

MAP 16: DYKEFOOT TO HOWE HOLE OF SHADDOCK

Hinterland Geology and Coastal Geomorphology: This region of coastline includes the Isle of Whithorn which is a peninsula situated at the confluence of two geological faults. The hinterland becomes less steep the further one travels north. The hinterland drift geology is exclusively till overlying exposed rock. The cliff-edge is very irregular and incised, especially around Doctors Rock and beyond to Howe Hole of Shaddock. The cliff-base is commonly cut by deep gullies and off-shore stacks, indicative of long term erosion, are also common.

Erosion Class: Sand and shingle are accreting in Whithorn harbour. This material is being brought in from the Isle of Whithorn Bay, possibly by accelerated sediment transportation when conditions are adverse. The rest of the coastline in this region appears to be stable but eroding at certain localities mentioned below.

Built Heritage & Archaeology: A cluster of sites at the Isle of Whithorn ranging in date from the first millennium BC/AD through to the eighteenth and nineteenth centuries and a wider distribution of more isolated sites leading north from the village, comprising later prehistoric promontory forts, a nineteenth century mill and a World War 2 platform, are included in this section. The listed buildings and remains of the port of the Isle of Whithorn, the chapel and the Castle all survive in good condition. Only at the promontory forts of Isle Head, Steinhead and Cairnhead is limited and localised coastal erosion evident and surveying and monitoring recommended. In the case of Isle Head fort visitor impact should also be taken into account.

Map 16: Hinterland Geology and Coastal Geomorphology

1. DYKE FOOT to ISLE HEAD (WHITHORN PENINSULA)

NX 477 356

2.5km

Cliff (< 10m)

Till over exposed rock

This is an exposed section of coastline that consists of greywackee rock platforms that are incised into numerous gullies. The cliff-edge is very irregular and indented into a series of ledges and sheer platforms. Wave cut platforms are common at the MHW. The harbour at Whithorn contains mainly boulders and sand.

2. ISLE HEAD to DOCTOR'S ROCK

NX 485 370

2.5km

Cliff (> 10m)

Till over exposed rock

Exposed incised cliff-edge indented by precipitous gullies. Stacks and caves occur in places. The cliffs are overlain with till.

3. DOCTOR'S ROCK to HOWE HOLE of SHADDOCK

NX 480 370

2.5km

Cliff (> 10m)

Till over exposed rock

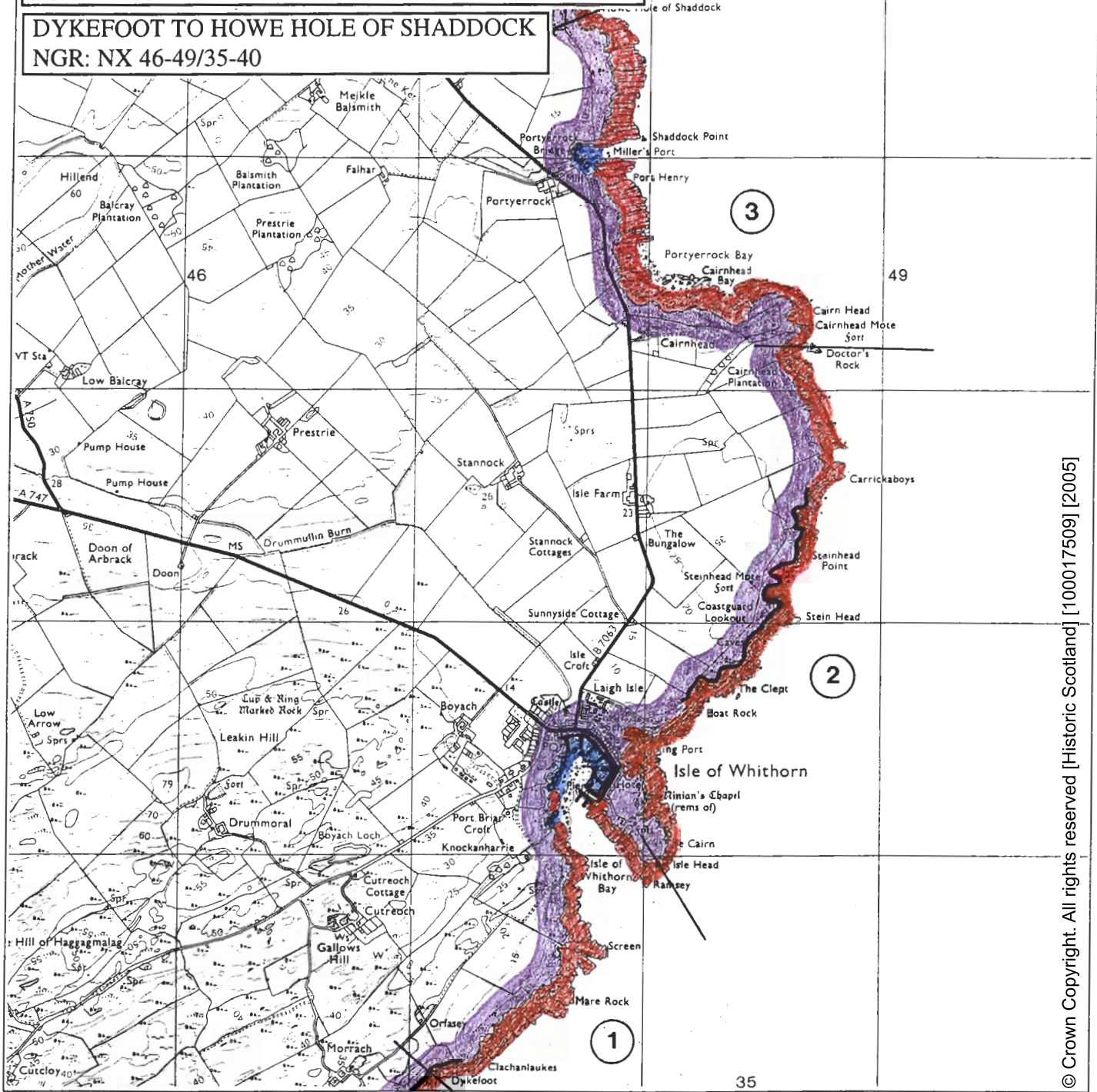
An exposed promontory headland occurs at Cairn Head (NX 486 384) which consists of steeply shelving greywackee platforms. Portyerrock Cliff (> 10m) and low edge (< 5m) Bay (NX 484384) consists of incised folded outcrops of greywackee. Till meets the irregular cliff edge.

MAP CLASS: Hinterland Geology and Foreshore Geomorphology

Assessment date: October 1996

Scale: 1:25 000

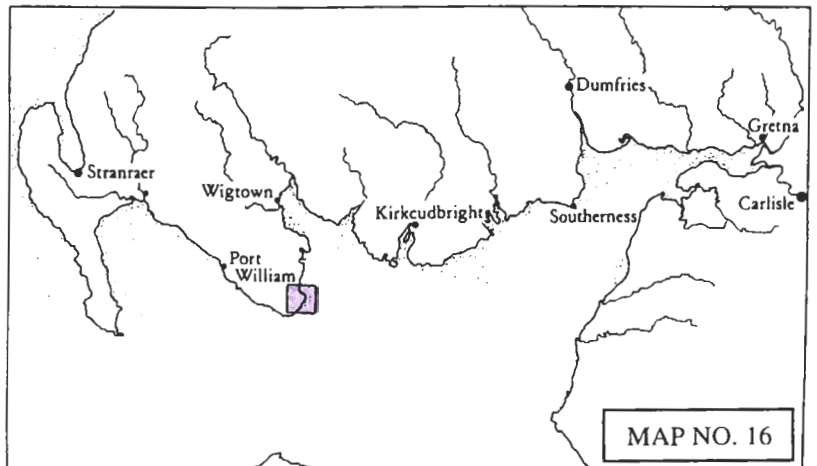
DYKEFOOT TO HOWE HOLE OF SHADDOCK
NGR: NX 46-49/35-40



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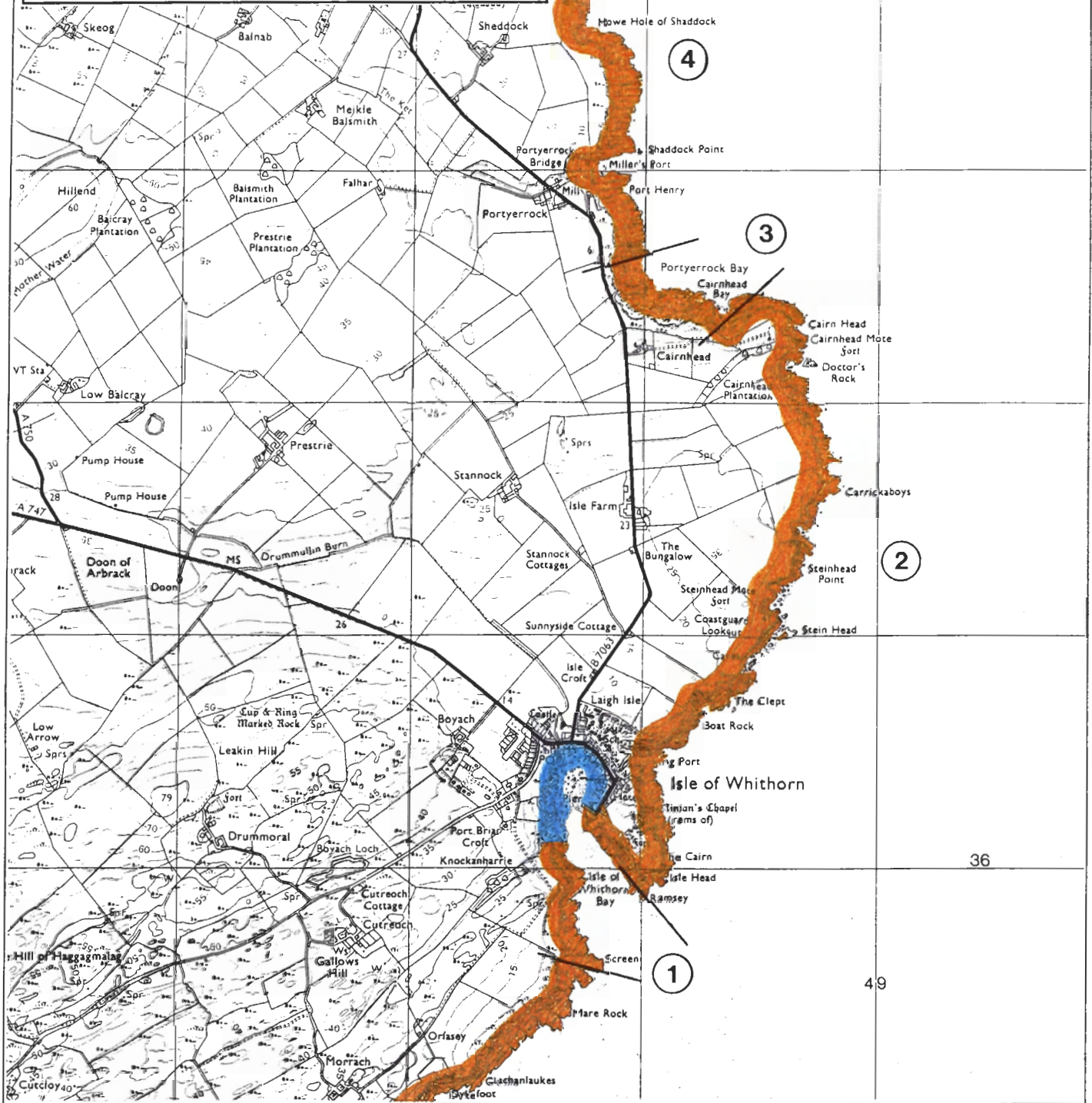
KEY

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	



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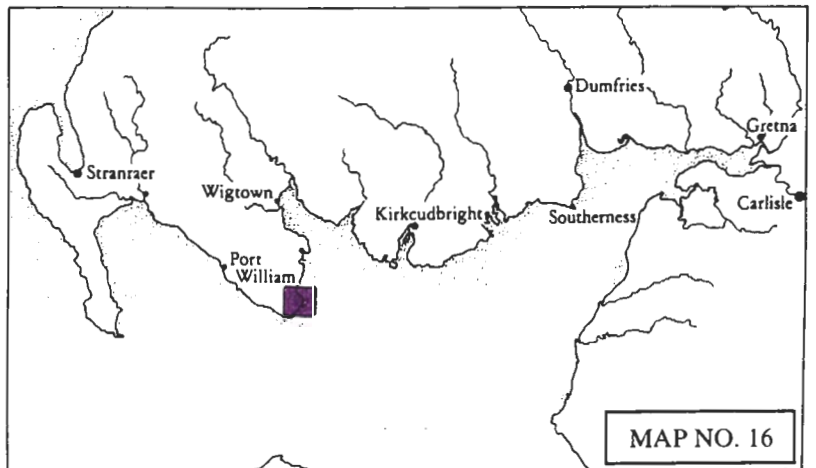


KEY

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: 27.9.96
 Scale 1:25 000



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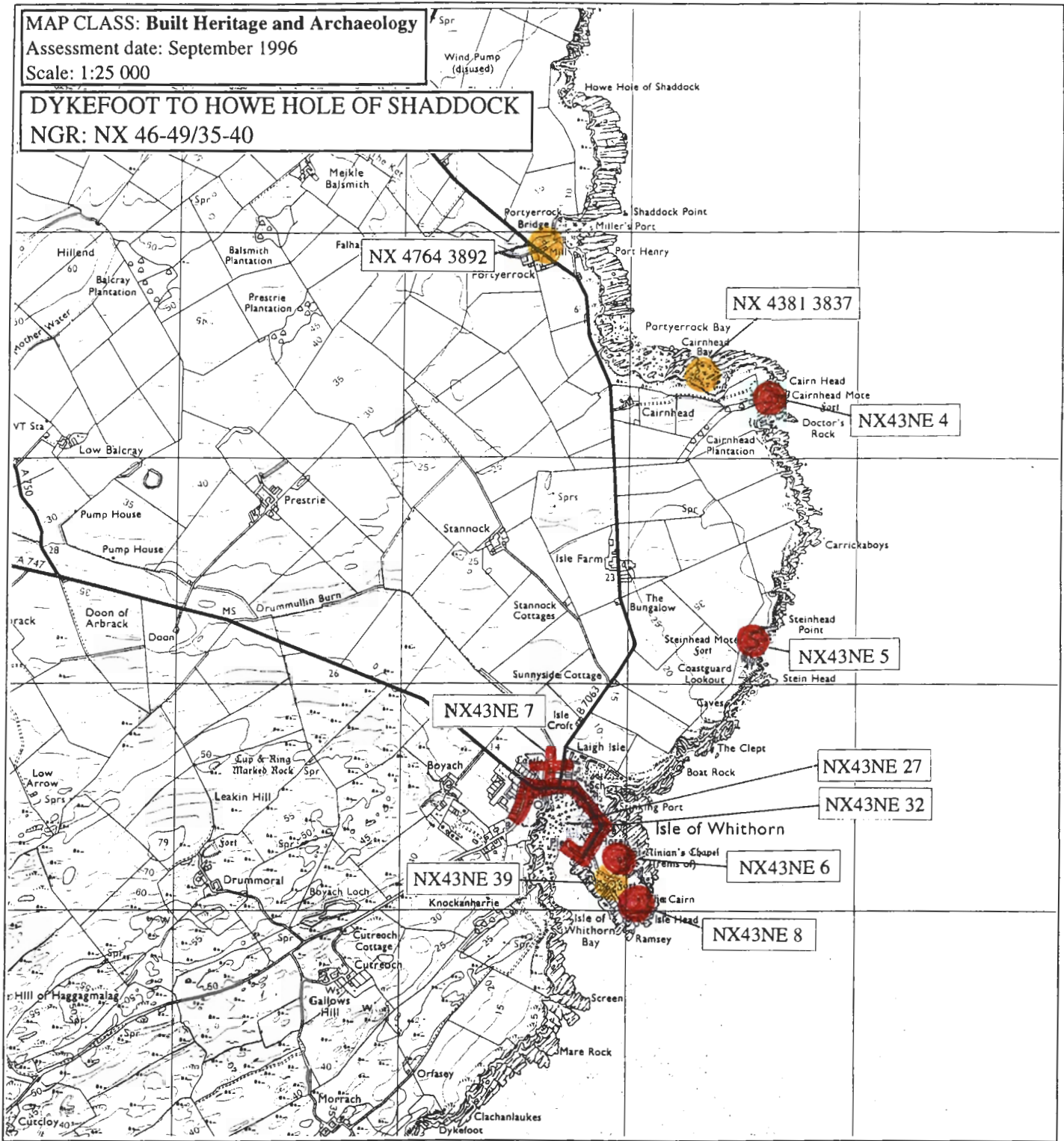
MAP CLASS: Built Heritage and Archaeology

Assessment date: September 1996

Scale: 1:25 000

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NGR: NX 46-49/35-40



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

