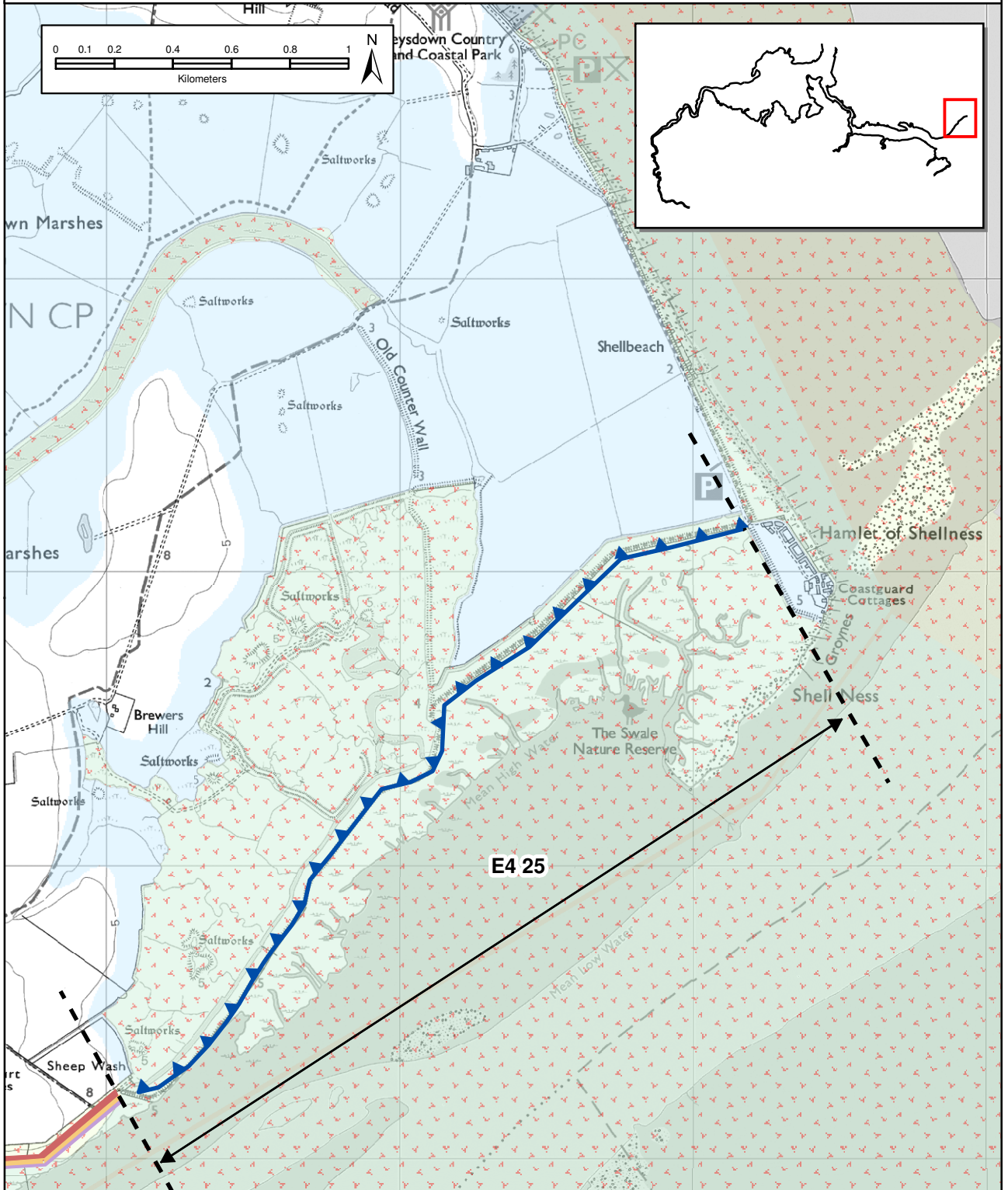













Medway Estuary and Swale Shoreline Management Plan

Policy Unit E4 25: Shell Ness to Sayes Court



Policy

From Present Day:	Medium-Term:	Long-Term:
Managed Realignment	Managed Realignment	Managed Realignment

-  Indicative erosion zone up to 2025
-  Indicative erosion zone up to 2055
-  Indicative erosion zone up to 2105
-  Indicative realignment location*
- * Actual realignment extent and location will be the subject of further studies.
-  Policy Unit Boundary
-  Policy Unit Extent
-  Current shoreline
-  Hold the Line
-  National Nature Conservation Designation
-  Important Heritage Sites (Scheduled Monuments)
-  2005 Indicative floodplain © Environment Agency

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Location reference:	Shell Ness to Sayes Court
Policy Unit reference:	E4 25

SUMMARY OF THE PLAN AND JUSTIFICATION

Plan:

The frontage comprises a sand and shell beach (managed toward the open coast) and spit, which is backed by nationally and internationally designated saltmarsh and low-lying coastal grazing marsh. Under rising sea levels it is anticipated that it will become increasingly difficult to maintain the beach along this frontage. Coastal squeeze together with a diminished supply of natural beach building sediment would lead to increased erosion if the current alignment were to be held in the long-term. Managed realignment would reduce the need for new defence works or beach management measures, possibly creating cost savings and environmental enhancements.

No specific realignment positions have been identified for the SMP. The potential impact on internationally designated sites will be a limiting factor on realignment extents and therefore, further studies will be required to investigate and define the extent, location and implementation of the realignment i.e. the best technical, environmental and economic option that best manages flood risk. These studies will also need to investigate the exact standard and alignment of any defences for this frontage and any mitigation measures required for loss of designated habitat.

The management of this frontage is consistent with the open coast policy unit (Policy Unit 4a 06: Leysdown-on-Sea to Shell Ness – Isle of Grain to South Foreland, SMP2. The preferred policy for this adjacent open coast frontage is Managed Realignment for all three epochs), which also proposes managed realignment for all three epochs.

The aim of these policies is to work towards achieving a more naturally functioning estuary and the creation of important brackish and saline habitats whilst at the same time creating a shoreline with a reduced requirement for defence maintenance. This policy is considered to be sustainable in the long-term, on the basis that environmental, engineering and inter-tidal benefits will be realised and that the overall flood defence is maintained to limit flood propagation.

The effect of these policies on designated conservation sites has been assessed in partnership with Natural England.

Preferred policies to implement Plan:

From present day: The present day policy is **managed realignment** for Shell Ness to Sayes Court. There is a need to control the realignment of this shoreline to best manage estuarine geomorphology and the integrity of European wildlife sites. The detailed alignment, will be subject to further study to address uncertainties and confirm the best technical, environmental and economic option to manage the estuary. To eliminate/reduce the risk of large scale flooding, new defence structures will need to be constructed, at a set-back position, prior to allowing the existing shoreline defence structures to fail or deliberately removing all or part of the existing defences. This will require re-routing of shoreline footpaths

The above provides the local details in respect of the SMP-wide Plan; therefore the above must be read in the context of the wider-scale issues and policy implications, as presented in the preceding sections and Appendices to this Plan document.

Location reference: Shell Ness to Sayes Court

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in localised areas.

No specific realignment positions have been identified for the SMP. Any set back however, will involve the loss of some agricultural land as well as designated freshwater habitat. The extent of these losses will be dependant on realignment extents. Loss of designated freshwater habitats would require mitigation / compensation measures to be implemented, and this aspect will require more detailed appraisal.

Medium-term: The medium-term policy is to continue to allow the shoreline to respond to changes in the forcing factors under a policy of **managed realignment**. The realigned defences will require further maintenance throughout this period. It is envisaged that environmental transitions will be prominent during this epoch, as brackish and inter-tidal habitats replace some of the freshwater interests. This transition may require specific management intervention to maximise the environment benefits and limit potential habitat impacts.

During this epoch there is the potential that the integrity of Shell Ness spit could reduce, due to a potential reduction in feed (from offshore) and the predicted rise in sea level. It is also anticipated that the connections between the estuary and open coast will increase during this epoch.

Long-term: The long-term policy is to continue allowing the shoreline to respond naturally, under a policy of **managed realignment**, by maintaining realigned defences. This will enable more flexible and sustainable flood and erosion risk management for this section of the Swale estuary (as well as the open coast – Leysdown-on-Sea to Shell Ness). It is expected that created habitat in realigned areas will become well-established during this epoch and provide added protection to the low lying hinterland.

With sea level rise predicted to accelerate during this epoch it is envisaged that the dynamics between the open coast and the Swale Estuary will undergo change. During this epoch it is likely that the integrity of Shell Ness spit will continue to reduce (due to sea level rise and uncertainty regarding feed). As such, it is envisaged that the northern shore of the Swale will realign landwards and the mouth will widen. This would result in the southern shore of the Swale and open coast at Faversham becoming increasingly exposed to open coast conditions.

Location reference: *Shell Ness to Sayes Court*

Policy Unit reference: *E4 25*

IMPLICATIONS OF THE PLAN FOR THIS LOCATION

Time Period	Management Activities	Material Assets, Infrastructure & Land Use	Landscape	Natural Environment	Historic Environment	Population (Amenity & Recreational Use and Human Health)
0-20 years	Construct secondary defences.	Areas of land affected by managed realignment will become intertidal.	Estuary landscape will be maintained. However some features will change through realignment.	Effect on internationally designated freshwater habitat and nationally important (BAP) habitat. Compensatory habitat will need to be secured before any designated habitat is lost. Transition of habitats from freshwater to internationally and nationally important brackish and saline habitat in realigned areas. Effect on sections of National Nature Reserve.	No loss of Sayes Court SM. Potential loss of buried unknown heritage.	Property at Shell Ness no longer protected (as MR policy between Leysdown-on-Sea and Shell Ness (Isle of Grain to South Foreland SMP2)). Re-routing of footpaths where MR is implemented.
20-50 years	Undertake engineering works to maintain the realigned defence line.	Areas of land affected by managed realignment will become intertidal.	Estuary landscape maintained. Potential for a more 'natural' shoreline.	Establishment of brackish and saline habitats in realigned areas. Effect on sections of National Nature Reserve.	No loss of Sayes Court SM. Potential loss of buried unknown heritage.	Property at Shell Ness no longer protected (as MR policy between Leysdown-on-Sea and Shell Ness (Isle of Grain to South Foreland

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Location reference: *Shell Ness to Sayes Court*

Policy Unit reference: *E4 25*

IMPLICATIONS OF THE PLAN FOR THIS LOCATION

Time Period	Management Activities	Material Assets, Infrastructure & Land Use	Landscape	Natural Environment	Historic Environment	Population (Amenity & Recreational Use and Human Health)
						SMP2).
50-100 years	Undertake engineering works to maintain the realigned defence line.	Areas of land affected by managed realignment will become intertidal.	Estuary landscape maintained. Potential for a more 'natural' shoreline.	Establishment of brackish and saline habitats in realigned areas. Effect on sections of National Nature Reserve.	No loss of Sayes Court SM. Potential loss of buried unknown heritage.	Property at Shell Ness no longer protected (as MR policy between Leysdown-on-Sea and Shell Ness (Isle of Grain to South Foreland SMP2)).

The above provides the local details in respect of the SMP-wide Plan; therefore the above must be read in the context of the wider-scale issues and policy implications, as presented in the preceding sections and Appendices to this Plan document.