following field(s) of practice (Schedule 1 of the Act)  
Ecological Science (Professional Natural Scientist)

Effective 20 July 2016

Expires 31 March 2025



Chairperson

Chief Executive Officer



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# RHODES UNIVERSITY

THIS IS TO CERTIFY THAT

JAMIE ROBERT CLAUDE POTE

WAS THIS DAY AT A CONGREGATION OF THE UNIVERSITY  
ADMITTED TO THE DEGREE OF

**BACHELOR OF SCIENCE**

**WITH HONOURS**

GRAHAMSTOWN

11 APRIL 2003

  
VICE CHANCELLOR

  
DEAN OF THE FACULTY OF SCIENCE

  
REGISTRAR