

Environmental Management

Environmental and Heritage Management

T: 021 850 4282 F: 021 850 4231 E stephanie.coetzee@capetown.gov.za

Ref: Strand Sea wall and lengthening of rock revetment

12 January 2018

PO Box 1058 Wellington 7654

Email: heleneb@iafrica.com

Dear Ms Helene Botha

AMENDMENT APPLICATION: THE STRAND SEA WALL AND LENGTHENING OF ROCK REVERMENT -PROPOSED CONSTRUCTION OF A ROCK REVERMENT AND STORMWATER CULVERT BETWEEN THE SEA WALL AND STRAND JETTY, STRAND (DEADP REF. NO: 16/3/3/5/A3/57/2054/17)

Reference is made to the amendment application of the Strand sea wall and lengthening of rock revetment in order to construct a rock revetment and stormwater culvert between the sea wall and Strand Jetty. This application has been assessed in terms of the National Environmental Management Act, no 107 of 1998.

The Environmental Management Department (EMD): Environmental and Heritage Management Branch circulated the amendment application to the following departments/branches for comment: Social Services: Recreation and Parks; Transport and Urban Development Authority (TDA): Asset Management and Maintenance Branch; TDA; Environmental Management Department (EMD): Coastal Management Branch.

Comments were received from the following departments/branches: Social Services: Recreation and Parks (Annexure A); TDA: EMD: Coastal Management Branch (Annexure B); and TDA: EMD: Environmental and Heritage Management Branch. Defailed comments can be viewed in Annexures A - B.

The respective City of Cape Town Departments' comments are as follows:

Social Services: Recreation and Parks – Tamara Josephs (Annexure A):

The lease for the jetty with the department of Public Works has expired in 2015 and the department has not reapplied for it since. No removal or alterations can take place without approval from the land owner. Furthermore, there are uncertainties with regards to the way forward concerning the department responsible as well as funds for restoring the jetty. It was proposed in the initial planning phases of the sea wall that after the wall has been built, it would allow for the restoration and the entrance of the Strand jetty.

There are currently no approvals for the demolition or restoration of the Strand jetty. It is further not clear if the design of the proposed rock revetment caters for the possible restoration of the jetty and its entrance. Whether or not the jetty is rebuilt, it is still imperative that the wave over-topping be minimized as the area is very popular due to the market and the restaurants located in close proximity. Please refer to Annexure A for the full comment from this Department,

PO Box 3 Strand, 7129

Strand Munisipale Kantoor

Hoek van Hoofweg en Faganstraat,

TDA: EMD: Coastal Management Branch – Natalie Newman (Annexure B)

While this Branch has no in principle concern with the preferred and proposed option 2, quantification of the potential socio-economic benefits and the loss of beach amenity through the preferred option 2 has not been assessed. Similarly, the beach amenity that has already been lost given the accelerated erosion as a result of the current sea wall that has been built, has also not been assessed.

It could be argued that this loss of amenity should be assessed and be a factor to consider in determining the preferred option. Given that option 3 could result in potential replacement of the lost beach, this should be investigated. Notwithstanding, while option 3 in theory is a viable option to consider, this Branch does agree that there are too many unknowns and as suggested to assess the potential impact(s), expensive field studies, numerical and physical modelling, as well as further impact assessments will be required. Option 3 is also considered the more expensive option. However, no quantification is provided on the potential socio-economic benefits that it may have in terms of the beach that would be formed. These benefits, although more difficult to quantify, should offset the cost associated with option 3, if found to be desirable.

Further to the above, all three of the proposed engineering solutions for "Bart's Corner" will have implications for the jetty. This Branch is of the opinion that the jetty is derelict, a danger, and should be demolished. Currently debris or pieces of the jetty that have washed loose or continue to wash loose, pose a significant threat to beach users. While it is understood that the Transport and Urban Development Authority (TDA) are trying to appoint consultants to assess the possible restoration of the Jetty, considering the current state of the jetty, it is highly likely that the jetty will require being demolished before it can be reconstructed. It is recommended that further discussions be had with TDA regarding the possible demolition of the jetty at the same time as the proposed works at "Barts Corner" is undertaken. This will allow for the derelict structure to be removed and the risk of debris from the jetty hurting someone to be eliminated. This will provide more time for TDA to consider whether the jetty should be reconstructed, and to consult with the necessary parties, and undertake the associated planning. Please refer to Annexure B for the full comment from this Branch.

TDA: EMD: Environmental and Heritage Management Branch (Heritage Section) – Elize Joubert

For this project to proceed, an application for the partial demolition of the Strand jetty will have to be made to the Provincial Heritage Authority, Heritage Western Cape (HWC), as the jetty is considered a grade 3A heritage resource. The Strand Jetty was built as a small fishing harbour in 1934 by the then Department of Mines and Fisheries. It has since become the property of the National Department of Public Works. The City of Cape Town had leased it from the NDPW since 1985 to 2015 as a public amenity. Currently there is no lease agreement in place as the last agreement lapsed in 2015.

TDA: EMD: Environmental and Heritage Management Branch (Environmental Section) - Stephanie Coetzee

Having reviewed the Amendment application, dated 21 November 2017 and the Coastal Protection Solutions document, dated 28 March 2017 it was noted that physical model tests investigated the hydraulic and physical (stability) of various seawall configurations. It was noted that option 3 was not part of the investigations and would require further detailed and costly studies. While this Branch has no in principle objection to option 2, it was not clear from the application what the construction and operational impacts will be on the environment when implementing the offshore breakwater berm compared to option 2, i.e. the seawall revetment.

Notwithstanding the above, the following amendments to the Amended Construction and Operational Management Plan, dated November 2017, are required:

1. On page 8 of the amended C&OMP the first sentence in the second paragraph must be amended to the following: "After the completion of the first phase of the seawall (as approved by the Environmental Authorisation......"

- 2. On page 9, the second sentence of the third paragraph states that the architectural design guideline for the beach wall and revetment must be accepted by the municipality and DWA prior to commencement of construction activities. It is not clear what DWA stands for in this document.
- 3. On page 10, the second sentence in the first paragraph is incorrectly stated at the end of the sentence i.e. "The existing wall on the beachfront is so low that frequent overtopping of waves and sand is required."
- 4. On page 10 and 11 errors were made in the bold letters. This should be corrected to reflect the correct figure numbers.
- 5. On page 12, first sentence in the first paragraph must be amended to the following: The existing stormwater infrastructure along the Strand"
- 6. On page 12, the first and second paragraph refers to the incorrect measurements of the stormwater outlets and sewer lines. Please amend to the correct measurements as stated in the Amended Environmental Authorisation dated 2016/01/26.
- 7. On page 14, section 3.2, paragraph 2 refers to HOA. It is not clear what HOA stands for.
- 8. On page 14, section 3.2, paragraph 2 the second sentence must be amended to the following: "The RE/ECO must consult the Environmental and Heritage Management Branch in order to decide how the penalties, if any, are to be spend on measures"
- 9. On page 16, section 3.4, point 7 must include the following sentence "All excavated rocks and stones must be removed from the beach in order to ensure that the state of the beach is the same as it was before construction commenced."
- 10. On page 21, section 3.14, point 1 the second sentence must be removed i.e. "All waste from construction will be used as fill in the dam wall."
- 11. On page 23, section 3.18, second sentence must be amended to the following: "The stockpiles must be placed within demarcated areas and not on the beach."
- 12. On page 24, section 4.1, point 3 the second sentence must be removed.

Conclusion

Having reviewed the application and the above comments, it is noted that there are concerns that the socio-economic and environmental benefits of option 2 compared to option 1 and 3 have not been adequately assessed and addressed. Furthermore, all three engineering solutions for "Bart's Corner" will have implications for the jetty and this has not been assessed either. It is recommended that the above concerns raised by the various branches be addressed and the information required be included in the Final Amendment application for comment, prior to the submission of the Final Amendment application to the competent authority.

Should you wish to discuss the above comments, please do not hesitate to contact Stephanie Coetzee (see letterhead for contact details).

Kind regards

Osman Asmal

Director: Environmental Management

23/01/18

Melissa Whitehead

In consultation

Commissioner: Transport and Urban Development
Authority

CC: Department of Environmental Affairs and Development Planning (DEA&DP)
Fax: 021 483 4372

Annexes

Annexure A: Social Services: Recreation and Parks – Tamara Josephs Annexure B: TDA: EMD: Coastal Management Branch – Natalie Newman



Internal Memorandum

T: 021 444 2613 M: 072 495 9715 E: Natalle nemwan@capetown.gov.za

To

: Stephanie Coetzee - Environmental and Heritage Management Branch

From

: Natalie Newman – Coastal Management Branch

Subject : Erf 1142 strand – DBAR Amendment: Strand Sea Wall (Bart's Corner)

Date: 20 December 2017

The Coastal Management Branch has reviewed the amendment application for the proposed construction of a new concrete culvert for the stormwater outlet and rock revetment structure at "Bart's Corner", Strand Beach.

As noted in the application, option 2 is the preferred option. While this Branch has no in principle concern with the proposed option 2, quantification of the potential socio-economic benefits and losses with respect to the beach amenity that may form if option 3 is pursued versus the loss of beach amenity through the preferred option 2 has not been assessed. Similarly the beach amenity that has already been lost given the accelerated erosion as a result of the current sea wall, that has been built, has also not been assessed.

It could be argued that this loss of amenity should be assessed and be a factor to consider in determining the preferred option. Given that option 3 could result in potential replacement of the lost beach, this should be investigated. Similarly the question should be asked whether the offshore revetment would create hazardous swimming conditions off this newly formed beach, and whether the offshore breakwater may impact the hydraulic and in turn morphological processes and subsequent coastline if pursued.

Notwithstanding, while option 3 in theory is a nice option to consider, this Branch does agree that there are too many unknowns and as suggested to assess the potential impact(s), expensive field studies, numerical and physical modelling will be required; as would further impact assessments. Option 3 is also considered the more expensive option. However, no quantification is provided on the potential socio-economic benefits that it may have in terms of the beach that would form. These benefits, although more difficult to quantify, should offset the cost associated with option 3, if found to be desirable.

Further to the above, all three of the proposed engineering solutions for "Bart's Corner" will have implications for the jetty. This Branch is of the opinion that the jetty is derelict, a danger, and should be demolished. Currently debris or pieces of the jetty that have washed loose or continue to wash loose, pose a significant threat to beach users. While it is understood that TDA are trying to appoint consultants to assess the possible restoration of the Jetty, considering the current state of the jetty, it is highly likely that the jetty will require being demolished before it can be reconstructed. It is recommended that further discussions be had with TDA regarding the possible demolition of the Jetty at the same time as the proposed works at "Barts Corner" is undertaken. This will allow for the derelict structure to be removed and the risk of debris from the Jetty hurting someone to be eliminated. This will provide more time for TDA to consider whether the Jetty should be reconstructed, and to consult with the necessary parties, and undertake the associated planning.

It should be noted that any works on the Jetty will require authorisation from Heritage Western Cape. Please contact Elize Joubert of the City of Cape Town: Environmental and Heritage Management Branch (elize joubert@capetown.gov.za or 021 850 4074) in this regard.

Kind regards

Natalie Newman

COASTAL MANAGEMENT BRANCH

ENVIRONMENTAL MANAGEMENT DEPARTMENT

Penny Nakani

Sent:

19 December 2017 08:43 AM

To:

Stephanie Coetzee

Cc:

Edward Knott

Subject:

RE: Strand Sea wall and lengthening of rock revetment_ Amendment Application

Hi Stephanie

Please see my comments below regarding the proposed revetment.

- The lease for the jetty with the department of Public Works has expired in 2015 and the department has not reapplied for it since. No removal or alterations can take place without their approval. Also, the HWC permit has expired and I was advised not to reapply for this as there was no funding to do the restoration.
- It was unclear who should apply for this as TDA: coastal management indicated that the structure will most likely fall under their jurisdiction once ODTP is concluded thus a decision has to be made as to which director will be signing the lease agreement. Elize Joubert (heritage professional) has asked Linsy Davids (Project Manager) to call a meeting between TDA and Recreation and Parks but I haven't heard anything since.
- As this structure is declared a heritage site, the restoration has to be like-for-like and according to the proposed changes, I don't see the restoration of the portion of the jetty they plan to remove.
- I would advocate for the portion of the seawall to be removed as to make space for the entrance to the jetty. This was supposed to be the case as it was proposed in the initial planning phases of the seawall however when the wall was built it made allowance for the restoration and entrance of the jetty.

In conclusion, the coastal coordination unit is not in agreement with the proposed lengthening of the rock revetment as it calls for the removal of a portion of the jetty. The City currently does not have the necessary approvals to do with the removal or restoration of the structure. Once these approvals are in place or a decision has been made by line management whether to restore or demolish the structure, a new design will have to be drawn up which accommodates both the revetment and the jetty as the current designs don't cater for both.

From a public safety perspective, this area and the jetty specifically poses a significant threat as it has been a drowning hotspot for number of years. Whether or not the jetty is rebuilt it is still imperative that the wave over-topping be minimized as the area is very popular due to the market and the restaurants located in close proximity.

Kind regards

Tamara

From: Stephanie Coetzee

Sent: Tuesday, November 28, 2017 11:14 AM

To: Darryl Colenbrander; Howard Gold; Natalie Newman; Dennis de Villiers; Wynand Buhr; Tamara Josephs; Willem

Jacobus Le roux; Edward Knott; Helen Jordaan; Johan van Wyk; Elize Joubert

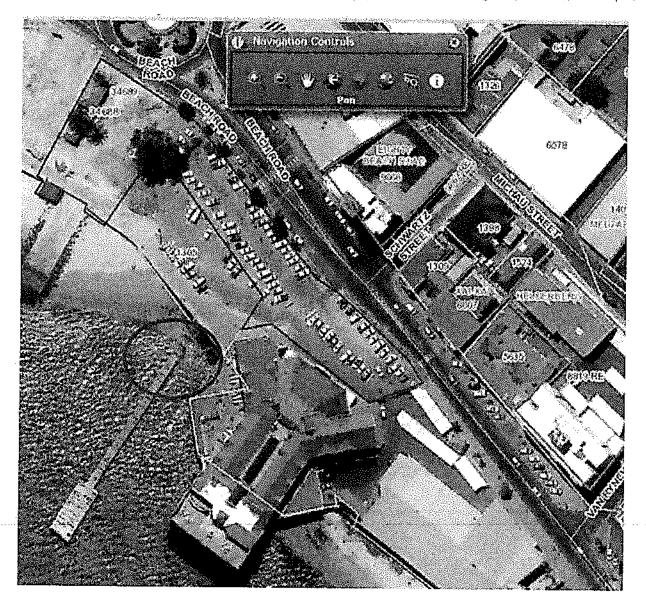
Cc: Barrie Barnard; Ben De Wet

Subject: Strand Sea wall and lengthening of rock revetment_ Amendment Application

Dear all

The Environmental Management Department: Environment and Heritage Management Branch are tasked with co-ordinating and collating internal Department/Branch comments on the **Amendment**Application for the proposed

construction of a new concrete culvert for the stormwater outlet and rock revelment structure in the location indicated in the picture below undertaken in terms of the Environmental Impact Assessment Regulations promulgated in terms of the National Environmental Management Act of 1998 (No 107 of 1998).



Please review the Amendment Application for the proposed construction of a new concrete culvert for the stormwater outlet and rock revetment structure and provide comment to me by no later than 19 December 2017.

http://citvteams.capetown.gov.za/sites/EHM/Shared%20Documents/Forms/Alltems.aspx?RootFolder=%2Fsites%2FEHM%2FShared%20Documents%2FDistrict%20E%2FEnvironmental%20Assessments%2FERF%201142%20Str%20Rock%20Revetment%5FAmendment%20Application

If you have any queries regarding the above please do not hesitate to contact me.

Stephanie Coetzee

Assistant Environmental Professional: Environment and Heritage Management Branch

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