

SPATIAL PLANNING AND ENVIRONMENT ENVIRONMENTAL MANAGEMENT

Dr Charmaine Oxtoby

Biophysical Specialist M: 082 265 2762

E: Charmaine.Oxtoby@capetown.gov.za

Enviroworks Block B2, Edison Square, Ground floor, c/o Century Avenue and Edison Way, Century City 7446

Attention: Ms Megan Smith

Via e-mail: megan@enviroworks.co.za

19 March 2021

Dear Megan,

RE: COMMENTS ON THE DRAFT MAINTENANCE MANAGEMENT PLAN FOR THE PROPOSED RESTORATION AND MAINTENANCE OF THE BLUE STONE QUARRY WALL, ROBBEN ISLAND

All comments from the City of Cape Town, submitted by Sandra Hustwick and Thandeka Mbambo on 5 March 2021, still apply and are supported by the City of Cape Town Biodiversity Management Branch.

The Biodiversity Management Branch thank Enviroworks and Robben Island Museum for the opportunity for a site inspection of the Robben Island Blue Stone Quarry wall on 15 March 2021, attended by Bongani Mnisi (Head: Nature Conservation North) and Dr Charmaine Oxtoby (Biophysical Specialist).

Please find below additional comments based on this site inspection (15 March 2021).

- 1.1. In addition to being a WHS, Robben Island is also an Important Bird Area recognised internationally. We are therefore concerned that the EAP has less than one year's experience for running this complex process in a sensitive environment, and would recommend that a team be appointed to include a marine avifaunal specialist and a coastal specialist to assess the avifaunal and coastal impacts of the proposed seawall construction.
- 1.2. Given that the construction of the wall triggered the need for a Basic Assessment Report in 2014, the same specialists would need to conduct fresh impact assessments for the reconstruction of the wall currently. The reconstruction / restoration cannot be managed as a maintenance project, without first reconstructing wall and assessing its associated impacts.
- 1.3. The unavoidable resultant environmental impacts of this proposed Maintenance Management Plan (MMP), on seabirds in particular, will be in direct conflict with the National Environmental Management Biodiversity Act (Act 10 of 2004, as amended) and the Robben Island Environmental Management Plan (RIEMP), 2002. The RIEMP provides for zero disturbance in established nesting sites, especially for Endangered species.

- 1.4. MMP Chapter 2, page 11 Figure 2 sensitivity map of the proposed activity is at too coarse a resolution to be informative. Please provide a zoomed-in map of the area. Please also indicate on a map the known breeding areas and access routes of the various seabird species that frequently use the Blue Stone Quarry and surrounds.
- 1.5. MMP Chapter 4.1 project description page 14 -
 - 1.5.1. Adding new material to strengthen the wall does not necessarily constitute "like for like" reinstatement. Please confirm:
 - what this "new material" is,
 - what quantity of new material will be used,
 - where the new material will be sourced from,
 - how the new material will be transported,
 - where this new material will be temporarily stored, and
 - where this new material will be used.
 - 1.5.2. The statement that "No concrete or heavy machinery will be used..." contradicts Appendix A on both accounts. Please explain in the final MMP how no concrete or heavy machinery will be used, given the aim to "ensure the future protection of the quarry and its associated heritage value".
- 1.6. MMP Chapter 4.2, page 16 and 17, relating to Figure 3 The site layout map provided comes from Appendix A, and therefore is not appropriate for the currently proposed MMP work. A revised site layout map should be replaced in the final MMP, in which the following concerns are addressed:
 - 1.6.1. Why does there need to be such a large Construction Camp, if no heavy machinery will be used? During the site inspection on 15 March, Enviroworks stated that no more than 10 personnel would be on site at any time.
 - 1.6.2. What material will be used to construct the temporary penguin fence? SANCCOB, SPCA and an independent Avifaunal Specialist should be consulted on material, colours and construction method for the penguin fence.
 - 1.6.3. Why does the penguin fence need to extend north beyond the construction area through the middle of the no-go zones? Road access from the north may not be used due to risk of disturbance to nesting seabirds.
 - 1.6.4. Why is the rock stock pile outside of the penguin fence? There is no gate access shown between the rock stock pile and the construction area. It was confirmed during the site inspection that this rock stock pile will be used. Therefore, is it necessary to show the how this rock will be transported to the wall without causing disturbance to seabirds.
 - 1.6.5. How long are the quarry revetment ring walls? Please indicate these on a map.
 - 1.6.6. Where will new material (tie stones and large barrier stones) come from? Where will this material be temporarily stored during construction?
 - 1.6.7. How will 'reinstating the original gravel limestone roadway that ran along the top of the wall' be done without using heavy machinery, if it is to be compacted?
 - 1.6.8. Where will the gravel be imported from for the roadway on top of the wall?
 - 1.6.9. What will this roadway be used for once reinstated? It is neither necessary nor environmentally appropriate to have a second road for vehicular movement around the auarry.
 - 1.6.10. Clearing the coastal vegetation that is currently growing on top of the former roadway, may constitute a NEMA EIA listed activity, and is not desirable from a coastal ecology point of view.

- 1.7. MMP Chapter 4.2, page 16 future general maintenance activities on the wall, quarry and surrounds may cause unacceptable disturbance to the environment, and the likely loss of breeding sites for several seabird species on this side of the island.
 - 1.7.1. The MMP should outline:
 - what this "general maintenance" will entail,
 - how often it will be done,
 - what time of year it will be done, and
 - how environmental impacts will be mitigated.
 - 1.7.2. Will the penguin fence be reinstated for future maintenance?
 - 1.7.3. With the increase of impacts of climate change, there is a strong likelihood of storm surges breaching the wall annually, and the resultant collapse of sections of the wall. Will boardwalks and a construction camp be used for each maintenance activity in future?
 - 1.7.4. Is this proposed future maintenance financially viable for Robben Island Museum? Is this the best use of resources?
 - 1.7.5. Is ongoing maintenance the most appropriate way to preserve and celebrate the heritage of this site? Would it not be more appropriate to preserve the remaining extent of the original wall, as well as the breached section in testimony to what the prisoners were up against, i.e. the ongoing futility of hard labour maintaining a wall that would be periodically washed away?
 - 1.7.6. It was proposed during the site inspection that future maintenance would cause less disturbance if it were symbolic only. For example, surviving ex-political prisoners and their family members could attend an annual ceremony to symbolically replace one stone each into the wall.
- 1.8. MMP Chapter 5, page 18-19, Table 4 -
 - 1.8.1. Ecology flora: Please define the area of vegetation expected to be lost. Loss of Cape Flats Dune Strandveld vegetation without mitigation is unacceptable under Section 2 of NEMA. This vegetation type is listed nationally as Endangered, the national conservation target of 24% conserved has not been met, and it is endemic to Cape Town.
 - 1.8.2. Ecology Avifauna (Caspian Terns): Why is the Caspian Tern roost site not also a no-go area? This species is listed regionally as Vulnerable.
 - 1.8.3. Why are the Bank Cormorant and Cape Cormorant breeding sites not included under avifaunal impacts? The breeding sites should be no-go areas. Both species are listed regionally and internationally as an Endangered species.
- 1.9. MMP Chapter 6.3, page 24 Monthly site visits by an ECO is inadequate to halt and rectify environmental damage, especially given the sensitive nature of this site as well as the presence and breeding sites of threatened bird species.
- 1.10. MMP Chapter 7.1.1., page 26 The "Do not" list should include:
 - Do not exceed the speed limit of 40km/h.
 - Do not interfere with, disturb, chase, hunt, trap, poison, feed, injure or kill any fauna.
 - Do not pick, damage, or remove any flora, except for what is permitted under the MMP.
 - Do not bring any dog on site.
- 1.11. MMP Chapter 8.1, page 31, 1.3 e -

- 1.11.1. The 2014 Avifaunal Specialist Report (Appendix A, Figure 1) stated that construction must not exceed a six-week period (mid-September until end October), not six-months as stated in the MMP. This six-week period is constrained by the end of the African Penguin breeding season and the start of the African Black Oystercatcher, Kelp Gull and Caspian Tern breeding seasons. Why is there no time-of-year constraint or timeline for construction in the MMP?
- 1.11.2. Expert advice from Prof. Les Underhill carried the caveats that construction should commence in the second half September and must be completed before the start of the African Penguin breeding season in March-April. This timeframe constraint is not clearly stated in the MMP. The extract below (Table 2 from page 13 of Appendix A) outlines the annual lifecycle of an adult African Penguin on Robben Island.

Table 2: The annual life cycle of an adult African Penguin on Robben Island (source Proposed Reconstruction of the Blue Stone Quarry Wall, Avifaunal Assessment, April 2014)

Activity	Approximate duration	Habitat utilised
Laying of eggs and incubation	Any time of the year with peak in Feb to May – incubation 38-41 days	Land when brooding Sea when foraging
Feeding and caring for chick(s) up to fledging	After hatching for about 60-110 days (mean 75-90 days)	Land when caring for chick(s) Sea when foraging to feed nestlings
Pre-moult fattening after chick(s) fledged	c. 35 days	Sea – they only return to land when moult starts
Moult	c. 21 days	Land – with very short forays to preen and drink near the landing beaches
Post-moult fattening	c. 42 days	Sea - the birds return after this period to restart the breeding cycle.

- 1.11.3. A six-month construction period, even with the proposed mitigation, is fatally flawed, because it will likely lead to the loss of a breeding season resulting in immeasurable knock on effects for the Endangered African Penguin colony. In addition, it is highly probable that the moulting season will be affected and as such the birds may not return to the area for breeding. On the basis that the six month programme will lead to permanent disturbance and habitat alteration, and the loss of one breeding season of the African Penguin a species with fast decreasing numbers will have not only an immediate impact, but the knock-on effect of the loss of a breeding season is immeasurable.
- 1.11.4. For Swift Tern, it may result in the loss of the breeding colony. This colony constitutes 1% of the global population of this species, and the subspecies is endemic to this area.
- 1.11.5. For Kelp Gull, if 6 months are allowed for construction, this timeframe overlaps with the peak breeding season. According to the RIEMP, a gullery is out of bounds when birds are breeding. Thus construction should not be allowed to run into the peak gull breeding season.
- 1.11.6. Mitigation/contingency measures relating to Covid-19 must be put in place to avoid construction taking longer than six-months from commencement, or construction commencing outside of the recommended period between the second half of September and March.
- 1.11.7. A new Avifaunal Impact Assessment should be conducted to include the Endangered Cape Cormorant and Bank Cormorant that have used this area in recent years.
- 1.12. MMP page 37-38, 1.10 ecology Points that should be added:
 - No vehicle may drive off-road to pass another or for any other reason.
 - Designated vehicle passing areas and turning circles must be clearly demarcated, in consultation with specialists and SANCCOB representatives, and adhered to at all times.

- Under no circumstances should a single-lane road become a double lane width roadway.
- 1.13. MMP Chapter 11, page 49, maintenance Large mammals (antelope and deer) and ostriches should also be kept out of rehabilitation areas to minimise trampling, browsing and/or grazing, and erosion, until the vegetation has re-established. This should be in addition to vehicles, people and livestock being kept out of rehabilitation areas.

Appendix A comments

- 1.14. Appendix A Option 1 (the preferred option) described a "penguin ramp" with 1:5 or 1:4 slope. Why does the 2021 MMP not include a penguin ramp or alternative access for African Penguin movement post-construction? A dry-stone ramp up the wall on the seaward side that has a gradient that would allow penguins to access and traverse the ramp would shorten the length of barrier and thereby shorten the time it might take penguins to habituate to the barrier. The longer the route to the breeding area is inaccessible, the longer penguins will take to habituate, and the greater the risk of the impacts being permanent. Irreversible impacts of construction cannot be supported from an avifaunal perspective.
- 1.15. Appendix A, page 14 "It is further recommended, by Professor Les Underhill, that independent monitors (such as NCC Group) are appointed to check that the proposed mitigation measures are being complied with throughout the six-month construction period." This recommendation should be carried through in the current MMP.
- 1.16. Appendix A, page 18 "BSQ site has seen the relatively recent ingress of African penguins that were not part of the historic cultural landscape. Penguins bred on the island in 1983 but are only thought to have colonised the BSQ site following 1997, when the Department of Correctional Services vacated the island, and more so following the degradation of the wall in 2003."
 - 1.16.1. The argument that the African Penguin colony is recent contradicts the Appendix A avifaunal addendum that confirms "recolonization". Records of African Penguin date back to 1497 referencing huge populations on the west coast of South Africa and Namibia. That changed dramatically in the early 1840s with the guano rush where vast quantities of seabird droppings were removed from breeding islands for use as fertilizers. The island guano, that had accumulated over thousands of years, provided optimal nesting habitat for penguins. Without this insolation, nests were exposed to the elements and predators, and penguin numbers plummeted. During the prison years, patrols with dogs would have caused sufficient disturbance to dissuade penguins from breeding.
 - 1.16.2. The Robben Island African Penguin colonies actually predate the Boulders Beach colony in Simonstown, where the first African Penguin egg was laid in March 1985. The shift in location of African Penguin colonies has been attributed to a shift in their prey (mostly sardines and anchovies). As such, survival of this species depends on protecting the current, not historic, breeding colonies in relation to proximity to their food sources. It is of the utmost importance to the survival of this species to protect island colonies, because mainland colonies are at a far higher risk from road mortality, feral and domestic cats and dogs, wild terrestrial predators (leopard, caracal and mongooses), pollution and physical disturbance.

We trust that the avifaunal and coastal impacts of reconstructing the seawall will be investigated afresh in light of current avifaunal and coastal trends and information, and that this MMP will be amended to mitigate the environment impacts and risks discussed above. This is a legal requirement under the "Duty of Care" principle as per of Section 28 of the National Environmental Management Act, 1998 (Act 107 of 1998).

The City of Cape Town Biodiversity Management Branch reserves the right to revise comments, and request further information, based on any additional information received.

Yours sincerely, Dr Charmaine Oxtoby