



Mott MacDonald House
8-10 Sydenham Road
Croydon CR0 2EE
United Kingdom

T +44 (0)20 8774 2000
F +44 (0)20 8681 5706
mottmac.com

Medway Estuary and Swale Coastal Flood and Erosion Risk Strategy

Appendix O - Sustainability Register

May-18

Environment Agency



Issue and Revision Record

347800 Medway Estuary and Swale Strategy

Revision	Date	Originator	Checker	Approver	Description
A	25/09/2017	L Wiggins	B Riley	Z Hutchison	Draft for issue and comment
B	14/05/2018	B Riley	L Eyres	Z Hutchison	Final for Issue

Information class: Standard

This report has been prepared solely for use by the party which commissioned it (the 'Client') in connection with the captioned project. It should not be used for any other purpose. No person other than the Client or any party who has expressly agreed terms of reliance with us (the 'Recipient(s)') may rely on the content, information or any views expressed in the report. We accept no duty of care, responsibility or liability to any other recipient of this document. This report is confidential and contains proprietary intellectual property.

No representation, warranty or undertaking, express or implied, is made and no responsibility or liability is accepted by us to any party other than the Client or any Recipient(s), as to the accuracy or completeness of the information contained in this report. For the avoidance of doubt this report does not in any way purport to include any legal, insurance or financial advice or opinion.

We disclaim all and any liability whether arising in tort or contract or otherwise which it might otherwise have to any party other than the Client or the Recipient(s), in respect of this report, or any information attributed to it.

We accept no responsibility for any error or omission in the report which is due to an error or omission in data, information or statements supplied to us by other parties including the client ('Data'). We have not independently verified such Data and have assumed it to be accurate, complete, reliable and current as of the date of such information.

Forecasts presented in this document were prepared using Data and the report is dependent or based on Data. Inevitably, some of the assumptions used to develop the forecasts will not be realised and unanticipated events and circumstances may occur. Consequently Mott MacDonald does not guarantee or warrant the conclusions contained in the report as there are likely to be differences between the forecasts and the actual results and those differences may be material. While we consider that the information and opinions given in this report are sound all parties must rely on their own skill and judgement when making use of it.

Under no circumstances may this report or any extract or summary thereof be used in connection with any public or private securities offering including any related memorandum or prospectus for any securities offering or stock exchange listing or announcement.

Medway Estuary and Swale Strategy - Sustainability Register

S = Strategy
 OBC - Outline Business Case
 DD = Detailed Design
 C = Construction

EA = Environment Agency
 FPT = Full Project Team
 MM = Mott MacDonald (Strategy consultant)

Currently adopted in Strategy
 To be progressed during OBC
 To be progressed during DD/ FBC
 To be progressed during construction

Goal	Action within Scheme	Stage of Scheme Action	Status	Impact			Ownership
				Social	Environmental	Economic	
Increasing the quality of lives for the local community	Reducing risk of flooding to residential properties over the next 100 years.	S, OBC	Green	✓	✓	✓	MM, EA
Creating development opportunities within the local community	Review wider plans in the area to determine if multiple benefits can be developed.	S, OBC	Green	✓	✓	✓	FPT
	Where possible, source materials from local suppliers.	DD, C	Orange	✓	✓	✓	Designer, Contractor
	Where possible, use local workforce.	C	Blue	✓	✓	✓	Contractor
Resources - Re-use and recycle where possible to minimise waste	Implement a Site Waste Management Plan and keep updated through life of Scheme.	OBC, DD, C	Orange		✓	✓	Designer, Contractor
	Specify use of recycled concrete where applicable.	OBC, DD, C	Yellow		✓	✓	EA, Designer
	Re-use elements of current defences where possible.	OBC, DD, C	Yellow		✓	✓	EA, Designer, Contractor
Resources - Minimise use of materials	Assess the flood risk scenario using UKCP09 medium emission scenario for phased scenarios - where preferable undertake works in a phased manner. If sea level rise scenarios then get updated overtime, can avoid building to a higher crest level (and hence using more materials) than required.	S, OBC, DD	Green		✓	✓	MM, Designer
	Work with natural flood measures to reduce designs and work with the natural processes. For example, use flood storage areas where possible to reduce the flood levels and reduce embankment/flood defence heights.	S, OBC, DD	Green		✓	✓	MM, Designer
	Management of delivery of material so only what is needed is delivered.	C	Blue		✓	✓	Contractor
Minimise and reduce pollution	Implement best practice construction techniques to minimise pollution. E.g. use modern machinery and plant tools.	C	Blue		✓		Contractor, EA
	Combine deliveries of material where possible to minimise pollution from vehicles.	C	Blue	✓	✓	✓	Contractor
	Preliminary Environmental Report at the minimum (to lead onto Environmental Impact Assessment if required for the scheme) to be developed to assess noise, vibration and visual impacts of the scheme and identified necessary mitigation measures.	OBC	Yellow	✓	✓		MM
	SEA has assessed the potential impact of the schemes on the community, historical assets, ecology, landscape and local culture, and identified necessary mitigation measures.	S, OBC	Green	✓	✓		MM
	WFD assessments highlight the potential impact of the schemes on water quality and has specified appropriate mitigation actions to be incorporated into Works.	S, OBC	Green		✓		MM
	Turn off machinery and site compound electrics when not in use - minimise energy use.	C	Blue		✓	✓	Contractor
Minimise impact and provide opportunities for enhancement on flora and fauna	Development of Managed Realignment sites to reduce impacts on designated intertidal habitat due to coastal squeeze. Impacts and potential mitigation is outlined in the Habitat Regulation Assessment. The HRA is to be reviewed at the project level.	S, OBC, DD	Green		✓		MM, EA, Designer
	Review of impacts on designated freshwater habitat due to overtopping reduced through a cost-effectiveness assessment to maintain some sections of defence or determine if compensatory habitat is required. Also impacts and potential mitigation outlined in the Habitat Regulation Assessment. To be reviewed at the project level.	S, OBC, DD	Green		✓		MM, EA, Designer
	Undertake regular consultation with Natural England, RSPB and KWT to ensure that the environmental concerns are addressed and opportunities for collaborative working to improve the environment are realised.	S, OBC, DD	Green		✓		MM, EA, Designer
	Undertake surveys of the designated sites to provide a more detailed assessment of the current species and determine more detailed management approach. At same time undertake surveys of compensatory sites to determine suitability.	OBC	Yellow		✓		EA
	Timing of construction works will need to be planned to avoid key months of wintering period for birds and other environmental constraints.	DD	Orange		✓		Designer, EA
	Environmental Reports and Indicative Landscape Plans to be developed to assess the potential impact of the Preferred Option on the environment.	OBC	Yellow		✓		Designer, EA
	Best construction practices implemented to ensure minimal impact to surrounding environment during construction.	C	Blue		✓		Contractor
Management of the overall project sustainability	Maintain the sustainability register.	S, OBC, DD, C	Green	✓	✓	✓	FPT
	Project management meetings to assess ongoing sustainability issues.	S, OBC, DD, C	Green	✓	✓	✓	FPT
	Coordinate and link projects for wider benefits, efficiencies and to maximise the use of Green Infrastructure. Use of the Implementation Plan to do this.	S, OBC	Green	✓	✓	✓	EA
	Implement and keep updated the Site Waste Management Plan.	OBC, DD, C	Yellow		✓	✓	Designer, Contractor
Encourage local community participation throughout the scheme process	Implement, and keep updated, the Stakeholder Engagement Plan.	S, OBC, DD, C	Green	✓			FPT
	Undertake public consultation to provide information and receive feedback on the preferred options	S, OBC, DD	Green	✓			FPT
	Meetings and/or correspondence with individual members of the public with specific concerns e.g. Landowner meetings.	S, OBC, DD, C	Green	✓			FPT
	Meetings with key stakeholders such as Network Rail, Local Councils, Southern Water, Power Stations, Sheerness Ports	S, OBC, DD, C	Green	✓		✓	FPT
	Encourage Contractor to register with the Considerate Construction Scheme.	C	Blue	✓			Contractor
Reduce transport pollution/ carbon footprint	Where possible, hold teleconference meetings.	S, OBC, DD, C	Green	✓	✓	✓	FPT
	Encourage increased used of public transport, cycling and walking within Project Team offices and to site.	S, OBC, DD, C	Green	✓	✓	✓	FPT
	Minimise movement and delivery of materials through careful planning.	C	Blue	✓	✓	✓	Contractor