Borough Council of **King's Lynn & West Norfolk**



PUBLIC INFORMATION - FIND OUT MORE

Hunstanton Coastal Management Plan will set out the road map to deliver the Shoreline Management Plan policy for the Hunstanton frontage over the next 100 years, this will include:

- Managing cliff erosion in Unit A (the Cliffs) and developing a business case for a pilot erosion reduction scheme
- Managing and maintaining the existing coastal defences throughout Unit B (the Promenade)

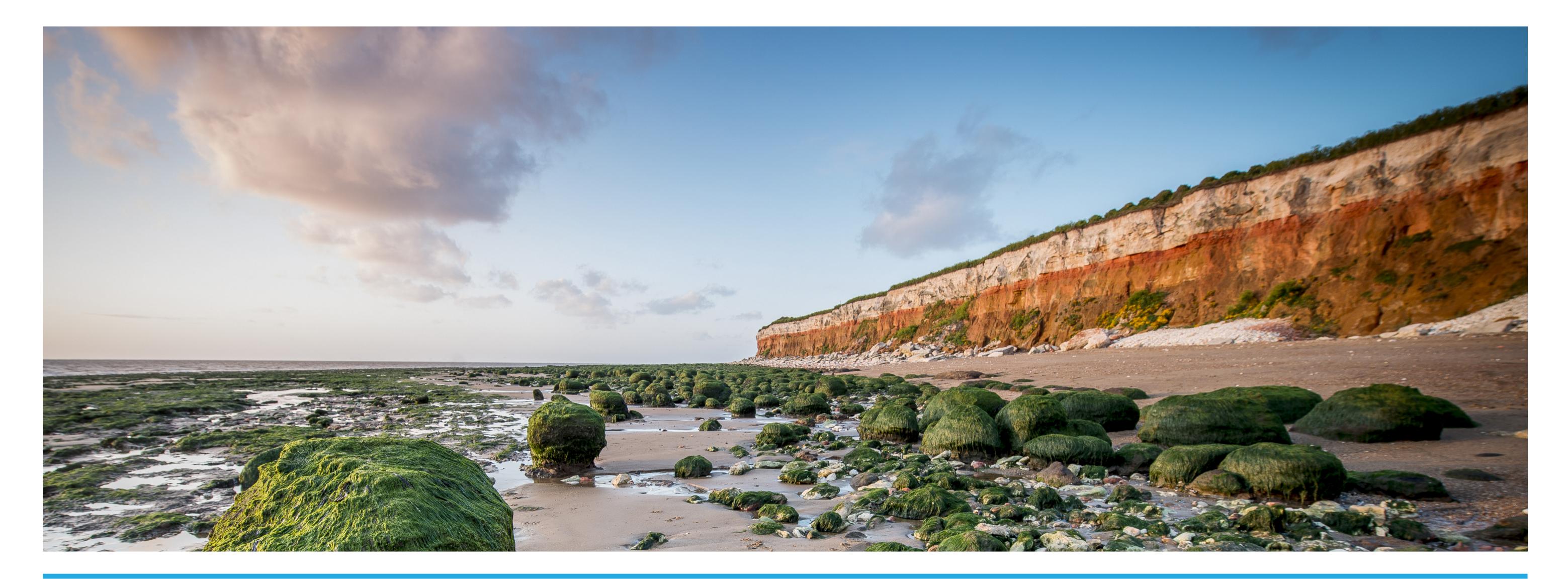
The plan must:

- Work within The Wash Shoreline
 Management Plan policies
- Work within the National Flood and Coastal Erosion Risk Management Guidance in order to get government funding
- Not create negative impacts to other parts of the coast

From this event we would like you to:

- Understand the need for coastal management and what is and is not possible
- Be aware of the process to obtain funds for a coast protection scheme
- Provide feedback on the long list of coast protection options which are being considered
- Be able to obtain necessary consents and approvals e.g.
 Planning, Marine, Environment Agency, Coast Protection
- Be deliverable within the funding available

- Understand what will happen next
- Think about how the community can contribute to the scheme to help make it happen
- Find out how you can keep updated



Borough Council of **King's Lynn & West Norfolk**



How are coast protection schemes planned and funded?

Since 2012 the Borough Council has spent approximately £360k repairing, maintaining and improving Hunstanton's sea defences. However, in the future the defences will require more substantial sums to be invested for them to continue to provide protection. To obtain this additional funding from central government a coast protection scheme must satisfy the Government's Flood and Coastal Erosion Risk Management Strategy. This means a scheme needs to be included in the following plans, studies and programmes in order to qualify for Government funding and support:

WECMS

Hunstanton is also included in the WECMS (completed in 2015). This identified that it is not realistic or desirable to stop erosion, but options to slow the rate of erosion should be pursued. Its preferred approach to managing the erosion in Unit A in the future, was to pilot a range of low cost options to reduce erosion caused by wave action at specific locations. This trial of options would determine their effectiveness in slowing erosion for future frontage wide schemes. In Unit B the preferred management approach of both the SMP and WECMS is to 'Hold the Line' by maintaining the existing promenade, seawall and groyne defences and replacing these structures when required.

Shoreline Management Plan

Hunstanton is covered by The Wash Shoreline Management Plan (SMP). The SMP is a policy document which

Partnership Funding for Flood and Coastal Erosion Risk Management Grant in Aid

outlines the risks posed by coastal change and how this should be managed. The plan provides a large scale assessment of the risks experienced by people and the environment, aiming to manage them in a sustainable way. The agreed intent of the SMP for Unit A is to continue to allow the cliffs to erode naturally and provide sediment to help maintain the beaches to the south, until the erosion starts to threaten cliff top properties and the cliff road. This is expected to occur in approximately 50 years (although there is a significant uncertainty in this date). From that time on, the SMP's

Large scale coast protection schemes can potentially be wholly or partially funded through central government (via the Environment Agency). This is called Grant in Aid Partnership Funding. The benefits of a scheme - for example the number and value of the homes protected - are compared with the costs of protection in a cost-benefit analysis so that schemes from across the country can be compared and prioritised. There is a limited amount of funding available and it is highly competitive.

aim is to prevent further cliff erosion to protect the properties and the road.

Often "partnership contributions" (local contributions) are required for a scheme to go ahead.

Borough Council of **King's Lynn & West Norfolk**



Current Stage: Developing the Coastal Management Plan

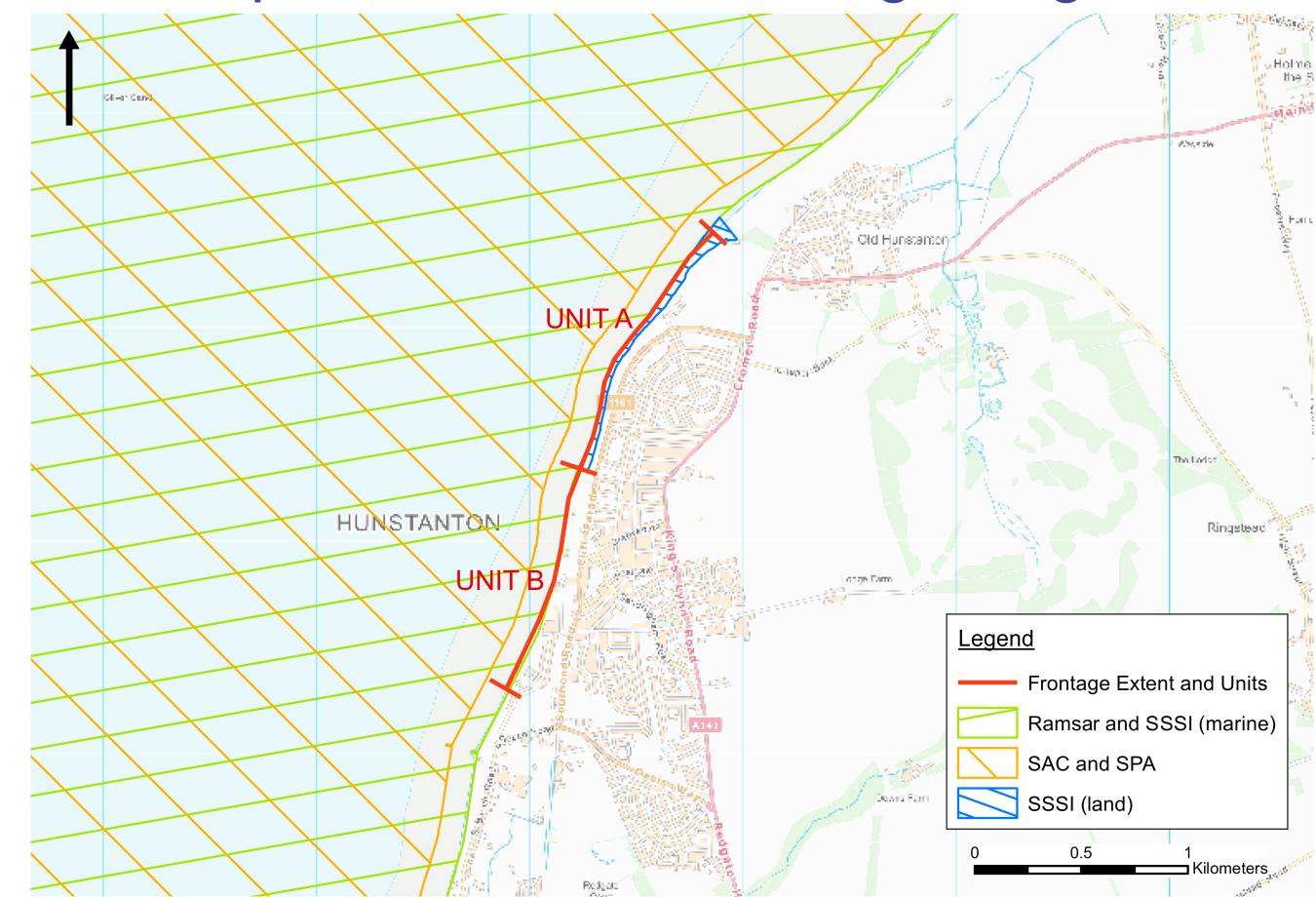
We are developing the Coastal Management Plan for Hunstanton (Units A & B). The Management Plan will set out the economic, environmental and technical case for a preferred approach to coastal management. Where appropriate it will develop a Business Case for any potential schemes and it will identify funding opportunities and seek Environment Agency technical and financial approval for the scheme. The following areas are being explored to develop the Management Plan:

Environmental Assessment

Any potential scheme will need to consider the environmental designations and other environmental considerations on or next to the coastal frontage. We are developing the Management Plan to ensure there are limited negative impacts which may mean that the need for additional Environmental Impact Assessment will be reduced.

- Coastal process study
- Beach profile analysis
- Cliff assessment
- Condition survey
- Initial environmental assessment
- Initial economic assessment

The map below shows existing designations.



Option appraisal

Condition Survey

A condition survey of the existing coastal defences in Unit B has been completed.

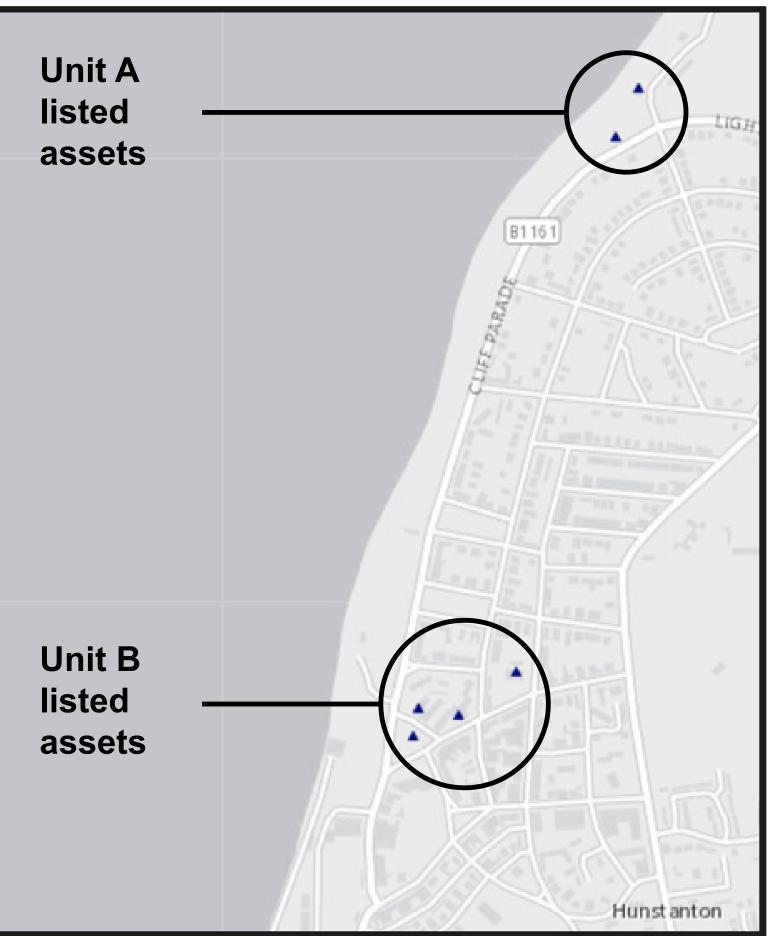
It has shown that the defences are in varying condition and there is a need for further investment to provide the target level of protection. This will help to direct where the highest priorities are for investment in the scheme.

Defence Section	Estimated Residual Life (years)
Section A	35
Section B	35
Section C	35
Section D	15
Section E	15
Section F	15
Section G	15

Historic Environment

There are important historic assets on the cliff top (Unit A), including two listed buildings - the Ruins of St Edmund's Chapel and the Lighthouse. In Hunstanton Town (Unit B) the following listed assets are setback behind

the existing seawall: Golden Lion Hotel, Town Hall, Church of St Edmund and a cross.



Borough Council of **King's Lynn & West Norfolk**



Initial Economic Assessment

An initial economic assessment helps calculate how much Grant in Aid funding could be provided.

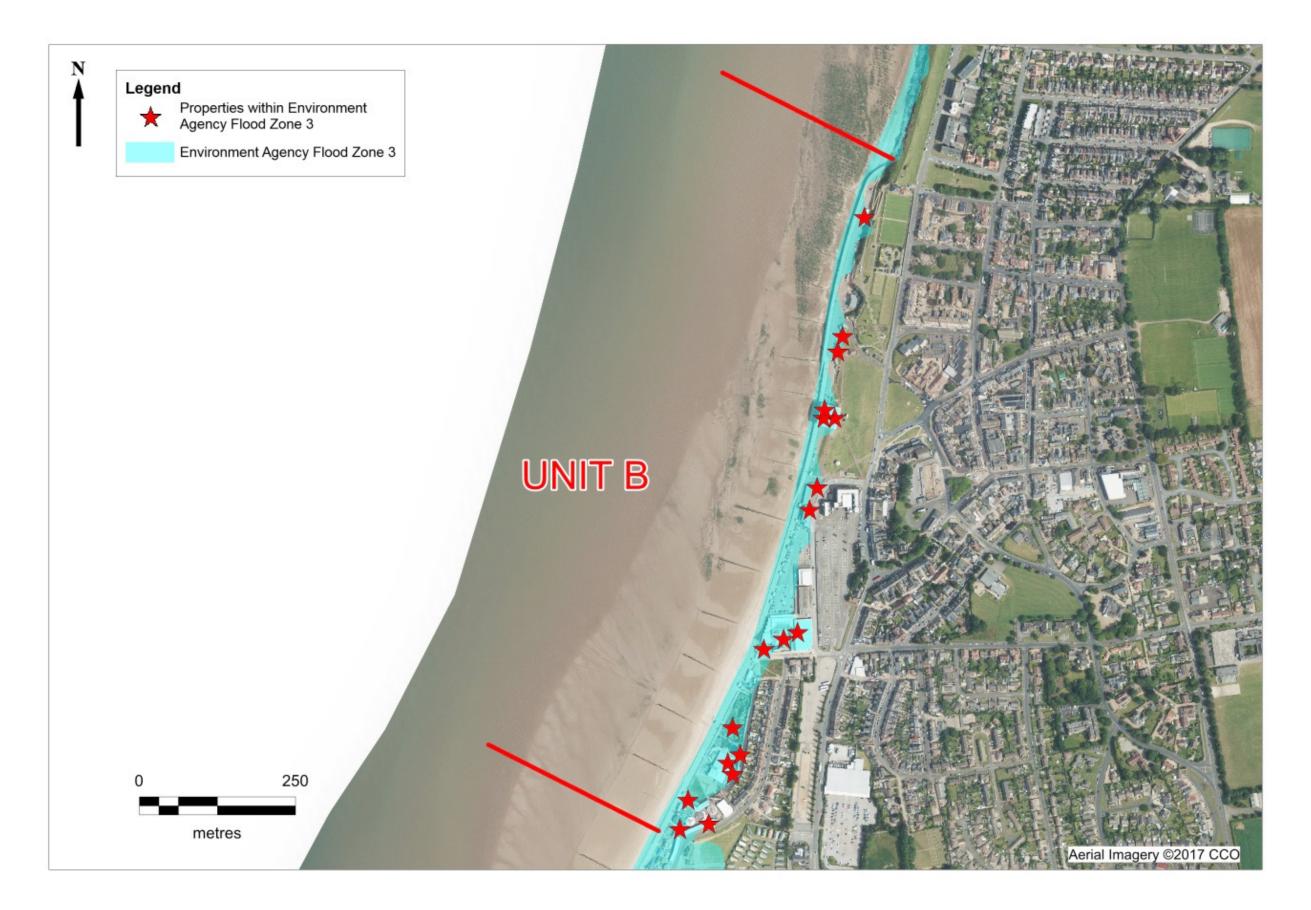
This assessment involves estimating the potential economic damages associated with continued erosion in Unit A and potential flooding and erosion damages in Unit B, including identifying the number of homes and commercial properties at risk and calculating the potential value of other assets at risk and comparing this with the cost of providing protection over a period of time. **Figure 1** *(below)* – Unit A Properties at Risk (Do Nothing) (100 years)



What's included?

Important assets such as homes and businesses contribute to the assessment, as can infrastructure such as roads and utilities, etc. It is also possible to include a value for the recreational benefits of the coast, but, national guidance does not allow

Figure 2 *(below)* – Unit B Properties at Risk (1 in 200 years) – flooding (100 years)



for counting the value of tourism to the area, but it does count as an 'intangible benefit'.

Figure 3 *(below)* – Unit B Properties at Risk - erosion (Do Nothing) (100 years)



Borough Council of **King's Lynn & West Norfolk**



Hunstanton – Coastal Protection Options – the long and short list

A 'long list' of coast protection approaches and options is being considered. The long list includes schemes which may be considered as desirable, but would not be achievable because they would not gain the necessary consents or be affordable. The outline approaches and options are detailed; these are split between those being considered for Unit A and those for Unit B. Following this consultation, some of the long-list options will be discounted and those which are shortlisted will be considered further.

These are broken down as follows:

No Active Intervention

Do nothing
 Do minimum

UNIT A

The 'long-list' of potential management options being considered for a potential pilot study covers: *No Active Intervention:* where the cliff is allowed to continue to erode and no capital works are undertaken; and *New Defences:* where capital works are undertaken to the existing frontage to reduce or remove its vulnerability to erosion caused by wave action.

New Defences

3. Cliff bolting

- 4. Netting to base of cliff
- 5. Rock revetment/Sill
- 6. Timber Revetments
- 7. Sand bags/Geotubes
- 8. Gabions
- 9. Cliff drainage
- 10. Seawall
- 11. Offshore breakwaters
- 12. Beach nourishment
- 13. Groynes (rock or timber)

14. Cliff stabilisation through re-grading

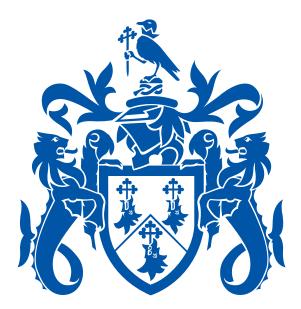
15. Relocation of key assets

Borough Council of King's Lynn & West Norfolk





Borough Council of **King's Lynn & West Norfolk**



UNIT B

The management approaches being considered include:

• No Active Intervention: where only minimal repairs for health and safety purposes are carried out and no other works are undertaken. The condition of the defences will decrease over time and eventually the existing defences will be allowed to fail. Maintain Existing Defences: where the existing defences are maintained through undertaking works to improve their residual lives. These options could range from low-scale patch and repair operations to large-scale planned defence refurbishment. Although the SoP offered by the defence will ultimately be reduced over time due to the impacts of predicted climate change. Sustain Existing Defences: where

The resulting management options are:

No Active Intervention

- 1. Do nothing
- 2. Do minimum

Maintain Existing Defences

- 3. Patch and repair maintenance of
 - seawall, promenade and floodwall.
- 4. Re-facing of the seawall, promenade and floodwall
- 5. Repair/replacement of groynes
- 6. Eventual replacement of defences maintaining existing crest height.

Sustain Existing Defences

- 7. Raise existing seawall, promenade and floodwall in line with climate change
- 8. Re-facing and raise the seawall and promenade
- 9. Repair of groynes
- 10. Eventual replacement of defences elevating crest levels in line with climate change.

the existing level of protection offered by the defences is sustained by undertaking works to progressively enhance the defences in line with climate change projections.

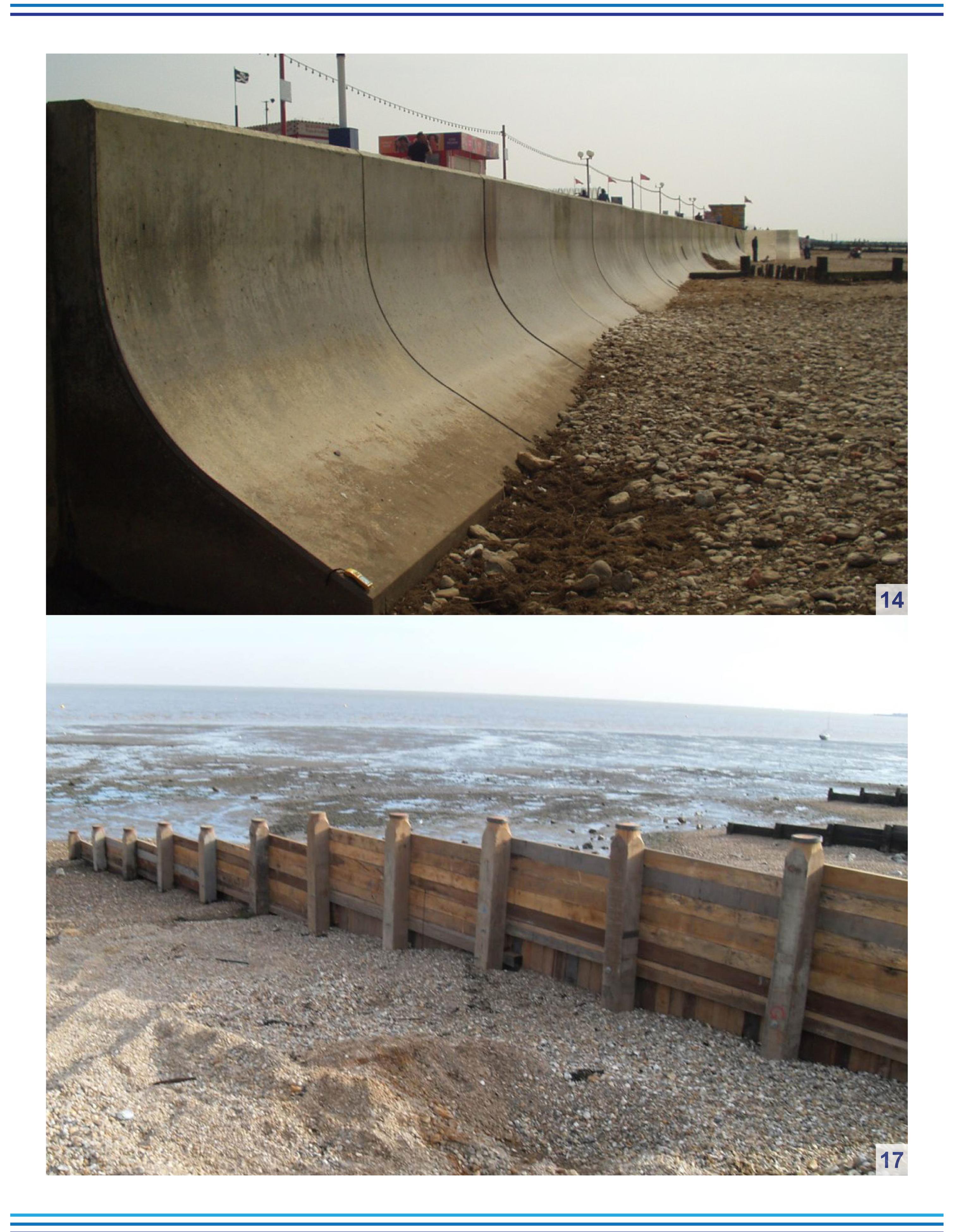
• Enhance or Improve the Defences: where capital works are undertaken to either enhance the level of protection offered by the existing defences or replace the existing defences with new enhanced defences.

Enhance or Replace Existing Defences

- 11. Rock revetment
- 12. Sand bags / Geotubes
- 13. Gabions
- 14. Replacement seawall, promenade and floodwall
- 15. Offshore breakwater
- 16. Enhanced beach
- 17. Groyne replacement/enhancement
- 18. Timber revetments
- 19. Rock groynes

Borough Council of King's Lynn & West Norfolk





Borough Council of **King's Lynn & West Norfolk**



CONTRIBUTIONS TOWARDS ANY POTENTIAL SCHEMES

Any potential coastal defence schemes in Hunstanton will rely on suitable levels of funding being sourced.

The National Flood and Coastal Erosion funding route seeks to ensure that any national funding is also supported by local contributions towards the scheme. If local contributions can be secured, it helps the case for national funds. Contributions to the scheme or future maintenance can be financial or 'in kind'.

What will happen next?

A Stakeholder Forum - made up from members of the Town and Parish Councils, Borough Councillors, Local Businesses and various statutory stakeholders has been formed. This forum will help to keep people informed, ensure local knowledge and feedback is included, and ensures that the scheme is sensitive to local circumstances. Please speak to a member of the team for contact details.

Sources of funding identified to date include:

- The Borough Council currently maintains the frontage and is committed to continuing this throughout the appraisal period (100 years).
- The Central Regional Flood and Coastal Committee has provided funding through

Developing the shortlist of management options - The short list of options, economic and environmental assessment and potential contributions will be developed further following this event.

Sharing the final preferred management plan - A preferred management plan will then be presented to Hunstanton and other stakeholders in the spring 2018 for a final opportunity for people to put their input into the scheme.

the Local Levy for the development of the Coastal Management Plan.

How can you help?

The community can offer to help the scheme and this 'contribution' can be included in the case for Government funding. Contributions can be in kind or financial. Even if a contribution is a small percentage of the total scheme cost, it will help to demonstrate local support. Please speak to a member of the team. **Decision -** It is anticipated that the Management Plan will be finalised in the summer 2018.

Would you like to be kept informed?

If you would like to be kept informed about the Hunstanton Coastal Management Plan, please fill in a contact card next to this display and pass to a member of staff.

Borough Council of **King's Lynn & West Norfolk**



TIMELINE FOR THE CMP PROJECT

DateMilestoneAugust 2017Selection of AECOM as the consultant to complete the
Hunstanton Coastal Management Plan

Sontombor Octobor 2017 AECOM stort bookground work This includes

September - October 2017	 initial site walkover a review of existing data an update of existing condition assessment
November 2017	 AECOM continue to complete background work including: initial economic assessment (base case) overview of coastal processes and erosion
December 2017	 issue and review of interim report and long-list options by Project Team Options Workshop number one (identifying short-listed options) give update to borough council senior management
January - February 2018	 Project Team review feedback from Stakeholder Forum

٠	deve	lopment	of sl	hortliste	d options
---	------	---------	-------	-----------	-----------

commence full economic appraisal

February 2018

- Project Team to review shortlisted option development
- second Stakeholder Forum consultation
- first public drop-in consultation
- Project Team review feedback from stakeholders and public consultation
- Options Workshop number two (preferred option selection)

March - April 2018

Project Team finalise:

- Options Appraisal Report
- Management Plan (MP)
- Develop Outline Business Case (OBC)

April 2018	 third Stakeholder Forum consultation second public drop-in consultation
May - June 2018	Present finalised MP and OBC to senior management
June onwards 2018	Submit CMP and potential OBC for consideration by relevant approval authority

Borough Council of **King's Lynn & West Norfolk**



We value your feedback

Please place a sticker in response to the following questions:

	Yes	Νο	Don't Know		
Did you find the information informative and easy to understand?					
Did you make any contributions where requested?					
Did you find the staff helpful and were they easy to understand?					
Do you agree with the following statements?					
The Hunstanton Coastal Management Plan is progressing and will seek to maintain coastal defences					
Any potential coastal protection schemes are dependent on finding an appropriate solution which can be funded and gain consent					
I support the scheme and the proposed way forward					

Do you have any other comments?

