From:
To: SizewellC

**Subject:** Proposal for site inspection for Sizewell C planning application

**Date:** 11 May 2021 16:51:23

Attachments: Proposed location for site visit - Thorpeness.pdf

## **Dear Planning Inspectors**

### Proposed location for site inspection

I strongly recommend that you visit the Thorpeness sea defences and cliffs, immediately north of Thorpeness. Full details (and rationale) are attached. Although i note that Thorpeness was visited in August 2020 (viewpoint 15 Thorpe Ness ) and again in February 2021 (Thorpeness village), neither of these locations will have given the very important insights that the proposed inspection site offers, especially given the erosion that has taken place over recent months.

Full access details are given in the attachment - please note that the site can now only be visited at low tide.

Should you have any queries regarding the proposal, please do not hesitate to contact me.

kind regards Frances Crowe

# Proposed location for Planning Inspectors' site visit in relation to DCO for Sizewell C

## Thorpeness sea defences/cliffs

OS Map reference: TM 47640 60167

The cliffs at Thorpeness and to its north towards Sizewell have been subject to long-term erosion for many years. I have been walking there and recording coastal change in photographs for the last 15 years and have seen significant change during that time. In 2007, a World War II pillbox (just north of Pt 2 on the map below) was bulldozed off the cliff for public safety. This now lies about 25 metres seaward of the cliff. Extensive sea defences (geo-textile bags and rock-filled gabions) were installed in 2010-2013 to protect residential properties.

Significant damage was caused to the south end of these defences (pt I on map in Appendix I) by a single day storm event on 12<sup>th</sup> October 2013 as a result of an unusually corrosive sea/wind which particularly impacted Thorpeness. This resulted in a 3 meter loss of beach height at the footpath from Old Homes Road - image attached (Appendix 2). The damage was subsequently repaired.

However, in recent months significant erosion has occurred at the northern end of the sea defences (Pt 2 on the map below), causing major loss of the cliff behind - images attached (Appendix 3).

I strongly recommend this area is visited by the inspectors for the following reasons:

- The cliffs north of Thorpeness (north of Pt 2 on the map below) clearly indicate the friability of this coast and why it is one of the fastest eroding coastlines in Europe. This site is only 2 3 km from the reactors and waste storage at Sizewell, which has very similar coastal geology to Thorpeness. Similar erosion is happening in places all along the East Anglian coast for example, Felixstowe, Bawdsey, Orford Ness, Dunwich, Easton Bavents and Covehythe.
- The cliff erosion north of the defences demonstrate the 'embayment' effect that occurs on land at either end of a significant hard sea defence. The larger the sea defence, the greater this embayment is likely to be. For comparison, see the last photo in Appendix 4 taken in 1993, showing no signs of embayment before the construction of these sea defences. The embayment impact of the proposed Sizewell C sea defences could be highly significant, given their size.
- There is major damage to the sea defences in this location. This has led to a huge breach at the northern end (pt 2 on the map), leading to a significant loss of cliff (and gardens of two houses on North End Avenue).
- This site illustrates the unpredictability of sea defence failure. The decimation of the sea defences here (especially the north end) has happened after only around 10 years of their life despite this being expected to be an estimated 25 years. The damage was not the result of any storm surge but just 'normal' attrition, especially over the winter months of 2020/21.
- The failure also demonstrates the inadequacy of existing coastal planning processes. Although the defences were known to have a limited lifespan, I am not aware of any measures (or budget) being put in place for its end of life management.
- The site also highlights the difficulty in remediating failed defences and illustrates their impact on visitors and residents. The failed defences now are restricting

- valuable access along the beach and represent a significant hazard and eyesore to beach visitors. Additionally, they are now partially ineffective in defending residential properties. Significant cost and disruption will result, regardless of whether the sea defences are repaired, replaced or left to retreat.
- If visible (only possible at low tide; often concealed by shingle/sand), the pillboxes offer a useful indication of the extent to which the cliff has receded in the last 15 years.

I would be happy to accompany the inspectors as guide if considered helpful.

Footnote: on my visit to this location today, contractors were on site for the day shoring up the northern end of the sea defences (a very temporary fix as it is beyond repair without a spend of several £million) and adding rock to the southern/middle part of the defences for reinforcement. I understand there is unlikely to be any further works in forthcoming weeks as there no budget at present.

Frances Crowe 10/5/21

### **APPENDICES**

Appendix I. Map of proposed location and access to beach.

<u>Important note</u>: Due to the erosion, this site is now only accessible immediately around low tide and it is impossible to gain any helpful view of the site from the cliff top or from locations north and south of the site at other times. Tide tables can be consulted here https://www.bbc.co.uk/weather/coast-and-sea/tide-tables/1/139

Access to the beach is best obtained by parking in Old Homes Road, Thorpeness, and walking past Beach Farm Cottages to the short path giving access to the beach (Pt I on the map below). Care needs to be taken when walking alongside the damaged sea defences.



Key:
Solid red line = area to be examined
Dotted line = walking access (shingle beach)
I = access to beach - footpath at end of Old Homes Road
2 = main site to be visited (major breach of sea defences)

Appendix 2. Photo of erosion at Thorpeness, October 2013 (site shown is Pt I on map in Appendix I)



Appendix 3. Photos of current sea defence damage and erosion at Thorpeness (2021) (site shown is Pt 2 on the map)









Appendix 4. Photos of pillboxes just north of the Thorpeness sea defences



Pillbox I (approx. 50 meters north of pt 2 on map) - photo taken in 2007, soon after it was bulldozed off the cliffs.



Pillbox 2 (located at the northernmost end of the red line on map) - photo taken in 2007.



Pillbox I, just visible on the tideline before the houses on the cliff, is now an estimated 25 meters from the base of the cliff - photo taken in 2021. NB photo taken just south of the site of Pillbox 2.



Photos taken in 1993, showing Pillbox I.