

Archaeological Evaluation of the Ruin beside Water's Clough, Castleshaw, Saddleworth

2017



Friends of Castleshaw Roman Forts volunteers undertaking test pitting

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for the Friends of Castleshaw Roman Forts

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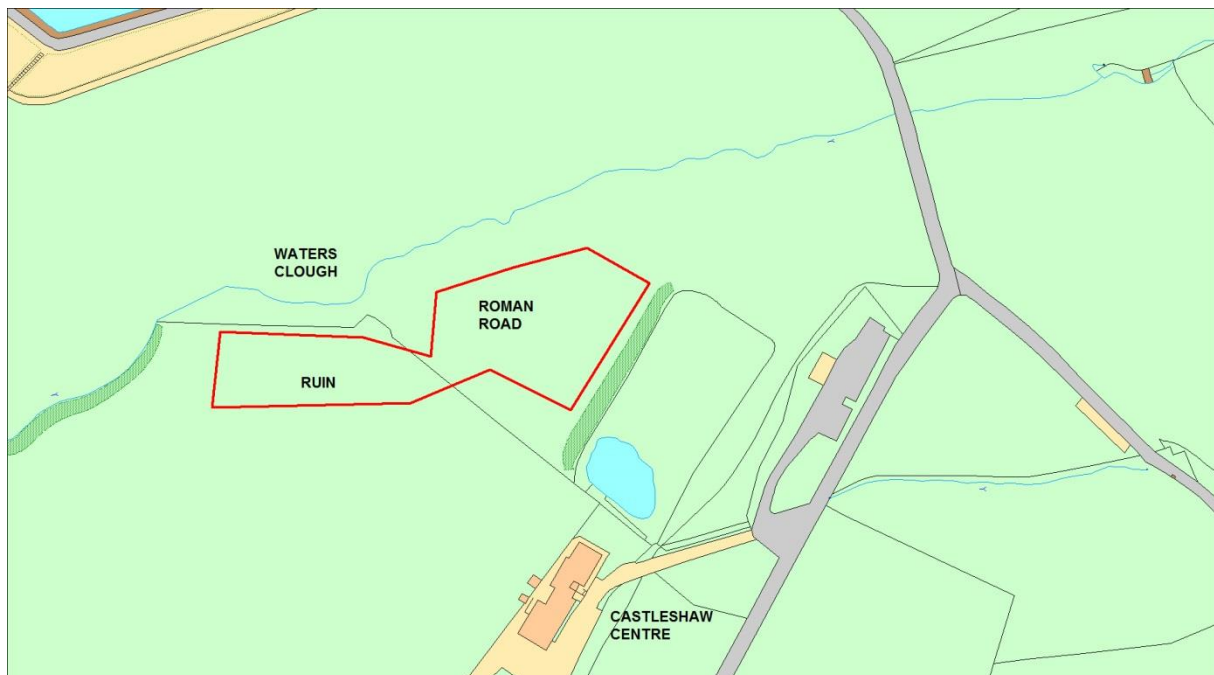
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Background

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, near Delph, Saddleworth, located at SD99470921. The land is owned by United Utilities and farmed by David Hirst.

In 2016 the Friends investigated the extent and character of two low, ruined walls sited on the high bank overlooking Waters Clough (Redhead 2016). The extant walls were surveyed and test pits excavated to determine the plan form. It was found that the walls represented a fragment of a much larger structure forming a rectangle of 20 x 10 metres with well-made gritstone walls set 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. Given that the building is not shown on any historic maps it must pre-date the earliest map of 1822, or have been overlooked by cartographers. 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.

The 2017 programme of evaluation comprised four days of test pitting and digging small evaluation trenches to build on the test pitting carried out in 2016. This work was undertaken on 13th May, 29th May, 16th July and the 28th August. The 13th May evaluation saw only one piece of excavation at the 'ruin' site as the work that day was focused on the adjacent Roman road (subject of a separate evaluation report). The other three days concentrated on the potential archaeology to the west and east of the visible ruined walls.



Location of investigation area, centred on the 'ruin'

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



The aerial photograph above, dating to the late 1990s, shows the line of walls revealed during the 2016 investigations. These depict a structure measuring 20 by 10 metres aligned on a north to south axis. On either side of the structure can be seen a rectangular area with lines representing potential walls and gullies. The Google Earth picture below shows the same site but looking from just north of the ruin. The key indicates the main features: A = remains of ruined walls beside the bank of Waters Clough with a pronounced earth bank bounding the edge of the slope down to the clough, B = rectangular platform of possible western range, C = rectangular platform of possible eastern range, D = central range incorporating the ruined walls and showing parallel lines, with the southern edge of the central range defined by a vegetation change, E = the line of the Roman road which appears to be partly cut into by the eastern range building platform (C).



Results for 13th May 2017



Cliff, Steve and Mike excavate a section against the northernmost ruined wall

Test pits were excavated either side of the northern wall of the ruin to examine the depth of the wall foundation and evidence for a floor surface. The external test pit revealed two courses of stone representing a wall depth at this point of 40 cm. A deposit of mid-grey silty clay loam with frequent pieces of mid orange-yellow mortar was encountered level with the base of the first course of stonework, at a depth of 30 cm beneath the turf line. This deposit was c 15 cm deep against the wall and tapered away from it, being the construction phase material. It was evident that the foundation trench was cut very neatly and very close to the foundation stonework. The interior test pit was located next to an internal return wall. This found natural clay at a shallow depth of around 10 cm, with no evidence for a floor. The internal wall butted up against the external but was of similar construction. The natural clay is an excellent material for building on. The foundations were robust and well-constructed, which is consistent with the high quality of walling seen elsewhere in the structure.



External wall test pit (left, looking south) and internal test pit (right, looking west).

At the end of the day, the digging team took the opportunity to explore the land immediately to the west of the ruined walls. It was very apparent that other potential walls existed in this area, along with the lines of what appeared to be linear depressions. The aerial photographs indicate a rectangular platform and this was evident on the ground as a flat area defined by low linear mounds interpreted as grassed-over wall foundations. Clearly there is more to the site than the central structure of 20 metres by 10 metres defined in our test pitting last year.

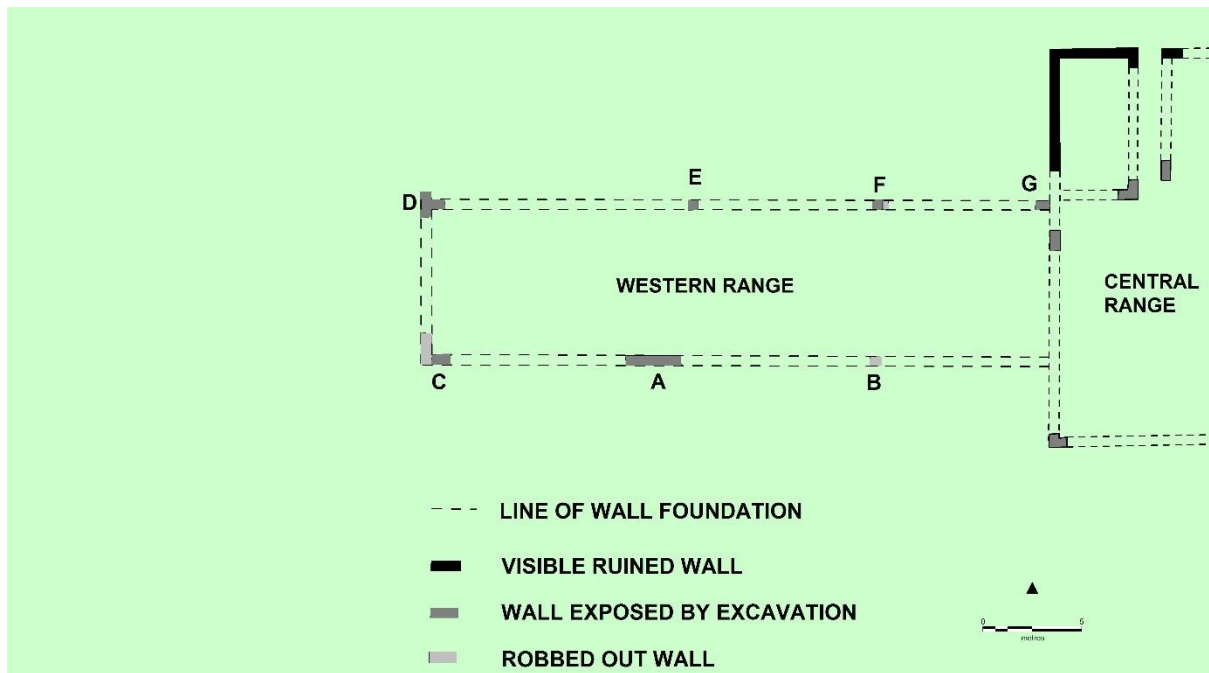


Left to right: Sue, Mark, Rob and Eleanor stand on the possible wall lines for a structure west of the ruin.

Results for 29th May 2017: the West Range



Commencement of test pitting on the site of the west range, looking east. The central range's upstanding walls are in the background beyond the figure in yellow.



7 test pits and trenches were excavated to define the extent of the structure to the west of the central range. These are denoted by letters A to G on the plan above and described below.

A 3 metre long trench (A) was opened up across one of the most prominent grassed-over wall bases along the western wall line of the putative structure, around 20 metres from the western wall of the central range. This was found to have wall remains stepping down from two courses in height to just a robber trench on the east side where all stonework had been removed. The surviving wall section was consistent with that found in the central structure in the 2016 evaluation. It was 50 cm wide comprising roughly dressed facing stones with a narrow rubble core, set in a dark orange-yellow mortar.



Well-preserved section of southern wall (A), looking south, showing wall construction with the dark orange-yellow mortar visible.

A narrow test pit was excavated 10 metres east of the well-preserved section of wall foundation. Here only the vestiges of the wall foundation trench survived, with all the stone work having been robbed out.



Robbed-out section of southern wall line (B), with only the mortar surviving within the foundation trench cut into natural yellow clay. Looking east. Scale = 1 metre.

The south-west corner of the western range was found at 31.8 metres from the central range's western wall. Evidence for the corner was found in a trench that exposed well-preserved foundations of the southern wall, similar to that shown above, joining a robber trench representing the return wall for the western gable. As seen elsewhere, there was no evidence for floor surfaces on the interior with natural light white-yellow clay being exposed at very shallow levels beneath the turf line.



South-west corner of western range (C), with southern wall base evident at the top, and the robbed-out western wall on right with a few disturbed stones left in the trench. Looking south.

The north-west corner of the trench was also investigated. This was better preserved with both the western gable wall and northern return wall having coursed stonework forming a level surface. Again, the construction was consistent with that seen elsewhere in terms of

the wall being 50 cm wide and bonded with dark orange-yellow mortar. The western gable wall extended beyond the junction with the northern wall. This suggests either a corner buttress or the continuation of the wall northwards beyond the western range. Excavation of this area was limited by time constraints and the presence of apparent 20th century activity in the form of spreads of concrete. It is not clear why the concrete is at this location. It did not overly the earlier stone building foundation. Beyond this north-west corner of the west range the land drops away to a ford across the stream (Waters Clough) and a possible trackway is apparent. This is an area that would repay further investigation.



The north-west corner foundation of the western range (D), looking south, showing an offset (bottom of photo) for a possible corner buttress. 20th century concrete straddles the early walls



Looking east from the north-west corner of the west range. The photographic poles show the line of the north wall running nearly 32 metres to the central range. The figures on the right are working on the southern wall of the west range.

A test pit was excavated half way along the line of the northern wall at (E), around 19 metres from the north-west corner. Here the wall foundation was well-preserved, with natural yellow clay on either side – as can be seen in the photograph below (looking west).



Between this test pit and the central range, a further exploratory test pit was excavated diagonally across the line of the wall (F). This revealed a two-course deep section of wall foundation in the western part of the test pit but with the wall having been removed/robbed out in the eastern part.



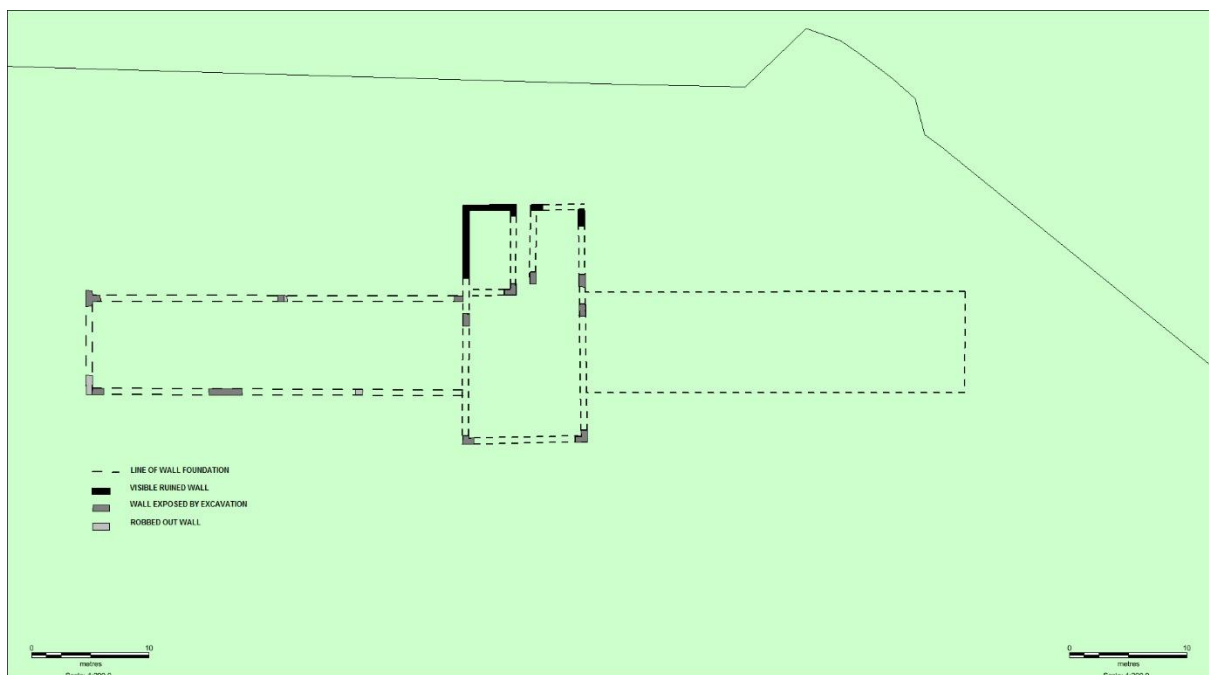
Test pit across north wall of the western range showing stepped survival of footings (F) with, on the right, the figures standing on the far north-west corner of the building. Looking west.

Finally, a small area was opened up against the western wall of the central range to examine where the northern wall should join it (G). As can be seen below, there was evidence for the wall here but only in the form of pieces of mortar showing where stone footings had been

located. The wall remnants appeared to abut the footings of the eastern wall of the central range (visible in the photograph below under the 1 metre photo scale, looking north).



The investigations of 29th May demonstrated the existence of a very substantial western range measuring 31.8 metres long by 8.4 metres wide. The extent of the excavated and known remains are plotted below. It appeared from analysis of aerial photographs, together with the platform visible on the ground, that there was an eastern range of similar proportions. This became the focus of the final two days of investigation.



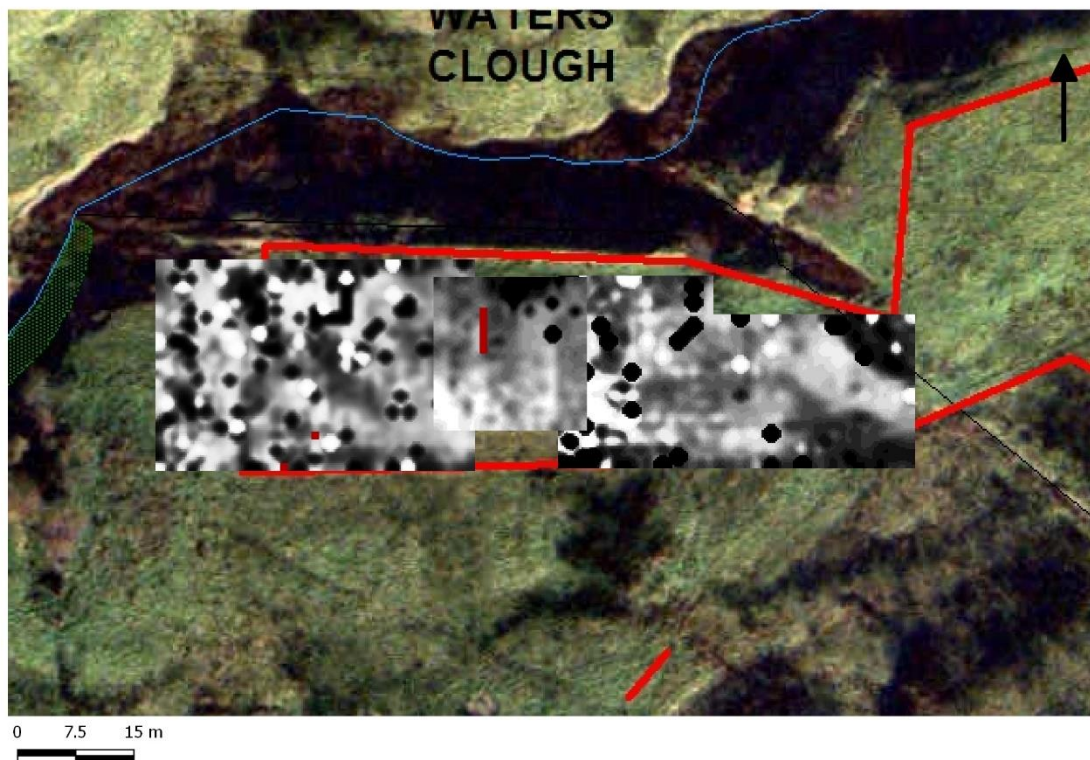
Plan showing possible east range (dashed line) to right of the central structure

Results for 16th July: the East Range



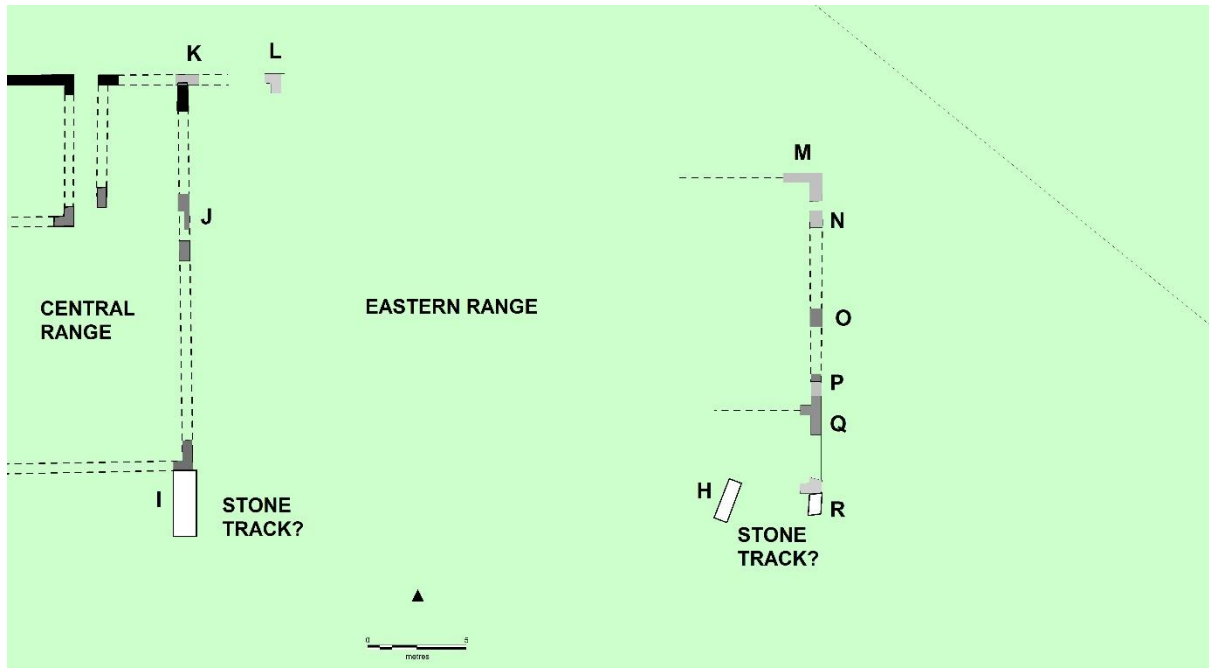
Nick and Gill excavate a test pit across the eastern range gable wall, with the measuring tape on the left showing the full length of the building. The figures in the background are at the central range, with Waters Clough to the right. The overgrown nature of the site made excavation and recording more challenging. Looking west.

Prior to digging test pits across the east range, the Friends also undertook a resistivity survey across the full footprint of the structure with the plotted results shown below.



The short vertical, central red line represents the visible section of ruined wall on the western side of the central range. The survey clearly shows wall lines for the building, some of which had been proven through site excavation, but also including apparent internal divisions. Other features show up as well, such as the line of the earthwork bank angling across the top right edge of the survey plot. Of particular note is a linear anomaly running alongside but just outside the southern wall of the building range. The surveyors, Phil and Jane, noted that the probes encountered a hard, stony surface just under the turf for a considerable distance along the southern side of the building leading right up to the Roman road to the east.

In all, 8 test pits and trenches were dug to explore the site of the proposed eastern range and ancillary features. These are shown as letters H to R below.



A 2 metre by 1 metre trench (H) was excavated close to the Roman road to determine its character and how it relates to the eastern range of the building. The excavation revealed a solid surface of gritstone, with a mix of medium, angular flat-laid stones and smaller metalling. No finds came from this surface and it was assumed to be part of the Roman road, being similar to examples excavated at the Roman fort site.

A further trench was excavated just south of, and adjacent to, the southern wall of the central range (I). This trench was only 0.5m wide and 2 metres long. It revealed a rough stone surface made of angular medium to large gritstones, with a kerb apparent on the southern side of the trench forming an edge with soft, rushy vegetation. From within the fill of a linear depression in the stone surface came two sherds of Pennine Gritty Ware. These are the first datable, stratified finds from the site of the building. They can be dated to the later medieval period, ie the 12th to 15th centuries.



Stone surface (H) interpreted as part of the Roman road. Looking west.



Slot excavated across rough stone surface (I) adjacent to the central range southern wall. The kerb can be seen on the left and from the depression just to the right of this came the medieval pottery sherds. Looking west.



The two body sherds of Pennine Gritty Ware

Trench (J) was excavated to look for the northern wall of the east range where it connects to the eastern wall of the central range. No evidence for the wall footing was found, although a spread of dark orange-yellow mortar was evident. However, based on later trenching of the eastern gable wall of the eastern range, it is possible that (J) is positioned too far south. Further exploratory work a little further north of (J) is desirable.



The eastern wall edge of the central range is well defined in trench (J), with a spread of dark orange-yellow mortar visible on the left side of the photograph. Looking west.

Aerial photograph analysis suggested that the extant, ruined wall at the north-east corner of the central range is not actually the corner of the building. A small trench (K) was opened up to clarify this. It found the remains of a wall base running eastwards from the corner, demonstrating that the central range is more complex and extensive than previously thought. The extent of this northern wall should be defined in future investigations.



The trench at (K), looking east. Footings of the northern wall can be seen as mortar and rubble in a grey silt fill.

The main purpose of the investigations on 16th July was to locate and define the east wall of the eastern range, with 4 test pits being excavated. A 1 metre square test pit was dug across the suspected site of the north-east corner of the eastern range (M). This immediately came on to a dense spread of gritstones. These were on edge but closely packed together, as though a section of wall had been pushed over. There was not time to define the edge of the stones or their relationship to the possible building corner.



Stone spread at suggested north-east corner of eastern range (M), looking west.

It was not possible to distinguish a wall foundation so another test pit (N) was excavated 2 metres to the south. This successfully located the site of the east wall, although at this point it had clearly been extensively robbed out with just a few stones and mainly mortar surviving in situ.



Remains of east wall footing exposed in (N), looking east.

At 4 metres south of (N) a much better-preserved wall base was found in the test pit at (O). This was partly 2 courses of stonework and partly 1 course in height, and totally consistent with surviving walls revealed elsewhere being 0.5 metres wide and with a thin rubble core and dark orange-yellow mortar.



Stepped survival of east wall footings in (O), looking west.

The established east wall line was chased 2.5 metres further south of (O) where a test pit at (P) found more remains.



Test pit at (P), looking west and showing the stone footings partial survival with the robbed-out foundation trench on the left side of the test pit filled with grey silt and some patches of dark orange-yellow mortar.

Results from 28th August 2017: East Range



The picture above shows excavation in progress on 28th August, with figures working on the eastern-most wall of the complex on the right and the stony area adjacent to the central range on the left. Trenches I and M were revisited and enlarged, whilst 3 new test pits were dug. Most of the long grass and rushes had been cut since the previous investigation making conditions easier for digging and surveying.

A test pit was dug 5 metres to the east of (K) to follow the robbed-out foundation trench of the north wall, reported from the previous investigations (16th July). The foundation trench was found to be filled with a grey silt, frequent patches of dark orange-yellow mortar and occasional remnant gritstones. This fill of the cut showed clearly against the background of natural white clay. A right-angle return was evident so this might represent the further extent of the northern wall eastwards from the central range.



Test pit at (K), looking east. White natural clay on the inside of the wall angle can be seen bottom right of photo.

At (M) the former test pit was extended to create a 'T' shaped trench to identify the character of the north-east corner of the eastern range. This had been obscured by what appeared to be wall tumble. This material was cleaned and defined and shown to be tumble or deposited stone. There was no evidence for mortar binding the stone work so it did not appear to be collapsed stone wall. One interpretation is that the stones were collected into a pile ready for carting away for use elsewhere, but were never collected. The context for this theory is discussed in more detail in the conclusion.

By opening-up areas adjacent to the pile of stones it was possible to confirm that the stones covered the corner of the building as two wall lines could be discerned running under the stones. The wall foundations for the east and north walls had been extensively robbed, with only a few stones and patches of mortar visible with the grey fill of the wall cuts.



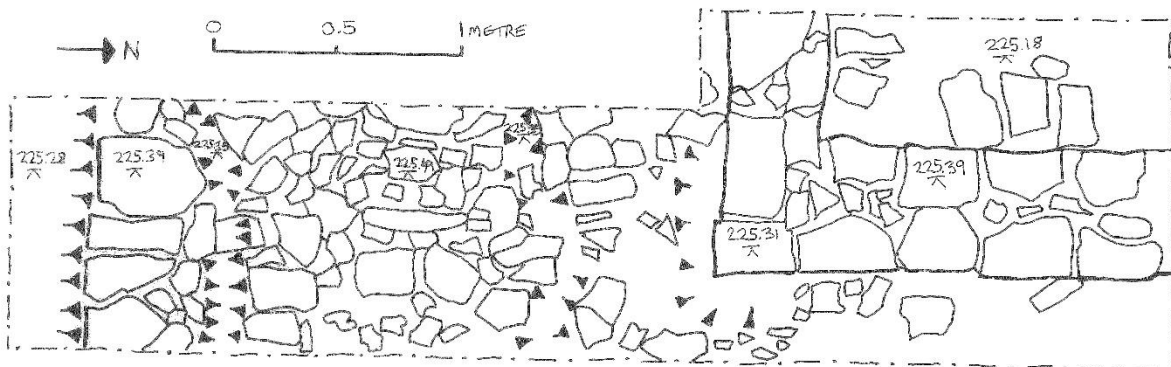
Trenches at (M), looking east and showing wall foundation trenches and stone pile overlying the north-east corner of the east range

The narrow trench excavated at (I) in the previous evaluation was revisited on the 28th August and widened to 1 metre and lengthened to 4.5 metres. The northern half of the trench was finally widened by another 0.5 metres to better define the south-east corner of the central range. This conformed to other excavated walls, being well made and 0.5 metres wide, although the southern return wall was a little narrower at this point. There was no evidence for a floor on the inside corner of the building.

The rough stone surface identified previously was found to run from the kerb to the south right up to the southern wall of the central range. The gritstones making up the surface were mainly medium to large in size, roughly laid, and formed a gentle camber in the middle, with linear depressions on either side running east to west. These are interpreted as cart wheel ruts within a trackway running alongside the building. The base of the ruts was 15 cm lower than the highest point of the centre of the track. The distance between the ruts was around 1.3 metres wide.



Stone surface revealed in the extended trench at (I), looking west. The kerb is on the left with the southern wall of the central range just visible on the right.



Plan of the trench at (I), with heights above sea level.



View of wall foundations at (I), looking east.

The south-eastern corner of the eastern range had still not been found, so a further section of wall just south of (P) was opened-up. This trench, at (Q) was about 1.5 metres long and successfully exposed a return wall. This was in the same style as the eastern gable wall to which it joined and, as elsewhere, its foundation trench was cut into natural white clay. However, the eastern wall did not form a right angle but continued further south meaning that the newly discovered return wall must be an internal division. It is apparent that the eastern range is more complex than the western and is not just a mirror image.



The internal wall in the foreground can be seen running up to the eastern gable wall at area (Q). Looking east.



The location of the wall foundations at (Q) can be seen in their landscape context in this photo. The figures in the middle distance are at (I) beside the central range. Work has commenced at (R) on the left.

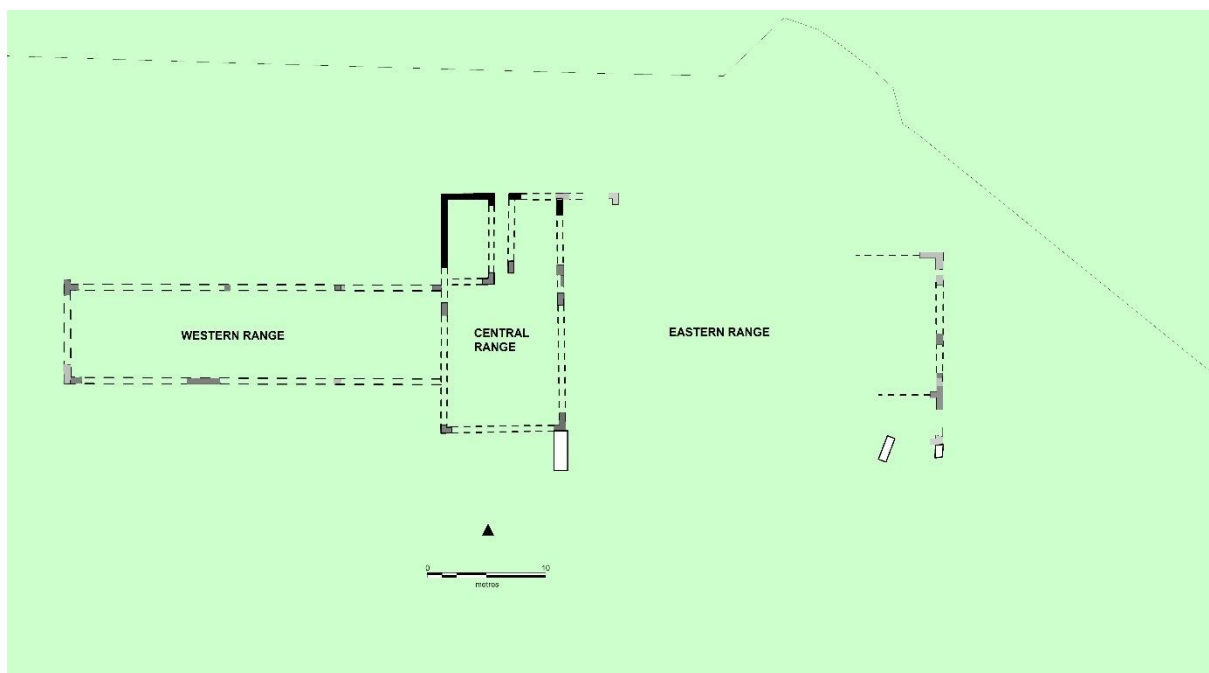
Towards the end of the day, (R) was excavated 2 metres to the south of (Q) in order to locate the corner of the eastern range. Although the trench was narrow, it proved to be very useful. Not only did it reveal the south-east corner of the eastern range but it also found what is probably the continuation of the trackway found in (I). The corner was evident as a robbed-out foundation trench with only occasional gritstones surviving and mainly filled with dark orange-yellow mortar. To the south of this was a rough stone spread similar to that encountered in (I), with a possible kerb stone on the north side close up against the building corner. The southern edge of the stone spread was not excavated due to time constraints.



Stone spread and robbed-out building corner at (R). Looking west.

Conclusion

The 2017 evaluation has confirmed that the rectangular structure defined in 2016 is in fact the central range of a much larger building. The end walls and corners of a west and east range have been located, each range being 31.8 metres in length giving a total building length of nearly 74 metres (including the central range). The west range has a width of 8.4 metres but the east range's width has not yet been defined, although it appears to be considerably wider. There is a remarkable uniformity of wall construction suggesting one phase of building. Investigations have shown that there are a number of internal divisions with the eastern range appearing to be a more complicated arrangement than the western range. Interpretation is made more complicated by the extensive stone robbing that has taken place so that many of the wall lines are only represented by foundation trenches. These appear as linear depressions and look like drains or gullies on aerial photos. The site has been very poor in finds with only two stratified sherds of medieval pottery, and a small number of post medieval finds from the topsoil. The lack of decorative architectural fragments, floor or roof materials, as well as demolition material, is remarkable and indicates that the building may have never been completed (perhaps due to changing economic circumstances). An alternative explanation is that after demolition it was heavily recycled, with materials being re-used for new buildings in the near vicinity. The pile of stones at the north-east corner of the east range may be from this process, with the stones not being collected for some reason. The probable cart track running appears to be of medieval date, to judge by the associated pottery. It runs from the Roman road and close up to the building's southern side and could be interpreted as giving access during and after construction or for the demolition and recycling process.



Plan of exposed walls and other features at the end of the 2017 investigations, with projected wall lines indicated by dashed lines.

The plan is overlaid on to the late 1997 Cities Revealed aerial photograph below. Several linear depressions can be seen running west to east parallel with already proven wall lines – it is possible that these represent internal wall divisions or drains. There is still considerable work to do in confirming the configuration of the eastern range walls and internal arrangements in the central and western ranges. But the work of 2017 has allowed for the first time an appreciation of the massive scale of this building and will inform where further

investigations can be targeted to obtain a more comprehensive understanding of the remains and their function.



Initial archaeological interest in the site at Waters Clough was sparked by the presence of several low walls representing a building that is not shown on any historic maps, which date back to 1822. It was thought that the walls may have belonged to an early post medieval field barn that had been too small and ruinous for cartographers to record. But the 2016 and 2017 investigations have demonstrated the presence of a remarkably large and well-built structure that would have taken considerable resources to erect and which would have dominated the valley floor. Associated with the building site are a series of substantial earth bank field boundaries. One of these runs at an angle across the Roman road to the east of the building and then along the edge of Water's Clough only around 10 metres north of the building. To the west this impressive field boundary continues across the clough and then separates into two. Analysis of aerial photographs and historic maps, along with field walking, shows other similarly constructed field boundaries crossing the valley floor and sides. It is clear that at one time a significant investment in time and resources was made to subdivide the valley into parcels of land for animal grazing.

Given the large scale and quality of construction, landscape management evidence, the historical framework and medieval pottery finds, the building foundations are interpreted as belonging to the medieval grange of Friarmere. The name first appears in 1455 but was previously known as 'Hilbrighthope' (Buckley 2009, 45-6). This was held by the Cistercian Roche Abbey (near Rotherham) from the late 12th century to the Dissolution of 1538. Medieval granges were outlying estate farms established to provide food and other materials for the use of the mother abbey and for wider distribution. Granges were essential for the self-sufficiency of the Cistercian order. Intensive farming was undertaken by labourers under the supervision of lay brothers. In the Castleshaw valley lies the small hamlet of Grange which may have been the original residence of the lay brothers; it lies around 0.75 km to the west of excavated building.

Evidence suggests that the grange at Castleshaw may have been involved with intensive cattle ranching, operating as a vaccary (essentially a large medieval cattle farm). Buckley and Khadem have identified the widespread occurrence of large fields named 'hey' within Friarmere, their nomenclature suggesting they were of medieval origin and once formed a

single cattle farming estate (Buckley 2017, 240). The boundaries of the 'heys' are reflected in later historic mapping and field boundaries, although subdivided. It is likely that many of the substantial earth bank field boundaries still evident in the landscape can be matched to the original medieval fields.

Other economic activities to exploit the land were probably taking place as well as stock management. We know from previous archaeological excavations that iron smelting was being undertaken at the head of the valley, with archaeomagnetic and radiocarbon dating suggesting a 13th century date for this activity. The grange also had the rights for land cultivation, stone quarrying, mining, hunting, and perhaps fish ponds and there might even have been a mill.

By the early 14th century the structure and organisation of granges appears to change. Many Pennine grange estates were divided up into smaller plots of land under tenant farmers; this seems to be the case at Friarmere where five tenant farms are referenced in the Lay Subsidy roll of 1297. Grange is the principal farm but has only 6 oxen and 10 cows, although it is thought that the assessment is unreliable (Buckley 2017, 243). The five farms are listed in the monastery's possession at the Dissolution in 1538.

In the Conservation Management Plan for Castleshaw Roman Forts, there is a specific reference to the medieval grange in relation to gaps in our knowledge of the medieval period (Middleton 2011, 58):

'Nature of the medieval grange: little is known about the operation of the medieval grange in the Castleshaw Valley. Documentary evidence would indicate the grange might have been operating primarily as a vaccary – a large medieval cattle farm – and it would be interesting to understand how this fitted in with the broader infrastructure of the abbey. A wide survey may identify features that survive in the landscape and which relate to this period of use. In particular, there may be further evidence of agricultural and industrial activity, including additional smelting site and evidence of mineral ore extraction and quarrying.'

The 2017 archaeological investigations at Waters Clough, undertaken by the Friends of Castleshaw Roman Forts, form part of the Hinterland Survey, which sets out to answer research questions and fill in gaps in our understanding of not only the Roman forts but also other periods of archaeology in the valley. It can be seen that this ongoing survey is starting to produce encouraging results in relation to the medieval grange.

Further Work

It has not been the purpose of this evaluation report to present the results of comparative analysis with other excavated and surveyed medieval grange sites. However, this is an important piece of research which is ongoing and will be particularly relevant once the layout of the Water's Clough building is more fully recorded and better understood.

To date, the site has been evaluated through a series of one day test pitting and small trench excavations together with geophysical survey. It is proposed that a more concerted investigation is carried out in 2018 over a one week period. This will allow for more extensive excavation targeted on key areas. In particular the investigations should target the following:

Excavation

- The south-east corner of the eastern range to look at the relationship of the building to the Roman road.
- To expose more of the 'cart track' to examine its relationship to the Roman road and to trace its course westwards.
- Define the external wall lines and internal wall layout for the eastern range

- Expose a wider area at the north-west corner of the western range to further examine the 'buttress, concrete, and negative feature visible on aerial photographs running at an angle through the corner of the building.

Landscape Survey

- Use aerial photographs and historic maps to record earth bank field boundaries
- To undertake a walk over survey to record these boundaries and their relationship with the landscape
- To examine the Castleshaw Valley for other potential grange related features such as fish ponds, mill, quarrying etc. Survey these features and undertake evaluation test pitting/trenching and geophysics.
- Carry out geophysical survey on fields close to the Water's Clough ruin site, to examine potential for other medieval buildings and features. Ground truth with evaluation trenching/test pits.

Research

- Undertake comparative research of published/unpublished archaeological investigations of other Cistercian medieval granges
- Compile a master list of relevant historical references to the grange



Sue, Phil and Jane carry out a resistivity survey of a field to the west of the 'ruin' site, on the opposite side of Water's Clough. This sort of work, extended across the valley floor fields, could identify other buried features/buildings relating to the medieval grange.



The photo below shows one of the impressive earth bank field boundaries running towards the building site which is just to the right of the hawthorn trees in the middle of the picture. It is important to now map and record these field boundaries to gain a better understanding of the medieval field system associated with the grange.

Sources

Redhead, N & Barrett, P 2016 'Archaeological evaluation of land besides Water's Clough, Castlesha', Friends of Castleshaw Roman Forts

Buckley, M 2017 'The origins and the evolution of a Pennine township: medieval and early modern settlement in Saddleworth' in Smith (ed) 'History in the South Pennines: the Legacy of Alan Petford', South Pennine History Group

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Acknowledgements

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Phil Barrett led the resistivity survey.

The test pitting/trenching was carried out by the following volunteers under the supervision of Norman Redhead. Their efforts and enthusiasm have made this exciting discovery possible.

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