# **Project Documentation**

# PROJECT INITIATION DOCUMENT (PID)

# Selsey Coastal Flood & Erosion Risk Management Scheme

Release:	V2
Date:	7 December 2023
Author:	K Klepacz
Approved by:	

Note: the completion of this document is required for medium and large projects as defined by the Project Type Matrix.

# **Document History**

<b>Revision Date</b>	Version	Summary of Changes	Reviewer(s)

# **Approvals**

This document requires the following approvals:

Name of person, group or committee		
Cabinet & Full Council - Jan 2024		
Project Board – following funding approval		

#### Distribution

Name	Job Title
Andrew Frost	Director of Planning & Environment
Alison Stevens	Divisional Manager, Environment & Health Protection
Mark Stratton	Coastal Policy, Environment & Research Team Service Manager, Coastal Partners

# **Glossary of Terms**

EA Environment AgencyGiA Grant in Aid Funding

#### 1. PURPOSE OF DOCUMENT

1.1 This Project Initiation Document (PID) defines the Selsey Coastal Scheme project. It sets out the aims of the project, why the project should go ahead, who is involved and their responsibilities. This PID will provide the baseline for the project's management and for an assessment of its overall success.

#### 2. PROJECT DESCRIPTION

2.1 Many of the coastal defences at Selsey are reaching the end of their serviceable life, at the same time, as a result of climate change the level of protection afforded by the existing defences is decreasing. These defences reduce the risk to people and property from erosion and flooding in the community of Selsey. A project is needed to build on the 2009 strategy and begin the development of a scheme which considers the future challenges of this exposed coastline.

#### 3. BACKGROUND

- 3.1 The Selsey peninsula is an exposed coastline with a long history of managing coastal flood and erosion risk. Coastal defences reduce the risk of coastal flooding and erosion to the town of Selsey. Many of the defences were constructed in the 1950's and have reached, or are reaching, the end of their design life. At the same time, as a result of climate change (specifically sea level rise) the level of protection afforded by the existing defences is decreasing.
- 3.2 Over 700 properties are at tidal flood risk from a 1 in 200yr event, present day. This increases over the next 100 years with climate change to around 1300 properties at risk. Approximately 1000 properties are also predicted to be at risk from erosion over the next 100 years.
- 3.3 The Council has adopted the North Solent and South Downs Shoreline Management Plans and the Pagham to East Head Coastal Defence Strategy (2009) for this frontage, which considered these risks and recommended a Hold-the-Line coastal management policy. However, the strategy recognised the need to manage coastal erosion and flood risk along the Selsey frontage, its aging defences, but also its low priority for national funding for replacement defences, at the time.
- 3.4 Following the strategy, a programme of beach management has been in place to decrease wave energy and extend the life of the existing defences. This has been hugely successful in prolonging the life of these defences, reducing the risk of undermining of the existing structures. However, as we have seen with recent emergency failures this is becoming increasingly challenging in isolation as the structures continue to age.
- 3.5 Since the strategy there have been changes in guidance, evidence to support understanding, and a change in the funding approach to for flood and erosion risk management projects. A feasibility assessment was needed to move

forward our understanding and review the risks, the economic damages and benefits, and scheme viability and funding.

- 3.6 The feasibility assessment identified:
  - Increased benefits of implementing a scheme (since the 2009 strategy).
  - That flood defence Grant in Aid (GiA) is likely to be available to part fund a flood and erosion risk management scheme at Selsey. (Under current funding rules)
  - That a significant financial contribution is likely to be required, towards construction.
  - That there are challenges ahead with the sustainability of defences along this
    coastline due to climate change, and consideration of adaptation to future
    change will need to be part of any scheme development moving forward.
  - That securing any GiA funding will be subject to demonstrating a robust business case and national GiA availability in the Environment Agency's Capital Investment Plan. Progressing through a number of assurance gateways will be required for a £multi-million scheme of this scale, with no guarantees of funding availability at any stage.

(The assessment is based on high level costing and benefits which will evolve and will need to be refined as any scheme develops.)

- 3.7 The feasibility plan proposed that application is made to the Environment Agency (EA) for GiA Funding to undertake the next stage of scheme development Option appraisal & Outline Design.
- 3.8 This PID has been developed for the outset of this Selsey Coastal scheme development, which will be delivered in stages, aligned with key funding gateways.

# 4. PROJECT OBJECTIVES AND SUCCESS CRITERIA

No.	Project Objective	Measurement criteria
1	Reduce flood and erosion risk to people, property, and infrastructure over the duration of the project design life, whilst accounting for climate change and adapting to the potential impacts.	Number of residential properties at reduced flood and erosion risk following scheme completion and the number of properties benefiting over the whole life of the project.
2	Provide cost effective and deliverable flood and erosion risk	Positive Benefit: Cost Ratio (BCR) for investment.
	management intervention, which	Adaptable design to meet changes in climate.
	is technically feasible and sustainable.	Buildable designs that reduce risk during construction.
		Required partnership funding (PF) contributions secured
		Positive contribution to achievement of EA efficiency target
		Minimal carbon footprint in line with CDC and EA aims.
		Planning permission granted.
		Project implemented within approved budget.
3	Maintain access to the coastline and incorporate opportunities for wider enhancements	Existing coastline access for businesses, residents and tourism maintained or enhanced.
4	Maintain and where possible	No net loss of key habitats.
	enhance the natural, historic, and built environments	Positive contribution to achievement of biodiversity net gain target of 10%.
		Opportunities for enhancements identified.
		Compliant with environment regulations and legislation.

# **5. PROJECT IMPLICATIONS**

PROJECT IMPLICATIONS	Yes	No
Crime and Disorder		Х
Biodiversity and Climate Change Mitigation	Х	
It is as a result of climate change (specifically sea level rise and increased		
storminess) that the level of protection afforded by the existing defences will		
decrease over time and a new defence scheme needs to be appraised. Option		
appraisal of a coastal scheme in itself has no positive or negative impact on		
climate change or biodiversity. However, the impact of climate change, and on		
biodiversity (including net gain considerations, and carbon impacts) will form		

part of the option appraisal work proposed.		
Human Rights and Equality Impact		Х
Safeguarding and Early Help		Х
General Data Protection Regulations (GDPR)		Х
Health and Wellbeing		Х

#### 6. PROJECT CONSTRAINTS

- It is likely a coastal scheme at Selsey will be constrained by funding availability.
- The residential and environmental landscape of Selsey will constrain the type and location of any flood defence options.
- Access and tidal constraints will affect construction in this location.

#### 7. PROJECT ASSUMPTIONS

The project is dependent on securing Grant in Aid (GiA) funding for scheme development and construction. Securing funding is dependent on a number of key assurance and funding gateways. It is anticipated that a significant funding gap will require further partnership funding for construction of the scheme.

#### 8. PROJECT COSTS

#### 8.1. Project Delivery Costs

This project is dependent on securing GiA funding, and a funding gap is anticipated which will require further partnership funding to be secured.

A capital scheme of this scale has a number of funding and assurance gateway stages. The first stage is the Option Appraisal and Outline Design, and cost estimates and programme have been developed for this first stage as shown below.

Description of milestone	Estimated start date (DD/MM/YYYY)	Estimated end date (DD/MM/YYYY)	Estimated Cost (£)
Project management & Procurement	01/04/2024	31/08/2027	£721,269
Site Investigations*	02/04/2024	17/07/2025	£567,956
Coastal Processes	02/04/2024	04/06/2025	£169,800
Communication and collaboration	18/07/2024	31/08/2027	£244,075
Option appraisal and economics*	18/07/2024	07/11/2025	£270,340
Numerical modelling	02/04/2024	04/06/2025	£74,264
Environmental, heritage, Licencing & Consents*	18/07/2024	22/02/2027	£415,364
Option development*	20/10/2025	29/05/2026	£408,660
Funding Plan*	18/07/2024	16/11/2026	£41,000
Funding & Approvals (including OBC*)	27/06/2024	31/08/2027	£74,990
Tasks marked with (*) may require 3rd party or professional service consultancy support/input			
TOTAL	01/04/2024	31/08/2027	£2,987,718
Total Including 30% Optimism Bias			£3,884,033

The total estimated value of external professional services is ~£1.3m for the option appraisal and outline design stage.

Further stages of development include detailed design, licensing & consents, and construction. These will be subject to further funding.

High level costing was developed in 'Selsey Beach options Report', Dec 2020, developed by JBA and utilised in the Selsey feasibility assessment for the full scheme development and construction cost:

- Estimated scheme cost (PV/ CASH): £50M / £56M
- Estimated Whole Life Cost (PV/CASH): £67M / £124M

Note the costing is based on indicative defence options and high-level cost estimates. Further development of a scheme will provide increased cost understanding.

#### 8.2. On-going Costs Following Project Completion

Maintenance of defences is a requirement of the Grant memorandum and receipt of Grant in Aid funding. Local authorities are not able to obtain funding for maintenance so maintenance of the defences will require revenue budget.

Beach management costs as part of an agreed beach management plan, where ongoing costs are included in the proposed scheme, may be identified. Under current funding arrangements Risk Management Authorities can apply for GiA for Beach Management, usually on a ~5 year basis, but there are no guarantees of GiA funding.

#### 9. OPTIONS SUMMARY

The following options were considered in the face of challenges at Selsey:

#### 9.1 OPTION 1 Do nothing -

If nothing was done to maintain the existing assets, they will continue to age and will face increasing risk of failure. At the same time, with sea level rise, the level of protection afforded by the existing defences will decrease. This option would not manage the risk of flooding and erosion along this frontage.

#### 9.2 **OPTION 2** Continue present management –

In this option management of the frontage would continue by undertaking risk-based inspections and maintenance of defences where appropriate. Beach management would be undertaken, subject to funding & approvals. This option would not address the reducing standard of protection, increasing impacts of climate change, and the likely increase in pressure on adhoc emergency work without any longer-term plans in place. The routine repair and maintenance of coastal defences has become more frequent, as well as increasingly complex and costly, as the defences age.

#### 9.3 OPTION 3 CDC undertake to develop a CFERM scheme at Selsey –

In this option defences will be designed to reduce flood and erosion risk to people, property, and infrastructure over the duration of the project design life, whilst accounting for climate change and adapting to the potential impacts.

#### 9.4 Preferred Option

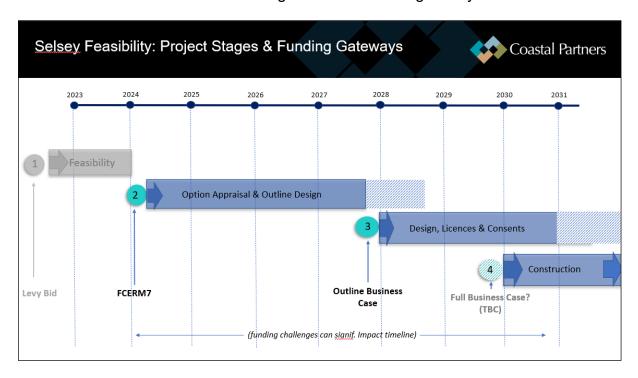
The preferred option was identified as Option 3, as this will result in a planned approach to future management of this highly exposed frontage.

This project is at its inception and options for delivery will be considered as part of the first phase of work.

#### 10. PROJECT APPROACH

Funding gateway stages:

There are a number of stages to the development of a coastal scheme at Selsey. These stages align with the key funding and assurance gateways for GiA funding. The timeline below shows the stages and numbered gateways.



The next stage of option appraisal and outline design is an estimated programme of 3.5 years. Timescales of further stages are estimated at this stage.

#### Development & procurement:

The scheme development will be managed by the Councils coastal team (Coastal Partners), and a main consultant will be procured to undertake technical work packages. To aid continuity of design, this contract is likely to allow for extension to enable continuation with detailed design and construction design support. Undertaking detailed design and construction will be subject to further funding.

Professional services will also be required to undertake site investigations & studies.

#### 11. PROJECT PLAN

Task No.	Task / milestone	Completion Date	Dependency			
Stage	Stage 1 Option Appraisal & Outline Design (*)					
1	Stage 1 Funding Submission	Feb 2024	Full Council approval			
2	Stage 1 Funding Decision	April 2024	EA approval			
3	Contract award - Main Consultant	July 2024	Funding			
4	Set Baseline Budget & Programme stage 1	Aug 2024	Main Consultant			
	(& update governance)		Contract award/ Funding			
5	Maintain monitoring & reporting programme	Sept 2027	Funding			
6	Delivery of Comms Plan (stage 1)	Sept 2027	Funding			
7	Informal Cabinet (outline design)	April 2027	Funding			
8	Cabinet / Full Council (OBC)	June 2027	Funding			
9	OBC (Stage 2) Funding Application	July 2027	Full Council approval			
10	OBC (Stage 2) Funding Decision	Sept 2027	EA approval			
Stage 2	Stage 2 Detailed Design, Licences & Consents					
11	Re-baseline Budget & Programme	Oct 2027	Funding (stage 2)			
12	Planning design	TBC	Funding (stage 2)			
13	Detailed Design	TBC	Funding (stage 2)			
14	Planning determination	TBC	Funding (stage 2)			
15	MMO Licence	TBC	MMO approval/ Funding (stage 2)			
16	Cabinet / Full Council (Detailed design / FBC)	TBC	Funding (stage 2)			
17	FBC (Stage 3) Funding Application (if required)	TBC	Full Council approval			
18	FBC (Stage 3) Funding Decision (if required)	TBC	EA approval			
Stage 3 Construction						
19	Tender - Main Contractor	TBC	Funding (stage 3)			
20	Contract Award – Main Contractor	TBC	Funding (stage 3)			
21	Construction	TBC	Funding (stage 3)			

<sup>(\*)</sup> Note: The milestone dates for stage 1 are currently based on an estimated programme, without the main consultant contract in place. The baseline budget and programme will be set once the main consultant contract has been awarded and this may change the milestone dates above.

#### 12. PROJECT TEAM

Appendix A shows the project governance as duties of the project board and delivery team.

#### **Project Manager:**

Rupert Teasdale, Coastal Partners

#### **Project Delivery team:**

Kirsty Klepacz, Coastal Partners

Dominic Henly, Coastal Partners

The delivery team will also include work package leads for each of the key workstreams as shown in Appendix A project delivery.

A Memorandum of Understanding will be developed for the scheme defining the roles of the board, project manager, project assurance and change control.

#### 13. COMMUNICATION

Reporting	Frequency	Circulation
Dashboard	Monthly	Project Board
Highlight Report	Quarterly	Project Board
Exception report	As required	Project Board (SLT/Cabinet by agreement with SRO)
Pentana (Project approved budget & milestone dates updated)	Quarterly review	CDC

Dashboard & Highlight reports will cover project spend against budget & forecast, programme, quality, key issues & risk.

A communication plan will be developed for the project identifying how everyone with an interest in the project will be kept informed. During the feasibility stage initial stakeholder mapping was undertaken to understand key stakeholders and their interest in the scheme. This work will be developed to inform the communication plan for the project, to ensure appropriate engagement.

#### 14. RISK LOG

The following key risks have been identified together with an assessment of their severity and actions that can be taken to mitigate/reduce the risk. Details of all project risks will be recorded as and when they are identified.

Risk No	Risk Description	Impact Minor Moderate Substantial Major	Likelihood Unlikely Possible Probable Almost Certain	Planned Actions to Reduce Risk
1	Application for next stage funding not approved by EA (or funding not approved at a later stage)	Major	Possible	Feasibility work to support business case.
2	It takes longer to get to construction, with aging defences at increased risk of failure.	Moderate	Possible	Programme management, alongside continued present management and maintenance to reduce risk. Position statement to share understanding of

				current management and responsibilities has been developed during feasibility stage.
3	The funding gap cannot be met	Major	Possible	Awareness and understanding of anticipated funding gap. Funding plan work to review potential partnership funding opportunities. Updates on funding requirements alongside increasing cost certainty.
4	The high-level costs increase significantly once there is more understanding of the defence option (making the funding gap more significant/unachievable)	Major	Possible	Funding plan work to review potential partnership funding opportunities. Updates on funding requirements alongside increasing cost certainty.
5	Raising expectations (No guarantees)	Moderate	Possible	Communications Plan / work with community
6	Future Sustainability of defences in this exposed location, and readiness for change.	Substantial	Probable	Communications Plan / work with community

#### Appendix A - Project Governance

