COUNCIL OF THE ISLES OF SCILLY

Planning & Development Department
Town Hall, The Parade, St Mary's, Isles of Scilly, TR21 0LW
01720 424350
planning@scilly.gov.uk

Mr J Pearce
Senior Officer: Physical Assets and Natural Resources
Council of the Isles of Scilly
Town Hall
St Mary's
Isles of Scilly
TR21
0LW

Tuesday, 17 April 2018

Dear Julian,

Re: EIA Scoping Opinion Request under the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 2017: Sea Defence Works and Dune Management Project, Isles of Scilly.

Further to your formal EIA Scoping Opinion Request as received at this office on 24th October 2017. My apologies for the delay in formalising our response. Please find below this Authority's formal Scoping Opinion in relation to the proposed sea defense projects on St Mary's and Tresco.

The Council of the Isles of Scilly – Environmental Impact Assessment (EIA) Scoping Opinion.

In response to your correspondence, we have considered the proposed development at the 4 sites on St Mary's and Tresco, as indicated and in accordance with Regulation 15, Part 4 of the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 2017.

Background
A request for a Screening Opinion was originally submitted in October 2016 in which the LPA concluded the sea defence works would constitute EIA development in accordance with the 2011 Regs.

As the competent authority the Local Planning Authority (LPA) has received a request from the Council of the Isles of Scilly's Infrastructure Department requesting a formal Scoping Opinion in accordance with Regulation 13 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2011 (hereafter known as the 2011 Regs) as to what information should be submitted as part of an Environmental Statement (ES) that will accompany a planning application for the proposed sea defense works and dune management project. The scope of the project, which is split over 4 site comprises:

1. Porth Hellick, St Mary's

Porth Hellick is located on the south-west coast of St Mary's. The 250m wide bay is flanked on both ends by rocky outcrops. The backshore dune is made of coarse sand (4-10mm particle size) and vegetation is well established along its crest including Fascicularia Bicolour and Hottentot Fig (C.edulis). There are gaps and low points due to the action of storm events during the past decade. The eastern end of the dune suffers from severe human-induced erosion due to the action of boat launching. Additionally the construction of the existing outfall required the excavation of dune which was not reinstated to match the existing dune levels. The low spots are potential paths for saline intrusion into the Higher Moors Pool, the main fresh water resource for St Mary's, hence the sand dune defense needs improvement to continue to protect this natural resource. Dune recharge to reduce the vulnerability of the Higher Moors SSSI to saline intrusions; the installation of a beach access ramp over the newly raised dune for maintenance of the leat outfall; approach access track to the beach ramp to reduce erosion and the installation of an elevated timber boardwalk to access the beach.

2. Porth Mellon, St Mary's

Porth mellon is located on the western coast of St Mary's. The bay measures approximately 240m and is flanked by rocky outcrops. Access to the beach is via a slipway. The works at Porth mellon involve the design and installation of a revetment in the south west corner of Porth Mellon beach. At the northern end of the beach an existing retaining wall shall be repaired and repointed. An existing path across the dune, located just to the north of the boathouses, will be formalised as part of the works.

3. Porthloo, St Mary's

Porthloo is located on the western side of St Mary's. The bay measures approximately 300m and is flanked to the north and south by rocky outcrops. At the southern end of the beach is a boat yard which is protected from wave run-up by an engineered dune which extends half way along the beach. The northern extent of the beach is backed by an earth embankment which retains the road. The embankment is protect by an assortment of various size rocks and is currently susceptible to erosion and overtopping from wave events. The project at Porthloo includes the installation of a 110 metre rock armour revetment along the northern half of Porthloo beach.

4. South Dunes, Tresco

South Beach is located on the southern coast of Tresco. Local observations suggest that the foredune (the most seaward ridge of a coastal sand dune complex) at South Beach has been subject to erosion, causing it to retreat landward by ~8-10m over the past 9-10 years. The design to protect South Beach is the installation of Salix rock rolls to protect the dunes from further erosion including a detailed design of civil works to mitigate further erosion of the dune.

In order to comprehensively address all of the environmental issues the LPA has consulted with Natural England, the Environment Agency and Historic England who have provided us with guidance on the scope of the EIA. These responses have been summarised below and attached as necessary.

Natural England

Natural England advise that the Environmental Statement should assess potential direct and indirect impacts to the interest features of a number of designated sites, including the supporting coastal processes. The EIA should assess the cumulative impact of all four projects on each of the designated sites as well as considering each project separately. It should also identify measures to minimise impacts on biodiversity and opportunities for biodiversity enhancement outside designated sites. A Habitat Regulations Assessment will also be required and sufficient information to inform this should be incorporated within the EIA.

I have attached the full response from Natural England for your information. This sets out the required scope of the EIA.

Environment Agency

The Environment Agency have set out general principles to be incorporated into the EIA as well as assessing the 4 sites individually. The responses for each site have been set out below.

General Principles

These are all sites characterised by natural dune-beach systems, exposed to episodic high wave energy and as such are highly dynamic environments. Whilst the proposed measures are likely to be effective in addressing areas of discrete risk in the shorter-term, and the need is recognised, the addition of static structures and defences can compromise the longer-term aim to develop natural adaptive capacity and resilience for the frontages. With this in mind, the design and introduction of such measures needs to carefully balance the need to address short-term risk against the requirement for long-term sustainability. The critical objective for the Environmental Impact Assessment (EIA) therefore, is to clearly demonstrate that this principle has been central to developing the proposals.

The EIA should address the following key points:

- Details of the alternative options considered at each site.
- How proposed interventions fit with Shoreline Management Plan policy at each site.
- Influence of proposed structures on the intertidal and nearshore wave climate
- Influence of proposed structures on beach-dune sediment exchange within the upper beach area.
- Potential impacts on sediment transport (cross-shore, long-shore etc.) within the intertidal and nearshore zones.
- Potential for enhanced risk of outflanking of existing and/or new structures.

Porthloo

This is a fairly low risk site, however the proposed intervention does not appear completely in line with SMP policy, currently No Active Intervention. Whilst there are already existing ad hoc rock defences in place, the proposed up-graded structure is likely to increase the erosional pressure on the remaining seaward beach face. Rock armour solution is preferable to harder or vertical structures, but the EIA needs to demonstrate strategic requirement for these works. EIA should identify how the introduced structures and materials will also help facilitate, rather than obstruct, the future transition to managed realignment of the frontage.

Port Hellick
The boardwalk as a formalised path is likely to be a positive management response, however the route needs consideration to ensure that this does not contribute to funneling of windblown sand through and past the dune system. Further fencing to control access might also be considered to maximise the effectiveness of the intervention.

Managing resilience of the frontage through strengthening the vegetation cover is a positive management response, however it should be recognised that the natural response of the dune to periodic storm events and sea level rise will be to roll-back by a process of overtopping and dune material being moved up and over onto the rear face of the dune. This process has the potential to transport the non-native vegetation gradually into the hinterland area and therefore careful consideration of the vegetation used on the dune is necessary, e.g. native plants should be considered as an initial preferred alternative to using the Fascicularia Bicolour. Clearance of other non-natives such as Hottentot Fig might also be considered. Cornwall Wildlife Trust can provide guidance on suitable alternative planting for this zone to support stabilisation of the dune heath.

The extension of the dune is proposed to be through importing of crush Cornish granite (sized 4-10m). The existing dune should be analysed to demonstrate that this is a suitable material, both in terms of chemical and physical properties. The aim should be for any imported material to closely match the existing beach and dune sediment characteristics and to avoid changing the chemical, profile and drainage characteristics.

It should be noted that saline intrusion via percolation through the dune ridge and filtration into the groundwater may be potentially as significant a threat to the fresh water resource of the Higher Moors Pool as is breaching and overtopping of the dune by waves. This risk will increase over time as hydrostatic pressures increase within the dune bank due to sea level rise.

Porth Mellon
Proposal is not strictly in line with SMP policy. The approach could enhance current rate of dune erosion, leading to enhanced flood risks in longer-term.

Retention and improved resilience of the dune system is crucial at Porth Mellon and the boardwalk as a formalised path would be a positive response. However the route of this needs to be considered to ensure that this does not contribute to funneling of windblown sand through and past the dune system. Further fencing to control access might also be considered to maximise the effectiveness of the intervention.

The rock revetment is liable to increase draw down of the beach levels local to the structure. The extent and depth of drawdown should be assessed, and this should then be related to stability of the slipway, wave propagation up the slipway and to the tide gate, and any wider drawdown that might affect the dune system to the east.

Because the proposed structure will obstruct the active face of the dune bank, disconnection from the beach could occur and the potential losses associated with this should be assessed. Measures which aim to 'roughen' the surface of the revetment and its ability to trap and retain sediment should be explored. Options should also be considered that restore this area of dune

elsewhere in the bay (e.g. by setting back the wall to the north east, or importing beach material to re-nourish the fore dunes).

Repairs to the existing wall in the north-east corner should not be problematic. However consideration of setting the wall back to a more landward position should be demonstrated, taking into account both short and long term objectives and sea level rise. This may provide a more resilient long term option.

South Beach Tresco

Whilst the proposed works are a trial, these actions are not strictly in line with SMP policy of No Active Intervention. As such it will be important that the ES details the strategic requirement. Whilst it is acknowledged that there are some assets at potential risk, these alone (cable inspection chamber / wood store) would not generally qualify as drivers of a proposed change to SMP policy. Strategically it may be more advisable to relocate assets than modify natural shoreline behaviours.

Whilst adverse impacts on the dune are to be monitored, impacts on the beach should also be considered. The ES should detail the following:

- What will be used as an indicator of adverse impacts?
- What response will be made to such impacts (i.e. would this trigger intensification of structural intervention, or removal of structures and restoration of the beach and dune)?
- How will this be monitored?
- Will this response be controlled through planning conditions?
- Is it meaningful to adopt a monitor and adapt approach for a structure which only has a 5–10 year design life (noting that there is a difference between damage caused in annual occurring storms and those that occur much less frequently, if the damage from the latter may only occur once in the design life)?

Whilst the proposed rock-roll revetment is above the 200 year still water level, it would still be within the active wave zone (due to run up). As a hard reflective structure, it will tend to increase draw down of the fronting beach. It is not certain that the structure will become covered with windblown sand as suggested and there is risk that the revetment becomes exposed, increasing the disconnection between the beach and the dune. This should be reviewed.

The planting and matting of the dune face is to be encouraged as this may help retain sand on the dune face. Consideration could be given as to whether the profile is too steep to allow accretion.

The proposal is for a 5-10 year design life. Plans for removal at 10 years, or sooner if deterioration in the structure is evident (this needs to be defined), need to be considered and presented. This consideration also needs to confirm that removal at the end of the design life will not lead to a period of accelerated erosion of the dunes, resulting in longer-term net detriment to the beach and dune system, despite the short-term protection obtained whilst the revetment was deployed. This process of rapid ‘catch-up’ erosion has been observed

elsewhere following the removal of structures. This long term consideration should then be compared against the do nothing option (NAI) that has been rejected.

Historic England

Historic England have identified that the proposed sea defense areas includes a number of Scheduled Monuments including two prehistoric entrance graves and a WWII pill box. In addition, there are a number of other designated heritage assets in the vicinity, including two sections of civil war breastwork on the northern edge of the bay. Any EIA should identify any designated or undesignated heritage assets and consider them in relation to the proposals and the potential to impact upon their significance. The EIA should address any construction period, as well as direct and indirect impacts on completion and future projected impacts.

Conclusion

The LPA would require the EIA to comprehensively assess the cumulative impact of the 4 projects with an individual ES for each individual project, to be submitted with each submission for planning permission. To be clear this would be a single EIA for the 4 sites as a whole and a specific statement with each site. Each of the 4 sites should be subject to its own separate application for planning permission. The EIA and each ES should take into account the issues set out below.

The EIA and ES should address the above matters and be submitted as part of the applications for planning permission to carry out the sea defense works at the sites listed. The LPA have 16 weeks in which to assess and determine the outcome of each planning application it may therefore be advisable to submit all applications at the same time to avoid significant delays. The planning fees for this type of operation are set out in The Town and Country Planning (Fees for Applications, Deemed Applications, Requests and Site Visits) (England) Regulations 2012, as amended 2018. This would be £234 per 0.1 of a hectare (or part thereof) up to £2,028.

EIA development planning applications will need to be determined at Full Council and the dates for these meetings can be found online here: http://www.scilly.gov.uk/council.

The Scoping Opinion set out in this letter has been based on the available information as submitted prior to the formal submission planning application. In accordance with Regulation 15, Part 4 of the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 2017, the Council reserves the right to reconsider this Scoping Opinion in the light of any consultation responses received, additional information submitted or revisions to the scheme following the submission of a planning application.

If you require any further information or require clarification on the above then please do not hesitate to contact me.

Yours Sincerely

Lisa Walton
Senior Officer: Planning and Development Management
Direct Line: 01720 424456 | Reception: 0300 1234 105 | lisa.walton@scilly.gov.uk