



ADUR & WORTHING  
COUNCILS

Joint Strategic Committee  
7th September 2021  
Agenda Item 11

Key Decision: No

Ward(s) Affected: All Coastal Wards

## **Protecting our Coastline - Worthing Coastal Protection Scheme**

### **Report by the Director for the Economy**

#### **Executive Summary**

##### **1. Purpose**

- 1.1 This report provides an update to members on the revised approach to the Worthing Coastal Protection Scheme following the Environment Agency (EA) peer review of the submitted Outline Business Case (OBC) and subsequent consultation with Senior WBC Officers.
- 1.2 The revised approach will amend the implementation of a large scale coast protection scheme for the Worthing frontage in favour of a two phased approach; a more immediate capital maintenance project (Phase 1) to repair and extend the life of existing groynes as well as shingle beach nourishment in the Town Centre area, followed by revisiting the Strategic Outline Case (SOC) for a larger scale groyne replacement scheme (Phase2) within ten years time.

##### **2. Recommendations**

- 2.1 The Joint Strategic Committee is asked to:
  - Note the progress and revised approach for delivery of the Worthing Coastal Protection Scheme;

- Recommend to the Council to amend the 2021/22 Capital Investment Programme to include the revised Phase 1 capital project for structural works to the groynes and shingle nourishment work.
- Approve the delegation to the Head of Facilities & Technical Services in consultation with the Executive Member for Regeneration to enter a Memorandum of Understanding (MoU) with the Environment Agency, following Phase 1, to commence works on revisiting the Strategic Outline Case (SOC) for the Phase 2 larger scale groyne replacement scheme.

### **3. Background**

- 3.1 Worthing Borough Council (WBC) is the Coast Protection Authority (CPA) for the Worthing frontage between Ferring to the west and Lancing to the east. Leading on coastal erosion risk management activities and carrying out coast protection work (including constructing and maintaining defences), shared responsibility for developing Shoreline Management Plans (SMPs) with neighbouring coastal authorities, which provide a long term holistic framework for managing the risk of coastal change.
- 3.2 The Beachy Head to Selsey Bill SMP identifies that the frontage at Worthing consists of a wide sandy lower beach and a narrow shingle upper beach. The coast is protected by a groyne field, mostly constructed of timber, but with some more recently constructed in rock. There are also concrete splash walls and rock revetments along the frontage; however the shingle beach is the principal coastal defence.
- 3.3 The River Arun to Adur Flood and Erosion Management Strategy was completed and approved by the Environment Agency's Large Project Review Group (LPRG) in 2011. It categorises the frontage under the 'Hold the Line - Sustain' policy, meaning that the current defences need to be strengthened to keep the levels of flood and erosion risk the same as it is now. It states that the approximate number of properties at risk from flooding and erosion if defences are not maintained in 100 years' time would total 2030 within Worthing.
- 3.4 In 2016 WBC commissioned expert Consultants Mott MacDonald (MM) to assist them with the preparation of an initial Outline Business Case (OBC) for the beach frontage between the Ferring Rife in Arun District and Navarino Road in Worthing to reconstruct failed and 'at end of life'

groynes across the frontage. Subsequent reviews incorporated Navarino Road to Brooklands and removed the Arun District section.

- 3.5 An OBC provides the rationalisation behind the Technical, Strategic, Financial, Commercial, environmental and economic impacts of the proposals identifying outcome measures in accordance with the current Environment Agency Flood and Coastal Erosion Risk Management (FCERM) appraisal guidance and Grant in Aid (GiA) criteria. GiA is the amount of Partnership funding the Government through the Environment Agency (EA) contributes to the project; any shortfall in funding will have to be met by external contributions.
- 3.6 The OBC for the proposed Worthing Coastal Protection Scheme was submitted to the EA for peer review in October 2019. The feedback received in December 2019 from the review was substantial and a number of large issues would need to be resolved before the OBC could be submitted to the EA's Large Project Review Group (LPRG).
- 3.7 The review raised concern from the EA that the project in terms of economical viability did not present a sound business case which under increased scrutiny, due to its size, would not gain approval.
- 3.8 In subsequent meetings with the EA, Senior WBC Officers agreed to the formation of a joint EA/WBC Officer technical group to collaborate and share the expertise available. Technical Officers from the Council will work jointly with EA Officers, as part of the Project Team, to arrive at a suitable business case that would protect our coastal frontage and assets whilst maximising any grant funding.
- 3.9 As part of this new approach, in the Summer of 2020 WBC Technical Services Engineering officers, as part of the project team with the EA, undertook condition surveys of every groyne across the Worthing frontage including beach volume assessments. This data has been used in arriving at the options presented.
- 3.10 During the same period, the EA undertook a high level economic appraisal for a Coastal Protection Scheme for the Worthing frontage which resulted in the EA promoting a change of approach to a two phased scheme.

Phase 1 - Focusing on improving the protection of the Town Centre frontage, in the short to medium term, to protect homes, the commercial town center and the A259 for the next ten years.

The project of around £2 million would entail smaller scale capital maintenance works to the existing wooden groynes and shingle recycling/replenishment.

The high level review undertaken by the EA of the economics indicated that sufficient Flood and Coastal Erosion Risk Management (FCERM) Grant in Aid (GiA) funding would be available to meet scheme costs.

Phase 2 - Longer term, ten years, where the larger £40-£50 million originally proposed Worthing Coastal Protection Scheme is taken back to Strategic Outline Case (SOC) stage to address the longer term erosion risk, in a time scale when the increased risk would mean that the required benefits would make the scheme more economically viable.

The approach will be an 'Engagement and Consultation' led scheme recognising the wider importance of the frontage to WBC and the community. Revisiting the 'Options appraisals' for consultation with the general public, business owners, councillors and other interested stakeholders, ensuring that a robust and publicly accepted scheme could be taken forward to the Outline Business Case (OBC) stage. As well as a focus on identifying and generating other funding sources for the project.

- 3.11 Further discussions with the EA on a number of occasions regarding the phased approach and funding culminated in Senior WBC Officers agreeing to the revised approach in December 2020, based on the EA's confirmation that the Phase 1 works are economically viable and would attract up to circa £1.9m of FCERM GiA funding.
- 3.12 The EA requested that WBC provide a 10% contribution to the project to provide financial reassurance to the EA Projects Approval Board. The majority of FCERM GiA funded projects do not gain 100% funding and require external funding from Authorities and landowners and therefore Senior WBC Officers agreed to the 10% contribution with the proviso of a cap at £200k, in case the project exceeds the high level economic appraisals prediction.
- 3.13 Both phases will be led by the EA in Partnership with WBC, and delivered through the EA's Collaborative Delivery Framework (CDF). Officers from

the EA and WBC will form part of the integrated Project Team covered by a Memorandum of Understanding (MoU) for each phase.

#### 4. Current Situation

- 4.1 The EA have commenced early engagement with their consultants and are planning to procure the first stage of the works to undertake Strategic Outline Business Case (SOC) demonstrating the economic viability of the maintenance works in mid August 2021. This will confirm the extent of the works and if the EA's high level economic appraisal is a viable option.
- 4.2 The consultants will then produce a Outline Business Case (OBC) demonstrating the economic viability of the project from the initial assessment, to submit to the National Project Assurance Service (NPAS) and Large Projects Review Group (LPRG) for sequential reviews prior to formation of a Full Business Case (FBC) for FCERM GiA funding application.
- 4.3 The earliest aim is to have construction complete on site by March 2024 to minimise risk to properties, but relies on all the FCERM GiA processes to advance in reasonable time.

#### 4.4 Indicative Programme

Milestones	Date	Comments
Strategic Outline (Business) Case submitted	May 2022	<ul style="list-style-type: none"> <li>○ Seeking approval to proceed and confirmation of viability.</li> </ul>
Outline Business Case submitted	Dec 2022	<ul style="list-style-type: none"> <li>○ Seeking approval to proceed and confirmation of viability.</li> <li>○ Outline design completed.</li> </ul>
Full Business Case submitted	Jul 2023	<ul style="list-style-type: none"> <li>○ Seeking approval to proceed and confirmation of viability.</li> <li>○ Detailed design completed.</li> <li>○ Contractor price agreed.</li> </ul>
Construction start	Sep 2023	<ul style="list-style-type: none"> <li>○ Works commence following summer period.</li> </ul>
Construction finish	Mar 2024	<ul style="list-style-type: none"> <li>○ Construction duration estimated at six months, subject to works</li> </ul>

		scope and contractors programme.
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## 5. Engagement and Communication

- 5.1 All stakeholders involved in the foreshore adjacent to the proposed Phase 1 groyne maintenance and shingle nourishment works shall be consulted, prior to the work progression, to ensure the least amount of disruption possible.
- 5.2 Consultation for the larger Phase 2 Worthing Coastal Protection Scheme will be included as part of the Strategic Outline Case (SOC) on the 'Options appraisal' with all interested stakeholders, ensuring a robust and publicly accepted scheme is taken forward. This will include a wide range of options and assessment of suitable and sustainable materials with public and community consultation on the proposed scheme.
- 5.3 Both phases of work will be undertaken in full consultation with the developing Sussex Bay initiative and kelp restoration project to ensure alignment. A coastal local authorities forum is being established to include West Sussex County Council, Arun, Chichester, Adur and Worthing Councils and Brighton & Hove. This will enable discussion and coordination between the several connected workstreams of coastal defence work, kelp restoration, beach management, and the development of the wider opportunities of Sussex Bay.

## 6. Procurement

- 6.1 The procurement of the works will be undertaken to comply with Worthing Borough Councils Contract Standing Orders.
- 6.2 The consultants and construction works will be procured through the EA's Collaborative Delivery Framework (CDF) used for delivering FCERM projects.

## 7. Financial Implications

- 7.1 The Joint Strategic Committee at its meeting on the 7th November 2019 approved recommendation to Council for including funding of £500k for the modelling and initial design stage of the preferred option for the

Worthing Coastal Protection Scheme, which has not progressed. The Council's contribution towards the cost of the scheme was £300k.

- 7.2 The revised phased approach for the Worthing Coastal Protection Scheme following the EA's peer review terminates the requirement for undertaking the modeling works at this time.
- 7.3 The proposed Phase 1 capital groyne maintenance works will be jointly funded between the EA and WBC with the majority funding through the EA's FCERM GiA funding and a 10% contribution (capped at £200k) from the Council. The EA current high level economic appraisal for the works being circa £1.9m. The total cost of Phase 1 is now:

Phase 1 Total Estimated Cost:	£1,900,000
Funding:	
Environment Agency:	£1,700,000
WBC Ring-Fenced Capital Receipts:	£88,800
WBC Approved Prudential Borrowing:	£111,200
Total Funding:	£1,900,000

- 7.4 The EA will be leading on the project and the WBC capped contribution of £200,000 needs to be added to the 2023/24 Capital Investment Programme.
- 7.5 Following completion of the Phase 1 capital groyne works all assets will remain the ownership of the Council who is responsible for their ongoing maintenance and repair from existing maintenance budgets.

## **Legal Implications**

- 8.1 WBC is a Coast Protection Authority (CPA) under Section 1 of the Coast Protection Act 1949. By Section 2A of that Act a Coast Protection Authority is also a Coastal Erosion Risk Management Authority.
- 8.2 By Section 4 of the Coast Protection Act 1949, the Council as a CPA shall have the power to carry out such coast protection work whether within or outside of its area, as may appear to the CPA necessary or expedient for the protection of any land in its area providing that; (a) the work is desirable having regard to the national flood and coastal erosion risk management strategies; and (b) the purpose of the work is to manage

coastal erosion risk within the meaning of Part 1 of the Flood and Water Management Act 2010.

- 8.3 Section 111 of the Local Government Act 1972, provide the power to the Council to do anything that is calculated to facilitate, or which is conducive or incidental to, the discharge of any of their functions.
- 8.4 S1 of the Localism Act 2011 empowers the Council to do anything an individual can do apart from that which is specifically prohibited by pre-existing legislation.
- 8.5 Section 1 of The Local Government (Contracts) Act 1997 provides that every statutory provision conferring or imposing a function on a local authority confers the powers on the local authority to enter into a contract with another person for the provision or making available of assets or services, or both (whether or not together with goods) for the purposes of, or in connection with, the discharge of the function by the local authority.
- 8.6 Where the Council obtains grant funding for any of its coast protection works, the Council must ensure that the funding is spent in accordance with the grant funding terms and conditions.

## **Background Papers**

- JSC 07/11/2019 Worthing Coastal Protection Scheme
- Regional Beach Management Plan 2017 : Littlehampton to Brighton Marina.
- River Arun to Adur Flood and Coastal Erosion Risk Management Strategy (2010)
- The Beachy Head to Selsey Bill Shoreline Management Plan (SMP) 2006.
- Rivers Arun to Adur Coast Defence Strategy 2000

## **Glossary:**

WBC - Worthing Borough Council  
CPA - Coast Protection Authority  
EA - Environment Agency



NPAS - National Project Assurance Service (EA)  
LPRG - Large Project Review Group (EA)  
SOC - Strategic Outline Case  
OBC - Outline Business Case  
FBC - Full Business Case  
FCERM - Flood and Coastal Erosion Risk Management  
GiA - Grant in Aid  
CDF - Collaborative Delivery Framework

**Officer Contact Details:-**

Steve Spinner  
Head of Facilities and Technical Services  
steve.spinner@adur-worthing.gov.uk

Martyn Payne  
Senior Engineer  
martyn.payne@adur-worthing.gov.uk

## **Sustainability & Risk Assessment**

Sustainability is considered as part of the development of the higher level foreshore strategies and Shoreline Management Plans. The FCERM process includes sustainability of specific projects within the Options Appraisals undertaken for the Business Cases. The proper management of the coastline is essential and the programme of works for the 100 year period of the study will maintain the standard of defence keeping pace with current climate change predictions.

### **1. Economic**

The effective maintenance and design of coastal defences along the frontage prevents the negative impact of coastal erosion and flooding on the economic development of our places and the economic participation of our communities.

### **2. Social**

#### **2.1 Social Value**

Maintenance and replacement works to coastal defences will impact on all beach users during the construction period and community and business engagement will be included as part of the design and implementation works.

#### **2.2 Equality Issues**

Matter considered and no issues identified

#### **2.3 Community Safety Issues (Section 17)**

Matter considered and no issues identified

#### **2.4 Human Rights Issues**

Failure to protect property from coastal flooding could be construed as interfering with the right to quiet enjoyment of property and possessions.

### **3. Environmental**

The Project Steering Group work in partnership to guide the development of technically, economically and environmentally sustainable coastal flood and erosion risk defences along the coastline from Sea Lane Ferring to the Brooklands.

### **4. Governance**

The proposal supports a number of Council priorities across the Platforms by ensuring effective management of the existing coastal defences in a serviceable condition, preventing erosion and flooding.

The Council in their capacity as Risk Management Authority under the Coast Protection Act 1949 and 1991 Land Drainage acts will form part of the Project Steering Group working in Partnership with the Environment Agency who will lead the project.