Archaeological Evaluation of land beside Water's Clough, Castleshaw

June 2016

Friends of Castleshaw Roman Forts volunteers undertaking test pitting

Report written by Norman Redhead and Phil Barrett
Friends of Castleshaw Roman Forts

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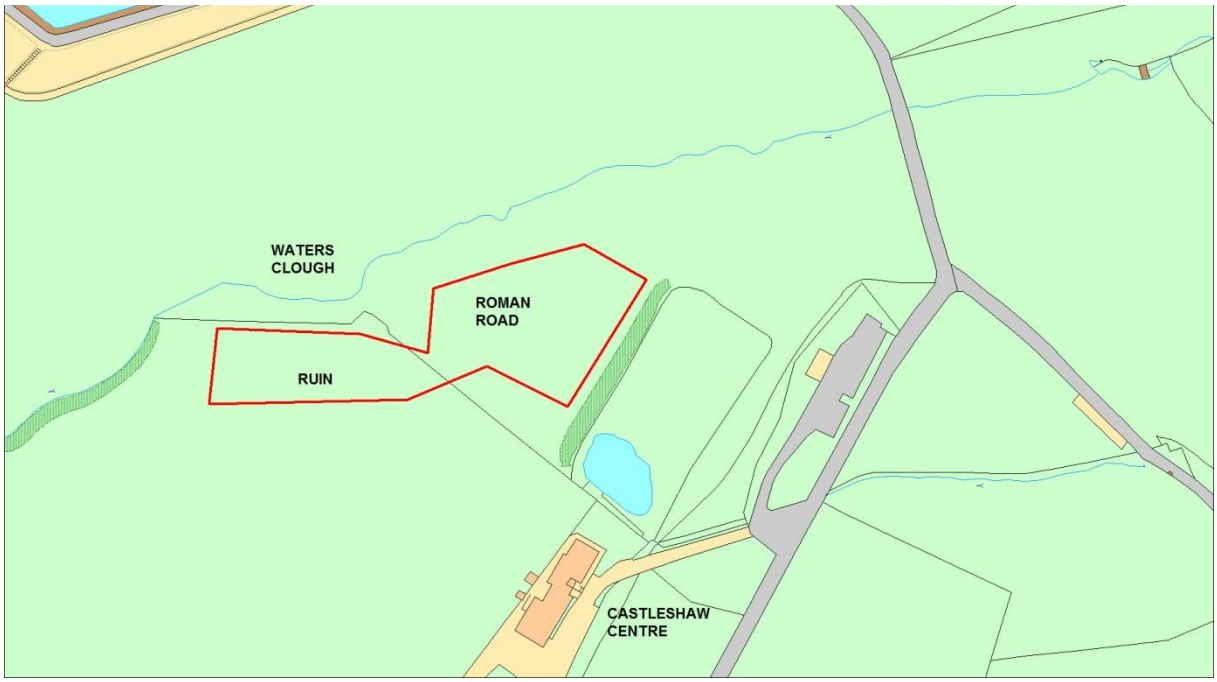
Background

As part of the Castleshaw Roman Forts Hinterland Survey, the Friends of Castleshaw Roman Forts carried out an archaeological evaluation of an area of land adjacent to the south bank of Waters Clough and to the north-west of the Castleshaw Centre, Waterworks Lane, Castleshaw, located at SD99470921. The land is owned by United Utilities and farmed by David Hirst.

The project had two aims. The first was to undertake a geophysical survey across the projected line of the Chester to York trans-Pennine Roman road as it approaches Waters Clough before climbing up to Castleshaw Roman fort some 400 metres to the north-east. The second was to record stone ruins representing a former building and to undertake archaeological test pitting to provide a better understanding of the function, date, extent, potential and archaeological significance of the remains. The geophysical survey also incorporated the ruined building site.



Location of investigation area

The geophysical survey was led and reported on by Phil Barrett, using the Friends' new resistivity meter. Investigations of the ruin were led and reported on by Norman Redhead.

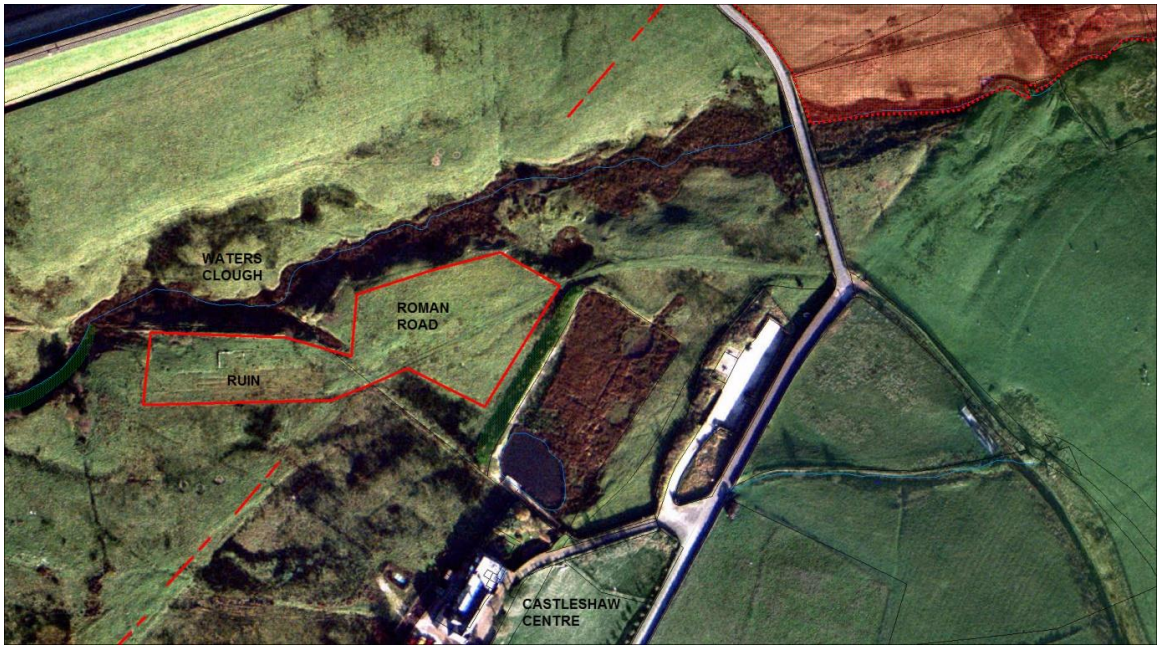
This report can be accessed as a pdf on the Friends of Castleshaw Roman Forts website: www.castleshawarchaeology.co.uk .

Geophysical survey

John Pitman, Terence Andrews and Phil Barrett use the Friends' recently acquired Frobisher Resistivity Meter.

Objective

The area of interest is the area marked 'ROMAN ROAD' on the late 1990s aerial photograph below. The road is believed to enter the site from the south-west and pass through the marked area before crossing Waters Clough and then heading up to the Roman Fort above the north-east corner of the of the photograph (north is top of the photo).



The agger (raised causeway) of the Roman road can be seen entering the site at the bottom left. The Scheduled area incorporating Daycroft Field to the south of the forts is the red-shaded area at the top right side of the photograph.

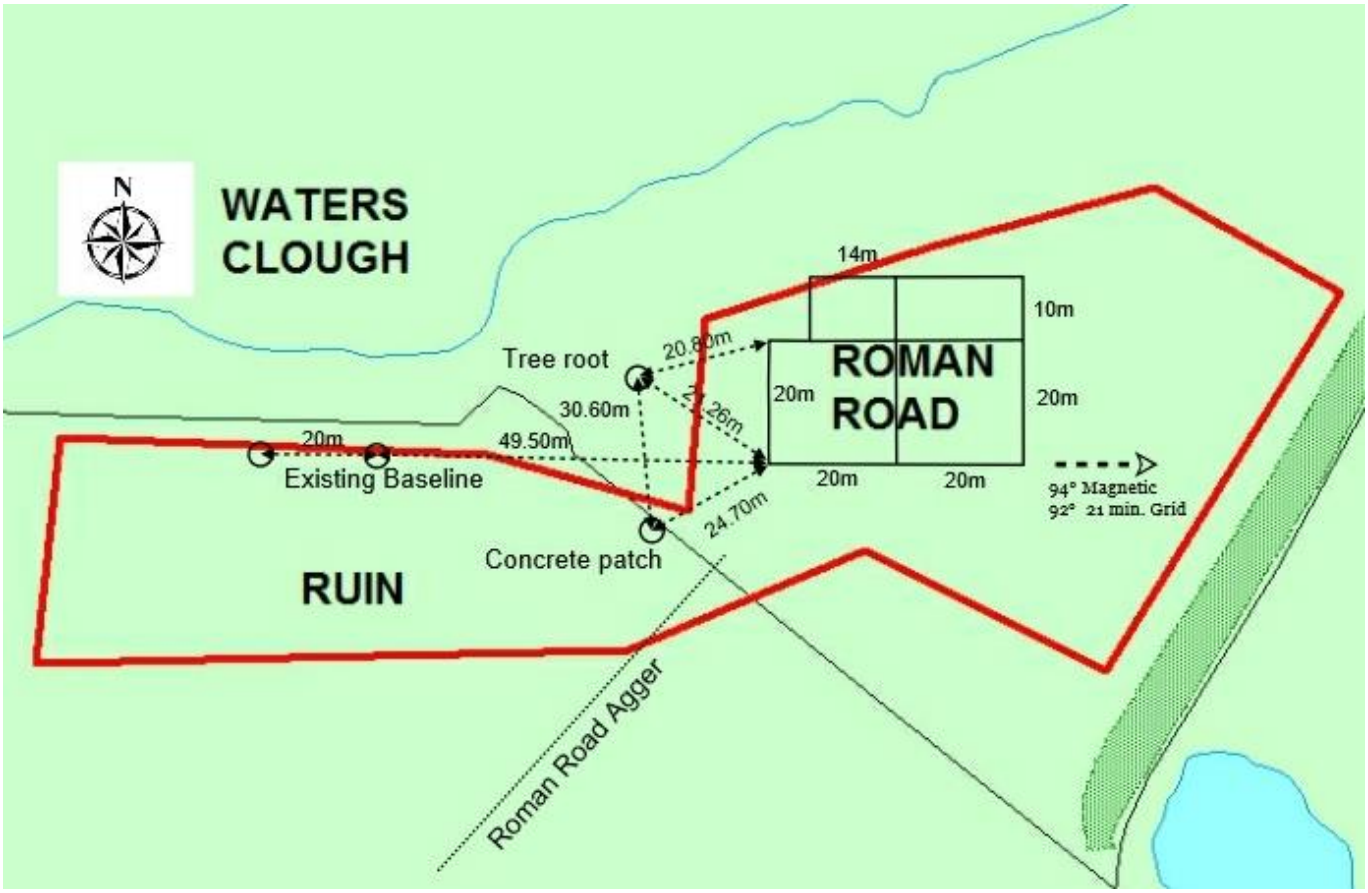
It is not known exactly where the road approaches Waters Clough or how the road crossed the stream and it was hoped that a geophysical survey could aid understanding of the road's alignment and inform future investigations.

This is the view across the site towards the Roman fort (which is directly above the single tree with the telegraph post in front of it in the upper left of the photograph.)

This is the view from the edge of Waters Clough towards Delph along the line of the Roman Road. The land in the immediate foreground being the possible road agger.

Methodology

Our “R.M. Frobisher TAR3 Resistivity meter” was used to survey the area (0.5 m electrode separation) and the grids were marked out using an extension to the base line used in the test pitting of the ruin area, which was being excavated at the same time as the investigation of the Roman Road area.



Two 20 m squares were initially surveyed, followed by a 20 x 10 m and a 14 x 10 m (this one truncated as the slope down to the Clough made surveying difficult). The base line of the 20m squares was taken from the extension of the baseline grid used for the excavation of the ruin area. Readings were taken at one metre intervals in a zig zag pattern.

The area we were surveying seemed somewhat lacking in fixed features to tie into our grid but eventually a vertical tree root adjacent to another tree to the west of our survey area (the tree itself being nothing close to vertical!) was selected. Another fixed feature used was a patch of concrete set into the ground adjacent to an early period earth bank field boundary that was running south-easterly across the site (the line above running from the centre towards the pond).

A ‘heart shaped’ pebble was selected in the patch of concrete and marked appropriately.

The Tree root used as a reference point.

Approximate GPS position of the tree root (SD 99519 09244).

The patch of concrete, the field boundary and the Castleshaw Centre.

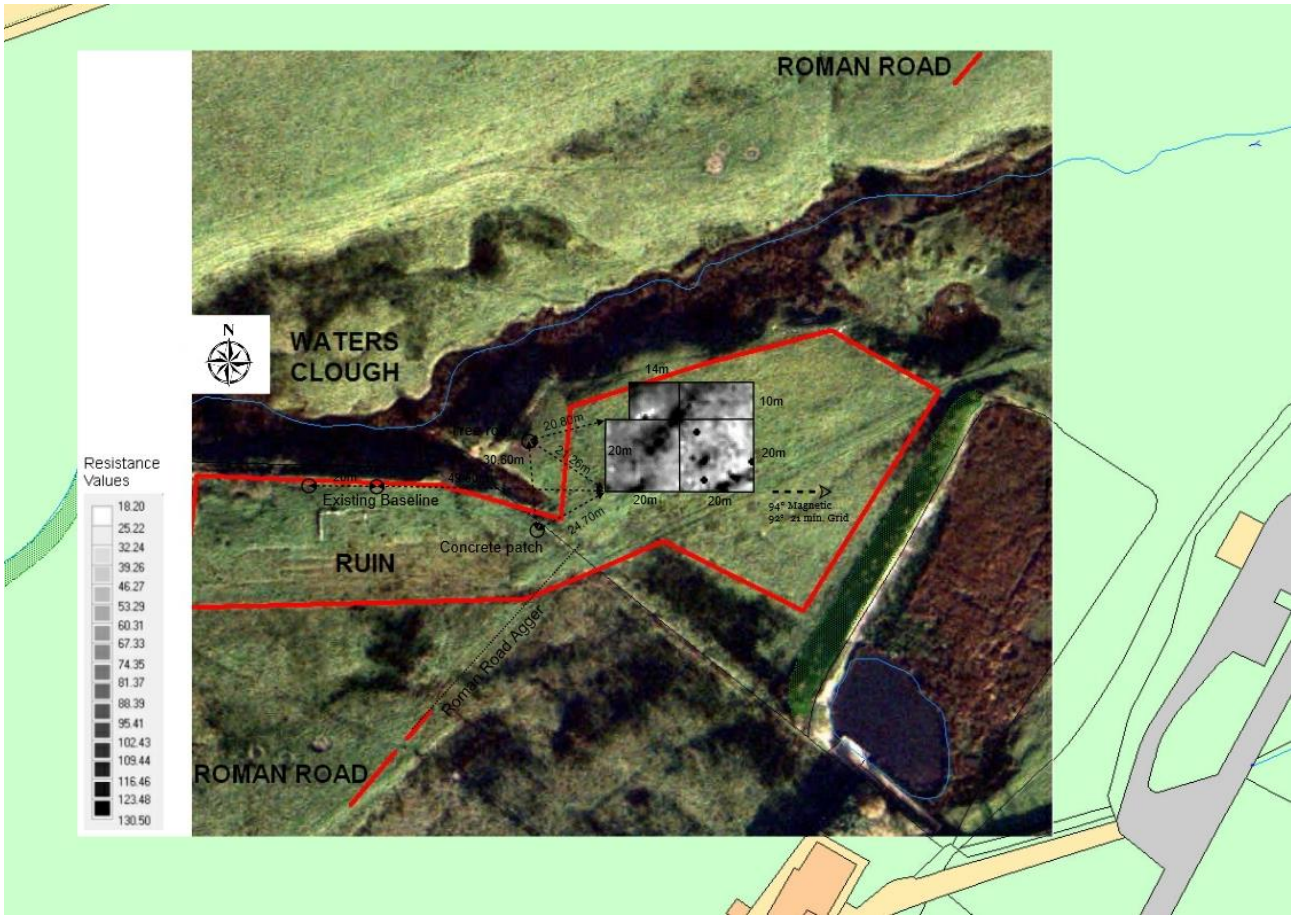
The ‘heart shaped pebble’ within the concrete used as the second reference point (SD 99535 09214).

The resulting geophysical data was plotted using the Snuffler Geophysics software (http://www.sussexarch.org.uk/geophys/snuffler.html)

This software provides a number of ways to display the data but for clarity of the results I have only included images which most clearly demonstrate the results.

Minimal data filtering was applied (Smoothing of the image was provided by horizontal and vertical interpolation)

Combined Image

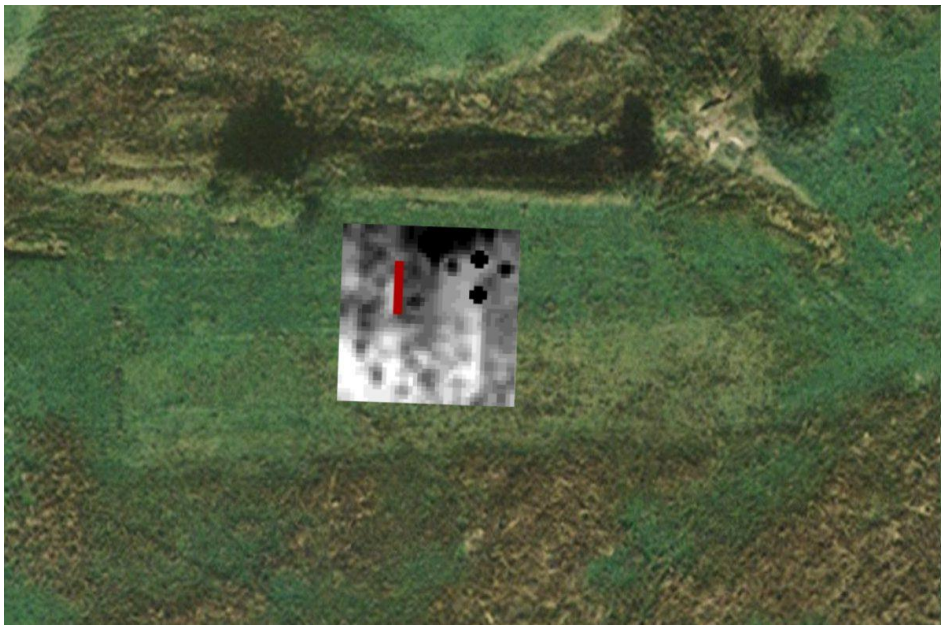


Geophysical survey of the ‘Ruin’ area

Prior to test pitting in the area containing the ruin, a Resistivity survey was initiated but unfortunately, due to technical problems, only one 20 x 20 m square was surveyed and this is summarised below.

Again, using the same baseline as the test pitting excavation, the following results were produced.

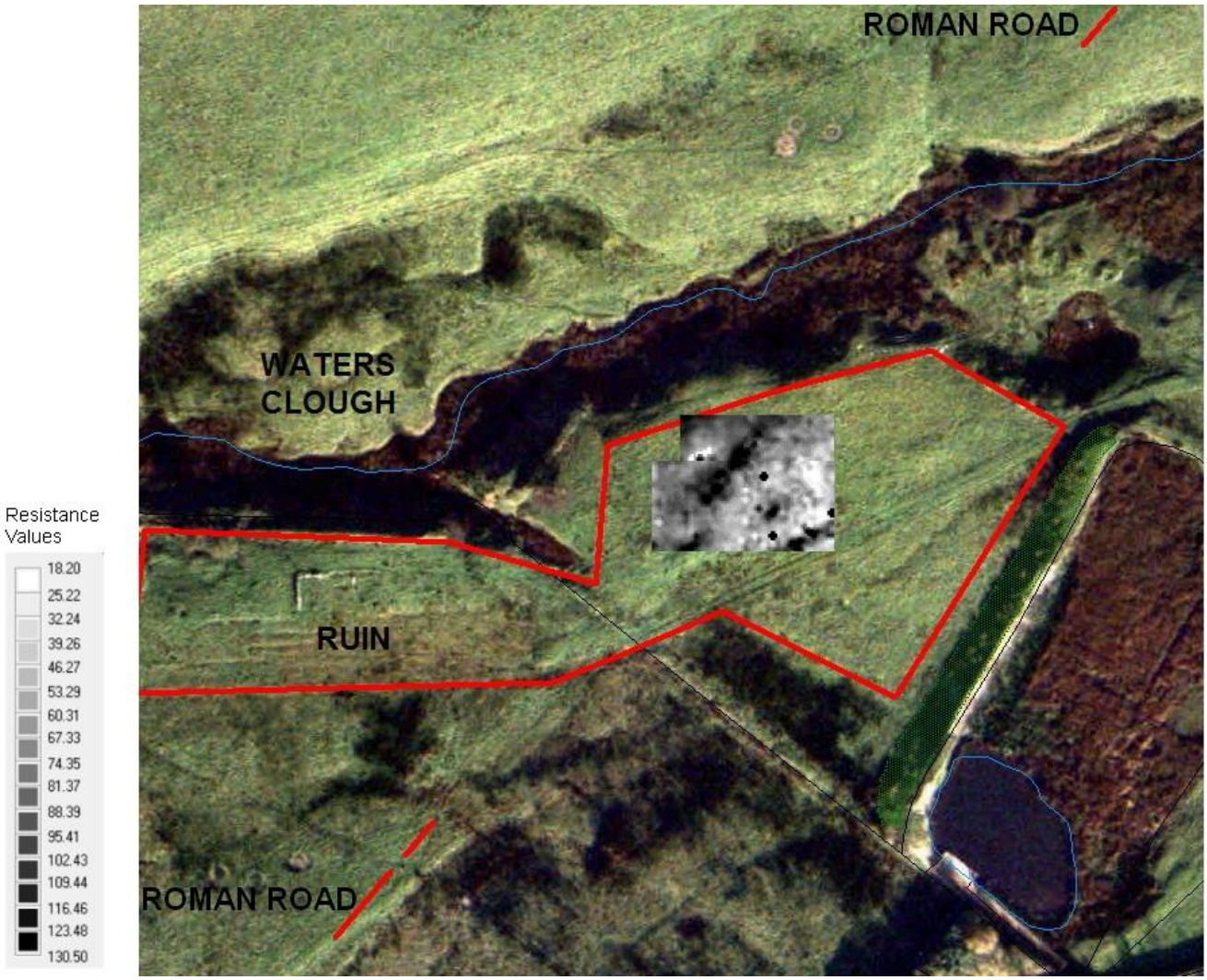
The visible walls of the ruin are the lines in the centre of the image (north is at the top).

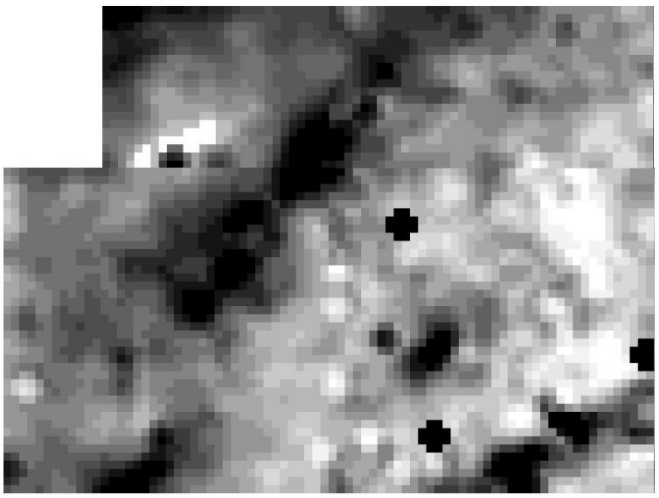


These results do seem to show possible walls extending southward from the visible ruin remains as well as possible walls in an easterly direction from the southern end of the longer visible (i.e. above surface) wall.

The red line is the area of no readings due to the wall preventing the probes being placed in the soil. The black crosses again being high resistances due to rocks/walls immediately below the ground surface.

Summary Results





The above image shows the results overlaid on the landscape while the image to the left is an enlargement of the survey area.

On the left the darker area of the image shows higher resistance, indicating a more compact area in the soil/subsoil. The small ‘crosses’ indicate a single

‘high’ reading and may be single rocks/boulders immediately below the surface. The linear dark feature bottom left to top centre is on the line of the Roman road while the linear feature in the bottom right is on the line of a more modern track. The area of high reading below right of the centre has an unknown cause. It can be seen that the resistivity survey has successfully picked up the line of the Roman road as it approaches the clough. The Roman road seems to continue directly to the bank of Waters Clough without deviating earlier to a lower crossing point.

This photograph shows the area where a bridge could possibly have carried the road across the clough, which is around 3 metres beneath the bank.

As can be seen above, the land in the centre does drop down towards the clough with slightly less gradient than the land either side and thus may be the start of a bridging point. It is possible that some land has been lost from here, eroded by stream action or removed by some other means, but this area would certainly repay further archaeological investigation to look for evidence of a timber or stone bridge structure.

Exploring the archaeological remains of the ruined stone building

Methodology

The site was evaluated through test pitting which consisted of one metre square sample excavations. A written description and photographic record was made of each test pit and its position recorded. Levels were taken of significant archaeological deposits, top and bottom of test pits. Finds were cleaned and described. This report sets out the results of the test pitting and a copy has been lodged with the Greater Manchester Historic Environment Record and put onto the Friends of Castleshaw Roman Forts website. An Oasis record form has also been created.

The investigations were undertaken by a mixture of experienced and inexperienced volunteers drawn from the Friends of Castleshaw Roman Forts, under the directorship of Norman Redhead. A risk assessment was prepared and agreed with the land owner. All test pits were excavated and backfilled in one day so that no holes were left overnight.

Looking south-west to the ruined building site, with the team just starting to excavate test pits.

The north-west corner of the ruin, showing the nature of stone coursing and thickness of the walls. The gritstone blocks are crudely dressed and in places larger stones extend the full width of the wall, as in the example top right of the photo.

The western wall of the ruin is the longest and best preserved section.

This section of the north wall has a large stone on the right which defines a former entrance into a corridor.

This test pit shows the inner face of the west wall, with a stepped foundation course but unfortunately the floor has been removed.

Mark and Jack excavating a test pit which has revealed the buried east wall.

The same test pit after the wall and surrounding natural is fully exposed. The wall is exactly 50 cm wide and well made in coursed gritstone bounded with a hard, dark orange-yellow gritty mortar. It only survives to one course high at this point.

A broken flint blade of possible Mesolithic date was found in the top of the grey silty clay deposit to the right (east) of the wall in the test pit above. The material is translucent brown flint with no presence of re-touching.

Looking north-west to the ruin with the east wall exposed in two test pits on the right.

Sonia exposing a robbed-out section of the northern wall, with natural clay in the foreground on the outside of the building.

Close-up of Sonia's test pit. The surviving section of wall foundation on the left shows the dark orange-yellow mortar.

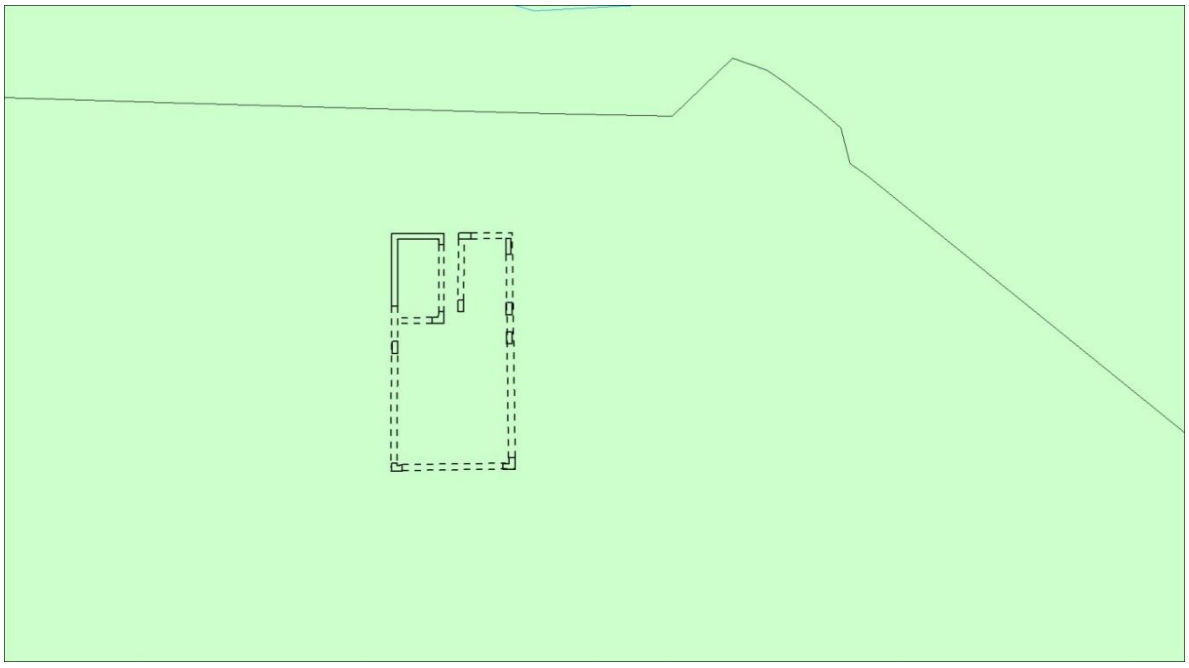
Test pit showing the south-east corner of the building. The figures in the distance are standing beside a west wall test pit.

Test pit showing the south-west corner of the building.

Running west from the south-west corner of the building was this section of walling, denoting a narrow and more crudely built wall. It is possible that this forms part of a compound or enclosure for stock control.

Detail of the wall shown above. On the right side can be seen the remains of a cobbled yard.

Test trenching within the building showed internal walls relating to a corridor and interior rooms/chambers. The walls are very similar in construction to the exterior walls and are again 50 cm wide, suggesting they are all of one build. The wall foundation on the left is in line with the spur from the north wall at the top of the photo where there was an entrance.



Plan of exposed remains, either visible and upstanding or revealed by test pitting. Broken lines show wall line projections.

Conclusion

The Friends volunteers had spent Sunday 26th June investigating the Roman road alignment and a ruin beside Waters Clough behind the Castleshaw Centre. This formed part of the continuing Castleshaw Roman Forts Hinterland Survey. The Friends used the newly acquired Resistivity Meter to survey across the Roman road alignment as it approaches a crossing over Waters Clough. There were a few technical teething problems but the end result was excellent, showing the road line as a strong, high resistance reading with some other high resistance features nearby. Thanks to Phil Barrett for leading on this.

The team also investigated the extent and character of several low, ruined walls sited on the high bank overlooking the clough. The extant walls were plotted in and test pitting was used to determine the plan form. It was found that the structure was a substantial building forming a rectangle of 20 x 10 metres with well-made gritstone walls in a hard, dark orange-yellow gritty mortar. There was evidence for internal wall divisions but no flooring survived nor was there any dating evidence. A coarser, narrower wall went out from the south-west corner of the building and may have enclosed a cobbled yard area. The aerial photograph above (dating to the late 1990s), shows the plot of the building foundations overlaid; a long narrow platform appears to exist either side of the building. Google Earth images suggest faint wall lines with internal divisions. This may indicate that these are stock enclosures and perhaps the building was a large animal barn with associates yards.

Given that the building is not shown on any historic maps it must pre-date the earliest detailed map of 1822. Unfortunately, no clear dating evidence was found during the evaluation. Further site investigations would help to provide artifactual dating evidence as well as enable a better understanding of the building's function, internal layout, and the nature and extent of associated walls and yards.

At the moment we can only speculate on age and function; however, the quality of construction suggests a high status builder. Could the building have been constructed for the Cistercian Abbey Grange that controlled the Castleshaw valley from the 12th to 16th centuries?

Acknowledgements

We are indebted to the following Friends of Castleshaw Roman Forts who took part in the test pitting exercise: Mark McNulty, Jack Crossley, Steve Milne, Michael Lloyd, Jim Grady, Sonia Allen.

Phil Barrett was assisted in the resistivity survey by Jane Neild, Terence Andrews (RM Frobisher Ltd), and members of Tameside Archaeology Society (John Pitman, Greta Ward, and Keith Rigby).