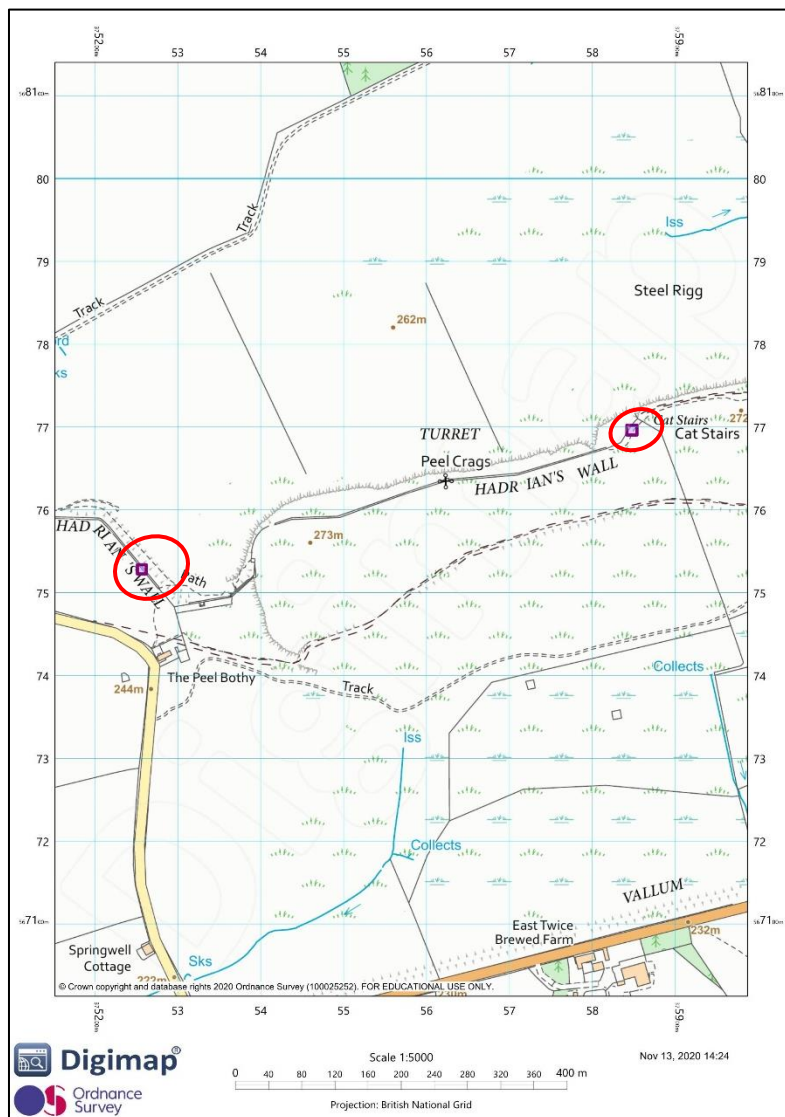


**Report on Conservation Work carried out at Cat Stairs and Peel Gap (SM listing: 1010966) in 2020 as part of the WallCAP Project**

**Jane Harrison**



**Fig. 1: Locations within the Scheduled Monument with curtain collapse: left, Peel Gap west slope and right, Cat Stairs.**

The *Heritage at Risk Register 2020* gives the following information on the scheduled monument (<https://historicengland.org.uk/advice/heritage-at-risk/search-register/>; accessed Jan. 2021):

**‘Hadrian’s Wall and associated features between the field boundary west of turret 37a and the road to Steel Rigg car park in wall miles 37, 38 and 39** Condition given as generally satisfactory but with minor localised problems, the principal vulnerability given as limited and localised visitor erosion.’

However, the localised problems included a recent collapse of the south facing courses of the Clayton Wall at Cat Stairs (NGR: 375846, 567697). This was the subject of a National Trust Scheduled Monument Consent (SMC) application in April 2020 (Appendix C). A further failure of the Wall’s southern face had taken place in the Peel Bothy field in Peel Gap (NGR: 375253, 567534), some 600m WSW of the Cat Stairs collapse (fig.1).

The surviving section of Clayton Wall, from where it butts the stone dyke running north-south alongside the minor road up to the Steel Rigg carpark (NGR: 3750667 567589), east and south-eastwards to the field gate into the Peel Bothy field (NGR: 375278 567503), is often walked on by visitors and there are several places used regularly for climbing up onto the Wall (e.g. fig. 2).

The opportunity was taken both to repair the two collapsed stretches, according to the parameters laid out in the application for SMC, and to consolidate and reprofile the often-walked stretches of wall top with turf and stones to deter visitors from climbing up onto and walking along the curtain. The work was undertaken by *Heritage Consolidation* in October and November 2020 as part of the WallCAP project. An archaeological watching brief was maintained during the repairs.



**Fig. 2: signs of erosion on the wall top on the northern side of the field gate into Peel Bothy field, looking north, October 2020.**

### Cat Stairs conservation work (NGR: 375846, 567697)

The National Trust 2020 SMC application sought consent to dismantle and rebuild the collapsed section of the southern wall face, reinstate fill behind the face as necessary, and re-bed and augment the turf capping.



**Fig. 3: the collapsed section at Cat Stairs, looking north, October 2020**

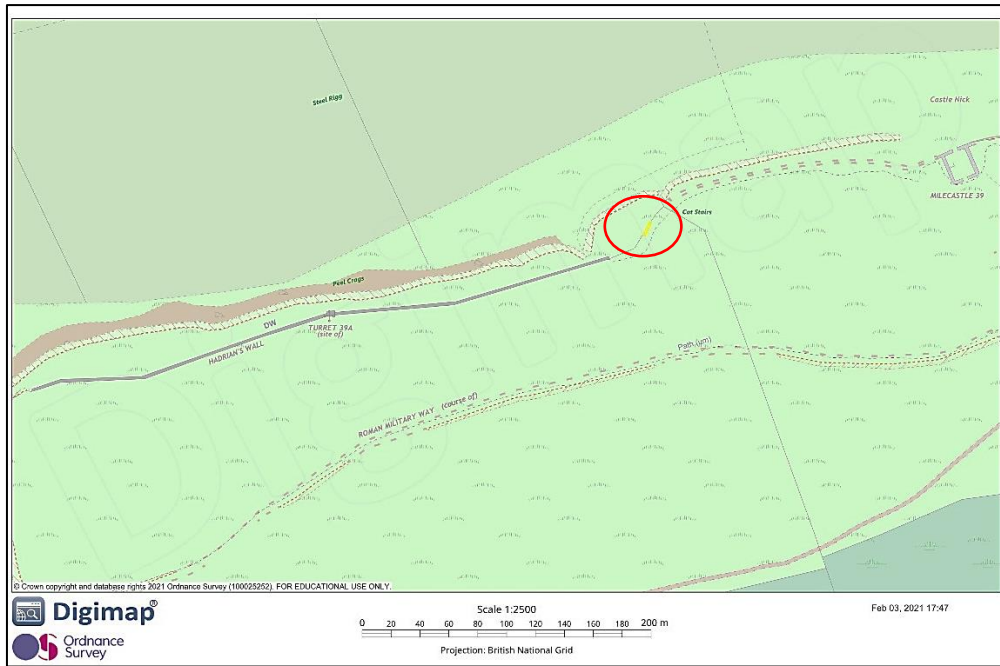
The following key working methods were proposed in the SMC application:

‘The failed section of the wall face will be cleared and dismantled by hand, down to the minimum number of courses needed to achieve stability in the rebuild... any trace of original Roman work will be carefully looked out for. If such is encountered, dismantling will cease.

From a stable base, the wall will be rebuilt according to the following parameters:

- Consolidation, disassembly and rebuilding of the Clayton fabric. In general, the works will involve as little intervention into *in-situ* fabric as possible;
- The use of dry-stone walling techniques to stabilize and correct defects in the re-laid Clayton facework. Generally, this will be remedied by the disassembly and rebuild of defective areas either side of the main 5.4m long collapse;
- reporting of any mortared facework found during disassembly of dry-stone to the monitoring archaeologist for recording prior to any intervention required to stabilise the Wall;
- The use of mortar tail bedding in order to stabilize the Wall in the short to medium term;
- The replacement of turf capping where lost or removed to facilitate conservation with soil and turf sourced locally outside the scheduled area at a maximum of 500m away.’

The application also indicated that it was intended to employ *Heritage Consolidation* to complete the work.



**Fig. 4: the yellow line indicates the location of the collapsed section**

After a recce with Historic England, Northumberland National Park, National Trust and WallCAP team members in October 2020, the following conservation works were carried out by *Heritage Consolidation* in October 2020 adhering to the SMC working practices, with the WallCAP archaeologist Jane Harrison present to carry out the watching brief:

1. The slumped stonework was dismantled until a stable course was reached;
2. The curtain was rebuilt using agreed techniques, including tail-bedding as necessary; and
3. The top was consolidated using the turf plug method: just over five metres of Wall were affected.



**Fig. 4: Cat Stairs under reconstruction**

The Cat Stairs collapse was of a stretch of the Clayton Wall that had clearly been repaired relatively recently as Terram was discovered in the wall core once the tumbled and loose stones were shifted.

No undisturbed Roman courses were revealed and the only find was a 2012 one penny piece. The archaeologist's site report is appended: Appendix A.



**Figs 5: Cat Stairs, conservation complete, looking north-west**

**Peel Gap conservation work (NGR: 375253, 567534): repair, reprofiling of Wall top and raising of stone dyke abutting the Wall (NGR: 375067, 567589)**

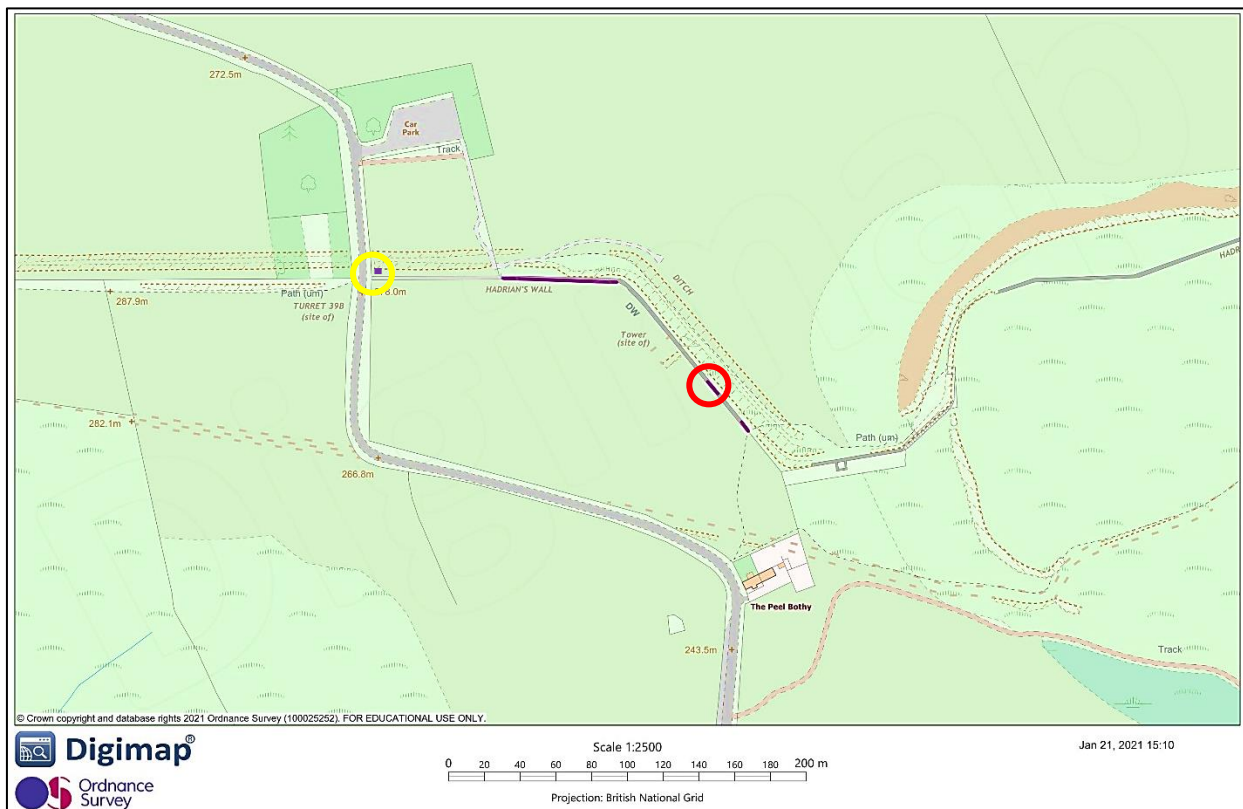
The rebuilding of the collapsed section of the Wall in Peel Gap, the raising of a protective stone dyke, and the turf and stone reprofiling of sections of Wall top was carried out by *Heritage Consolidation* in October and November 2020. The same parameters were followed in the work carried out in this area as had guided work at Cat Stairs.



**Fig. 6: the failed section in Peel Gap, west slope, October 2020 looking north**

After a recce with Historic England, Northumberland National Park, National Trust and WallCAP team members in October 2020, the following conservation works were carried out by *Heritage Consolidation* in October and November 2020, with the WallCAP archaeologist Jane Harrison present to carry out the watching brief for the dismantling and rebuilding:

1. At the Peel Gap, west slope collapse: the slumped stonework was dismantled until a stable course was reached; the curtain was rebuilt using agreed techniques, including tail-bedding as necessary; and the top was consolidated using the turf plug method. Around six metres of Wall were affected.
2. Stretches of curtain top – as indicated in figure 7 – were consolidated and re-profiled (figs 8 and 12); some 70m of the curtain were involved in total. The work at the gate into the Peel Bothy field also included repairing the ordinary stone dyke forming the south-eastern side of the gate.
3. The stone field wall running north-south to Steel Rigg carpark was raised to deter people from climbing onto the end of the Wall from the road to take photos (fig. 9).



**Fig. 7: Peel Gap: the purple lines show locations of turf and stone reprofiling, red circle the location of curtain Wall re-building and the yellow circle the location of the north-south stone dyke raising**



**Fig. 8: reprofiled section of curtain, looking south-west.**



**Fig. 9: raised and re-shaped stone field wall, looking south-west**

The collapsed section of the south face of the Clayton Wall in the Peel Bothy Field was dismantled down to a secure foundation course of larger stones, which was probably undisturbed Roman fabric. Mortar was discovered on the tail ends of three of these large foundation stones and a sample was taken. No other finds were made. The curtain was rebuilt from that secure base and the top reprofiled with stone and turf (figs 10 and 11). The archaeologist's report is attached as Appendix B.



**Fig.10: rebuilding at Peel Gap, west slope, looking east**



**Fig. 11: Rebuilding and reprofiling complete at Peel Gap looking north-east**





**Fig. 12: Peel Gap west slope, reprofiling underway, looking east**

## **Appendix A**

**Cat Stairs (NGR: 375846, 567697): 13/11/20 Watching Brief report, Dr Jane Harrison MCI/A, Community Archaeologist, WallCAP**

Serious collapse of south-facing facing stones and wall core. In the west of the exposed wall core terram was revealed – white/clear non-breathable – and visible dropping down over an area of core and lapping down to just above the secure course at which the *Heritage Consolidation* team stopped dismantling. A modern repair had clearly collapsed; it was unclear whether the course in the photo below was Clayton work or original but observing the fall of the ground there were probably at least two further courses below the one revealed and the former is more likely. There was no reason to dismantle further. A 2012 one penny piece was found.



**Fig 1: Secure course at which dismantling stopped, looking north-east**



**Fig 2: Terram visible to left of photo, looking north-east**

## **Appendix B**

**West slope of Peel Gap, Peel Bothy Field (NGR: 375253, 567534): 13/11/20 Watching Brief report, Dr Jane Harrison MCI(A), Community Archaeologist, WallCAP**

South face collapse of at least four courses of surviving Clayton wall. Dismantling was needed of a further five stones of the course at the base of the collapse as they had slipped out and canted

downwards as the wall bellied under the weight of the core and previous reprofiling (fig. 1). This course may have been surviving Roman fabric pushed out of position by the slump of Wall fabric.



**Fig. 1: slipped course of stones, looking north**

Below the slipped course were four larger stones, exposed to a depth of c. 0.25m. The length of the furthest west stone was not fully exposed but 0.5m was visible, the next stone east was 0.62m long, the next 0.47m long and the furthest east, again not fully exposed, was 0.4m long. These stones were completely secure and were larger than the majority of the stones used in the courses above. This course may well have been foundation and was almost certainly *in-situ* Roman construction. There appeared to be some contemporary mortar surviving at the back of the exposed stones, c. 0.15m in from the faces (fig. 2).

The mortar had many inclusions including white and CBM-red coloured fragments and was an orangey pink colour on exposure. Silt had washed down from the wall above, but lenses of the mortar seemed to be relatively undisturbed, with the silt only on the surface (fig. 3). A sample of mortar was taken. The section was rebuilt up from the sound course of larger stones.



**Fig 2: the sound course of probably undisturbed foundation stones with mortar visible, looking north-west**



**Fig 3: the mortar and large foundation stones, looking north-east**

## Appendix C

### Application for Scheduled Ancient Monument Consent, repair to a failed section of Clayton wall face at Cat Stairs between turret 39a and milecastle 39

#### Impact Assessment and Works Design

Mark Newman 3<sup>rd</sup> April 2020

#### Introduction

The central sector is one of the most dramatic and popular landscape components of Hadrian's Wall, part of the Roman Frontiers World Heritage Site. The wall traverse high Winn Sill ridges and is followed by the Hadrian's Wall National Trail.

The wall corridor is designated as a Scheduled Monument, as well as being inscribed as a World Heritage Site.

The planned works are intended to take place on a 4.5m long section of the wall at Cat Stairs, Grid ref NY 75846 67697.

#### Archaeological Background

There is a long history of archaeological investigation of the Hadrian's Wall. However, in terms of the specific site under consideration, detailed investigation has been more limited, beyond surface features recording conducted mainly by Historic England and the National Trust. There is no specific evidence to suggest that particularly complex or unusual archaeology will be encountered in the affected area.

#### Reasons for this application

The popularity of this section of Hadrian's Wall, its visibility to the public and the (discouraged) tendency for the public to walk atop this section of the Clayton reconstruction of the Roman Wall have already been alluded to.

In 2019 this section started to fail. Repair works were deferred until an HMA for management of the NT owned section of Hadrian's Wall could be agreed, but given acceleration of decay over winter, a separate SMC application is now submitted.

This application seeks Consent to dismantle and rebuild the failed section of the wall face to high professional standards, and reinstate fill behind the face to re-bed the turf capping.

#### Working Method

The National Trust propose to employ Heritage Consolidation (who have carried out a number of high-quality, sensitive, repairs to the wall in recent years) to carry out this rebuilding.

The failed section of the wall face will be cleared and dismantled by hand, down to the minimum number of courses needed to achieve stability in the rebuild.

In the course of any necessary dismantling, any trace of original Roman work will be carefully looked out for. If such is encountered, dismantling will cease.

From a stable base, the wall will be rebuilt to the following parameters

- Consolidation, disassembly and rebuilding of the Clayton fabric. In general, the works will involve as little intervention into *in-situ* fabric as possible.
- The use of dry-stone walling techniques to stabilize and correct defects in the relaid Clayton face work. Generally, this will be remedied by the disassembly and rebuild of defective areas either side of the main 5.4m long collapse
- reporting of mortared face work during disassembly of dry-stone to the monitoring archaeologist for recording prior to any intervention if required to stabilise the Wall;
- The use of Blaxter stone pinning to level and bed facing stones where required;
- The use of mortar tail bedding in order to stabilize the Wall in the short to medium term;
- Hammers will not be used by the conservation builders during works to the Clayton Wall to prevent damage to Roman facing stones;
- The replacement of turf capping where lost or removed to facilitate conservation with soil and turf sourced locally outside the scheduled area at a maximum of 500m away.



**The failed section facing east**



**The failed section facing north**

### **Impacts**

The impacts of these proposals are considered against the areas of heritage value discussed in the EH conservation principles (2008)

#### *Evidential*

The evidential value of the element of the wall affected by the planned works is considered to be relatively minor. This is a section of the Clayton Wall, reconstructed in the nineteenth century. While this work is far from without significance, it is not perceived as having the same significance and sensitivity of original Roman work.

There is no reason to believe that the evidential value of this section of the wall would not be very similar to many other sections of wall between the defences, turrets and milecastles.

The surface topography of the immediately adjoining land (which is also Scheduled) has more potential to be of unique evidential value, telling the story of the way these few yards of the Roman wall have been treated since the end of Roman Britain. However, the planned works should not affect these adjoining areas, aside from recovery of any recently fallen stone.

The greatest potential risk to evidential value from the works would be if any Clayton, or certainly any Roman, work was to be affected. The working methodology would deliberately avoid doing this. On the other hand, if left unaddressed the wall is likely to collapse further and in doing so would run a significant risk of accidental damage to previously untouched fabric.

#### *Historical – Illustrative/Associative*

The Historical values of the site are high. There is an obvious association, by proximity and location, to the operation of Hadrian's Wall as a military system and the life of its associated vicus. That said, there has been enormous landscape change here since the Roman period, not least since the acquisition of the site by John Clayton. Indeed the landscape today owes more to his nineteenth century interventions than any other period.

The proposed works are believed to represent a positive impact on this heritage value. The failing condition of the wall conflicts with both the public's perception of the World Heritage Site, and the principles behind Clayton's management of the site. Repairs would rectify this currently negative impact. Failure to undertake them would constitute the risk of further damage.

### *Aesthetic*

There is, effectively, a designed aesthetic (exploiting the fortuitous values of the natural topography) present on the site, represented by John Clayton's organisation of the landscape and presentation of the monument. The presently planned works will, modestly, have a positive impact on this aspect, addressing an element of failure in the landscape. There should be no fortuitous aesthetic impact as any dismantling works involved will be temporary.

### *Communal values*

There are no known commemorative values associated with the site by the local (or wider) community.

In terms of social value, this is one of the most visited, iconic and valued sections of the Roman Wall, and therefore decay of the archaeological asset has particularly high significance. Moreover, there is considerable walker's use of this section, both on the approved footpath and – more illicitly – on top of the wall. Both uses, but particularly the latter, are put at physical risk by the current condition of the wall. The present works are intended to address this impact.

### **Archaeological Mitigation**

The archaeological impact and therefore mitigation that can be offered for this proposal is limited. It is proposed that

- a) A photographic record of the failure will be completed, along the lines of that completed previously at Hot Banks and elsewhere, prior to clearance
- b) That a watching brief be maintained during any clearance/dismantling works and that if any evidence of pre C19 work is exposed this will be cleaned, recorded, and preserved *in situ*
- c) Records of the recording will be attached to the NT HBSMR and supplied to the Northumberland NPA and Historic England