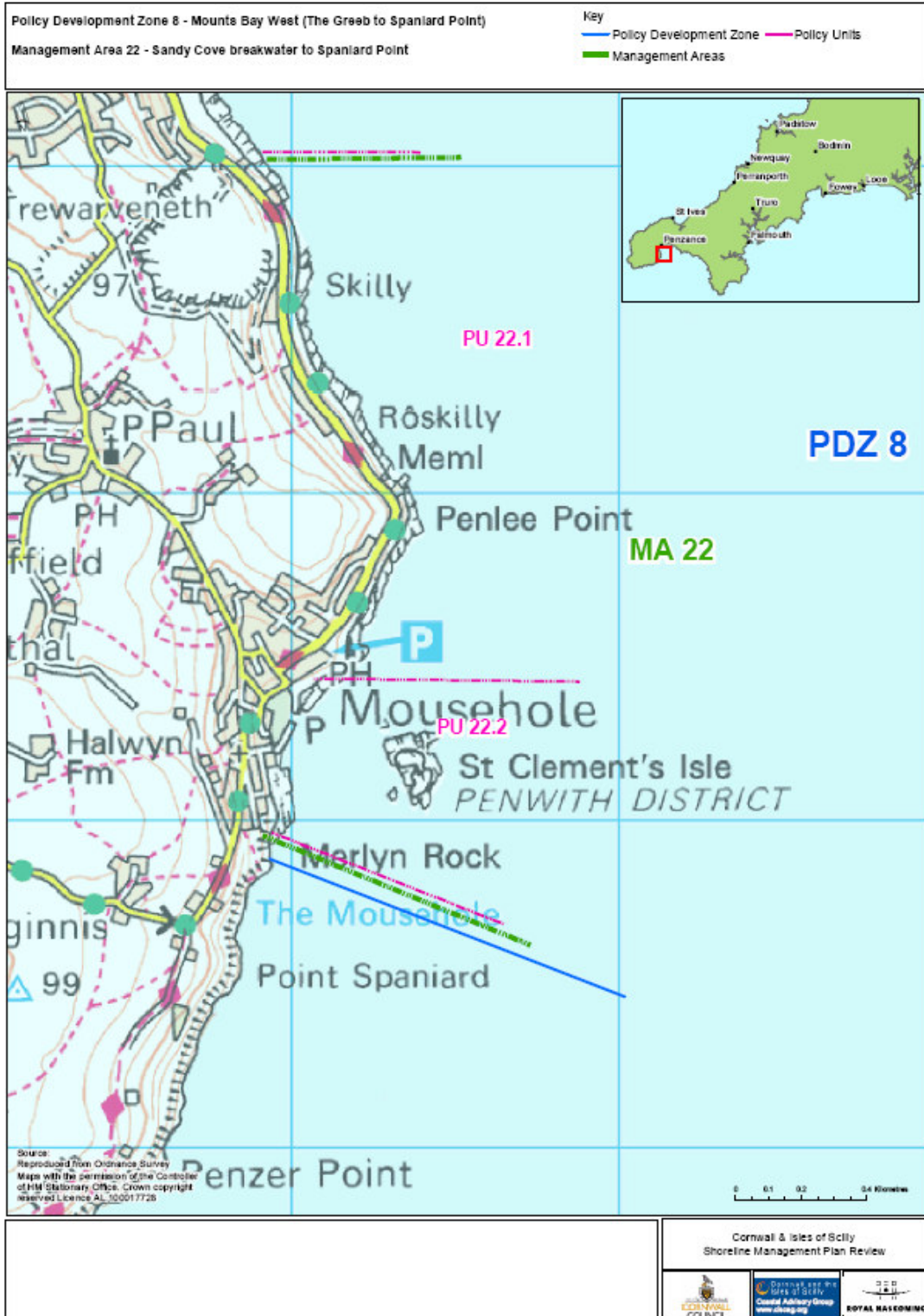


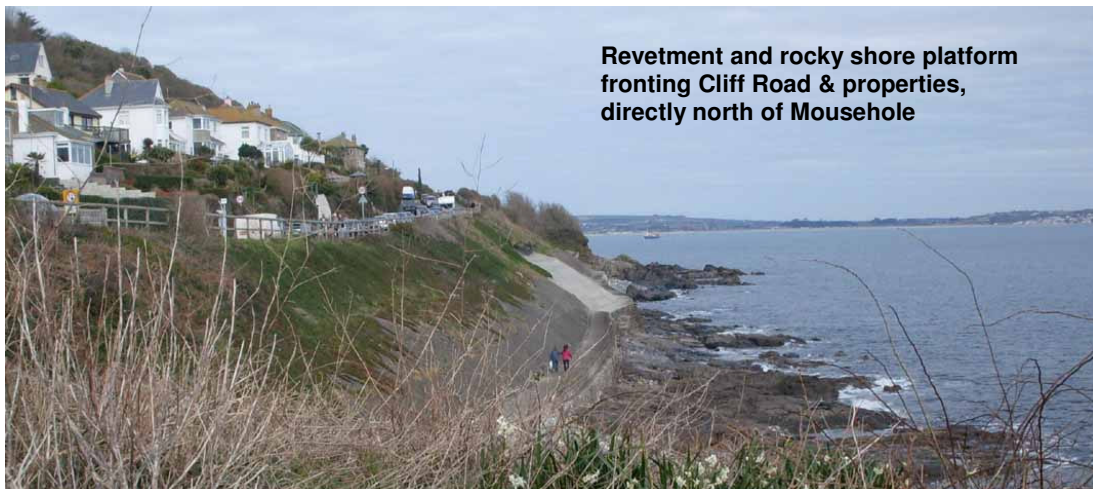
Location reference:	<b>Mousehole ( Sandy Cove breakwater to Point Spaniard)</b>
Management Area reference:	<b>MA22</b>
Policy Development Zone:	<b>PDZ8</b>



## DISCUSSION AND DETAILED POLICY DEVELOPMENT

Travelling due west from Newlyn and Sandy Cove, **Cliff Road** provides the main route between Newlyn and Mousehole. It is therefore a locally strategic route however it is not the only link road, as there is a second route in via the nearby settlement of Paul. Commercially it is an asset for trade between the harbours but possibly now more so for the tourist industry, as it provides a very picturesque coastline drive between the two locations. The coastal slope supporting the road is retained by vertical masonry walls at the base and sloped concrete revetments above (see inset photo, below). These structures are maintained by Cornwall Council and were built in 1920 – their residual life is estimated at between 11 and 20 years.

The assessment of erosion risks indicated that maximum erosion by 2105 under the NAI scenario along this section of coast would not exceed 10m. This level of recession would however effectively result in loss of the road as a viable route. Failure of the revetments and walls and loss of the route would also greatly increase risks to the numbers of residential properties landward of the road. Given the relatively low exposure of the coastline to wave energy, maintenance of the current retaining structures should not be excessively expensive or particularly unsustainable. Failure of the defences would also impact upon the **Penlee Quarry**, a scheduled monument and designated SSSI.



Penlee Quarry has been subject to a number of development proposals in the past, the most recent as part of the technical investigations into the regeneration of Penzance and Newlyn. The latest proposal put forward a plan to create housing and an associated marina complex within the existing quarry. This proposal included the requirement to create a seaward entrance to the quarry, by blasting through the quarry wall and through the Cliff Road route. At present this proposal is on hold.

The preferred plan along the Cliff Road would be to hold the line over the three epochs. As long as works to retain the road do not create an adverse visual impact or change the character of the area, the HTL policy should still meet the objectives of the AONB designation, which begins at Roskilly, just to the north of Penlee Point. Long term transport plans should assist in reviewing the policy along Cliff Road in the longer term.

The Penlee Point SSSI would continue to be modified by the presence of the coast protection structures which would be maintained under the preferred plan. It is not anticipated that impacts would increase significantly, though some coastal squeeze may result along the foreshore in the longer term.

The picturesque working harbour of **Mousehole** lies some 2km to the south of Newlyn. Its entire frontage is part of the Cornwall AONB and an extensive conservation area surrounds the harbour, with numerous listed buildings clustered around the harbours' western quayside. Mousehole's frontage is defended by a series of masonry walls, rock revetments and concrete revetments, plus the harbour has a tidal gate to prevent excessive wave action entering the harbour (see inset photos, below).

Objectives to protect the character and core values of Mousehole, along with its historic value and economic viability are closely linked to the retention and defence of the Harbour, which itself is a Grade II listed structure. The assets and infrastructure at risk from erosion or flooding under the no active intervention scenario are indicated to be very limited but this does not take account of the wave protection provided by the outer Harbour structures and in this way they are partly assuming a flood defence role, alongside



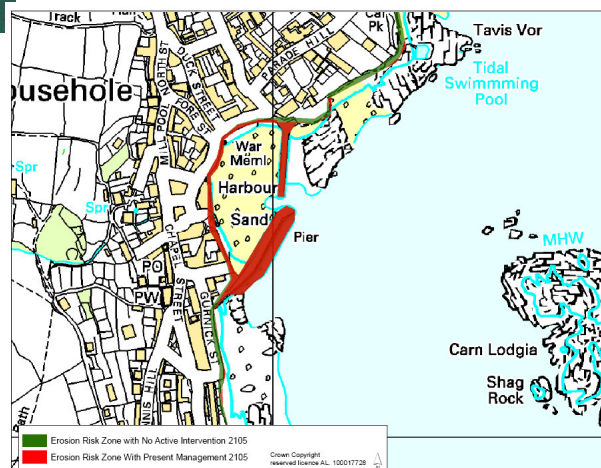
enabling the continued safe commercial use of the harbour and quay area.



It is proposed that a policy of hold the line is maintained at Mousehole, a continuation of the policy advocated through SMP1. This would include maintaining the outer harbour arms, alongside the revetment to the north of the town and the walls to the south.

There is no adverse impact upon adjacent coastline as a result of holding the Mousehole frontage as sediment linkages are negligible.

Generally it is seen more sustainable, both technically and economically, to maintain the current shoreline position for the Cliff Road – Mousehole frontage, than for Wherry Town or Longrock to the east. The harder geology and more steeply rising topography (see inset photo on page



46 above) creates a more easily sustained shoreline position with significantly fewer concerns than the previous management areas within PDZ8 to the east. Along with Newlyn and Sandy Cove, Cliff Road and Mousehole experience the lower wave energy inputs from the dominant south westerly climate than Penzance to Marazion. Only during south-easterly events are these frontages more exposed to significant wave energies and then there is shelter afforded to the Mousehole Harbour area by the presence of St Clements Isle (see inset map, above).

This means that, together with the more resistant geology, recession under the NAI scenario is unlikely to exceed 5 or 6 metres along any part of the Cliff Road to Mousehole frontage. Maintaining the Harbour at Mousehole helps protect the core values of the area, in a manner consistent with the preferred plan for Newlyn and Penzance Harbours, along with maintaining the short length of seawall to the south of the Harbour, fronting Gurnick Street (see inset photo, right) which would protect around 15-20 homes, 12 of which are listed buildings.



**Gurnick St defences,  
Mousehole**

The high level economic assessment for Management Area 22 provides a very low benefit / cost ratio of 0.04 (refer to the Economics Summary Table below and Appendix H). This relates to high cost of harbour maintenance at Mousehole and due to limited assets at risk along Cliff Road. Whilst generally not supporting the hold the line approach proposed for policy units 22.1 and 22.2, it should be noted that the assessment does not take into account the socio-economic value of having the road in place as a link between Newlyn and Mousehole and of the touristic value of Mousehole Harbour. This should be considered in more detail as part of the wider strategy for Mount's Bay.

## SUMMARY OF PREFERRED PLAN RECOMMENDATIONS AND JUSTIFICATION

### PLAN:

<b>Location reference:</b>	<b>Mousehole (Sandy Cove breakwater to Point Spaniard)</b>
<b>Management Area reference:</b>	<b>MA22</b>
<b>Policy Development Zone:</b>	<b>PDZ8</b>

PREFERRED POLICY TO IMPLEMENT PLAN:	
<b>From present day (0-20 years)</b>	HTL along Cliff Road. HTL at Mousehole.
<b>Medium term (20-50 years)</b>	HTL along Cliff Road. HTL at Mousehole.
<b>Long term (50 -100 years)</b>	HTL along Cliff Road. HTL at Mousehole.

### SUMMARY OF SPECIFIC POLICIES

Policy Unit		SMP1 Policy 50 yrs	SMP2 Policy Plan			Comment
			2025	2055	2105	
22.1	Cliff Road	Hold the line	HTL	HTL	HTL	Frontage is much less vulnerable and shoreline more sustainable to maintain in current position. Therefore no change from SMP1 policy.
22.2	Mousehole	Hold the line	HTL	HTL	HTL	Resistant geology and topography means little recession under NAI, but risks to heritage increase under NAI if harbour not maintained, so the WPM scenario is preferred, implemented through continuing current HTL set by SMP1. Resistant shoreline makes it much more sustainable to implement HTL, in line with Newlyn Harbour and Penzance Harbour. Therefore no change from SMP1 policy.
Key: HTL - Hold the Line, A - Advance the Line, NAI – No Active Intervention MR – Managed Realignment						

### ENVIRONMENTAL ASSESSMENT

#### Strategic Environmental Assessment (SEA):

The policy of HTL will continue to protect the settlements and infrastructure associated with Cliff Road and Mousehole in regards to maintaining the current standards of defence and protection of numerous Listed Buildings. However, obstruction/prevention of habitat/features responding to erosion and sea level rise through landward migration may occur along the Penlee Point SSSI under a policy of HTL. Impacts to the Cornwall AONB and heritage coast are anticipated while the continued protection of the Mousehole Conservation Area will occur under this policy.

#### Appropriate Assessment (AA):

HTL for all Epochs is proposed at Marazion Town, St Michael's Mount (Harbour), Marazion West, Marazion Marsh, Chyandour, Penzance Harbour and Docks, Newlyn, Cliff Road, and Mousehole. HTL in the first Epoch followed by MR (or NAI) for the remaining Epochs is proposed at St Michael's Mount (Causeway), Longrock, Eastern Green, and Wherry Town. NAI is proposed for all undefended cliffs, Marazion east, and Sandy Cove. The majority of policy locations and HTL/MR policies amongst the units are a sufficient distance or physically unconnected to the *Natura 2000* Sites that no direct loss or indirect effects are expected.

**IMPLICATION WITH RESPECT TO BUILT ENVIRONMENT**

Economics Summary		by 2025	by 2055	by 2105	Total £k PV
<b>Property</b>	Potential NAI Damages (£k PV)	0.0	13.4	123.1	136.5
	Preferred Plan Damages (£k PV)	0.0	0.0	0.0	0.0
	Benefits of preferred plan (£k PV)	0.0	13.4	123.1	136.5
	Costs of Implementing plan £k PV	1785	831	587	3203
				Benefit/Cost ratio of preferred plan	0.04

**Notes**

V low B/C ratio due to high costs of Mousehole harbour maintenance. Investigation into role of harbour beyond simply flood/coast protection required. A wide range of funding sources may require investigation.