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**Hadrian's Wall Milecastle 78 (Kirkland), Cumbria: Interim
Report on Archaeological Evaluation, September 2000**

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Summary

Milecastle 78 is one of thirteen of these installations on Hadrian's Wall under regular or intermittent ploughing. Field evaluation was carried out on these milecastles in 1999-2000.

No substantial work has previously been done at this site, which was located by trenching in 1934. The excavation of three trenches showed that the milecastle survives in good condition, despite having been heavily robbed. It has rounded external corners and square internal corners, and is a long-axis milecastle measuring 20.2m east-west and 24.9m north-south.

Keywords

Excavation
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HADRIAN'S WALL MILECASTLE 78 (KIRKLAND), CUMBRIA

Interim Report on Archaeological Evaluation, September 2000

1. Project background

Thirteen of the 79 milecastles on the World Heritage Site of Hadrian's Wall have been identified as being under potentially damaging land regimes, principally cultivation either in rotation, or annually for cereal crops. A programme of field evaluation to investigate the condition of the remains and their vulnerability to further cultivation was put forward in a Project Design (Austen and Wilmott 1999) in June 1999, and the first phase of the work, during which five of the milecastles were evaluated, took place during August 1999. A further phase of work which covered seven more milecastles took place in Autumn 2000.

The primary objective of the fieldwork was to provide data on the survival and vulnerability of these milecastles in order to inform discussions with land owners and managers over their future management. Archaeological information on the shape, size, internal layout and dating of the milecastles was also recovered.

Pending the production of a formal MAP2 assessment on the completion of the whole project, it has been decided to produce a series of short interim reports summarising the results of the work on each site. These will be circulated to archaeological curators, and also to the owners and managers of individual sites.

The work on Milecastle 78 was undertaken by permission of the site owner, Mr D Hogg, Kirkland Farm, Port Carlisle.

2. The Site

The milecastle site (Figs 1, 2) lies at NGR NY 2454 6136. Its north side lies in OS parcel 5737 through which the line of the Wall passes, and the southern part is in OS parcel 5830. The milecastle was identified in 1934. The northern field, OS 5737 is under permanent pasture, but the larger field, OS 5830, is cultivated intermittently in rotation.

The milecastle site was recognised by Horsley (1733, 157), and Simpson *et al* (1935, 214) record that a prominent platform still existed during their excavations. It seems likely that the platform has become somewhat lowered by ploughing, although it is still clearly discernible. The fabric of the milecastle was located in 1934 as part of the long-running campaign to establish whether the Turf Wall extended as far as the western end of Hadrian's Wall, indeed the partial excavation of Milecastle 78, and the subsequent discovery that turret 79b was a turf wall turret finally confirmed that the turf wall did

indeed terminate at Bowness. The report on the discovery of the milecastle is laconic, and no plans, photographs, or detailed locational data were provided. Simpson *et al* (1935, 217) wrote simply;

“.....the west wall was found, measuring 9ft 2in across the foundations. One course of masonry stood upon the inner face above a five inch offset: the outer face had been robbed”

They made no observation of the survival or otherwise of remains of the Turf Wall phase structure.

3. Original aims

The original aims for the work were:

M78.1 to locate the remains of the milecastle walls without disturbance to *in situ* surviving remains.

M78.2 to ascertain the depth below the present surface at which remains of the milecastle survive

M78.3 to assess the impact on the site of past cultivation, and the implications of its continuance.

Given the lack of detailed evidence for the size of this milecastle, an additional aim was formulated during excavation, namely to establish the overall dimensions of the milecastle.

4. Site Methodology

Three trenches were excavated (Figs 2, 3), their location guided by the topography of the slight milecastle platform, and by information from Mr Hogg, the farmer, concerning the location of parch-marks in drought conditions, and places where stones have been encountered in ploughing. Trench 1 (8m x 2m) was designed to traverse the west wall, Trench 2 (6m x 2m) the south wall and Trench 3 (5m x 2m) the east wall.

5. Archaeological results

5.1 Description

Trench 1 (Fig 3)

Post-Roman Deposits

The topsoil (1400) covering trench 1 was 0.25m thick, and contained very little stony material. Directly below this was a layer (1401) which represents the remnants of an

earlier ploughsoil. It was 0.19m thick and contained abraded sandstone rubble which was probably derived from ploughing above the milecastle. Below this, was an area of disturbance which seems to have taken the form of a roughly linear cut (1430) running across the trench. This was a fairly shallow cut with gradually sloping concave sides. It contained two fills, the lower of which was very similar to the natural subsoil, a blue grey silty clay (1429), approximately 0.06m thick, which probably represents the rapid backfilling of the trench with material excavated from it. The upper fill (1432), was 0.35m thick and was a grey-brown silty sand containing abraded red sandstone pieces. This cut is late in the stratigraphic sequence and is likely to be a trench cut by earlier excavators, probably Simpson *et al* during the 1930s. The trench also truncated a homogeneous deposit of mid brown-grey sandy silt (1404) at the western side of the trench.

The late excavation trench (1430) truncated the fill and western edge of an earlier robber trench (1402), the purpose of which had been to remove stone from the western wall of the milecastle. The robber trench was filled with a mid brown-red silty sand (1403) with red sandstone rubble which was probably derived from the rubble core of the milecastle wall. It was 0.36m deep, and was approximately 3.3m wide, although this is uncertain due to the truncation of its western side. The remains of the western wall of the milecastle survived below the fill of the robber trench.

Roman Structures and Deposits

The foundations of the western wall (1426) of the milecastle survived in a remarkably intact state below the fill of the robber trench (1403). They were composed of large sandstone facing stones on the eastern face of the sandstone wall. Some of these facing stones were quite large and measured up to 0.56m x 0.32m. The front edge of the stones was obscured by a deposit of grey sandy silty clay (1423) which was banked up over the wall foundations to form the interior surface of the milecastle, and which was some 280-300mm deep. The western side of the wall was removed either by robbing, or by the later probable excavation trench (1430) which truncates it. The wall core was composed of red sandstone rubble bonded together with a pale blue clay, which appears to be the natural subsoil in this area. The wall was greater than 2.05m wide and was approximately 0.55m below the top of the ploughsoil. The interior milecastle surface (1423) lay 0.33m below the top of the ploughsoil.

Trench 2 (Fig 4)

Post Roman deposits

The topsoil (1407) in Trench 2 was very shallow at 0.17m thick, and directly below this archaeological deposits were observed. The trench was fortuitously located on the south western corner of the milecastle, and a continuous robber trench following the alignments of the western and southern walls along with the curved playing card shape of the corner of the milecastle was visible. A water pipe trench (1419) truncated the robber trench

(1408), and was filled with yellow clay.

The robber trench (1408=1413) had vertical sides, and followed almost exactly the line of the original walls. The fill (1409=1410) was a mid reddish brown sandy silt with frequent angular sandstones which are likely to have derived from the rubble core of the wall as it was being robbed and demolished. This fill was very similar to that recorded from the robber trench in Trench 1. Presumably the robbing of the walls of the milecastle was one contemporaneous event, and all the trenches were backfilled together. No finds were recovered from any of the robber trench fills, so it is difficult to say at what date the robbing of the milecastle took place. The depth of the robber trench (1408) was approximately 0.40m, and the visible width within the trench was 1m. The depth of the robber trench for the southern wall was 0.25m, and it was 2.40m wide.

Roman structures and deposits

Below the robber trench fill (1409=1410) the foundations of the corner of the milecastle survived intact, with facing stones in situ. The core of the wall was composed of red sandstone rubble bonded together with a blue-grey clay. The southern wall curved round at the western side of the trench to form the playing-card shape typical of Roman forts, though the interior corner was squared and did not mirror the outer curve.

On the eastern side of the western wall a grey silty clay surface (1412) survived which was banked up over the facing stones of the western wall. This is very similar to the surface that survived in trench 1 (1423), and was probably constructed at the same time as the milecastle wall. Pottery was recovered from this surface, and a patch of burning was also recorded which may be the remains of a hearth. The surface was 0.30m deep and 0.90m x 1.72m of it was visible in the trench.

On the southern edge of the trench, immediately behind the southern wall of the milecastle, a pale blue-grey clay deposit (1427) was banked up over the facing stones of the wall. It was thickest closest to the wall at 0.18m, tapering to 0.05m to the south. Immediately above this layer was a thin deposit of small whitish-grey pebbles and silty sand (1424) which was 1.40m wide and 0.16m thick. This deposit may have been a laid as a layer above the clay so that there would have been a dry, firm surface upon which to work to construct the superstructure of the wall. This interpretation is supported by the fact that a shallow posthole (1405) was excavated through this surface. It was half moon shaped in plan, and was very shallow at 0.05m deep, and may have been a posthole for scaffolding to construct the wall. Above the fill of this post-hole was a deposit of rubble identified as collapse from the wall (1434)

Trench 3 (Fig 5)

The topsoil above Trench 3 was 0.25m thick, and directly below this archaeology was encountered.

On the eastern side of the trench, a robber trench (1421) which was presumably following the line of the eastern wall of the milecastle was recorded. The far eastern edge of it was not visible as it was beyond the limits of the trench to the east. It was 1.60m wide, but was not completely excavated due to site conditions and the trench rapidly filling with water. It was filled with red sandstone rubble similar to that found as robber trench fills in Trenches 1 and 2.

This robber trench was cut through a layer of mid grey-brown clayey silt (1418) which contained some large pieces of sandstone rubble. These were randomly spaced and are likely to have been disturbed by ploughing. This is probably an early ploughsoil layer which formed above the milecastle and has been moved around by the action of the plough for a considerable time. A number of finds were recovered during cleaning of this layer, including a fibula brooch and a coin. This layer was not excavated, except in a very small slot, which revealed a grey clay surface beneath it which may be similar to the surfaces (1423) in Trench 1 and (1412) in Trench 2.

Trench 3 was not excavated fully, but the presence of the robber trench for the eastern wall within the trench, fulfilled the aim of establishing the overall dimensions of the milecastle.

The Wall westwards

Immediately to the west of the site of milecastle 78 is a small, deep north-south drainage dyke, which has been canalised for drainage, and seems formerly to have been stone lined. It is probable that robbed Roman stone has been used for this as many sandstone blocks within the bed, both up- and down-stream of the milecastle have the typical tapered shape of Roman facing stones. Given that this dyke transected the line of the Wall, it was decided to attempt to locate it in section. Undergrowth was cleared, and part of the eastern edge was cleaned back slightly. This revealed the foundations of the stone Wall, comprising two large flagstones, of which the north facing stone was 90mm thick and 710mm deep. Above this was a mass of beach cobbles and sandstone pieces, which clearly comprised either intact core work or robber trench filling. The importance of this observation was that it enabled the true line of the Wall, and thus the north wall of the milecastle, to be established (Fig 6).

5.2 Interpretation

The milecastle is similar in shape to milecastle 79 (Richmond and Gillam 1952), though the dimensions differ slightly. The interpretation advanced for 79, that it was a long axis milecastle, is even more applicable here, as 79 measured 22.09m square externally, whereas milecastle 78 measures approximately 20m east-west and 25m north-south (Fig 6: the approximation is within 0.5m each way and is due to uncertainty in the absence of some wall faces). The similarity in the form of the corners, which are rounded on the outside and square on the inside, may suggest that the milecastles 78 and 79 may have been built by the same legion, and the similarity in corner form to milecastles 37 (Housesteads), 39 (Castle Nick), and 42 (Cawfields) may tentatively indicate that the

same legion was responsible for stone milecastles 78 and 79 as for this group. Milecastle 79 was built on a high sea-bank. Though no such provision was necessary at 78, the natural wetness of the ground seems to have been compensated for by laying clay and gravelly deposits (1427) and (1424) to a depth of 280-300mm. These deposits overlay the inner offset of the milecastle wall foundation, and were therefore emplaced either during or after the construction of the milecastle walls.

6. Conclusions

6.1 *Original aims*

All of the aims were met. The walls and interior surfaces of the milecastle were exposed with no disturbance of archaeological deposits except for the excavation of the fills of later excavation or robber trenches (M78.1). The interior surfaces of the milecastle lie 0.17m below the modern surface in Trench 2, and some 0.33m deep in Trench 1, where the deeper overburden is probably due to proximity to a field boundary, and burial under a plough headland (M78.2). The plough has obviously damaged the milecastle. The evidence for this is the presence of ploughed-up stones in the hedge boundary, and Roman finds recovered from the lower ploughsoil (1418). Having said this, the remains lie at a sufficient depth below the plough zone for no threat currently to exist to either the walls or intact internal surfaces (M78.3).

The additional aim of establishing the size of the milecastle was fortuitously realised due to the location of Trench 2 over the corner of the milecastle (see 5.2 above)

6.2 *Recommendations*

It seems unlikely that the present regime of intermittent ploughing for pasture improvement will cause the intact fabric of the milecastle further harm in the long term. The stones cast up by the plough are derived from the upper fill of robber trenches. No change to the current land-use is therefore required. Any change in land use, such as deeper ploughing, however, would not be desirable as it would result in the attrition of some of the intact internal surfaces, and it is therefore recommended that the status quo continues.

Evaluation by: Helen Moore

Date: September 2000

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Date: 25th May 2001

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Enclosed figures and plans

- Figure 1 Location of the site on Hadrian's Wall
- Figure 2 Location of milecastle and trenches in relation modern mapping
- Figure 3 Plan of Trench 1 on completion of excavation
- Figure 4 Plan of Trench 2 on completion of excavation
- Figure 5 Plan of Trench 3 on completion of excavation

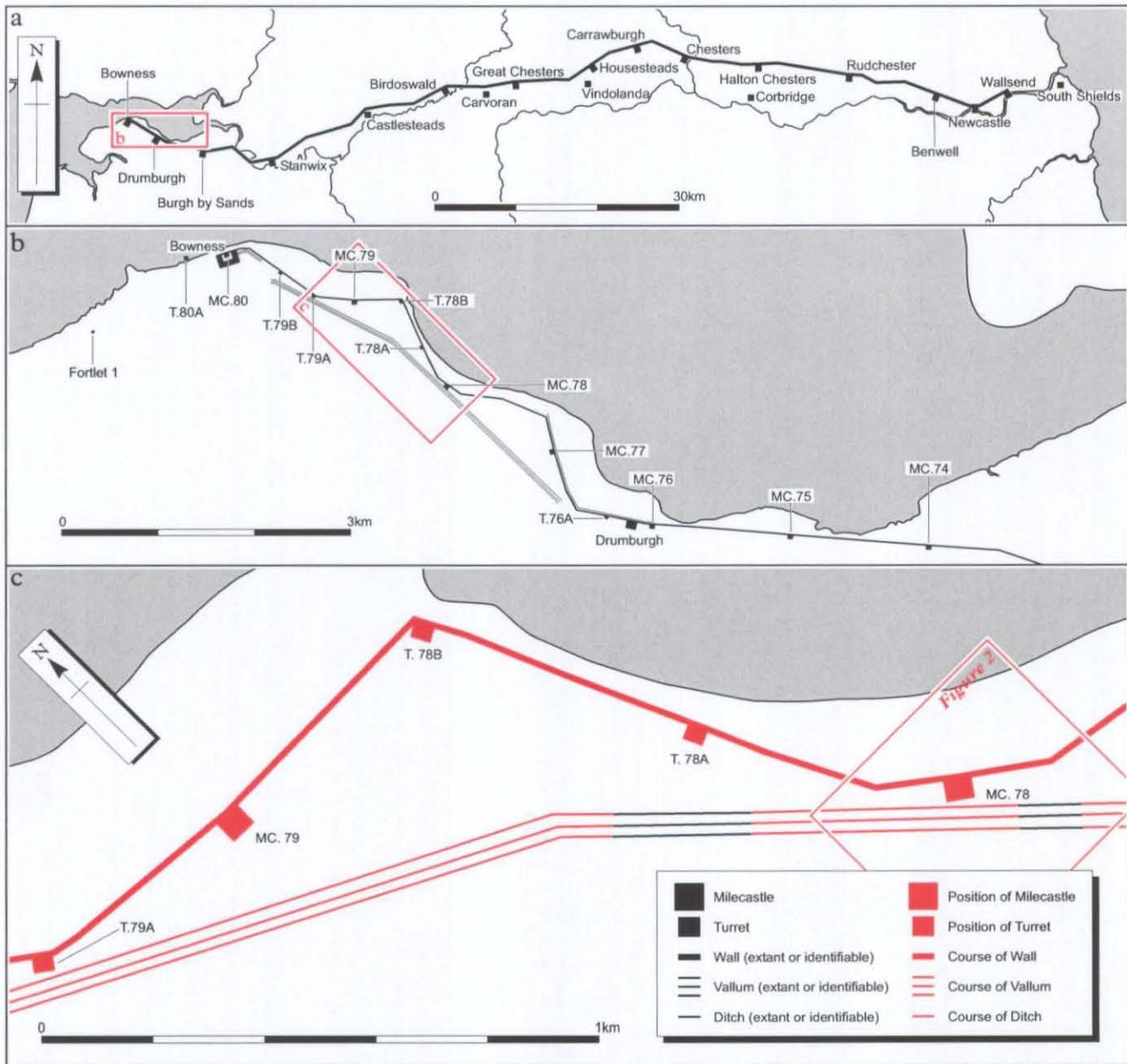
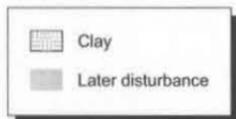
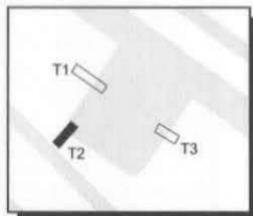


Figure 1 Location of Milecastle 78 on Hadrian's Wall







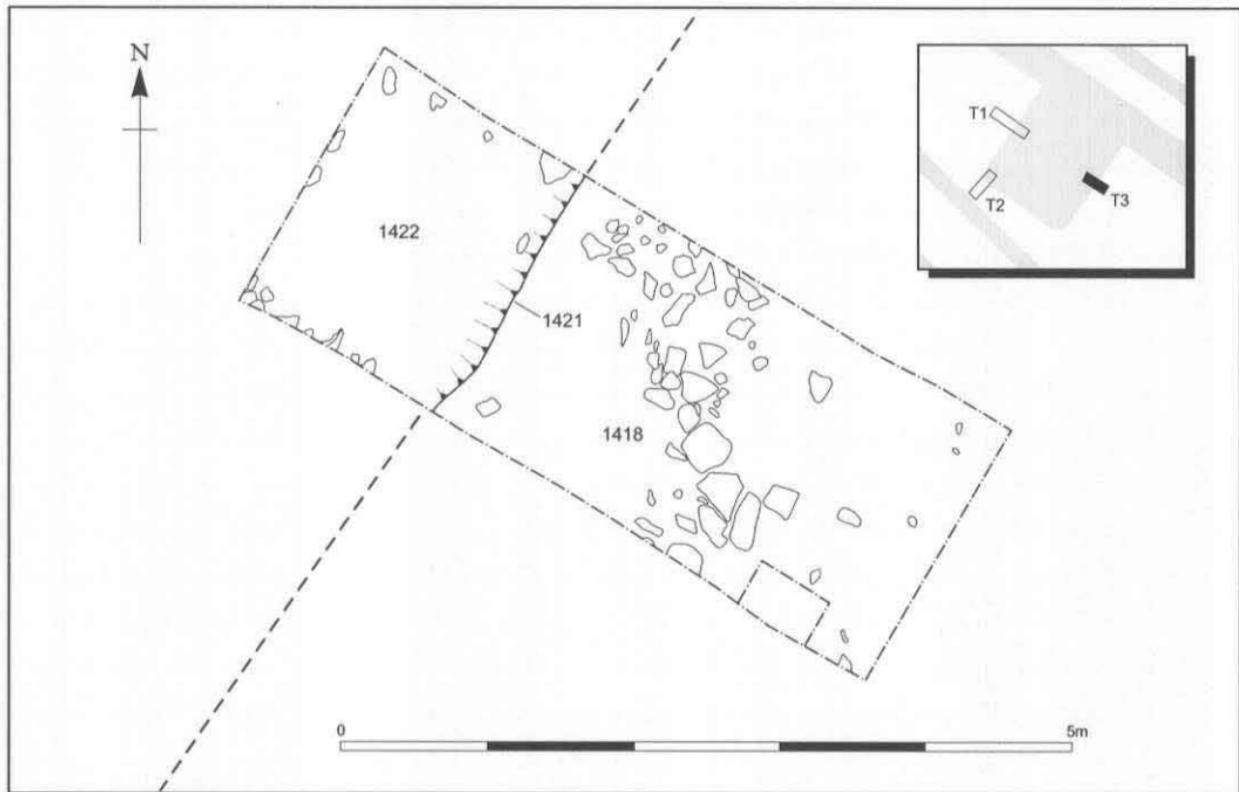


Figure 5
Plan of Trench 3

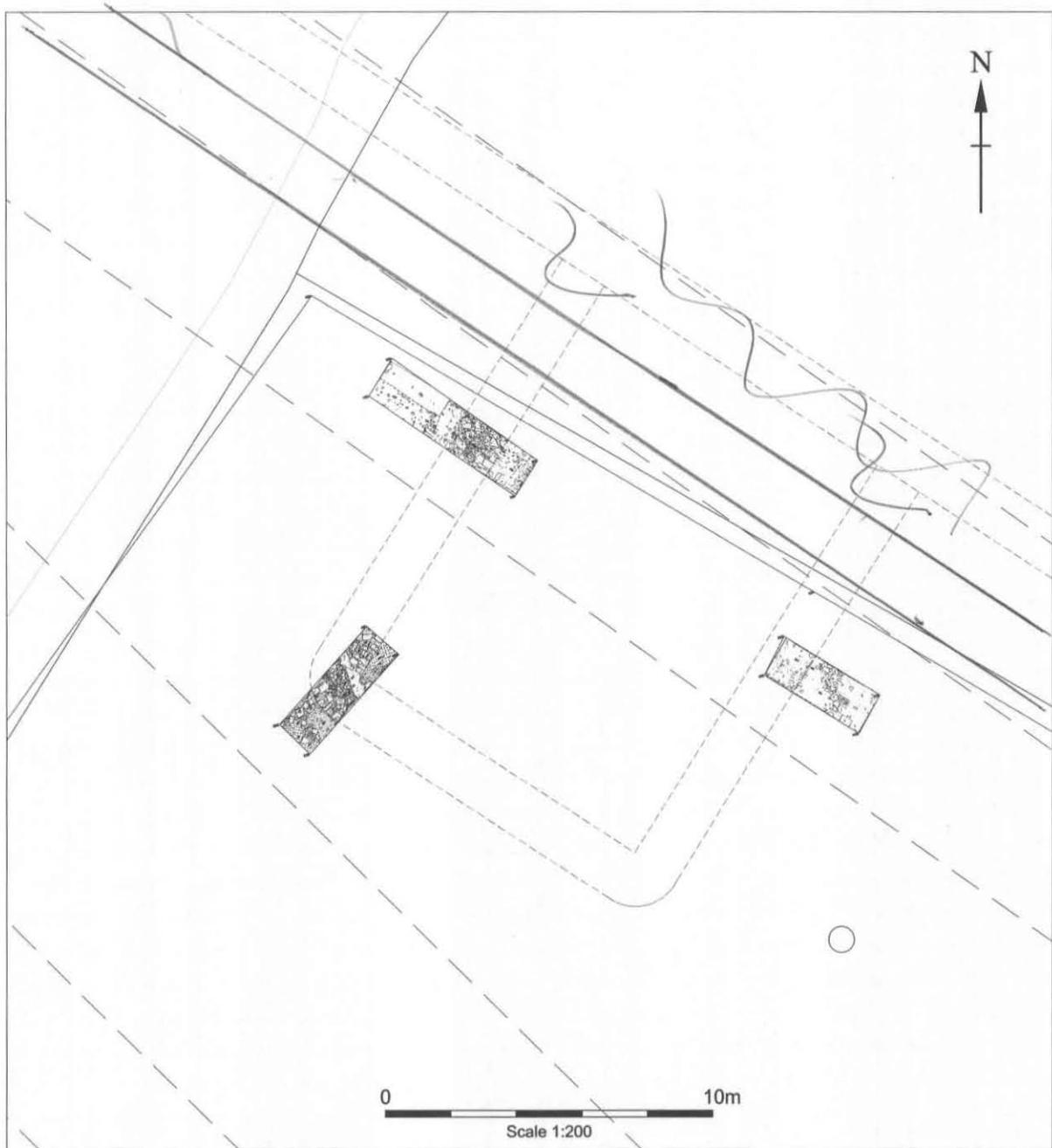


Figure 6 Trenches 1,2 & 3 and reconstructed outline of Milecastle 78