

MAP 50: CAERLAVEROCK MERSE TO STANHOPE

Hinterland Geology and Coastal Geomorphology: This map shows a continuation of Caerlaverock Merse as far as the lower tidal reach of the Lochar Water. Coastal-bar and marine deposits overlie alluvium silts and muds (carse). Salt-marsh is a common feature. Carse deposits continue along the tidal reach of the Lochar Water. Flood banks protect this low lying area.

Erosion Class: The marsh is both accreting and eroding in parts, especially in the oxbow at the mouth of the Lochar Water. Further up the river, conditions are more stable.

Built Heritage & Archaeology: This stretch of coastline contains monuments of the twentieth century, comprising a shipwreck in the foreshore, and a WW2 pillbox and two groynes in the merse of Caerlaverock Nature Reserve. Intermittent high tides may be adversely affecting all monuments in this section.

Map 50: Hinterland Geology and Coastal Geomorphology

**1. South of KENNETH BANK east of
BLACKSHAW FARM**

NY 035 652

10km

Low edge (< 5m)

Marine sands and gravel over carse clays

Large tract of estuarine salt-marsh of Caerlaverock Nature Reserve. The hinterland consists of marine sands and gravels overlying Carse clays.

**2. East of BLACKSHORE FARM to NETHER
LOCHARWOODS HOLDINGS**

NY 050 664

2.5km

Low edge (< 5m)

Marine sands and gravels and carse clay

Lower tidal reach of the Lochar Water. The hinterland at the mouth of the Lochar Water consists of marine sands and gravels which give way further west to Carse clays. Alluvial mud and silt flanks the meandering river channel.

**3. NETHER LOCHARWOODS HOLDINGS to
south of MID UPPER PRIESTSIDE**

NY 094 660

7.5km

Low edge (< 5m)

Marine sands and gravels

marine sands and gravels overlay Carse clays on the hinterland. On the coast a salt-marsh flanks wide mud-flats.

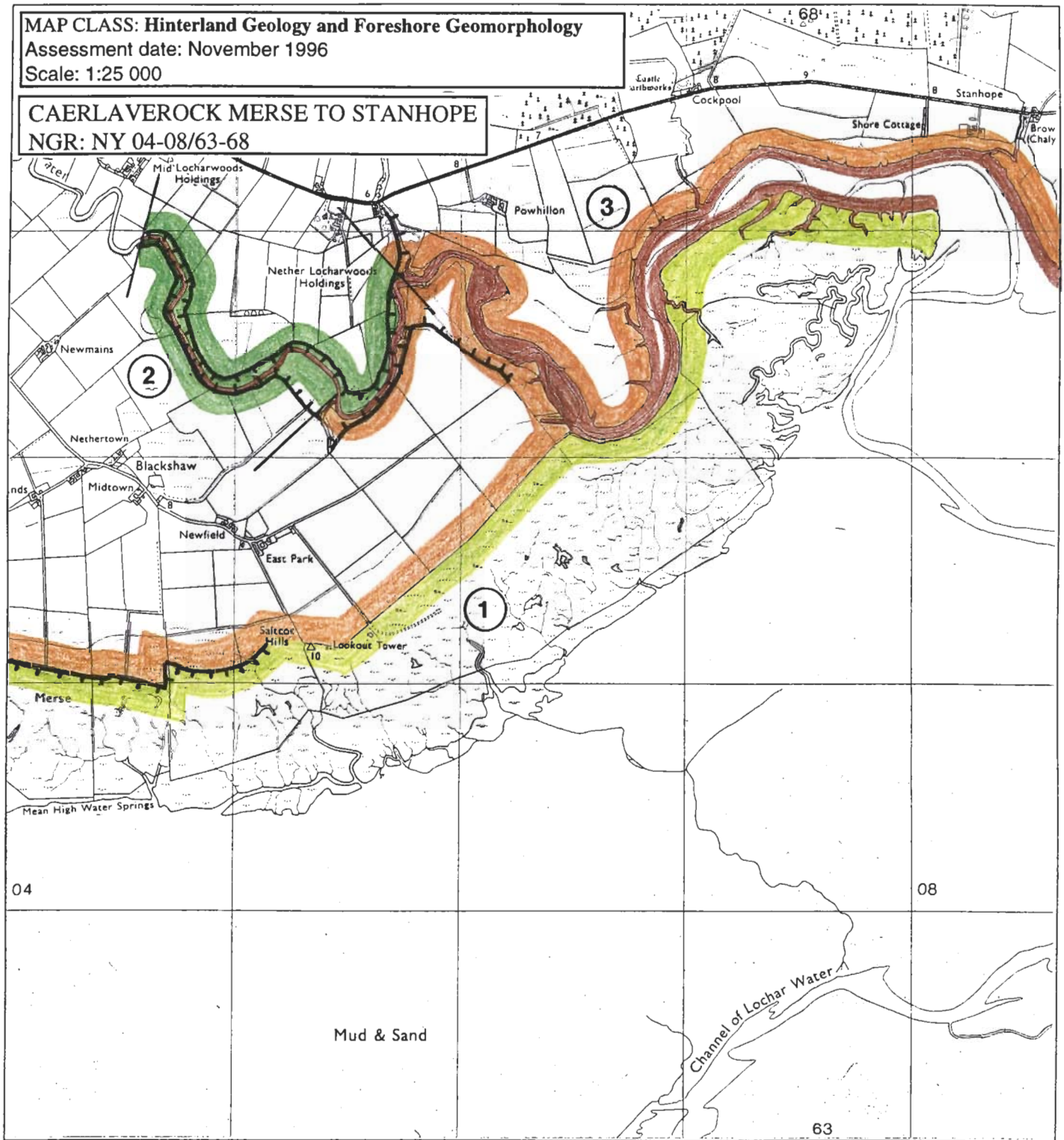
MAP CLASS: Hinterland Geology and Foreshore Geomorphology

Assessment date: November 1996

Scale: 1:25 000

CAERLAVEROCK MERSE TO STANHOPE

NGR: NY 04-08/63-68

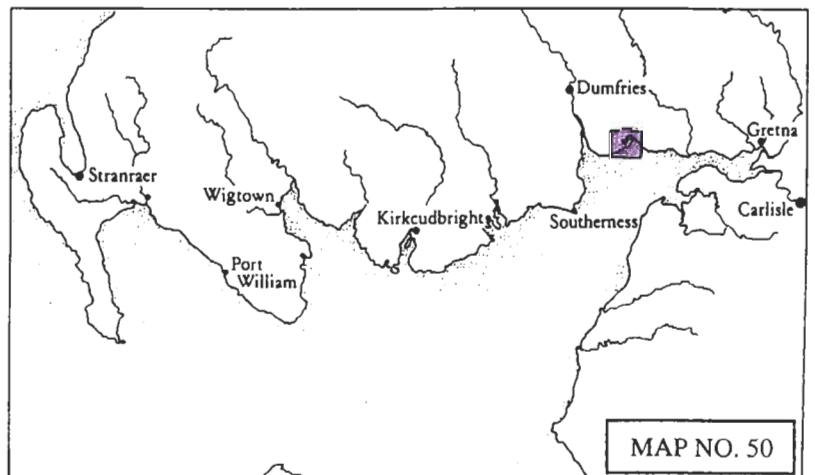


Mud & Sand

Channel of Lochar Water

KEY

Hinterland Geology	Derwent Code	Colour
Drift, boulder clay	French Grey	
Drift, boulder clay over visible rock	Dark Violet	
Raised beach and marine deposits	Golden Brown	
Blown sand	Pink Maddar Lake	
Glacial sand and gravel	Magenta	
Alluvium	Emerald Green	
Coastal Geomorphology		
Mainly rock platform	Deep vermilion	
Mainly sand	Ultramarine	
Mainly alluvial/marine mud	Venetian Red	
Marsh	May Green	
Coast Edge		
Low edge (<5m)	Thin black line	
Cliff (>5m)	Solid black line	
Man made barrier	Black line with spines	
Shingle beach	Small circles	
Human disturbance	Black carats	



MAP NO. 50

MAP 50: EROSION

1. South of BOWHOUSE SCAR to south of SHORE COTTAGE (mouth of Lochar Water)
NY 054 646

5.5km

Both accreting and eroding

Marshland deeply incised with drainage channels. Mud is accreting on the banks and arcuate slope failure is occurring on some sections of the channels.

2. Mouth of the LOCHAR WATER to south of POWHILLON
NY 072 670

3km

Both accreting and eroding

This unit consists of the lower tidal reach off the Lochar Water. Mud accretion is occurring along the banks of a persistent bend.

3. Upper tidal reach of the LOCHAR WATER
NY 050 663

4km

Stable

Earthwork banks are defending this stretch of the river which appears at the present to be stable.

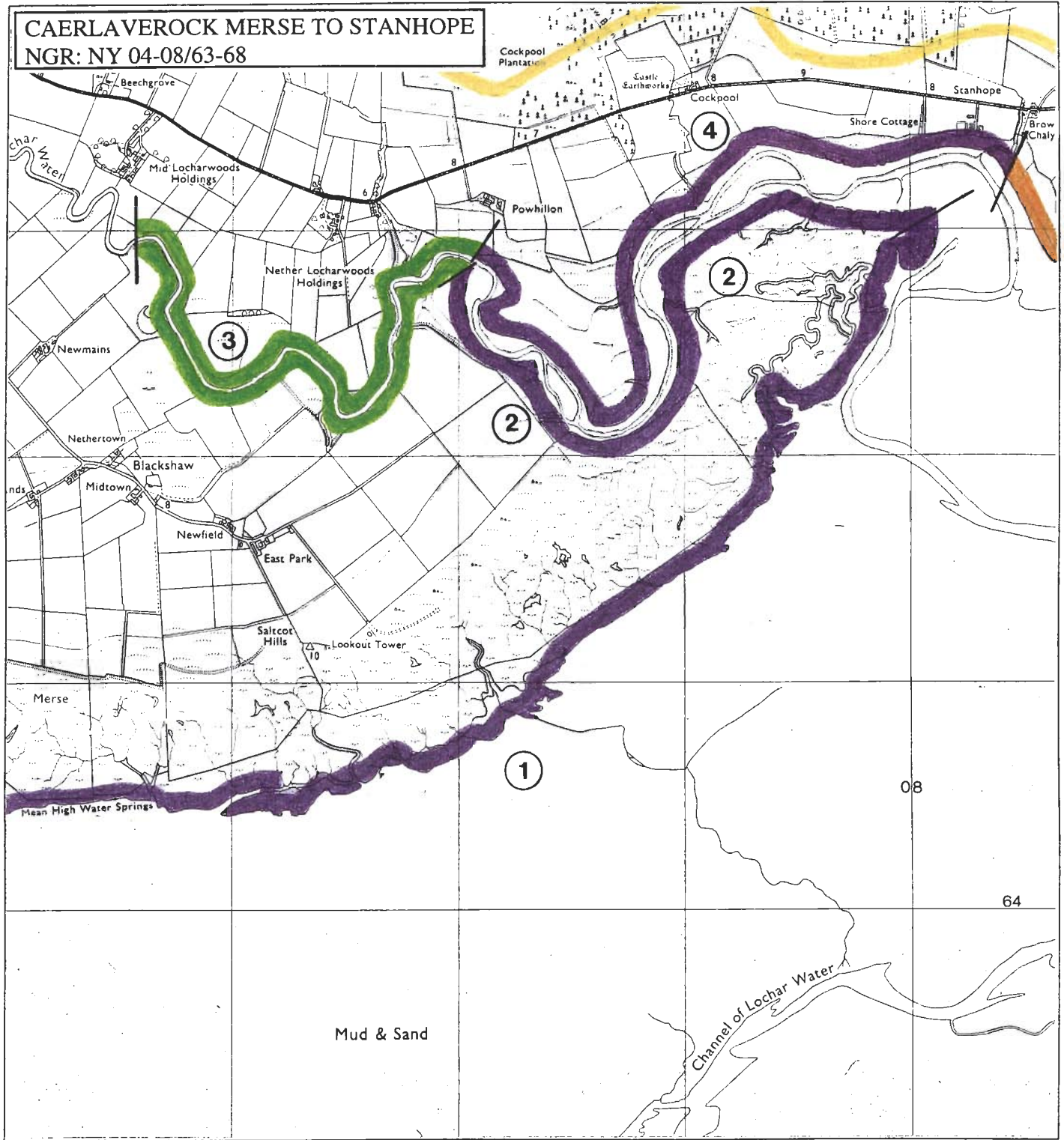
4. South of POWHILLON to BROW WELL
NY 074 670

2.7km

Both accreting and eroding

Northern bank of the lower tidal reach of the Lochar Water. There is some instability due to river scour at the river edge whilst in parts mud is accreting.

CAERLAVEROCK MERSE TO STANHOPE
NGR: NY 04-08/63-68



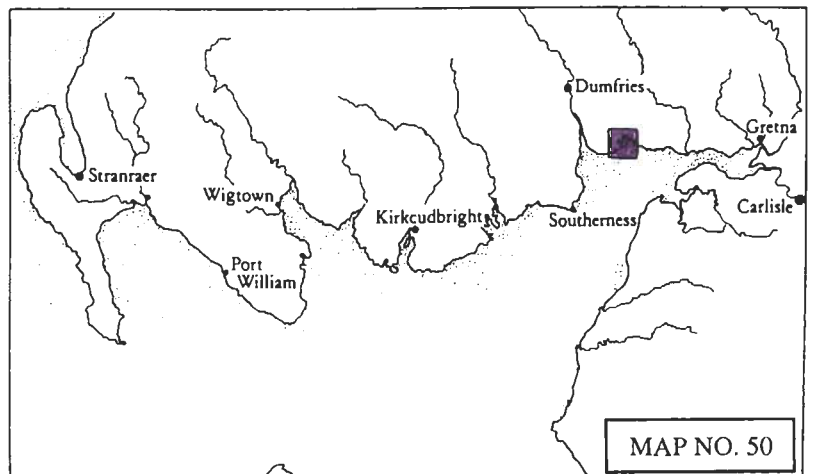
KEY

Erosion class	Derwent Code	Colour
Definitely accreting	Prussian Blue	
Accreting/stable	Light Blue	
Stable	Grass Green	
Stable/eroding	Deep Chrome	
Definitely eroding	Deep Vermilion	
Both accreting and eroding	Imperial Purple	
No access	Blank	
Land below 10m	Straw Yellow	

MAP CLASS: EROSION

Assessment date: 08.10.96

Scale 1:25 000



MAP NO. 50

MAP 50: BUILT HERITAGE AND ARCHAEOLOGY

Sites on the Coast Edge & Foreshore

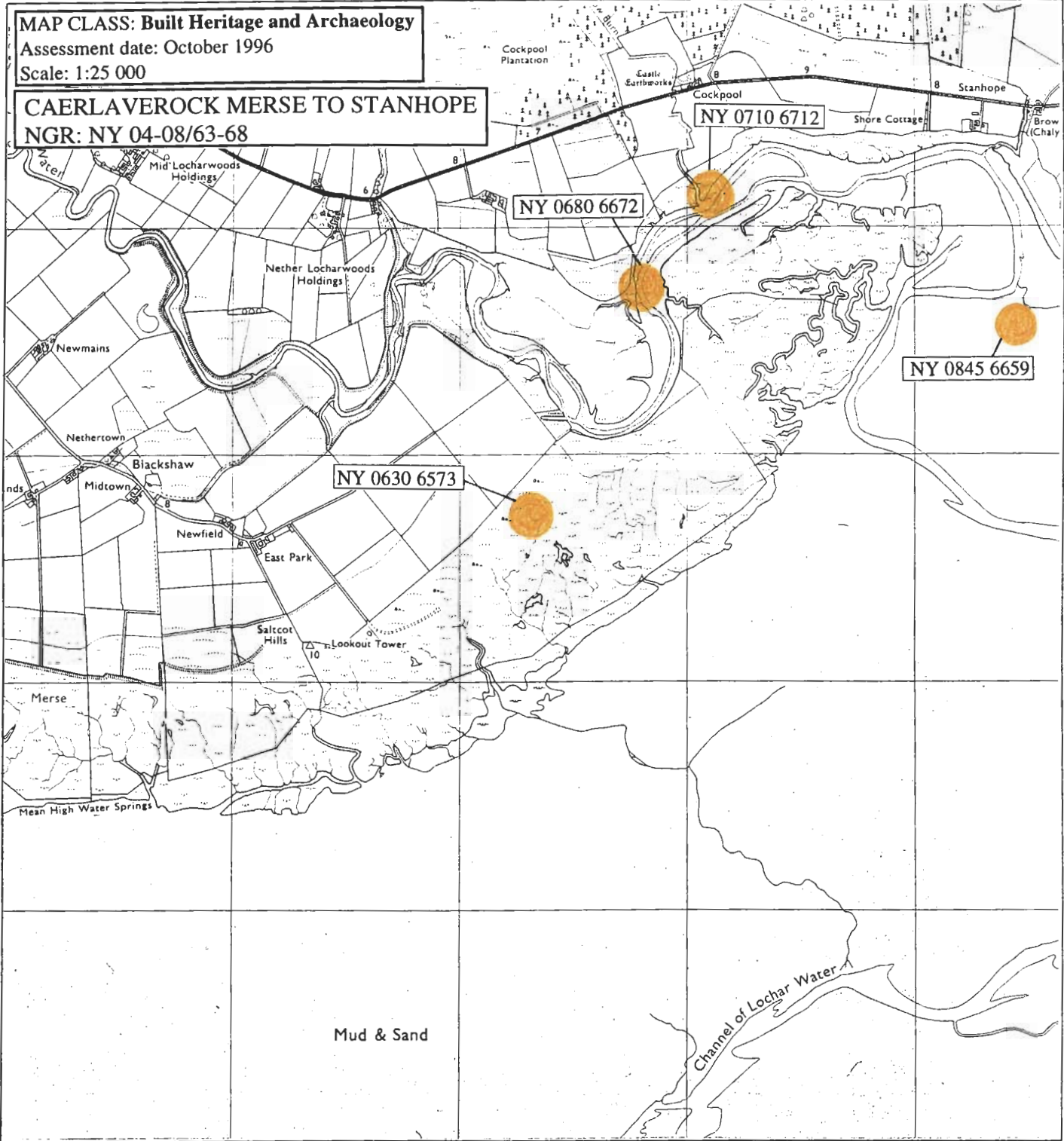
NY 0845 6659
CAERLAVEROCK RESERVE
Shipwreck
Uncertain
Poor
Survey & Monitor

Sites in the Hinterland

NY 0630 6573
CAERLAVEROCK RESERVE
WW2 Pillbox
Mid 20th century
Good
Nil

NY 0680 6672
CAERLAVEROCK RESERVE
Groyne/Pier
Uncertain
Good
Nil

NY 0710 6712
CAERLAVEROCK RESERVE
Groyne/Pier
Uncertain
Good
Nil



KEY

Site location	Symbol	Colour	Significance
NGR ref. - eg.	Roundel - Solid, (or area)	Red	Protected Ancient Monument
	Cross	Red	Listed Historic Building
NX 143 368	Roundel - Open, (or area)	Red	Monument formally proposed by Historic Scotland for designation
	Roundel - Solid, (or area)	Yellow	Other known Ancient Monument
NMRS ref. - eg.	Dashed outline	Yellow	Gardens/Designed landscape
NX13 SW17	Roundel - Solid, (or area)	Yellow	Undesignated wreck
	Area	Green	Insufficient information; more work needed
	Area	Blue	Probably archaeologically sterile

