Altogether Archaeology
Digging our heritage in the North Pennines

LOST ROADS ON HEXHAM FELL

Project Report – December 2016

ALTOGETHER ARCHAEOLOGY

Please note: The features described in this report lie on private farm-land with no public access.

Cover photo: Volunteers excavating Trench 3 at Low Stublick. The abandoned farm-house is in the background, with heather moorland beyond the valley of the Stublick Burn. In the trench, modern disturbance due to cutting of a field-drain crosses the near end of the trench diagonally. Beyond this the line of the north road kerb crosses the trench, with road surface and then the south kerb at the far end. The road surface has a zone of disturbance crossing it diagonally, probably due to ploughing.

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Contents

1 INTRODUCTION

1.1 This project

This report describes work done to investigate two newly recognised linear features located a few kilometres south of Hexham, Northumberland. Initially these were seen on lidar images. The features are roughly parallel, running in a south-west direction from the Tyne Valley towards Allendale and Alston, across areas of rough pasture. The project is complete apart from analysis of samples of the ditch-fill in Trench 6; this report will be updated when the results are available.

Historical investigation (Section 5) showed that one of the features, a holloway running for approximately 4km, could be identified as the Hexham to Alston road, probably medieval in origin. As well being a general transport route, it may have been used to carry coal from Stublick colliery. This road was replaced in the eighteenth and nineteenth centuries when the enclosure of this area was completed and a turnpike constructed on a different line. The holloway fell out of use and its existence was forgotten.

The second feature is a straight causeway in two parts, 3km and 1km long, separated by a 1km gap where the feature is lost in an area of medieval arable cultivation. The feature does not appear on old maps and is not used in any way as a boundary or track. The likelihood was that it was ancient, predating other features of the current landscape. Subsequent archaeological investigation (Section 3) confirmed that is has a structure similar to other Roman roads in the area. In a series of trenches across the line of the feature, a six-metre wide road surface, bordered by kerbstones, was found. In one trench, it was overlain by an eighteenth-century boundary-bank. The road surface was damaged or absent in some trenches, but clear in others. The is little doubt that it is a Roman road, but its purpose is unclear; it cannot be confidently identified with the Corbridge to Whitley Castle fort (near Alston) Roman road that has previously been proposed. This is discussed in more detail in Sections 5 and 6.

The excavation part of the project, was carried out by nearly thirty volunteer members of Altogether Archaeology under professional supervision. The project, including this report, was planned in accordance with current best practice including the guidance outlined in *Management of Research Projects in the Historic Environment* (English Heritage 2006) and the Institute for Archaeologists' *Standards and Guidance for Archaeological Excavation* (I*f*A 2008).

1.2 Altogether Archaeology

This was the first excavation by the newly-constituted Altogether Archaeology (AA) community archaeology group based in the North Pennines. The group's area of interest is the North Pennines Area of Outstanding Natural Beauty (AONB) and adjacent parts of Cumbria, County Durham, and Northumberland. Altogether Archaeology follows on from a similarly named project based at the AONB Partnership, supported by the Heritage Lottery Fund and managed by Paul Frodsham. At the end of this project in Autumn 2015, the volunteer participants decided to carry on its work by forming a permanent community archaeology group of the same name.

The new AA group has received a grant from the Heritage Lottery Fund to aid its start-up, including the writing of a research agenda, a business strategy and a fund-raising strategy. These are currently in progress and will lead to a programme of community archaeology work in future years. AA has, over the last six years, greatly advanced the understanding of the historic environment of the North

Pennines area, with a programme of high-quality digs, surveys, and other activities. Members of AA have developed skills in many aspects of archaeology which will prove valuable in the reconstituted organisation.

1.3 Lidar data

Lidar (light detection and ranging) is a relatively new information source being used by archaeologists to discover, interpret and record archaeological sites. Information is gathered using lasers mounted on aircraft. The laser produces pulses of infrared light that reflect from small areas of the ground; sensors record the time of return to the aircraft. The information is processed to make a computerised 3D model of ground features which is referenced to the OS National Grid using GPS. A map-like lidar image of the area is produced which looks similar to an aerial photograph, but is in fact a computer-generated image of the ground structures from which the laser beam has been reflected. The images can be computer processed in various ways, the relevant ones in this case being a DTM image (which shows the lower detected surface, e.g. ground under trees) and a DSM image (which shows the upper detected surface, e.g. the tops of trees and buildings). These images are then hill-shaded to make features on the ground apparent to the human eye: this process involves computer simulation of a light beam (or beams) falling diagonally across the image. More information on lidar is given in Wikipedia or on the AA website, which has an archive of lidar hill-shaded images for all parts of the North Pennines and south Northumberland for which Environment Agency lidar scans are available; images for the Yorkshire Dales, immediately to the south, are also available (see Endnote 1).

One AA project was a lidar-based landscape survey from 2013 to 2015, supervised by Prof. Stewart Ainsworth (University of Chester). The project covered 250 square km of the North Pennines: East and West Allendale and Hexhamshire (south of Hexham). This followed on from (and adapted methods from) a landscape survey of Alston Moor by an English Heritage team (Ainsworth 2010, Oakley, Radford and Knight 2012). Participating volunteers were allocated one or more 1km square areas, for which they were provided with a modern map, an aerial photograph, and two lidar images (DSM and DTM). They were trained in evaluation of lidar images by Prof. Ainsworth, before examining their allocated areas for archaeological features and correlating their findings with old OS maps and with the Historic Environment Record. The findings were assessed and collated by Prof. Ainsworth, and many of the discoveries were discussed by the whole group of volunteers. A report of this project is available on the AA website (Ainsworth 2016).

1.4 Recognition of the road features

Following on from this survey, two of the AA volunteers, Greg Finch and Martin Green, began in November 2015 to look at lidar images of the area immediately south of Hexham (the rectangle with SW corner NY8057 and NE corner NY9965), filling the gap between the north edge of the Hexhamshire survey and the town of Hexham itself. Greg Finch has a particular interest in the history of this area. The lidar data (with 1 metre resolution) were downloaded from the Environment Agency website, although there are gaps in lidar coverage of the area of interest. The data had been generated from an aerial survey in 2012. Martin Green processed the DSM and DTM lidar data to give hill-shaded images of the area, using QGIS and Irfanview software. Examination of the images showed a clear straight linear feature running east-west for 5km, 8km WSW of Hexham, with a more sinuous holloway type feature running roughly parallel to, and north of, the straight feature. The features are located on the northern edge of the North Pennines AONB. Extrapolation of the straight feature at each end shows that, if continuous, it would have run from Corbridge to Allendale, crossing the Allen between Langley and Catton near Cupola Bridge. If extrapolated further west it would have reached the South Tyne valley about 10km north of Alston.

Figure 1: General location on Google Earth image of sections of the straight feature seen on lidar.

2 ARCHAEOLOGICAL BACKGROUND

2.1 The straight linear feature

The straight feature seen on lidar is roughly parallel to, but 500m south of, the B6305 (Figure 2) on a gently south facing slope. Approximate OS co-ordinates for the two sections on lidar are:

NY85076082 to NY87946156 (western Low Stublick section)

NY89766188 to NY88786173 (eastern Watch Currock section)

There is also a less certain section SE of Hexham in Dukeshouse Wood (shown on Figure 1):

NY95746309 to NY96156319 (Dukeshouse Wood possible section)

This section is seen only on the DTM lidar image as it is under tree-cover. The quality of the lidar image is lower and there has been quarrying and coal-mining disturbance in the area, making interpretation of this section more difficult.

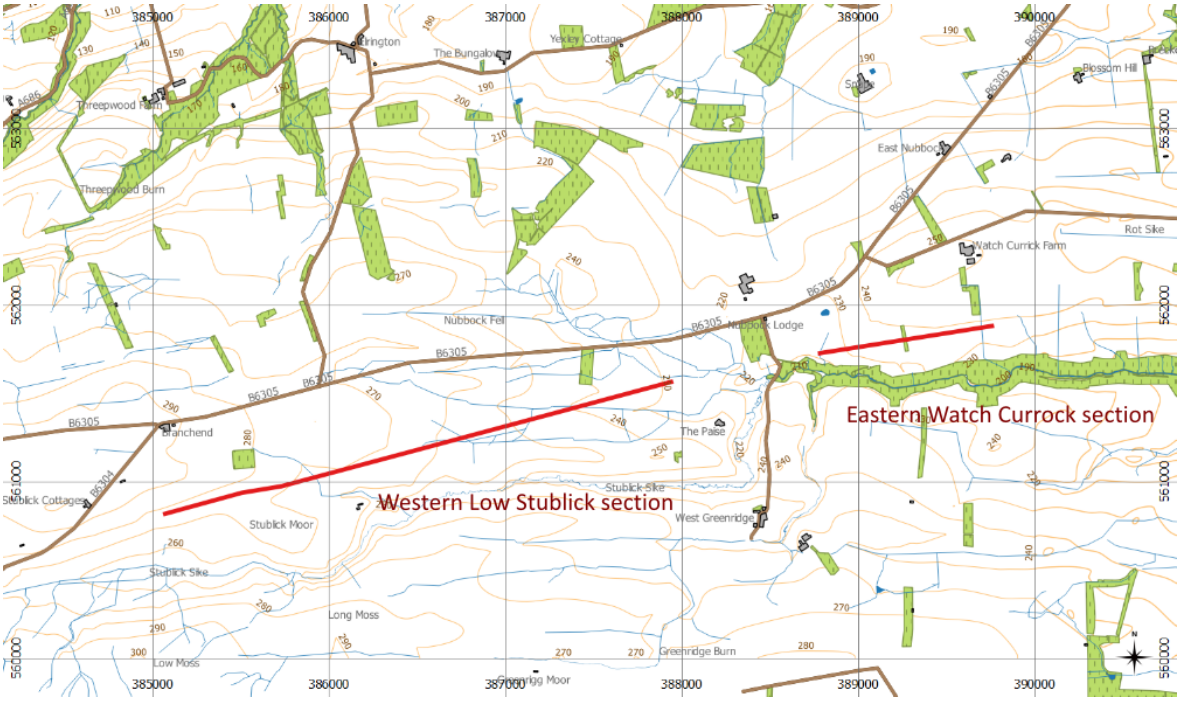

Figure 2: Location of straight linear feature on OS map (not showing uncertain section in Dukeshouse Wood). Feature shown in red. Grid-lines at 1km intervals.

The feature runs across rough pasture at an altitude of 220m to 280m. The west end is lost in the tracks and ground disturbance of Stublick Colliery (see Figure 3), and the east end is lost where agriculture becomes more intensive and there is disturbance caused by the construction of Hexham racecourse (Figure 4). There is also a section missing in the middle around Greenridge, Nubbock and The Paise. Interpolation of the visible sections shows that, if once continuous, the feature would have passed immediately to the north of a sharp bend in the deep ravine of the West Dipton Burn. Although very close to a straight line, there are several subtle changes of direction (e.g. at NY 89076176, NY87756152, and NY86486115) between straight segments.

The ground crossed by the feature was at the western edge of the medieval regality of Hexham where it bordered the Barony of Langley. The boundaries between the parishes of Hexham, Allendale and Warden meet near Stublick. Most of the land was unenclosed waste until the mid to late eighteenth century although with 'islands of cultivation' and/or summer shielings/pasture from medieval times (and possibly earlier) at Nubbock, The Paise and Greenridge.

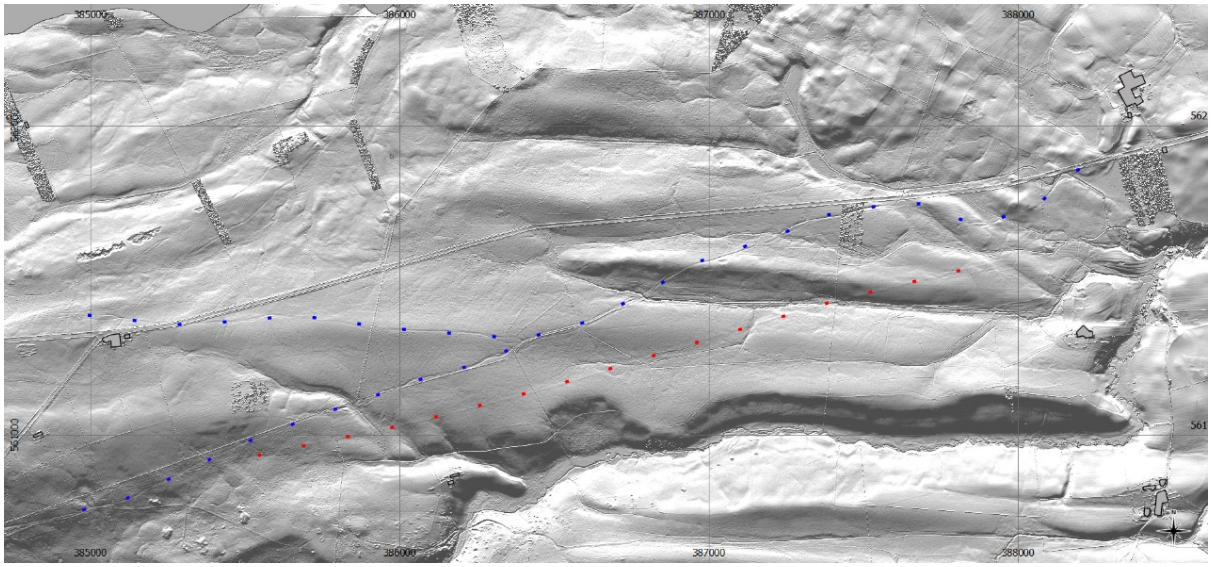

Figure 3: Western section of features on lidar: straight feature red dots, holloway blue dots. Gridlines are at 1km intervals.

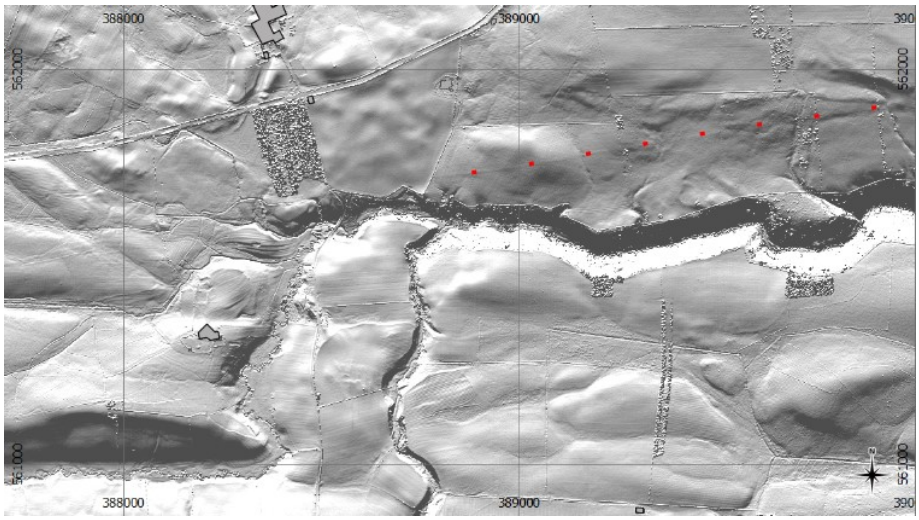

Figure 4: Eastern section of features on lidar, east of The Paise farm: straight feature red dots.

The feature is seen on the lidar hill-shaded images mainly as a slightly raised bank roughly 6m across. In some places, possible flanking ditches are apparent with a total width of about 9m. Discussions with Stewart Ainsworth confirmed that this could be a Roman road, but that other possibilities had to be considered.

Field visits in early 2016 confirmed that there was no evidence, such as marker poles or rebuilding of walls and fences, of the feature being a modern pipeline. Nor were local farmers able to remember any cables or pipes being laid in the alignment. The feature was not apparent on the ground for the most part. However, a slight ridge with ditches could be seen at approximately NY86236109, east of the track from the B6305 to the remains of Low Stublick Farm. Also, in April 2016, similar just visible earthworks could be seen at NY89176178.

On the western section the farmer recalls ploughing the field east of the Low Stublick track in the 1970s. Ploughing was difficult and brought up a great deal of stone, now piled in a heap on top of the feature at NY86266109. He gave up the attempt but subsequently field drains were laid in the field to the east of the stone-heap.

2.2 The holloway-type feature

At NY86266109 a meandering holloway is seen on the lidar to cross the straight linear feature (see Figure 2). The holloway continues eastward running approximately parallel to, and 250m north of, the straight feature. It clearly predates the stone enclosure walls as these cross and re-cross the holloway in their straight path across the landscape. Where the holloway crosses small stream valleys it becomes braided in its diagonal course on the steep slopes. There are no associated ditches or banks; it has the typical appearance of an old unpaved trackway, with its course altering according to the requirements of traffic passing along it. Other routes with a similar appearance on lidar are known to have been used for the pack-horse transport of lead and lead-ore in the North Pennines.

2.3 Local geology and mining

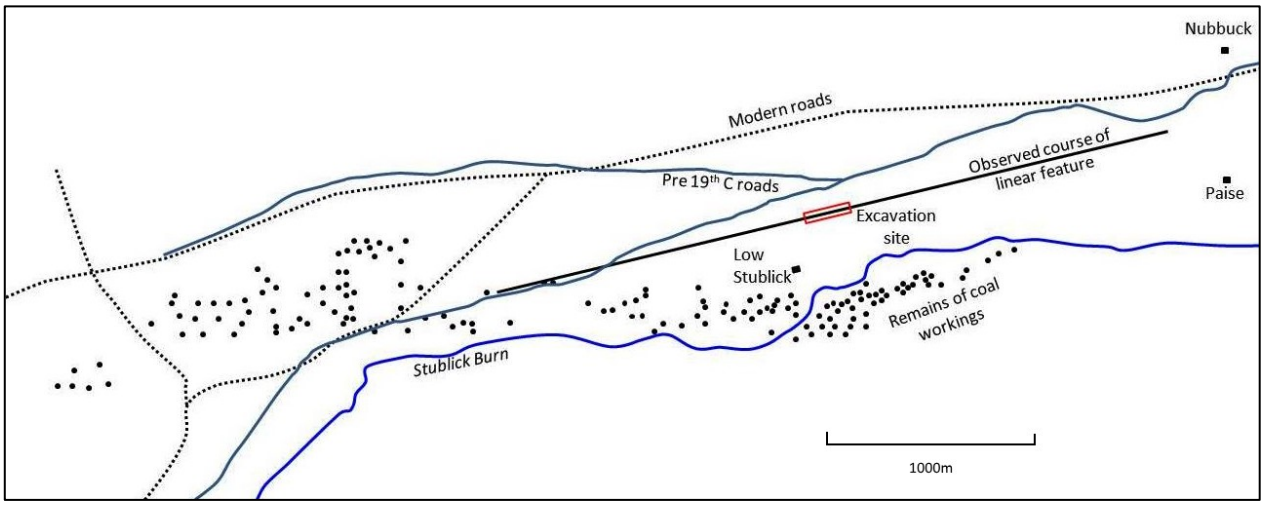

Figure 5: Plan of western section showing relationship to coal workings (black dots).

The features lie on an area covered in glacial till (clay or sandy clay with a variable stone content, mostly local sandstone). The underlying bedrock is sedimentary rock of the carboniferous era, mainly sandstones (Young 2006). To the south and west of the features is an outcrop of coal measures which are cut off at their southern margin by the Stublick fault system. This outcrop has been exploited at Stublick colliery, an extensive area of coal workings lying in a 4km belt between NY872609 and NY831605. Coal mining is documented in the area from as long ago as 1690 and is

likely to have been established at an earlier date (see Endnote 2). The appearance of many small surface pits visible on lidar images and early maps (see Figure 5) suggest shallow working along the line of the exposed seam which could date from any period prior to the modern era. Young (2006, p.23) describes 'innumerable small shafts and several adits'. When viewed by Amos Barnes in 1736 it was already a well-established colliery, working a 21-inch seam of coal by two shafts, 60 and 70 feet deep (see Endnote 3). Working of the colliery continued until 1926 (Peters and Wooler 2007). The existence of deeper shafts is indicated by the presence of a drainage engine on a plan of circa 1770, by which time the seams were being heavily exploited to provide fuel for the Langley lead smelt mill 3km to the north-west (NY830615).

Lead mining and processing have been major economic activities in the North Pennines from medieval times until a century ago. However, there is no evidence of lead mining near the features, nor are there any known lead-veins nearby. Lead and lead ore were transported by pack-horse to the Tyne. Until Langley smelt mill was constructed in 1767 most of this traffic passed well to the south of the features. Only for the decade between the opening of the mill and the building of the Hexham to Alston turnpike in 1778 was lead transport likely to have taken place along these routes.

Prehistoric remains are absent, apart from records of possible stone circles 2km SW of the feature at NY846603 (Northumberland Historic Environment Record number 7663). There are no recorded Roman sites nearby. Evidence of medieval and more recent land use is discussed in Section 5. Currently the land is used for grazing of sheep and cattle, with no arable cultivation. A few hundred metres to the south, beyond Stublick Burn, is the northern edge of extensive heather-covered moors.

2.4 Test-pit investigation

Prior to excavation of full-width trenches, it was decided to carry out a trial one-day excavation of test-pits. This was carried out in April 2016 on the eastern section of the straight feature where it passes through one of the fields of Watch Currock Farm, owned by the Dinning family. The farm is named as 'Watch Currick' on Ordnance Survey maps but usually known as 'Watch Currock', so this spelling is adopted here. Test-pits were excavated prior to proceeding to full-scale investigation, with the aims of planning the main excavation, verifying that there was indeed some feature present (with no evidence of modern activity), and helping to decide the location of larger trenches.

The Watch Currock section of the feature was chosen as it includes areas where the feature is indistinct and areas where it is obvious on lidar images. Figure 6 shows a Google Earth image of the area with the straight feature (in blue) and test-pit locations (in red). The farm on the right is Watch Currock, on the left is West Nubbock. Figure 7 shows a lidar DSM image of the lower half of the same area, with the straight feature visible as it passes WSW to ENE across the centre of the image. The lidar image is illuminated ('hill-shaded') from the north.

Figure 6: Google Earth image of eastern section of straight feature, with test-pits marked in red.

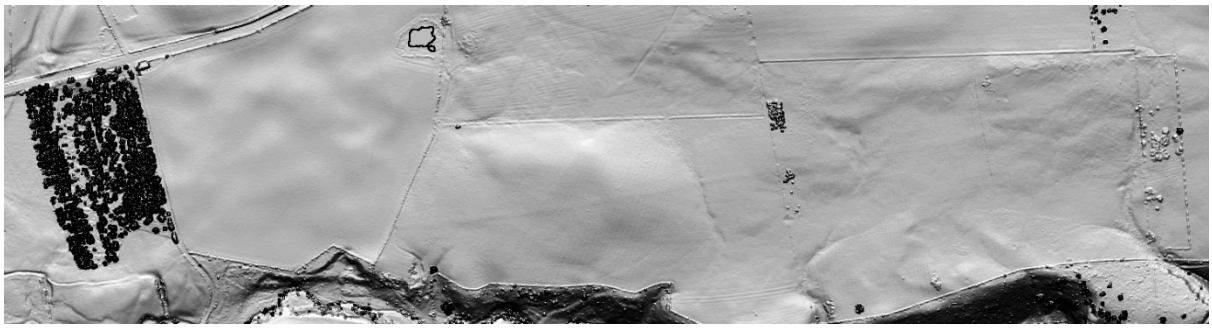

Figure 7: Lidar image of lower half of same area as in previous figure. North is at the top.

The field is currently pasture, but lidar images suggest that there has been post-medieval ploughing across the feature: there is subtle parallel ridging 3m across, on a compass bearing of 169 degrees, seen on lidar images illuminated at right-angles to this direction.

In all, nine pits were dug. Their locations were established by tape measurement from fixed features visible on the geo-referenced lidar image, checked by reference to handheld navigation-grade GPS units. Test-pits were dug 5m from the eastern boundary of the field (where the feature is invisible on the ground and indistinct on lidar) and 90m further west beside a natural gully (where the feature is clear on lidar and visible on the ground). The test-pit locations are shown in Figure 8, an enlarged view of the centre section of Figure 7.

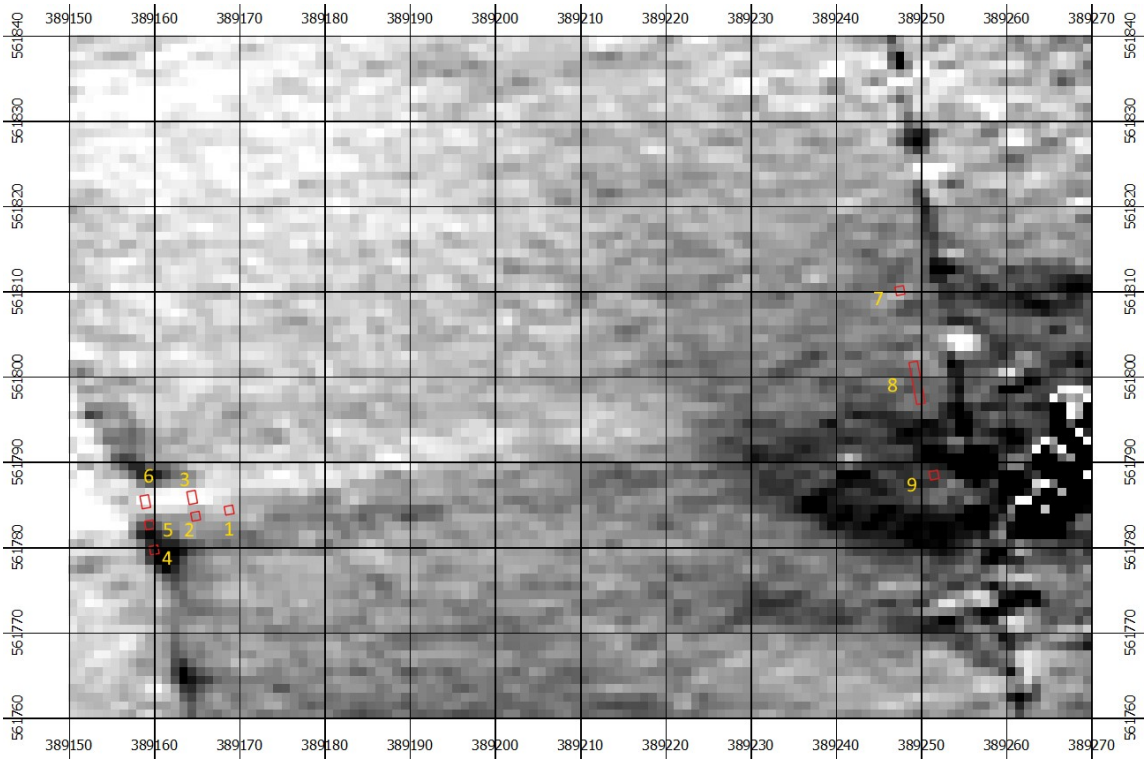

Figure 8: Test-pit locations (red rectangles) marked on a DSM lidar image. The pits are across the straight feature which runs almost E-W. OS grid-lines are at 10 metre intervals.

Of the 6 trenches in the western group, three of these (1,2,5) were on the middle of the feature, two were on the northern edge (3,6), and one on the southern edge (4). In the eastern group, a long trench crossed the centre line of the feature (8) with two trenches well to the north (7) and south (9) of the feature.

The trenches were aligned on the straight feature as seen on lidar and so are rotated by 10.5 degrees anticlockwise from true east-west. The table below gives the Ordnance Survey co-ordinates for the test-pits.

Test-pit number	Dimension EW, metres	Dimension NS, metres	NE corner of trench, OSGB eastings, northings
1	1	1	389169.18,561784.95
2	1	1	389165.25,561784.22
3	1	1.5	389164.80,561786.68
4	1	1	389160.39,561780.27
5	1	1	389159.84,561783.22
6	1	1.5	389159.30,561786.17
7	1	1	389247.92,561810.69
8	1	5	389249.55,561801.84
9	1	1	389251.92,561789.05

The eastern trenches (7,8,9) showed an even spread of small stones at about 20cm depth, with no evidence of any feature. All three trenches (covering a width of 23m across the line of the feature) showed no variation. No attempt was made to excavate deeper.

The western trenches (1,2,3,4,5,6) showed larger (up to 15cm) stones in a sand/earth matrix at 20cm depth, although not a regular surface. Of these trenches, the two northern ones (3,6) demonstrated an edge to this layer of stones with (to the north) a pale clay/sand surface, probably natural. In Trench 3, there was an intervening dark loamy feature, suggestive of a small roadside ditch (see Figure 10).

In summary, trenches at the eastern edge of the field, where the feature is indistinct on lidar, showed no evidence of the road at shallow depth. In the centre of the field, where it is seen on lidar and on the ground, there was evidence of a disturbed road surface (the field has been ploughed in the past, judging by its lidar appearance), with a ditch on the northern side. The road width was consistent with the 6m breadth seen on lidar. The evidence, on trial excavation, suggested that the straight feature was a road or trackway at least 6m wide, of unknown date. There was a disturbed surface of large stones and a possible small roadside ditch. In view of these positive findings it was decided to proceed to more extensive excavation in better summer weather.

Figure 9: Test-pit 5 (on centre of feature) showing disturbed stony surface.

Figure 10: Looking west along the feature. Test-pits 3 (foreground) and 6 (right background) demonstrate the northern edge of the stony surface, with a small ditch in test-pit 3. The road is visible as a raised causeway.

3 EXCAVATION

3.1 Introduction

The test-pit excavation in April 2016 showed that the straight linear feature was a stony surface. More extensive excavation was therefore carried out over nine days, 6 to 14 August 2016. In view of the limited time available, the excavation was only of the straight linear feature. It was felt that historic studies had securely identified the holloway as a medieval route so there was less pressing need to investigate it further.

The trenches were located at two sites separated by 3km, one on the eastern section (at Watch Currock) and one on the western section (at Low Stublick) of the straight feature. No attempt was made to investigate the more questionable section of the feature further east in Dukeshouse Wood. The first six days of the excavation were spent at Watch Currock where access was easier and only sheep were grazed in the field. The remaining three days at Watch Currock were made interesting by the herd of cattle in the field.

3.2 Trench location

At Low Stublick, on the western section of the feature, four trenches (1,2,3,4) each 10m long were excavated across the line of the feature. Three were 2m wide, the other trench (4) was 1m wide. They sampled a 120m stretch where the feature is clear on lidar, there is no indication of previous ploughing on lidar, and ground conditions are comparatively dry. The actually positions of these four trenches were chosen to coincide with particularly clear parts of the feature on lidar; the trenches were not evenly spaced over the 120m.

A fifth trench (5) at Low Stublick was excavated to examine the intersection of the feature and a boundary-bank at the eastern edge of the field. This bank is present on eighteenth-century maps and forms the western boundary of eighteenth-century encroachments on to Hexham Common (see Figure 17, where the bank is the western edge of the marked encroachments).

The second site, at Watch Currock, was in the same field as the previous test-pits (see Section 2.4). Two trenches (6,7), 10m long and 2m wide, were placed across the feature with their centres 16m apart. The western of the trenches (6) was placed beside a natural gully running through the field, between the location of test-pit 2 and 3 (to its east) and 4,5 and 6 (to its west). This location was chosen to be close to where a suspected road-side ditch had been found in test-pit 3. The eastern trench (7) was located further into the field, where the feature was clear on lidar images.

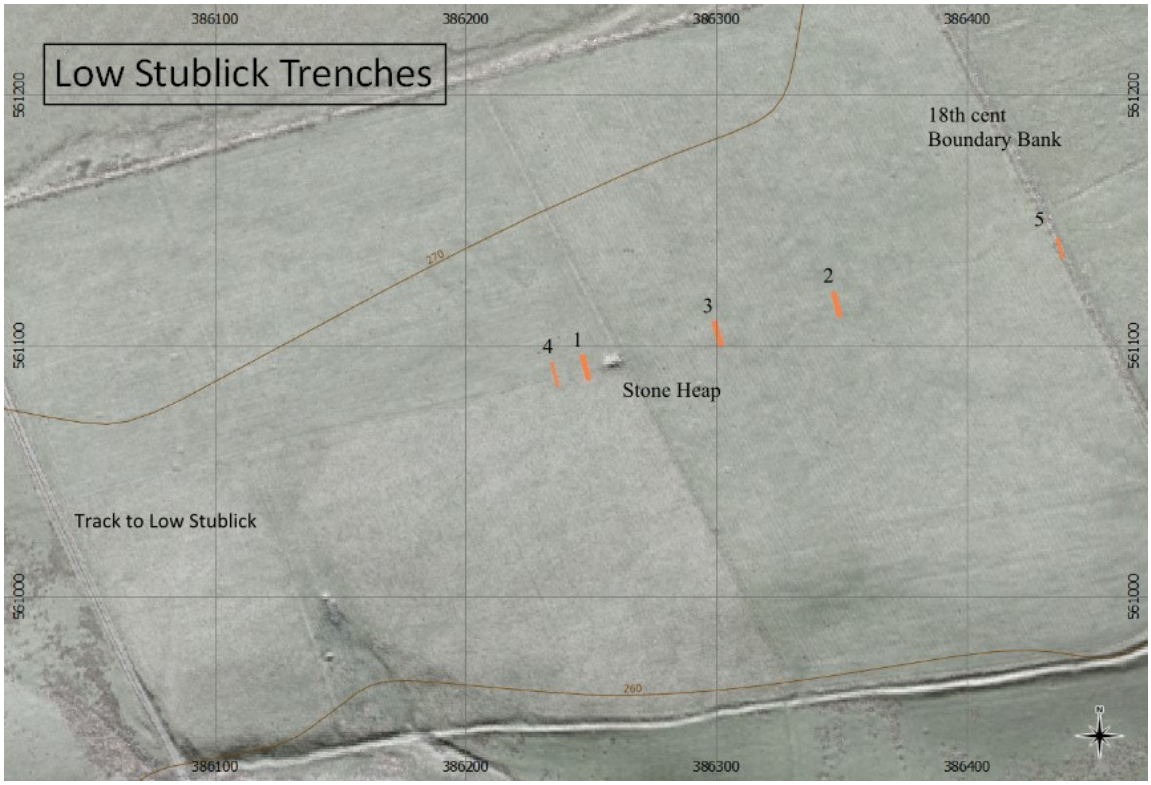

Figure 11: Location of the five trenches at the Low Stublick site. The background is a lidar image and Google Earth aerial photograph superimposed. Contours are in metres, gridlines at 100m intervals.

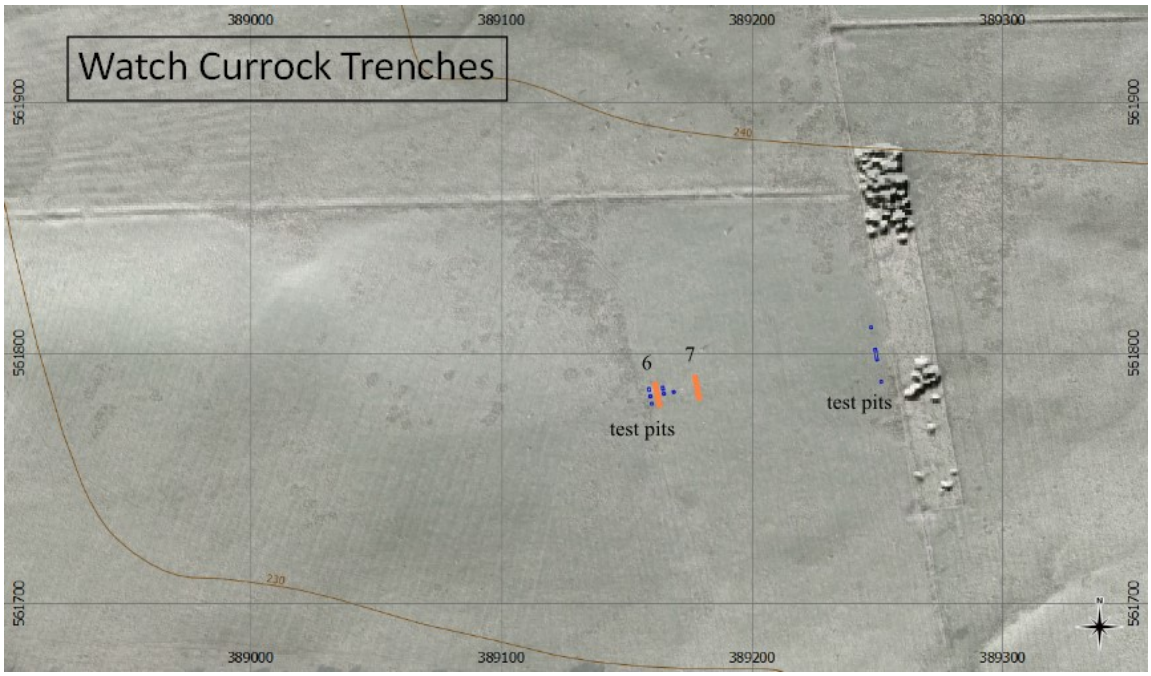

Figure 12: Location of the two trenches at the Watch Currock site. The previous test-pits are shown in blue. Background, contours and gridlines as in previous figure.

Trench locations in OS co-ordinates are given in the following table. Trenches were aligned with the road (as seen on lidar images), not orientated true north-south. As shown, the compass bearing of the road on lidar images differs at the two sites since it turns to the right (looking eastwards) by 3.6 degrees in the intervening 3km. If there is a single turning point, calculation shows it to be at NY8857061673, but it is more likely that there are a series of small corners rather than a single turn.

Site	Trench no.	Trench length (across road)	Trench width (along road)	Trench centre	Compass bearing of road (degrees)
Low Stublick	1	10m	2m	NY 86248 61092	75.9
Low Stublick	2	10m	2m	NY 86348 61117	75.9
Low Stublick	3	10m	2m	NY 86300 61105	75.9
Low Stublick	4	10m	1m	NY 86236 61089	75.9
Low Stublick	5	7.6m	1m	NY 86437 61139	75.9
Watch Currock	6	10m	2m	NY 89162 61783	79.5
Watch Currock	7	10m	2m	NY 89178 61786	79.5

3.3 Aims of excavation

Aims of the excavation were:

To establish whether the straight linear feature seen on lidar was in fact a road

To evaluate the state of preservation of the road and risks to it at more than one location

To establish the character of its original construction and any later modification

To recover material useful for dating the construction and usage of the road

To recover material and other evidence to establish the type of use of the road

To compare the road with the road examined at Whitley Castle in 2011 (Mounsey 2012).

To recover suitable palaeoenvironmental material (if present) to aid understanding of the site and landscape

In general, to act as 'quality control' for linear features found on lidar surveys, to strengthen (or weaken) their attribution as Roman roads etc.

To enhance the archaeological capability of AA members including greater involvement in project planning, delivery, and reporting

For volunteers to have a good time and have both mental and physical exercise

3.4 Methods

a) Initial evaluation of the road in April 2016 by test-pit has been described in Section 2.4
b) A pre-excavation evening meeting was held to brief volunteers (and other interested members of AA and the Hexham Local History Society) at Whitley Chapel on 19 July

2016. The historical and archaeological background, health and safety issues, and practical arrangements were discussed.

c) The excavation was carried out in accordance with the guidance given in the Institute for Archaeologist's *Standard and Guidance for Archaeological Excavation* (IfA 2008), and completed according to relevant professional standards and guidelines.

d) The excavation was directed by a professional archaeologist, Paul Frodsham, with Martin Green as co-ordinator for Altogether Archaeology. Both were present on site every day. Excavation and recording was undertaken by Altogether Archaeology members, who received training and on-site guidance and supervision as necessary, as well as an initial health and safety briefing. Excavation was for nine days in 2016, from August 6 to 14 inclusive.

e) The depth of the excavations was in general shallow, less than 0.5m over nearly all of the area of the trenches; at no point did depth exceed 1m. Netlon temporary fencing was available on site but not used as it was felt that the risk to livestock by entanglement in fencing outweighed potential benefits. In the event, there was some damage to spoil heaps by livestock, but only minor damage to the trenches.

f) On lidar images the position (in OS co-ordinates) of the crossing points of the feature with the eastern and western field boundaries were noted for both of the sites. The co-ordinates on lidar images of the corners of the two fields were also noted. From this information, it was possible to calculate the distance along the field boundaries between the field corners and the points where the feature crossed the boundaries. On site, these distances were measured along the field boundaries by tape, establishing the location where the feature crossed the field boundaries, despite the feature not being clearly visible.

g) Once the crossing points of the feature and the field boundaries were established, a baseline was marked out in the field, showing the assumed line of the feature running straight across the field between the crossing points. Trenches were marked out with reference to this, using the baseline as the centre line, so each 10m trench extended 5m each side of the baseline. Hence the trenches were orientated across the line of the road, not due north-south (see table in Section 3.2).

h) This method of laying out the trenches was successful in that the road surface, where found, lay centrally in the trenches and no extensions to the trenches were needed. It was fortunate that the field boundaries were narrow banks with fences along the crest, making them accurately identifiable in position, both on lidar DSM images and in the field. The trench positions should have an accuracy of between 1m and 2m, errors being caused by uncertainty in the geo-location of the lidar images, the error in recognising the centre point of banks in the images, and errors in tape measurement along the field boundaries.

i) The location of all trenches was checked by hand-held navigation grade GPS units which are expected to have an absolute accuracy no better than 3m. The average difference between these GPS readings and those derived as above from lidar images was 2.56m (Low Stublick) and 1.86m (Watch Currock), which is good agreement, well within expected margins of error.

j) All excavation was by hand. Turf, stones, and soil were stored separately on site and, after the completion of the excavation, the original ground surface was restored and the area re-turfed.

k) Metal detection, by Darren Carr, was carried out at the Low Stublick site. He swept the trenches and spoil-heaps and he also did a general sweep along the course of the feature across the whole field.

l) Finds from excavation and metal detection were bagged by type and context. They were retained for evaluation post-excavation.

m) Plans of the trenches were drawn at a scale of 1:20, and sections also at 1:20. A scale of 1:10 was not used as the sections are long (10m) and comparatively simple. Plans and sections of the trenches are shown in Appendix 1.
n) A dumpy level was used to establish heights at multiple points on the plans, and to establish the standard height for the sections. There are no bench marks listed within 2km of either site, so the altitude of temporary benchmarks was established by reference to the altitude of nearby areas of level ground given on www.geoplaner.com and www.freemaptools.com/elevation-finder.htm. These altitudes are consistent with Ordnance survey contour data (see Figures 11 and 12).
o) Excavated archaeological deposits were recorded stratigraphically using a paper system of context sheets and a context register. Paper registers were also kept of photographs, levels, samples, finds, and attendance by volunteers. In addition, a site notebook was used to keep a daily record of the progress of the excavations, site visitors, and other useful information.
p) A photographic record was maintained, using colour digital photography, of all significant features, finds, deposits and general site working.
q) Photogrammetry models of most trenches were computed from multiple photographic images; this work was by Stephen Eastmead using Agisoft software. The resulting models, shown as vertical (plan) and oblique (section) views, are displayed in Appendix 2.
r) The Northumberland County Archaeologist and the AONB Historic Environment Group Chairman were informed that the dig was to take place, as were other local professional archaeologists.

3.5 Description of trenches

3.5.1 Trench 1

See Appendix 1 for plans and sections of the trenches, Appendix 2 for photogrammetry images and Appendix 3 for a table of contexts

Trench 1 was 2m by 10m, across the centre line of the straight feature. It was sited about 10m west of a large heap of stones ploughed up by the farmer from the field about 40yrs ago; he gave up the attempt. On cleaning the trench after de-turfing, a discontinuous surface (F102) was found at a shallow depth, bounded by kerbstones, forming a road surface running across the trench. This consisted of a single layer of irregular sub-angular cobbles, with a typical size of 5cm to 15cm, although with a few larger stones. At both edges of the road there was a single line of somewhat larger irregular kerbstones (F103), typically 10cm to 20cm. All road and kerb stones were sandstone. The whole feature was 6m wide. On the downslope (south) side there was a sparse tumble of stones similar to those of the road surface. On the upslope side there was a thin scatter of smaller stones.

All stones lay directly under the topsoil (101), with no evidence of gravel, sand or other material on top or between them to form the surface of the road. The stones were immediately on top of the natural subsoil (104), which here (and in all trenches on both sites) was glacial till, consisting of grey clay with small pieces of friable sandstone. The topsoil was shallow, only about 20cm to 25cm, with no distinguishable layers.

A sondage was excavated into the natural surface, 0.5m wide and 1m long, on the east side of the trench, 4m to 5m from the north end. This was excavated to a depth of 0.5m through the assumed natural subsoil to see if it had been re-profiled to form an agger (causeway). No evidence was found of this, but there is still the possibility that the natural was excavated during the building of the road and immediately re-deposited. The section drawing indicates that if any re-profiling of the natural was done, it resulted in an agger less than 20cm high.

The road surface did not cover the whole area between the lines of kerbstones. Apart from some stones beside the kerbstones, there were no stones on the northern (uphill) 2m of the road. There was no evidence of plough damage to the rest of the road; this bare area could be due to ploughing or to re-use of the stones for repairing the rest of the road (or other uses). There is also the possibility that only 4m of the road width was ever surfaced, even though lines of kerbstones had been placed 6m apart after removal of topsoil. There was no evidence of roadside ditches.

3.5.2 Trench 2

Trench 2 was sited about 100m east of Trench 1, and was also a 10m x 2m trench across the line of the straight feature. The natural glacial till was reached at a depth of 20cm. There was a scatter of stones up to 15cm in size lying on the natural, but no road surface or kerb-line was found. The drawn section shows that there was a probable agger, approximately 10cm high, formed by re-profiling the natural surface. Some possible shallow plough-marks were noted in the subsoil on the northern side of the agger. There were indentations in the natural on the agger suggesting the previous presence of rubble on it, and sandy residue formed a sparse patchy deposit on the natural, probably formed by disintegration of sandstone cobbles. There was no evidence of road-side ditches.

3.5.3 Trench 3

Trench 3 was sited roughly mid-way between Trenches 1 and 2. Again, it was a 10m x 2m trench across the course of the straight feature. The findings were very similar to Trench 1, with a surface of sub-angular sandstone cobbles (F302). This formed a road surface 6m wide, bounded by kerbstones (F303, F304). It was placed directly on top of the natural subsoil, which had possibly been re-profiled into a low agger, 10cm high at most. The road surface covered most of the area between the lines of kerbstones apart from a strip about 0.6m wide, running diagonally NE to SW across the trench, over which coverage was patchy. This was probably due to plough damage.

The kerbstones were particularly massive on the south (downslope) margin of the road surface. To the north of the road surface, near the end of a trench, was a 0.5m wide linear feature (F306) passing diagonally across the trench from NW to SE. Its fill (307) was formed of mixed subsoil and topsoil: the upper surface of the fill material was 5cm above the natural subsoil. The interpretation was that a modern drain had been cut through the topsoil and into the subsoil, then mixed spoil used to fill the cut. A small sondage in the NW corner of the trench was excavated to confirm this. There was no evidence of roadside ditches.

3.5.4 Trench 4

Trench 4 was sited to the west of Trench 1, with an 11m intervening gap. It was 10m long and located across the line of the feature, as with Trenches 1 to 3, but it was only 1m wide. Parallel lines of kerbstones 6m apart were found (F403, F404), as in Trenches 1 and 3, but no road surface apart from a few stones next to the kerbstones. It was not clear whether the road surface between the kerbs had been robbed, or had never been constructed.

Small sondages were excavated 0.5m deep and 0.5m wide across the centre of the trench and in the NW corner to compare the natural in these two location, but no significant difference was found, nor was there any evidence of re-profiling of the natural subsoil. There was no evidence of roadside ditches.

3.5.5 Trench 5

Trench 5 was sited at the eastern edge of the field at Low Stublick, about 90m west of the other trenches. The field boundary consists of a low earthen bank (F502), 30cm high, surmounted by a fence. About 2m to the west of the fence is a low ditch (F503), generally about 20cm deep. This bank is shown on old maps; it was the western boundary of eighteenth-century intakes from Hexham Common (see Section 5).

The bank is earthen, but in the vicinity of the line of the feature there were medium (10cm) sized stones eroding out of the bank, though not reveting it. This suggested that when the ditch was excavated and material used to make the bank, the road surface had been cut and the robbed material incorporated in the bank. Although now only 20cm deep, the ditch was probably deeper when originally cut and would have destroyed the road surface if it were as superficial at this location as in the rest of the Low Stublick trenches.

Trench 5 was 1m wide, and 7.6m long (centred on the presumed line of the feature). It was cut into the side of the bank with intention of exposing (in section) the road surface, if preserved under the bank. It was not possible to clean and plan the floor of the trench since it was in an active ditch, hence very wet.

The bank at this point was found to consist of loose stones (similar to those forming the road surface in the other trenches) in a matrix of topsoil. On cleaning the section, the road surface (F505) of 10cm cobbles was seen to be intact, with kerbstones present (F506, F507). Its width, 6m, and stone size was the same as in other trenches. No road-side ditches were noted. See Appendix 1 for the drawn section.

3.5.6 Trench 6

Trench 6 was sited between the previous test-pits at Watch Currock, on the eastern side of a natural gully running through the pasture. There was approximately 1m of unexcavated ground between Trench 6 and neighbouring test-pits (numbers 2 to 6). It was positioned to investigate the possible road-side ditch noted in test-pit 4. Trench 6 was 10m long and 2m wide, centred on the line of the feature.

As in other trenches, the natural subsoil of glacial till (603) was reached at a shallow depth, 20cm. No road surface of stones was found, nor was a kerb. The section shows evidence that the subsoil had been profiled into a 6m wide low agger, about 10cm to 15cm high. On the northern (uphill side) were two shallow ditches parallel to the line of the road (F604, F606). Both were 0.6m wide at the top, with ditch centres 1.4m apart. The fill of both ditches was a dark silty loam (605, 607), with no discernible variation seen in section. The ditches were very shallow, about 8cm. Samples of the lower fill of both ditches were taken for laboratory assessment.

3.5.7 Trench 7

Trench 7 was sited 16m east of Trench 6. It was 10m by 2m, centred across the line of the feature. The location was chosen to be where the feature was clear on lidar images. On excavation, a discontinuous surface of sub-angular sandstone cobbles was found (F702), similar to that in previous trenches, with irregular 5cm to 15cm stones. The surface was about 5m wide, with no clear evidence of a continuous kerb. The section shows that the natural may have been reprofiled to give a very low (10cm) agger. There were no roadside ditches.

The damage to the surface is suggestive of plough damage, with loss of stones in an irregular 0.5m wide band running transversely across the road. There are faint parallel plough ridges, 3m apart, seen crossing this area of the field on lidar images (see Section 3.5) at a bearing of 169 degrees and the road feature is aligned on a bearing of 79.5 degrees. The difference between the two bearings gives the angle (about 90 degrees) at which the ploughing crosses the road.

A small, 0.5m square, sondage was excavated in the NW corner of the trench through the natural subsoil. Nothing of note was found.

3.5.8 Summary of trench descriptions

All trenches were similar in that the natural glacial till was reached at a shallow depth, about 20cm to 25cm. The road surface where found was always of sandstone, formed of a single layer of irregular sub-angular cobbles (5cm to 15cm in size). Some of these were very friable, crumbling on

trowelling. The stones were laid directly on the natural subsoil. There was no upper road surface of flagstones or smaller stones; between the stones was topsoil, with sandy debris in places from degradation of road stones. There were no signs of wear or of wheel-ruts along the road surface.

A table of trench characteristics is given below. Trenches are listed in order along the road, with the approximate distance eastwards along the line of the road from Trench 4 (the western-most trench). This distance is approximate as it depends on the unknown course of the missing section of the road through the zone of medieval ploughing. See table in Section 3.2 for trench sizes and OS co-ordinates.

Trench	**Distance along road from Trench 4, metres**	**kerb-stones?**	**Stone road surface**	**Roadside ditches?**	**Agger height, cm**	**Altitude of road surface in centre, metres**
4	0	Yes	No	No	0	269.3
1	12	Yes	Yes, northern 2m missing	No	less than 20	269.3
3	67	Yes	Yes, some ?plough damage	No	10 or less	269.1
2	116	No	No	No	10	268.7
5	208	Yes	Yes, full width	No	0	266.3
6	3005	No	No	2 on uphill (north) side	10 to 15	236.9
7	3021	No	Yes, some ?plough damage	No	10	237.5

4 FINDS AND SAMPLES

4.1 Metal detection finds

Metal detection was used only at the Low Stublick site, not at Watch Currock. The trenches, spoil heaps and the field along the line of the linear feature were all scanned with a detector. Only post-medieval finds were located, all in the topsoil. Most metal finds were bullets and casings, but there were two buttons, one decorated with a military insignia (see Figure 13).

The military button is similar to buttons catalogued as DENO-7F5211 and DENO-EAEBB0 on the Portable Antiquity Scheme database (see Endnote 4). The description given is: '*Modern cast copper alloy military button. The button is circular and flat bearing a shield showing 3 cannons arranged in a column and a row of 3 cannon balls above. It is the insignia of the Royal Artillery. The separately attached circular attachment loop is present on the reverse. This button is dated c.1790-1840.'* Perhaps there was military activity on the field about 200yrs ago, e.g. shooting practice.

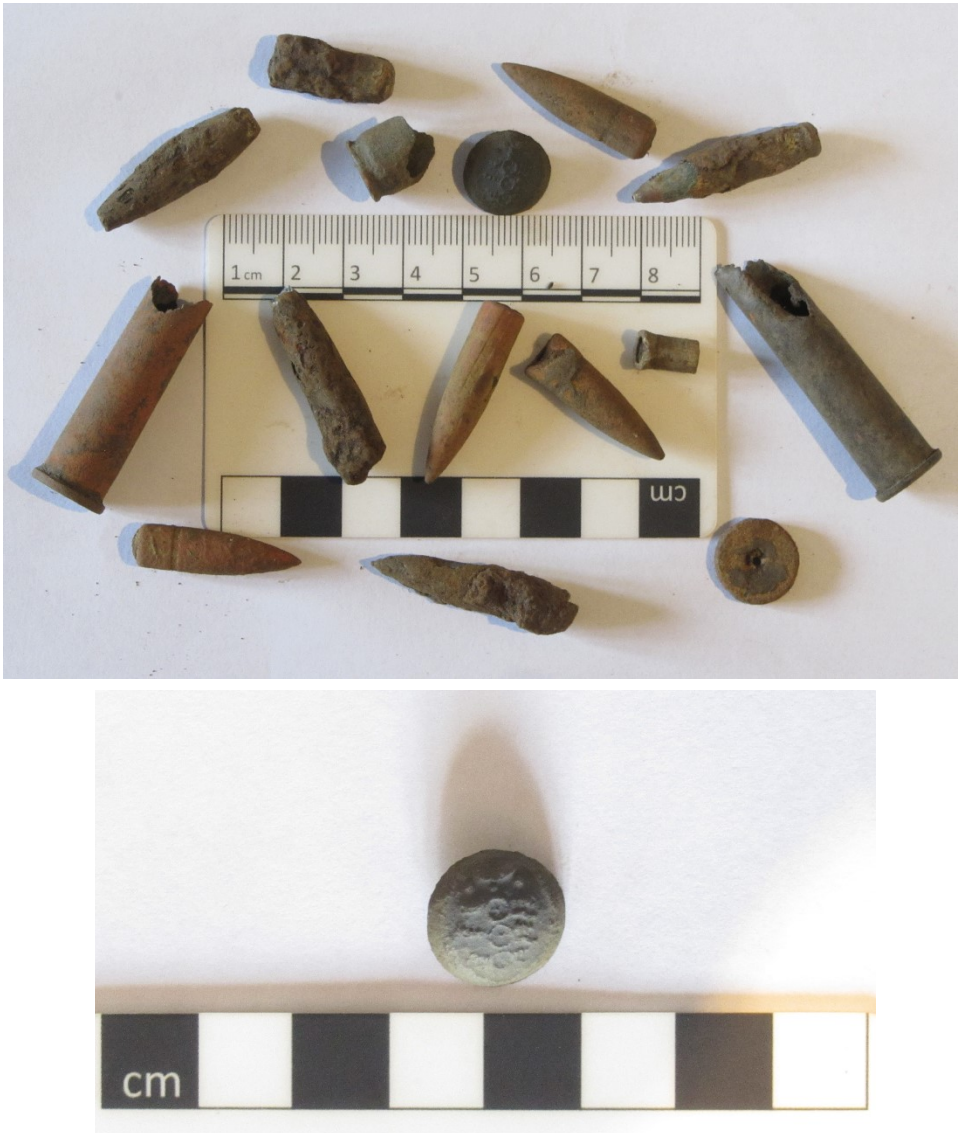

Figure 13: Metal detecting finds from Low Stublick site, with close-up view of the military button.

4.2 Other finds

There were very few finds, despite the large total area (118 square metres) of excavation. All finds were in the topsoil, and are post-medieval or undatable. The lack of finds is itself significant and points to limited used of the road. It further suggests the lack of medieval activity near to the road at these sites, as predicted by the historical investigations. In particular, no lead or lead ore was found, despite one possible use of the road being transport of lead or its ore (galena). Small fragments of coal and of clinker were found in the topsoil of both sites over the road. This was expected in view of the proximity to shallow coal workings, irrespective of whether the road was used for coal transport. Another possible source of coal and clinker is from steam-ploughing of the fields, or their presence in domestic waste spread on the fields. The Nubbock and Paise Common estate map of 1770 (see Section 5) shows a 'fire engine' at Low Stublick to the south of Stublick Burn. This was presumably a coal-fired engine providing power for part of the colliery: another source of clinker.

Trench	Context	Find type	Details	Total wt.	Notes
1	topsoil	clinker	4 pieces	8g	
1	topsoil lying on road stones	clinker	7 pieces, largest 5cm diameter	149g	
1	topsoil	coal	small pieces	55g	
1	topsoil	iron plate, triangular fragment	sides 60mm, 65mm, 70mm, one corner rounded	119g	tip of blade of agricultural equipment?
6	topsoil	iron nail	22m long	2g	
6	topsoil	pot sherd		10g	black glaze
6	topsoil	pot sherd		2g	low-quality cream/grey glaze
6	topsoil	iron nail	70mm	18g	
6	topsoil	coal	small pieces	56g	
6	topsoil	clinker	2 small pieces	3g	
6	topsoil	glass fragment	14mmx6mmx1.5mm		curved, pale brown, one air bubble
7	topsoil	pot sherd	25mm x 22mm	4g	black glaze
7	topsoil lying on road stones	iron nail	in 2 fragment, total length 75mm	15g	

4.3 Samples

The only deposits suitable for laboratory investigation were from the ditch-fill of the two roadside ditches of Trench 6. Samples of the lower fill of both ditches were taken and await analysis to see if they contain suitable material for further dating and palaeoenvironmental study. Unfortunately, the ditches are at shallow depth: the natural glacial till subsoil at that point is about 20cm below ground

surface and the ditches are only cut about 8cm into the subsoil. Hence the conditions are not ideal for survival of undisturbed material. However, the ditch-fill was clearly different in nature to the topsoil.

5 HISTORICAL CONTEXT

5.1 Historical background

This section summarises evidence regarding the history of the local landscape, with a focus on implications for the dating of the observed and excavated road feature (hereafter referred to as the 'straight road' for convenience.)

As indicated in Section 2.1 above, most of the adjacent land was unenclosed waste until the mid to late eighteenth century although with 'islands of cultivation' and/or summer shielings/pasture from medieval times (and possibly earlier) at Nubbock, The Paise and Greenridge. The boundary between the manor of Hexham and the Langley Barony lay across this wasteland to the north of the straight road, a boundary possibly unchanged from that of the grant of Hexham to St.Wilfrid in 674. The presence of standing stones at Stublick Head (shown on a late eighteenth-century estate map) and at White Crag to the east of the confluence of the East and West Allen (mentioned in a boundary riding of 1690) could indicate the presence of a boundary in the area much earlier. The manor of Hexham, which extended as far as the West Allen, was owned by the Archbishop of York in the medieval period, with some farms within it granted by the Archbishop to the Priory of Hexham. By the late seventeenth century, Hexham manor was owned by Sir William Blackett, a wealthy Newcastle merchant, and the adjoining land of Langley Barony by the Radcliffes, Earls of Derwentwater. Both families had mineral interests and a boundary dispute over their shares of the linear Stublick coal seam provides us with the evidence that coal was being mined there from at least 1690 (see Endnote 2).

The modern road from Hexham to Alston dates from shortly after 1778, when it was created as a turnpike across the open fell. From the aptly named Branch End, the present Allendale road was added shortly afterwards. Hexham Common was enclosed in 1755, and Watch Currock farm established. Nubbock and Paise Common was enclosed in 1782, with land allotted to both named farms and also to the small farmstead of Low Stublick, which probably originates from an earlier date in association with the nearby coal seam.

With this knowledge of land ownership and usage, and taking information from all known maps and associated documentary records relating to the area, the various possibilities for the origin of the straight road are discussed in turn in the next section.

5.2 Possible origins of the excavated road

5.2.1 A late eighteenth-century post-enclosure road?

The straight road is not shown on any of the Ordnance Survey maps from the first edition onwards, nor on the Hexham Common enclosure map of 1755 where it crosses the fields laid out as part of the new Watch Currock farm. Neither is the western section near Stublick shown on estate maps from c.1770 (see Endnote 5) and 1736 (see Endnote 6). A quarry track is, however, shown in the area on the map of Nubbock and Paise Common when it was enclosed by private agreement in 1782 (see Figure 14).

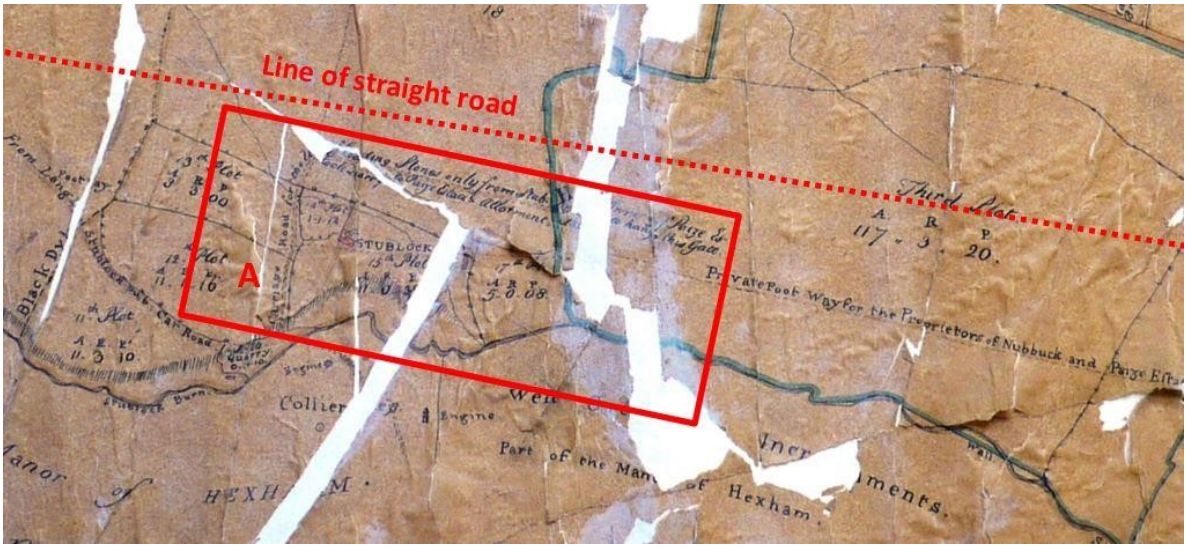

Figure 14: Extract from damaged 1864 copy of Nubbock and Paise Common Enclosure Map of 1782 (Allendale Estate, uncatalogued maps).

The track shown within the highlighted box on this map, and marked with 'A' to its left, led north from a quarry next to Stublick Burn. It is labelled 'Carriage Road for the Use of leading Stones only from Stublock Quarry to Pays Estate Allotment'. A gate is shown in the western boundary of that allotment and labelled 'The Owners of Paize Estate to hang this Gate'. A 'private foot way for the proprietors of Nubbock and Paize estates' is shown running eastwards. Since portions of these ways run in the same direction as the observed and excavated straight road, it has to be considered whether it could be a late eighteenth-century quarry track. However, as shown on Figure 14, this track lies to the south of the straight road, which in any case extends in a straight line over a much longer route to the west and to the east. The lidar image of the same area (Figure 15) shows the possible remains of this evidently short-lived quarry track and footway.

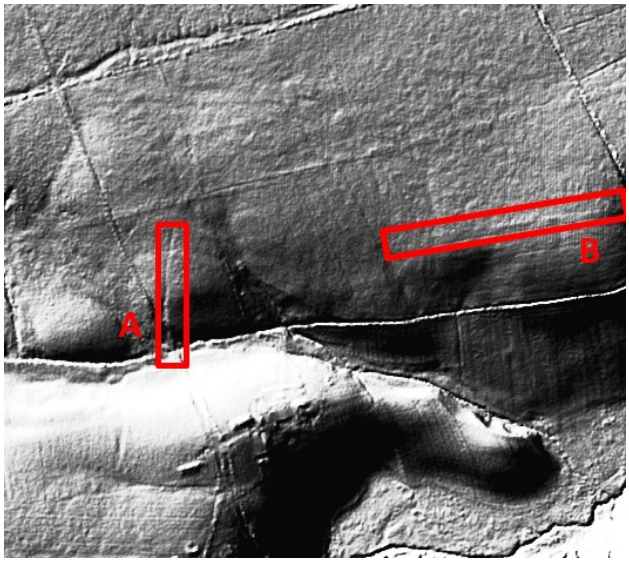

Figure 15: Possible traces on lidar image of the quarry track (A) and footway (B) marked on Figure 14 above. The straight road is seen crossing the image further north.

5.2.2 A pre-turnpike road to Alston and Allendale?

The eighteenth-century turnpike replaced an earlier route or routes between the Hexham area and Alston and Allendale. In 1713 a road was described roughly on the line of the present road, along the ridge past Hexham racecourse, as follows:

'From Dilston lead-gate along raggonside thro Yarridge Grounds, and the [Hexham] West Quarter to the bounder of Wester Grundridge, upon Warden Parish, 7 miles 28 chains' (Ritschel 1713, p.58).

Dilston lead-gate, just to the west of Devil's Water, near its confluence with the Tyne just to the south-west of Corbridge, might conceivably be paired as an indicator of a direct road link with Corbygates, a mile north-east of Alston at the medieval head-dyke in the Nent valley, and named as such in 1315 (Jessop and Whitfield 2010, p.6). From the 1630s, the Radcliffes of Dilston owned the estate and mining rights on Alston Moor, and the 'lead gate' on the road leading south-westwards from their home estate in the direction of Alston seems likely to have been so-named from at least then, and possibly centuries earlier judging from the place-name evidence in Nentdale. The excavated road could therefore be the remains of this medieval roadway.

However, as discussed in Section 2.2, the lidar imagery shows another roadway, a meandering holloway, lying to the north of the straight road. This is also shown on an estate map of 1736 prepared for the Greenwich Hospital which had recently acquired the Derwentwater Estates (see Endnote 6), where it is labelled as the Hexham to Alston road, suggesting it was more than a local route serving Stublick colliery or lead carriage alone. When shown alongside the boundaries of the pre-enclosure 'ancient grounds' of the Paise/Greenridge and Nubbock (see Figure 16) the meandering roadway carefully avoids this 'in-bye' land and keeps to the narrow corridor of waste land between the farms. Nubbock and Greenridge are both documented in the early fourteenth century, and it is possible that they were taken in from the waste earlier still. The meandering road is therefore probably a medieval (or earlier) road from Hexham to Alston and still in use in the eighteenth century. After this it was replaced by the modern road system.

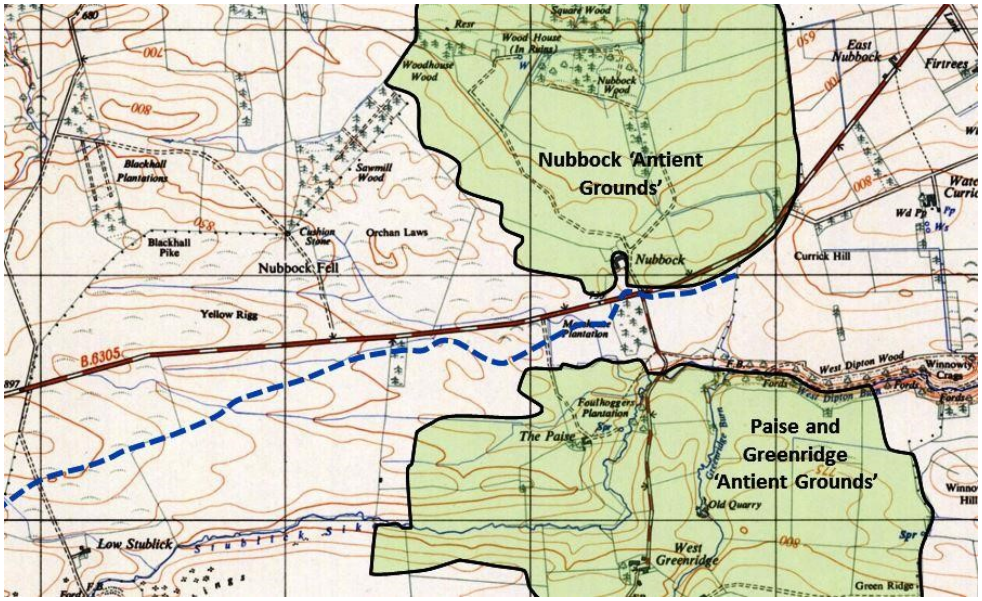

Figure 16: Holloway and the ancient enclosed ground of Nubbock and Paise.

Figures 3 and 4 show that this meandering roadway lies on a separate course to the straight road, even where their paths lie very close to each other to the west below Stublick Hill. Figure 17 superimposes on to the lidar image the boundaries of the medieval enclosed ground of The Paise and Greenridge farms (shown in green) and farm encroachments into the waste made by 1770 (shown in yellow). The meandering roadway is shown as a dashed line weaving its way to the north of The Paise grounds, and is also followed by the boundary of one of the post-medieval encroachments on to the common.

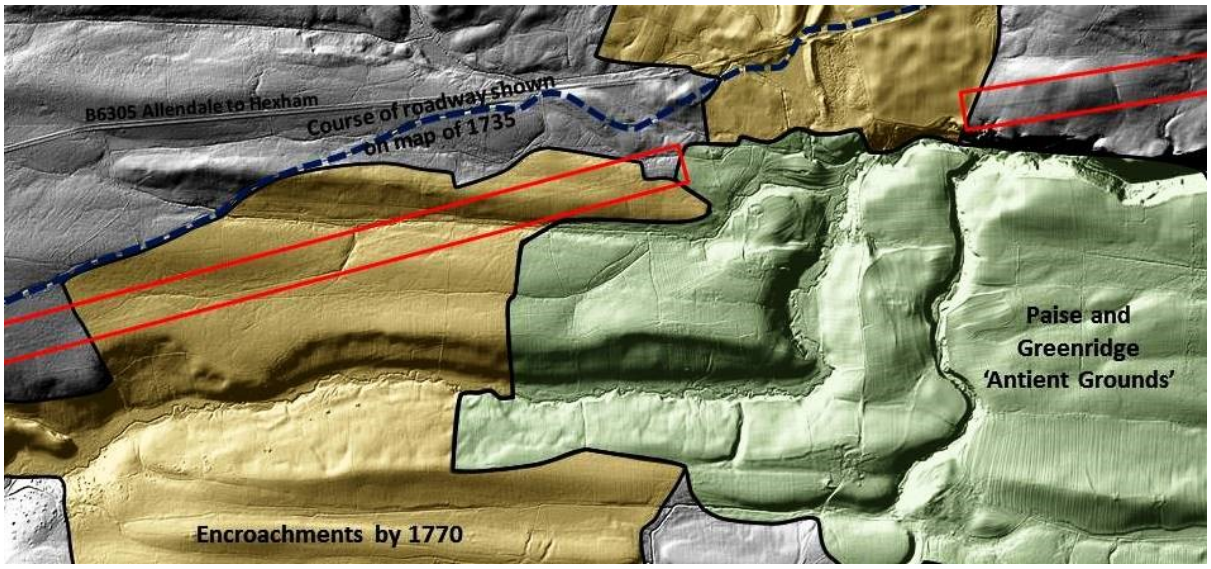

Figure 17: Features on lidar with medieval/post-medieval land enclosure indicated. The route of the excavated road is indicated by red rectangles. Derived from Nubbock and Paise Common map of c.1770 (Allendale Estate, uncatalogued maps).

By contrast, the straight road does not respect the boundary of medieval cultivation, and nor was it made use of by any other boundaries or tracks. It seems safe to conclude that it was not the pre-turnpike road from the Tyne valley to Allendale and Alston.

5.2.3 A monks'-road?

Straight roads have been identified in Derbyshire as monks'-roads, used by medieval monasteries and priories (Stewart Ainsworth, *pers. comm.*, 27 Jan 2016). The medieval priory of Hexham was granted an estate to the east at Yarridge (now occupied by Hexham racecourse) and minor properties to the west (in Allendale and beyond) in the early twelfth century (Britnell, Etty and King 2011, pp. 169-70, 239). The priory's ownership of other properties in the vicinity (see Figure 18) therefore raises the possibility that the excavated road could have been created by the priory in the high medieval period. It is unlikely that any other landowner in the area would have had the resources to construct a straight and level metalled road.

Figure 18: Location of Hexham Priory property, with the straight road shown as red dashes. Main estates shown as large blue circles, and minor property rights as small blue circles (derived from Britnell, Etty and King 2011).

However, closer examination of the route of the straight road as shown in lidar (see Figure 17) indicates that although visible in the area of post-medieval encroachment west of the Paise, it disappears from view exactly where the ancient enclosed land of the Paise starts at NY87986157 and appears again to the east at NY88786173 on what was Hexham Common, not enclosed until 1755. This suggests that the feature predates the medieval ploughing of the land at The Paise. Broad 'reverse-S' curving ridged cultivation is visible here on lidar images. The Paise is contiguous with the medieval settlement at Greenridge which is documented in 1304 (Mawer 1920, p.96), by when it would be reasonable to suppose that the distinctive style of medieval ridged cultivation visible on the lidar imagery was in place.

While settlement in the Nubbock, Paise and Greenridge area is not documented until the very early fourteenth century, the land might well have been occupied from a much earlier date. Indeed, Yarridge, situated on slightly higher ground on the ridge to the east, was granted as a 'vill' to the priory between 1108 and 1114 and was therefore presumably already settled by then (Britnell, Etty and King 2011, pp.269-70). As mentioned above, there is no sign of the straight road east of Watch Currock and Blackhill, but there is a possible section in Dukeshouse Wood (see road section circled in red on Figure 19). Although this is in a nineteenth-century plantation and has yet to be examined, it is on the exact extrapolated route of the observed section of the road.

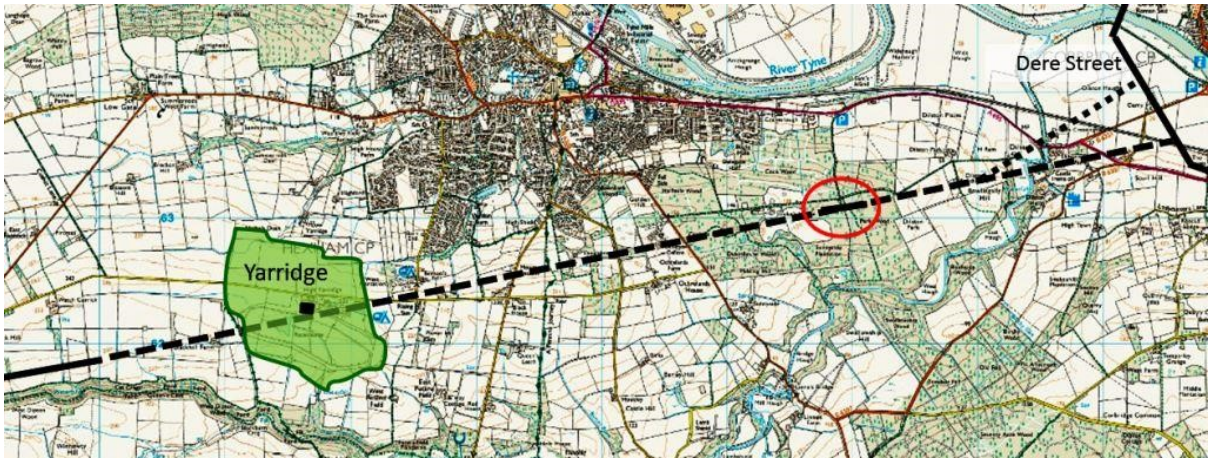

Figure 19: Extrapolated road between Watch Currock and Dukeshouse Wood.

The extrapolated route also runs right through the middle of the ancient enclosed land of Yarridge as shown when the surrounding Hexham West Common was enclosed in 1755. Although we cannot be certain that the road continued eastwards on its observed course it does seem likely that it passed underneath ground at Yarridge that was occupied by no later than 1114.

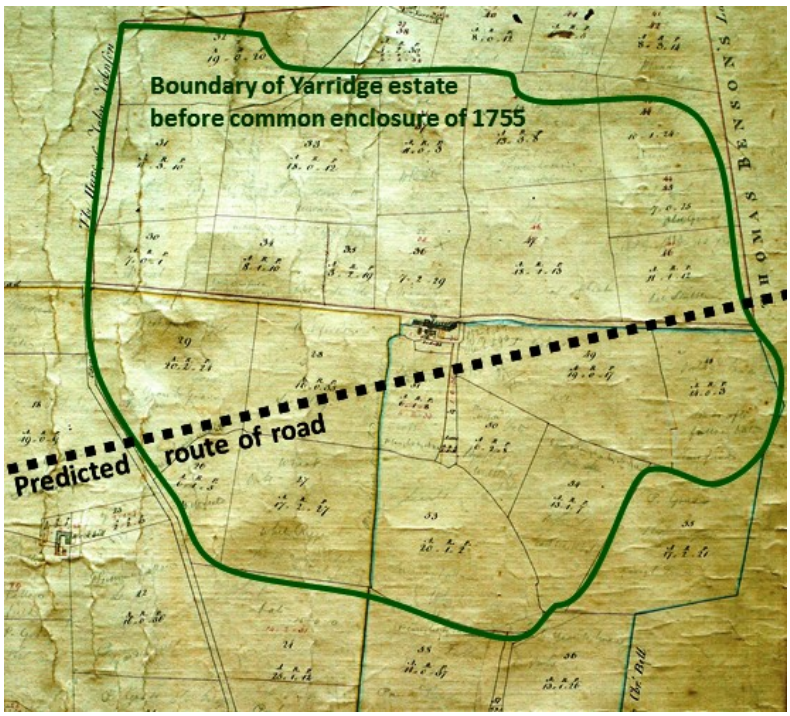

Figure 20: Yarridge estate field boundaries in 1802 (Allendale Estate, uncatalogued maps).

The earliest detailed map available for Yarridge dates to 1802 (see Figure 20). It is quite possible that field boundaries could have been regularised either before or after the enclosure of the surrounding Hexham Common in 1755, and the original cluster of small farm holdings had probably been

consolidated into a single farmstead in the seventeenth century. However, the presence of a narrow plot running southwards from the east end of the farmstead and named 'Lane', is characteristic of ancient paths giving access from the settlement to and from the surrounding common for people and livestock, suggesting it was a surviving remnant from much earlier times. The predicted route of the road by extrapolation eastwards from Watch Currock appears to bear no relation to this feature, to the alignment of the farmstead, or to the rest of the surrounding field pattern surviving at Yarridge at the end of the eighteenth century.

This cannot be conclusive, given both the late date of the estate map, and the speculative route of the road in the absence of any field or lidar evidence in this area, but it does suggest that the road was no longer in use, and had disappeared from view by the early twelfth century at the latest. Since Hexham Priory was still a young and growing foundation in the twelfth century and was not dissolved until the 1530s it is reasonable to surmise that the straight road was not a monks'-road, for a straight, level and metalled road running through land in which the priory had an interest would surely not have gone out of use while the priory was still in existence.

5.2.4 A Roman road?

Extrapolation is speculation, but it is interesting that, if extended eastwards, the route as shown in Figure 19 intersects the course of Dere Street just to the south of the Roman bridge over the Tyne at Corbridge. The location and orientation of the straight road places it between the known Roman settlements of Coria (Corbridge) and Epiacum (Whitley Castle), as shown in Figure 21. Speculation on the existence of such a road has been documented since at least the seventeenth century (Birley 1950) and it has been shown, equally speculatively, on maps (Horsley 1732 and Collingwood Bruce 1851: see Figures 22 and 23).

The outlines of a Roman camp were drawn on the first edition of the Ordnance Survey map around Old Town farm overlooking the East Allen north of Catton, to the west of the linear feature under examination here. There is no trace of this claimed feature on the relevant lidar image, but the distinct outline of an Iron Age/Romano-British rectilinear enclosure can be observed less than a mile to the north (Ainsworth 2016). However, this has yet to be visited in the field, and even if verified is not evidence of a Roman road passing nearby. Birley documented a Roman altar incorporated into the medieval tower at Staward Pele overlooking the River Allen, not far to the north of a westwards extrapolation of the straight road. He argues for it having been originally placed nearby by a Roman army cohort (Birley 1950, p.141).

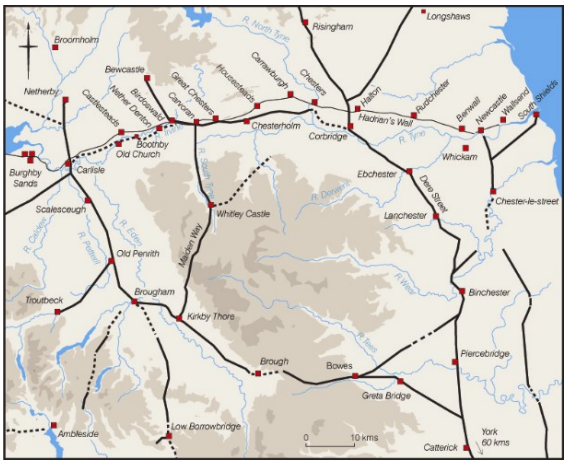

Figure 21: Roman road network map of Northern England (English Heritage/Historic England).

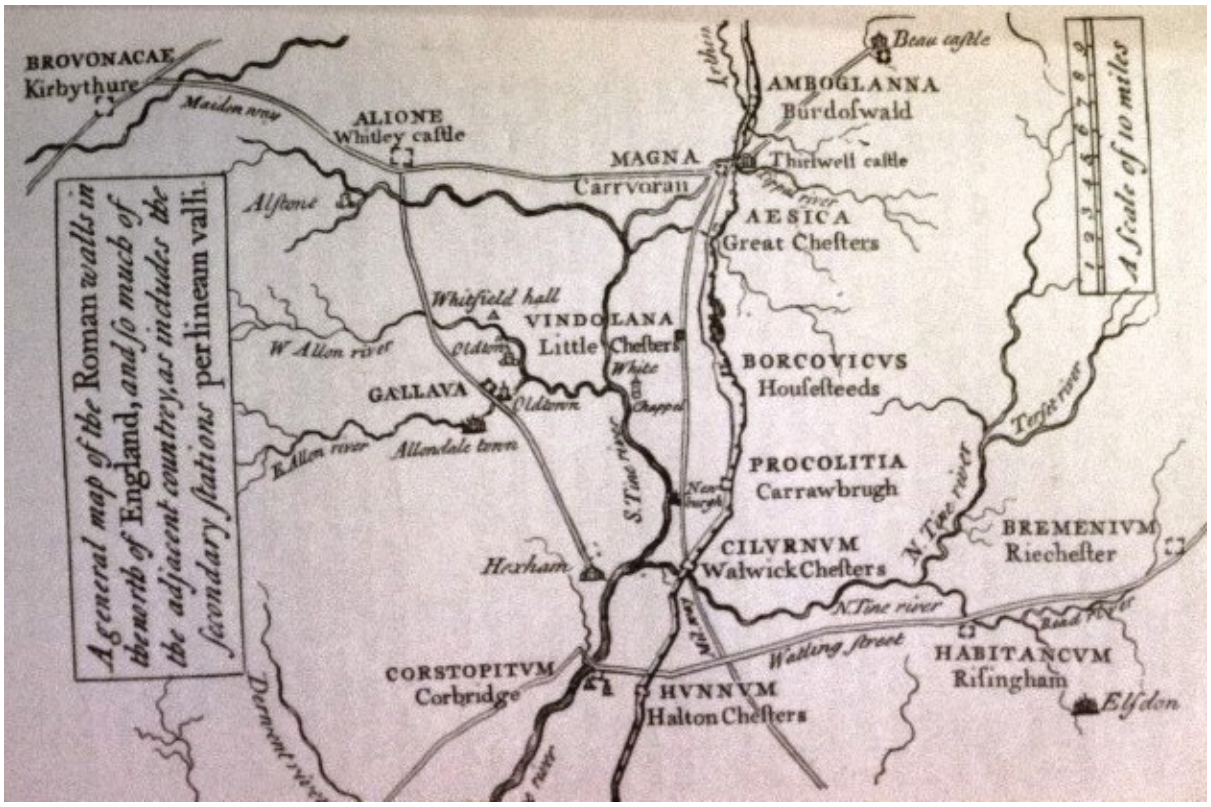

Figure 22: Horsley's 1732 map suggesting a Roman road from Hexham to Whitley Castle. North is to the right.

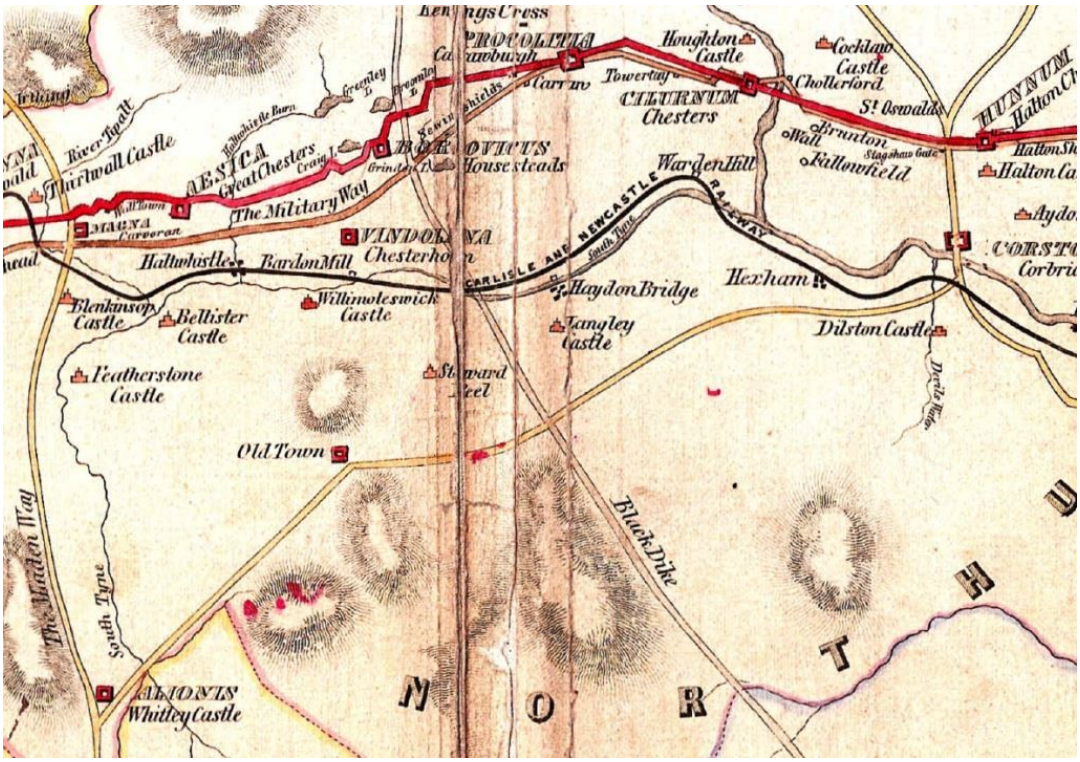

Figure 23: Collingwood Bruce's 1851 map, showing a Roman road from Corbridge to Whitley Castle.

However, there is no obvious trace on lidar images of the straight road continuing south-west beyond Stublick Colliery and across the Allen Valleys. For much of its putative course there has been later agricultural, mining and forestry disturbance, and it is possible that a Roman road could lie buried beneath later roads and tracks. This is less the case on rough fell pasture between the West Allen and the South Tyne valleys in the vicinity of Whitley Castle. This area has been studied in the AA Hexhamshire and Allen Valleys lidar project, and the surroundings of Whitley Castle in even greater detail through the Miner Farmer landscape project, for which bespoke high-definition lidar imagery was commissioned (Went and Ainsworth 2009). No evidence of a lost road north-east of Whitley Castle has been found.

6 DISCUSSION

6.1 Lidar results

This project stems from the discovery, on lidar images, of a linear feature located south-west of Hexham. It was seen on the images as two sections, of 3km (Low Stublick) and 1km (Watch Currock), separated by a gap of nearly 1km. If extrapolated to the east it would reach the south bank of the Tyne opposite Corbridge, and to the west would cross the Allen near Cupola Bridge, north of Catton. It appears mainly as a slightly raised 6m to 7m wide causeway with possible road-side ditches in places. The appearance on lidar of the feature is certainly consistent with it being a lost length of Roman road. There is no single method of construction used by Roman engineers; they adapted to local conditions. However, the 6m wide raised 'agger' (i.e. cambered causeway) with flanking ditches is common, as is the construction of the road in straight sections with occasional changes of direction.

A short linear feature was also noted on the same alignment in Dukeshouse Wood, south-east of Hexham, but this is less definite as lidar loses resolution under tree cover, and the area has been disturbed. Hence no further investigation of the Dukehouse Wood section has yet been carried out.

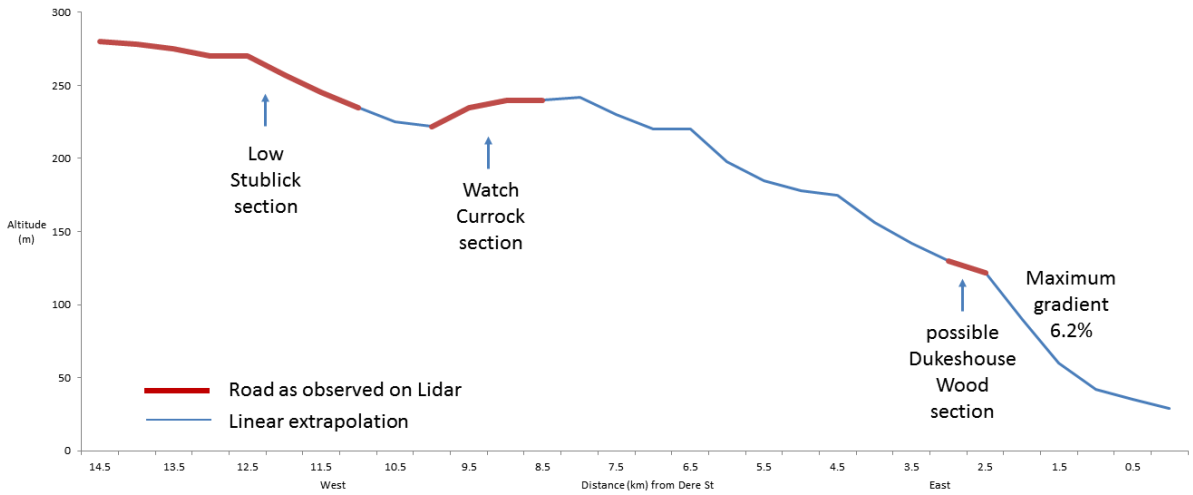

Figure 24: Height profile of the possible Roman road, extrapolating its course to Dere Street at Corbridge.

The gradient of the road is shown in Figure 24, which plots the altitude of the sections of the features seen on lidar, extrapolated eastwards via the possible Dukeshouse Wood section, to join Dere Street just south of its crossing of the Tyne near Corbridge. It has a perfectly usable maximum gradient of 6.2% (about 1 in 16).

The gap between the two main sections of the linear feature has, on lidar images, extensive areas of broad, curving agricultural ridges, typical of medieval arable cultivation.

To the north of, and roughly parallel to, the Low Stublick section of the linear feature, a more sinuous feature was also seen on lidar images. This has the characteristics of a holloway.

6.2 Archaeological findings

The recent availability of free lidar images (from the Environment Agency) has led to the discovery of many previously unrecorded Roman roads by amateur as well as professional investigators. Groups with a strong interest in researching Roman roads are making exciting progress in increasing knowledge about the Roman road network of Britain (see Endnote 7). However, few if any of these newly discovered roads have been excavated so their period of use, type of traffic, intensity of use, and other aspects remain unknown.

In this project, seven trenches were excavated across the line of the linear feature. They are described in Section 3. Evidence of a road was found in all of the trenches, although preservation was very variable. In all cases the road surface was under only a shallow cover of soil and therefore very vulnerable to damage from the plough. In four of the trenches extensive areas of road surface were seen, with kerbstones present in three of these trenches and one other trench. In all cases the road was 6m wide. There was evidence in several of the trenches that the natural clay subsoil may have been re-profiled to form an agger, but in no case was this more than 20cm high.

The road structure was very simple, consisting of a single layer of irregular sub-angular sandstone cobbles 5cm to 15cm in diameter, with a single line of somewhat larger kerbstones at each edge. There was no metalling of smaller stones, sand or paving slabs. There was no detectable wear of the road surface.

Construction of the road was probably by:

- removing topsoil/turf over a 6m width
- possibly reprofiling the natural clay subsoil to give a slight camber
- placing kerbstones at the edge of the excavated trench
- filling between the kerbstones with a single layer of stones
- replacing the topsoil to give a raised road surface of stone reinforced topsoil/turf
- digging road side ditches in locations where drainage might be a problem

In one trench a pair of shallow parallel ditches was found on the uphill side of the road, this was the only evidence of ditches found. Analysis of samples taken from the ditches is awaited.

In one place the road was found to be preserved under an eighteenth-century boundary-bank. There were no medieval or earlier finds, suggesting that the road may have had only limited use. This is also suggested by lack of wear, and by the possibility that the road was never completed to full width in all places (see Sections 3.5.1 and 3.5.4). Combined with the lack of evidence that the road continues further west, it seems likely that it was never finished as planned, or if completed then was little used.

6.3 Comparison with other excavations of Roman roads in the region

Various other rural Roman roads have been excavated in the region, although not always to modern standards or with many details published. Some descriptions of road structures found on excavation are given below:-

In the 1930s Wright (1938a, 1938b, 1939, 1940) excavated the Stanegate and Devil's Causeway in Northumberland and a side-road near Binchester in County Durham. His extensive series of trenches across the roads found a variety of construction techniques: 'There is a great diversity of construction, although they are included within a space of six miles. They do indeed lack a smooth top surface of either gravel or small metalling' (Wright 1938a). Kerbs were usually but not always present. Sometimes there was only a single layer of stones, sometimes an upper layer as well as a base layer of stones on the subsoil. The Stanegate was about 19ft 3in (5.9m) wide. 'In structure the

road is lightly built' (Wright 1939). The Devils Causeway varied from 11ft (3.4m) to 26ft (7.9m) in width. The side road at Binchester was 21ft 8in (6.6m) wide, in one place it had a central rib.

Young et al (2005) summarised investigations of Roman roads in the Northumberland National Park. Dere Street at High Rochester was found on excavation to be 5.40m wide, demarcated on its eastern edge by a kerb of regular stones (the other edge was robbed). There was a foundation of angular sandstone blocks, set in coarse sand, with a layer of smaller metalling above. It was later resurfaced in cobbles and narrowed to circa 2.5m. Another section nearby showed a cobble and flagstone surface. At a different location (Featherwood), Dere Street was 5.5m to 6m wide, well-defined by a straight edge of cobbles. Hunter Blair in 1936 found a side road from Dere Street to Devils Causeway to be a single layer of large cobbles laid upon sand and 22ft 3in (6.8m) wide; larger stones formed a kerb at each side and there was a central rib in the road. An excavation in 1996 of the branch road found that it was a single layer of irregularly laid slabby sandstone blocks, put directly on to subsoil; it had a fairly regular kerb.

Sockett (1973) excavated the Stanegate at Homer's Lane and found a single layer of sandstone cobbles with some larger kerb-stones in situ. The published section shows the sandstone was laid directly on subsoil and there was no metalling. The trench was 16ft (4.9m) wide, the road width 14ft (4.3m).

Platell (2014) excavated the Roman road through Chester-le-Street; the road had a foundation of tightly packed angular sandstone cobbles 0.2 to 0.3m diameter. The road was at least 2.5m wide (one side had been truncated by later activity). In some areas, small patches of gravel overlay the stones, but were absent on most of the road. Interestingly, some of the stones were cup-marked, probably taken from a nearby prehistoric cairn.

The Roman Military Way near to Housesteads is visible as a gently cambered terrace about 5m to 6m across. Some cobbling can occasionally be seen and its south (downhill) side is defined by a kerb of closely-set small boulders (Rushworth 2009).

The Maiden Way near Alston was excavated by Altogether Archaeology volunteers under direction of NP Archaeology (Mounsey 2012). In one trench the road was 5.8m wide, formed mainly of flat, sub-angular stones (0.25 x 0.15 x 0.12m average size, but 25% of stones larger). The sandstone stones were laid on subsoil, redeposited as a 0.25m high mound. There was only one phase of construction and no metalling of smaller material. There was a 0.18m deep ditch on the uphill side of the road. Another trench showed a similar road structure; due to damage and lack of kerbstones the width of the road, 6m, was less certain.

General conclusions are

- The widths of the roads described are mostly between 5m and 7m
- Kerbstones are often, but not always, present
- The road structure is very simple, usually of irregular sandstone cobbles/blocks, 10cm to 30m across
- The blocks are laid directly on to subsoil, sometimes re-profiled into a low camber
- In most cases, there is no upper road surface of smaller stones, sand, or flagstones

The road excavated in this project therefore has a structure typical of rural Roman roads in northern England. The lack of dating evidence is also typical.

6.4 Historical evidence

Section 5, above, summarises the landscape, map and documentary evidence for various hypotheses regarding the origin of the straight road. This concludes that the straight road is very unlikely to have

been a post-enclosure late eighteenth-century quarry access road, a long-distance medieval route between Hexham and Alston, or a medieval monks'-road. The straight road disappears from view under the high-medieval pattern of ridged cultivation within the ancient enclosed ground of The Paise, and its extrapolated course runs directly under the Yarridge estate, already occupied by 1114. It is reasonable to assume, therefore, that it had disappeared from view by then, and had by the same token long since passed out of use.

The only feasible explanation for a straight metalled road of much earlier date than the medieval period is that it was created during the Roman occupation to lead south-west from Corbridge, one of the two major settlements of the frontier complex (the other being Carlisle).

6.5 Summary

Lidar images show two linear features south of Hexham, running in a south-west direction from Corbridge. One is a sinuous holloway, the other a straight linear feature seen for about 5km, although with a gap of 1km. Historical studies show that the holloway is a road that was in use in the eighteenth century, but superseded after that by the modern road system. The straight feature was not present on eighteenth-century maps, it is lost where it passes through an area of medieval arable cultivation, and it is not used as a later track or as a parish, estate, or field boundary.

Excavation showed the linear feature to be a road with a simple structure (a single layer of irregular stones between kerbstones), consistent with Roman roads in the region. An eighteenth-century field boundary-bank passes over it. No datable finds were made, which is as expected for a minor Roman road. It may not have been completed or much-used.

There seems little doubt that it is Roman in date; archaeological and historical evidence point to a pre-medieval date, when only the Roman army had the skills, resources, and excess labour available to construct a straight, stone-built road, and then probably not make much use of it.

This leaves open the question as to the intended purpose of the road. Its eastern end was almost certainly Corbridge for its extrapolated course intersects with Dere Street just south of the Roman bridge over the River Tyne opposite the fort. There is no likely intervening alternative destination. However, although it is tempting to identify the western destination as the Roman fort of Whitley Castle (Epiacum, a few km north of Alston), there is no clear evidence for this. Hence, although it may have been part of a planned short-cut military route from Corbridge to service Whitley Castle (as an alternative to using the Stanegate and Maiden Way), there are other possibilities. It may have been constructed for transport of lead or lead-ore from the Allendale and/or South Tyne valleys. It may have been more local in scope, for transport of coal from the Stublick coal seam (if exploited in the Roman period) or local agricultural produce from the south-facing slopes of what was Hexham Common until the 1750s. As a major supply base, Corbridge will have required a great deal of food and other products from the land.

The date of the road's construction in the Roman period is unknown, even whether it pre-dates or post-dates Hadrian's Wall. A possible construction date would be the very early third century, when Corbridge appears to have been developing rapidly (Hodgson 2008).

6.6 Further work

The history of Stublick Colliery is relevant to the usage of transport routes, but the first known documentary evidence for its operation dates from the late seventeenth century, at which time it was already an established colliery. Search of relevant documents might uncover evidence for much earlier operation.

Further fieldwork and examination of lidar images and aerial photographs could be used to look for sections of road further to the west. However, it is significant that the course of the road further west was not located in the English Heritage survey of the South Tyne valley around Alston, nor in the Altogether Archaeology Allen Valleys lidar project led by Stewart Ainsworth. Hence, if the road is to be found further west, then examination of existing tracks and roads is more likely to be productive than lidar assessment.

The Dukeshouse Wood section of the linear feature would benefit from further investigation, perhaps initially a survey when vegetation is at its lowest (late winter) and further historical research into old maps of the area.

The excavation examined only about 12 metres out of over 3 kilometres of the road (as seen on lidar), so there is ample scope for further, larger-scale, investigations. Motivation for these would be the hope of finding more dating evidence and retrieving environmental samples. Further investigations would also help to clarify the extent to which the road was completed and put into use. Geophysics might be able to locate sections of the road with deep ditches suitable for sampling, and a metal detection survey along the road course could also produce valuable evidence.

The medieval arable fields, the 'gap' in the road, could be further investigated through documentary research and archaeological fieldwork to clarify the period of its use, and examine the relationship between the road and medieval features.

A search for Roman and other sites along the line of the road (extrapolated east and west) might give further clues as to the reason for the building of the road.

A comparison of Roman roads in the region might throw light on the question of whether minor roads such as this one were part of an early attempt by the army to penetrate all areas as they took control, or if they were part of a later programme to fill gaps in the transport network.

7 ACKNOWLEDGEMENTS

Excavation was by kind permission of the farmers and landowners along the route: the Murray family, the Dinning family and the Burnell family. Tragically, William Dinning of Watch Currock passed away unexpectedly shortly before the August excavations; we are grateful to his son Thomas for allowing us to continue with our plans. Volunteer parking was at Hexham racecourse, by kind permission of Robert Whitelock (chairman).

The Hexham Local History Society and the Henry Bell Trust gave grants towards excavation expenses. We also received financial help from anonymous donors and support from the Hadrian's Wall Community Champions Project. The remaining costs of the excavation were covered by AA membership subscriptions. Our dumpy level was donated by The Archaeological Practice, Newcastle upon Tyne. Some digging equipment was borrowed from Rob Young and Jane Webster.

Members of AA who took part in the excavation, braving the unseasonally stormy conditions, are:-

Darren Carr, Lorraine Clay, Dot Coe, Steve Cunningham, Steve Douglas, Stephen Eastmead, Greg Finch, Paul Frodsham, Martin Green, Michael Hall, Brian Henderson, Jan Hicks, Gail Hildreth, Alex Jackson, Marilyn Kendall, Sophie Laidler, Pete Lee, Tony Metcalfe, Alan Newham, Rob Pearson, Liz Pounds, Chris Powell, Mike Powell, Joan Raine, Brian Stirk, Janet Stirk, Stuart White, Chris Wilson.

Excavations were directed by Paul Frodsham, with Martin Green. Historical research was by Greg Finch, photogrammetry by Stephen Eastmead, and metal-detecting by Darren Carr. Photographs used in this report were taken by Paul Frodsham, Martin Green and Stuart White

Useful discussions about the excavation were held with Chris Jones (Northumberland National Park), Stewart Ainsworth (Chester University), Kerry Shaw and Chloe (age 3) (Hadrian's Wall Community Champions Project), Marc Johnstone and Alan Rushworth (both of The Archaeological Practice, Newcastle).

Software used included Arcsoft (photogrammetry), QGIS (mapping), Serif Drawplus (plans), Irfanview and Paint.net (image handling).

Excerpts from uncatalogued Allendale Estate maps are reproduced by kind permission of Lord Allendale.

Henry Bell Trust

Altogether Archaeology
Digging our Heritage in the North Pennines

HEXHAM LOCAL HISTORY SOCIETY

8 ENDNOTES AND REFERENCES

8.1 Endnotes

1 The Altogether Archaeology website http://www.altogetherarchaeology.org has lidar images for the North Pennines. This coverage is continued southwards across the Yorkshire Dales at https://www.swaag.org. Both sites, and http://eastmead.com, have details on lidar image processing compiled by Stephen Eastmead.

2 Northumberland Archives, Blackett Chief Agent Letter Book, *Richmond to Blackett* 24 January 1755, NRO 672 E/1E/1. A transcription is available at Dukesfield Documents www.dukesfield.org.uk/documents.

3 North of England Institute of Mining and Mechanical Engineers, *Report on Stublick and Cragshead Collieries*, Amos Barnes, 23 October 1736, For/1/4/20. A transcription is available at Dukefield Documents www.dukesfield.org.uk/documents.

4 The database is available at the Portable Antiquities Scheme website: finds.org.uk.

5 Allendale Estate, uncatalogued maps.

6 National Archives Admiralty Records, Greenwich Hospital Estate Maps 1736, MPI 1/230/1-40.

7 See for example the website www.romanroads.org.uk.

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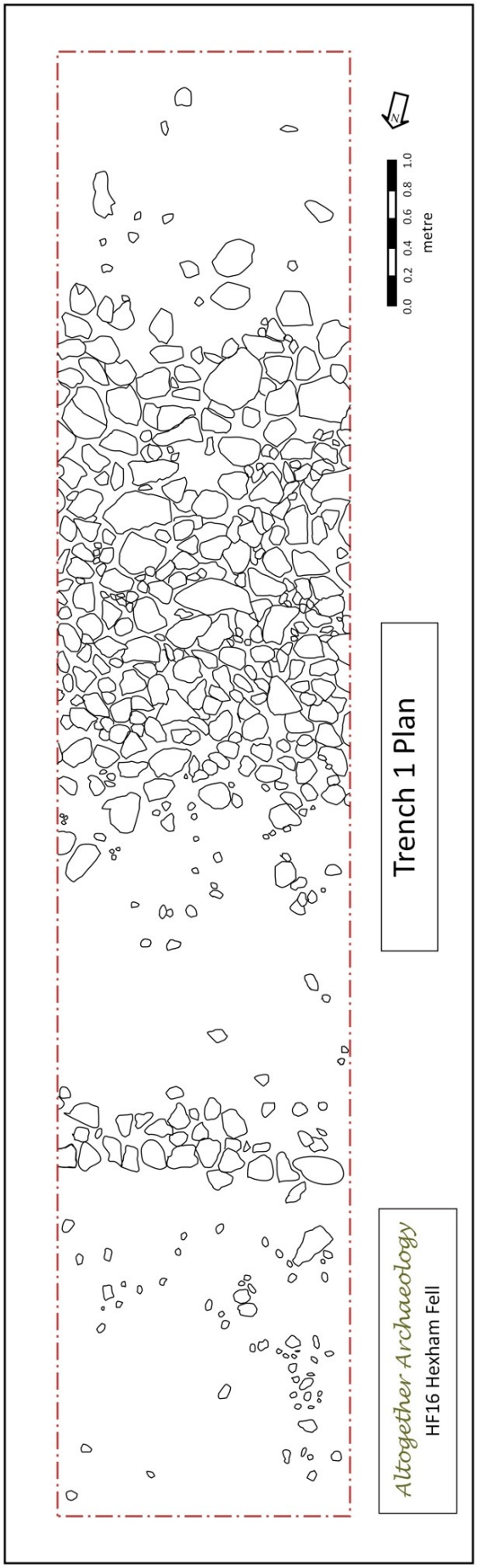
9 APPENDIX 1: TRENCH PLANS AND SECTIONS

A plan and section is shown for each trench, with the exceptions of a Trench 4 section and a Trench 5 plan. Levels are not shown (apart from section datums). The plans are repeated (on a smaller scale and with levels marked) in Appendix 5 to allow easy comparison between trenches. Level values are given in Appendix 4.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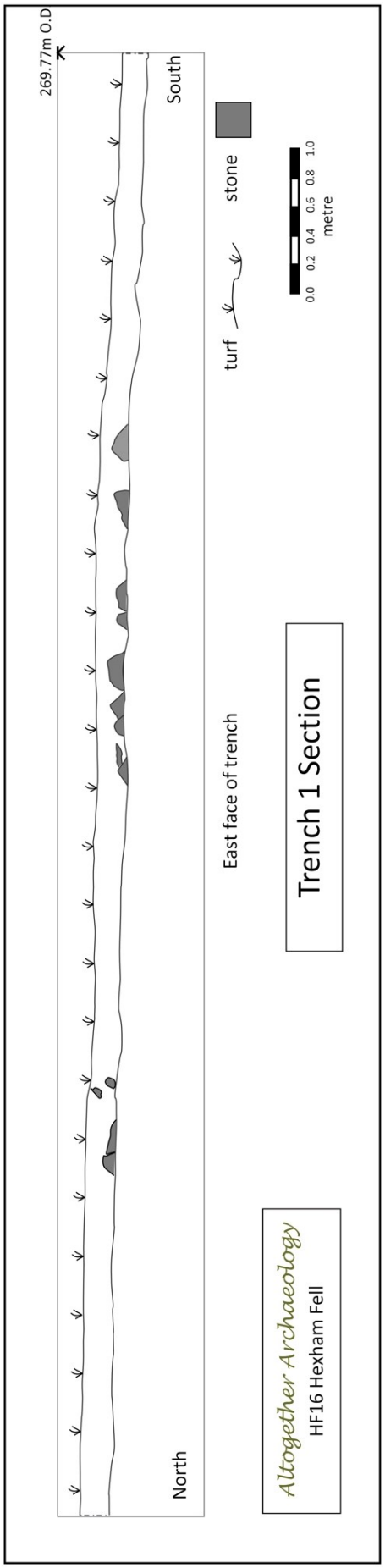
metre
Trench 1 Plan
Altogether Archaeology
HF16 Hexham Fell


269.77m O.D
South
stone
turf
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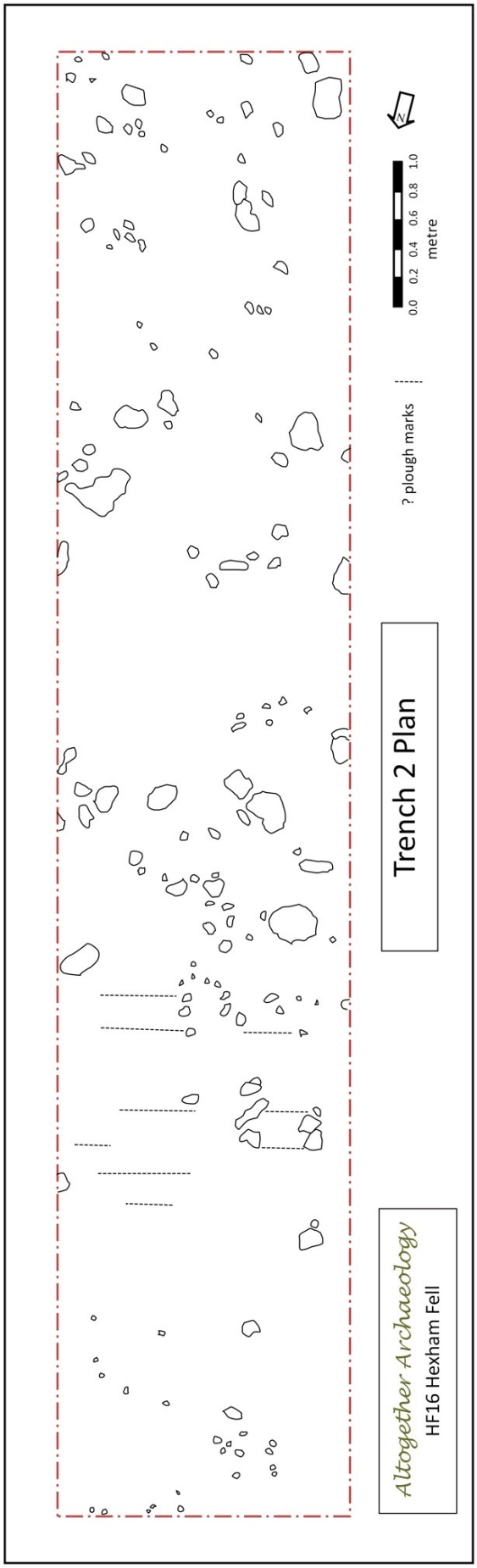
metre
East face of trench
Trench 1 Section
North
Altogether Archaeology
HF16 Hexham Fell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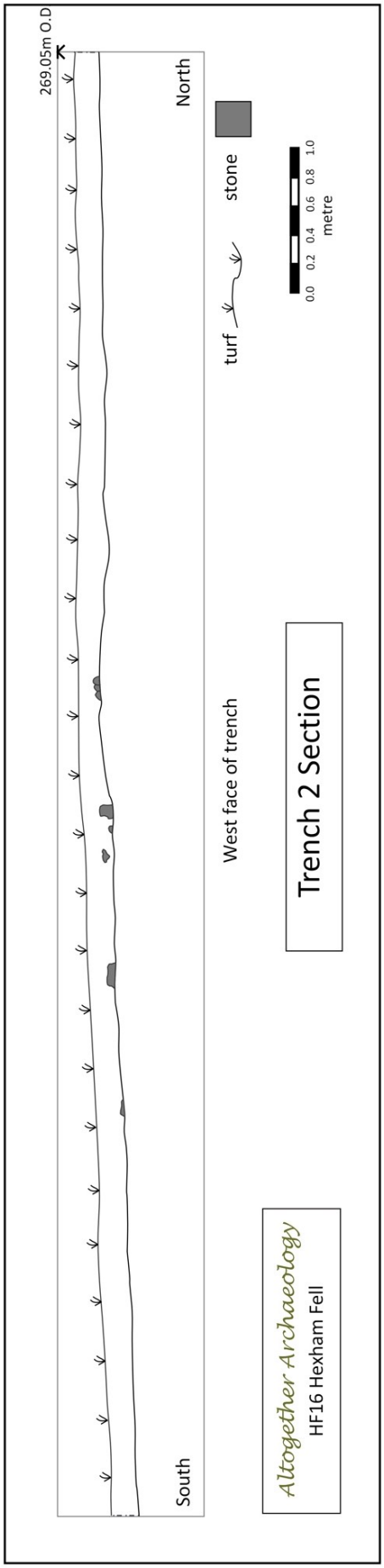
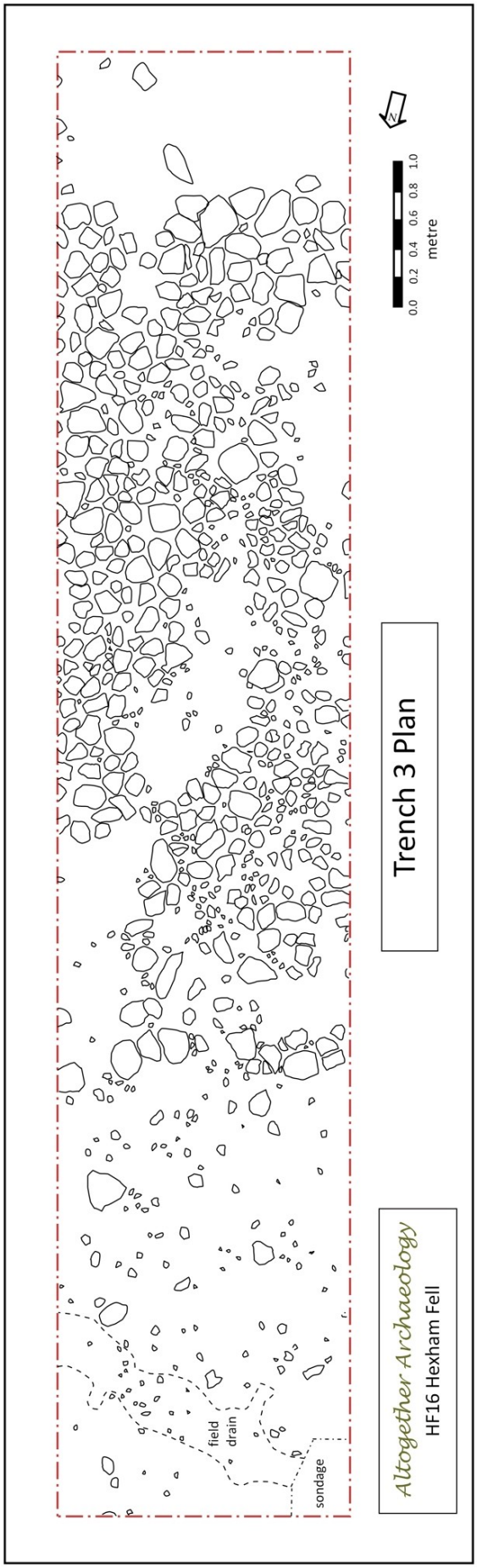
? plough marks
Trench 2 Plan
Altogether Archaeology
HF16 Hexham Fell


269.05m O.D
North
South
stone
turf
0.0 0.2 0.4 0.6 0.8 1.0
metre
West face of trench
Trench 2 Section
Altogether Archaeology
HF16 Hexham Fell


field drain
sondage
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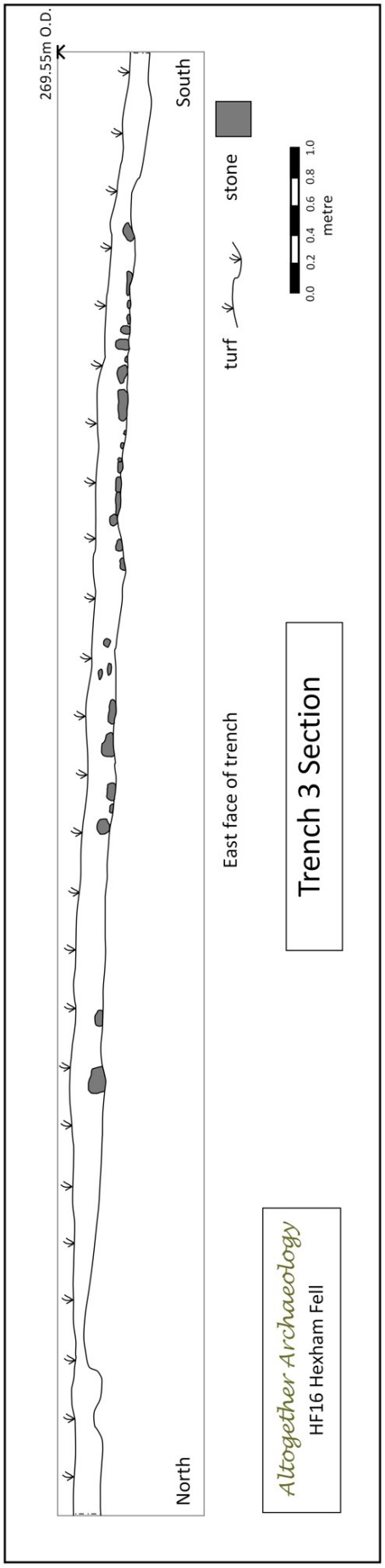
metre
Trench 3 Plan
Altogether Archaeology
HF16 Hexham Fell


269.55m O.D.
South
North
East face of trench
stone
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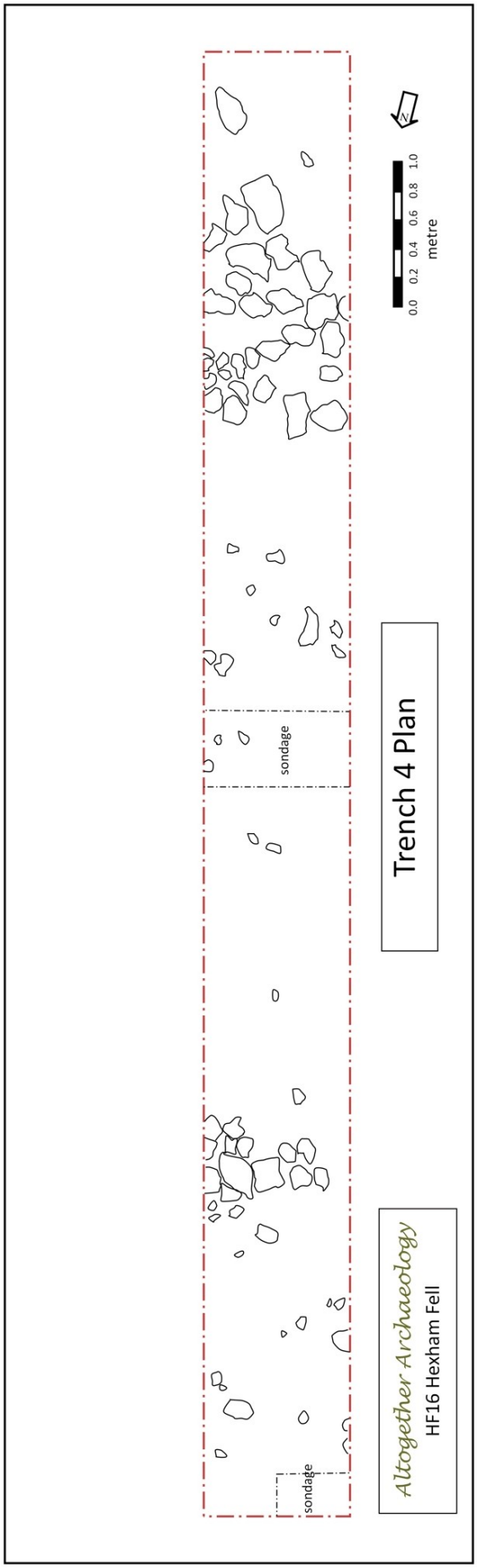
0.0 0.2 0.4 0.6 0.8 1.0
metre
Trench 3 Section
Altogether Archaeology
HF16 Hexham Fell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sondage
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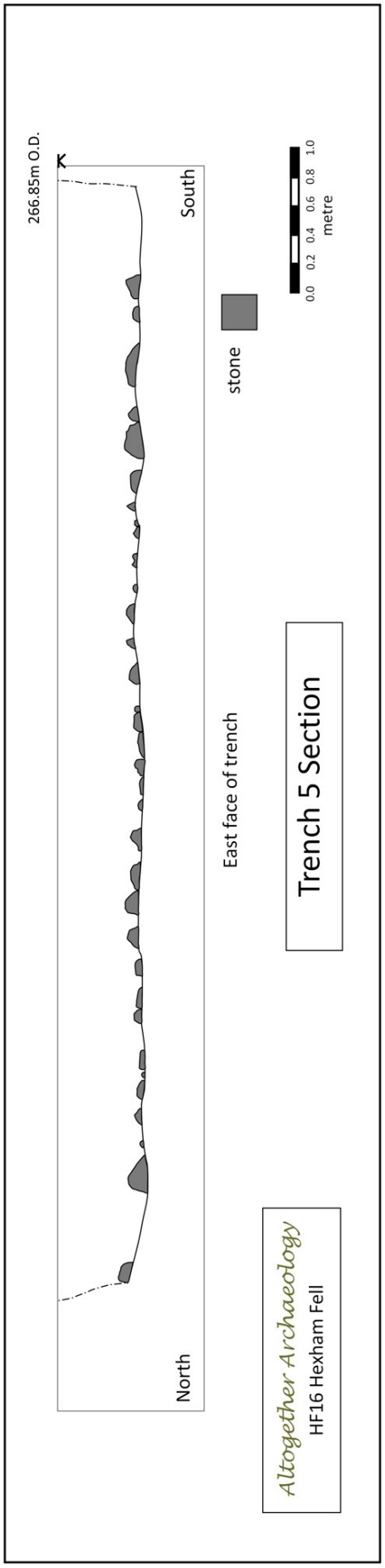
Trench 4 Plan
Altogether Archaeology
HF16 Hexham Fell


266.85m O.D.
South
North
East face of trench
stone
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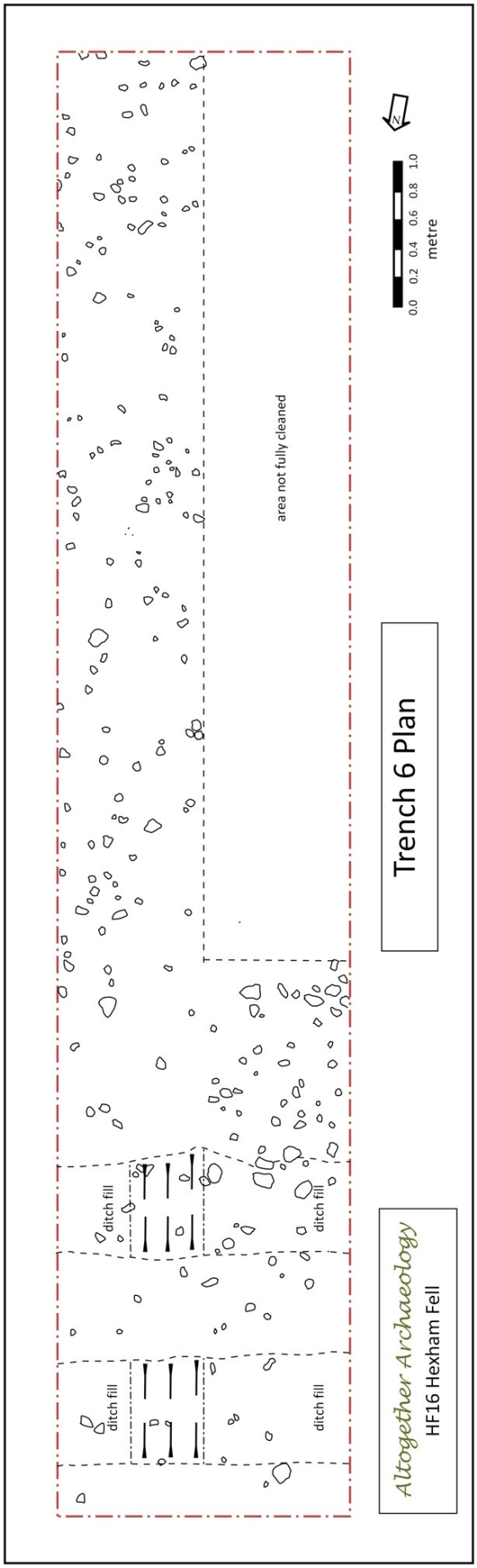
metre
Trench 5 Section
Altogether Archaeology
HF16 Hexham Fell


ditch fill
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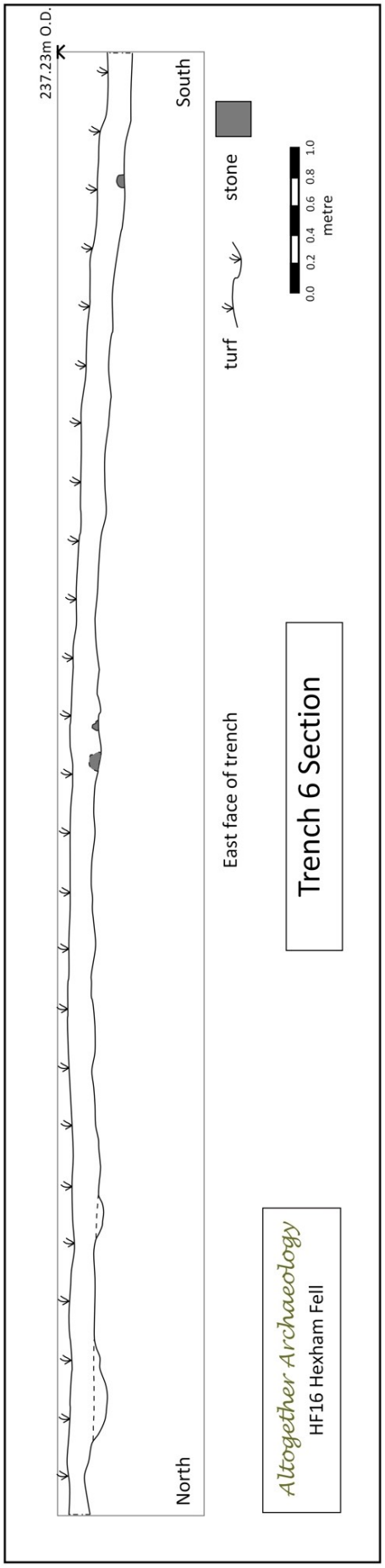
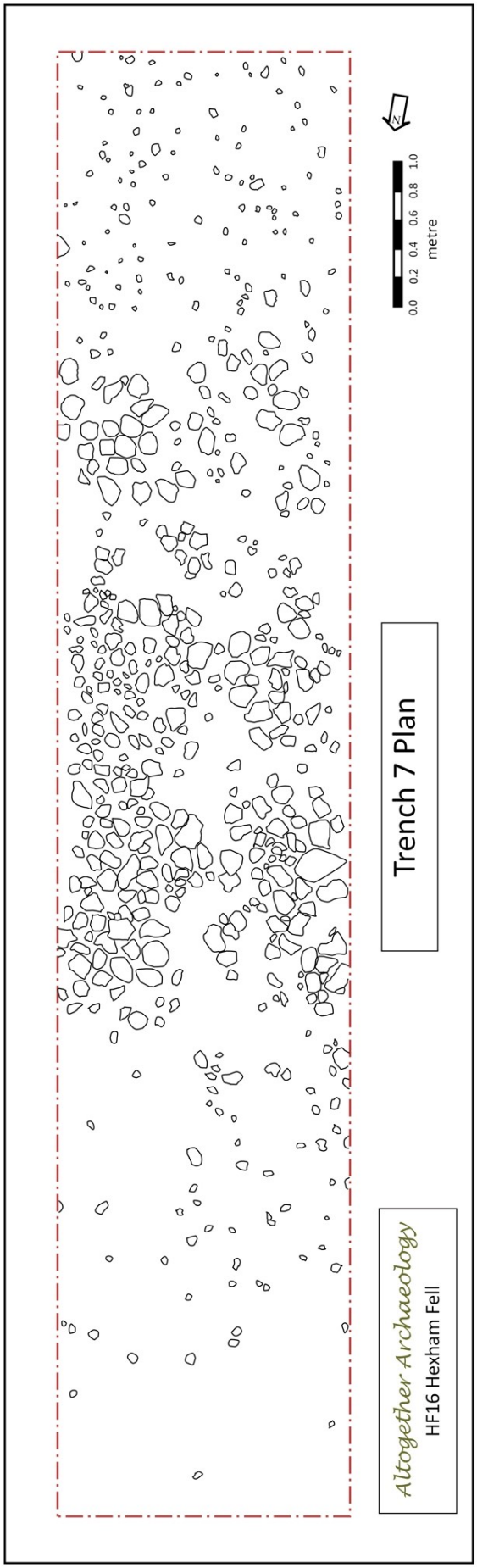
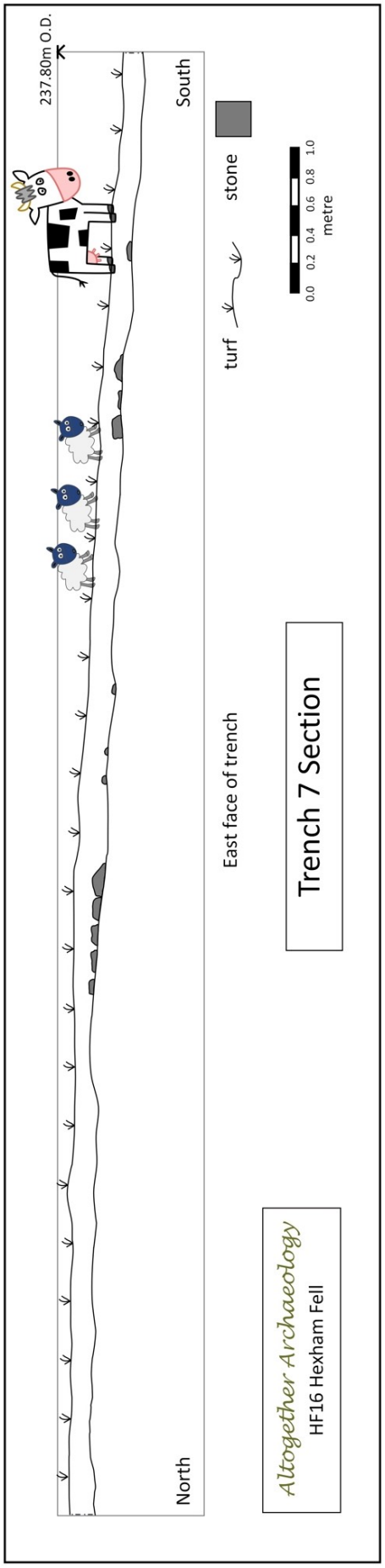
ditch fill
ditch fill
area not fully cleaned
0.0 0.2 0.4 0.6 0.8 1.0
metre
Trench 6 Plan
Altogether Archaeology
HF16 Hexham Fell


237.23m O.D.
South
North
East face of trench
stone
turf
0.0 0.2 0.4 0.6 0.8 1.0
metre
Trench 6 Section
Altogether Archaeology
HF16 Hexham Fell


0.0 0.2 0.4 0.6 0.8 1.0
metre
Trench 7 Plan
Altogether Archaeology
HF16 Hexham Fell


237.80m O.D.
South
stone
turf
0.0 0.2 0.4 0.6 0.8 1.0
metre
East face of trench
Trench 7 Section
North
Altogether Archaeology
HF16 Hexham Fell

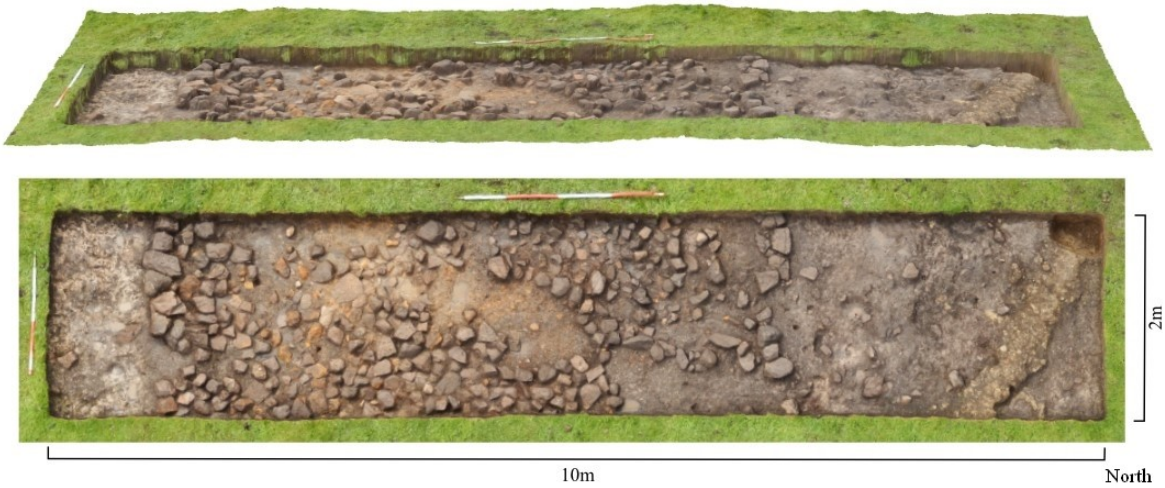
10 APPENDIX 2: TRENCH PHOTOGRAMMETRY

Photogrammetry for five of the trenches was carried out by Stephen Eastmead using a pole-mounted camera to take multiple digital photographs. From these, Agisoft software produced 3-D models of the trenches. The views shown here are isometric vertical and oblique views of these models. As they are free of camera distortions and to a uniform scale, they can be used as an alternative to traditional hand-drawn archaeological plans.

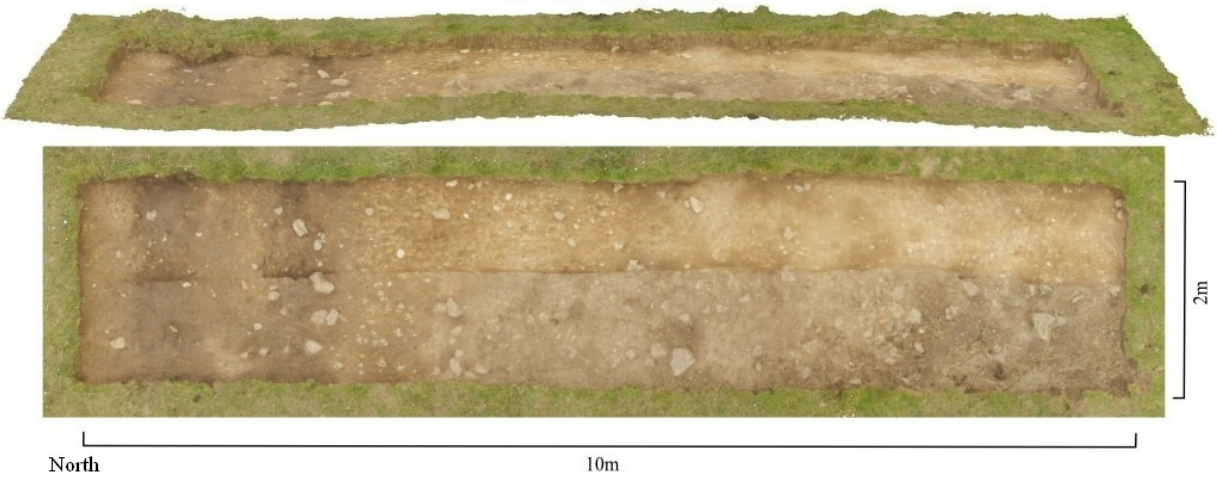
Trench 1 Plan + Profile

Trench 2 Plan and Profile

Trench 3 Plan and Profile



Trench 6 Plan and Profile



Trench 7 Plan and Profile

11 APPENDIX 3: TABLE OF CONTEXTS

Context Number: features start with "F"	Trench	Context Type: see key below	Description	Notes
101	1	D	Ploughsoil	Same as ploughsoil in all other trenches.
F102	1	S	Road surface	Random sub-angular cobbles of sandstone, well preserved on south half of road but missing in north.
F103	1	S	Probable kerbstones	Apparent kerb to presumed north side of road.
104	1	G	Natural clay	Surface apparently slightly cambered along line of road.
201	2	D	Ploughsoil	Same as ploughsoil in all other trenches.
F202	2	S	Road surface	Very few surviving random sub-angular cobbles of sandstone road surface, here presumably largely destroyed by ploughing.
203	2	G	Natural clay	Surface apparently slightly cambered along line of road.
F204	2	S	Possible plough scars	
301	3	D	Ploughsoil	Same as ploughsoil in all other trenches.
F302	3	S	Road surface	Random sub-angular cobbles of sandstone. Well-preserved surface.
F303	3	S	Kerb	Kerbstones to south side of road.
F304	3	S	Kerb	Kerbstones to north side of road.
305	3	G	Natural clay	Surface apparently slightly cambered along line of road.
F306	3	C	Cut of field drain	

Context Number: features start with "F"	Trench	Context Type: see key below	Description	Notes
307	3	D	Fill of field drain	
401	4	D	Ploughsoil	Same as ploughsoil in all other trenches.
F402	4	S	Road surface	Very sparse layer of sub-angular cobbles; road surface presumably largely destroyed by ploughing or robbing (though possibly never completed).
F403	4	S	North kerb of road	
F404	4	S	South kerb of road	
405	4	G	Natural clay	Sondage dug into natural subsoil beneath line of road provided no evidence of re-profiling e.g. by scraping up clay adjacent to line of road.
501	5	D	Ploughsoil	Same as ploughsoil in all other trenches.
F502	5	S	Post-med field bank	
F503	5	C	Cut of ditch associated with post-med field bank	Cut through F505, F506 & F507.
504	5	D	Fill of ditch associated with post-med field bank	Waterlogged. Not excavated.
F505	5	S	Road surface	Sandstone sub-angular cobbles. Extends beneath F502 (not excavated)
F506	5	S	North kerb of road	Only one stone exposed, more presumably survive in situ sealed beneath F502
F507	5	S	South kerb of road	Only one stone exposed, more presumably survive in situ sealed beneath F502

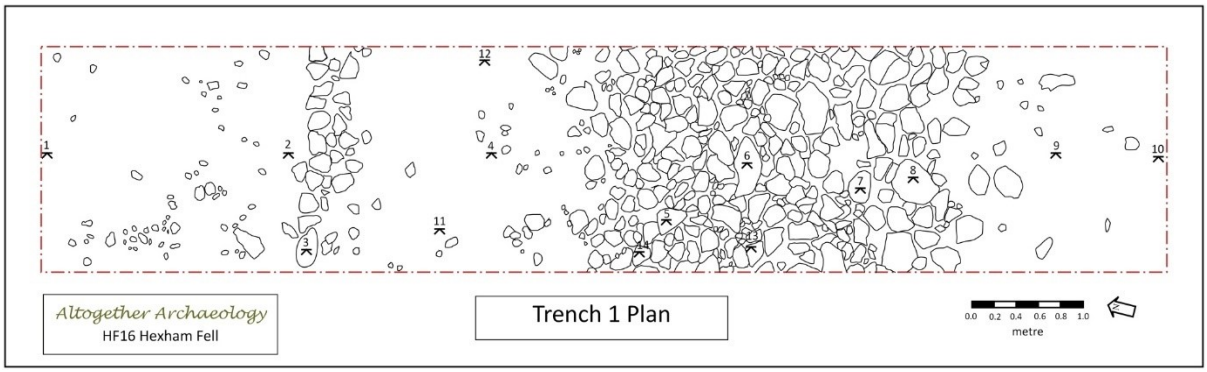
Context Number: features start with "F"	Trench	Context Type: see key below	Description	Notes
508	5	G	Natural clay	
601	6	D	Ploughsoil	Same as ploughsoil in all other trenches.
F602	6	S	Road surface	Badly damaged by ploughing. Only occasional sub-angular sandstone cobbles survive.
603	6	G	Natural clay	Surface apparently slightly cambered along line of road.
F604	6	C	Cut of inner roadside ditch	
605	6	D	Fill of inner roadside ditch	Sample awaiting analysis
F606	6	C	Cut of outer roadside ditch	
607	6	D	Fill of outer roadside ditch	Sample awaiting analysis
701	7	D	Ploughsoil	Same as ploughsoil in all other trenches.
F702	7	S	Road surface	Sub-angular sandstone cobbles. Generally well preserved, but no kerbs. Not lifted (due to time constraints).
703	7	G	Natural clay	Surface only partially exposed; apparently slightly cambered along line of road.

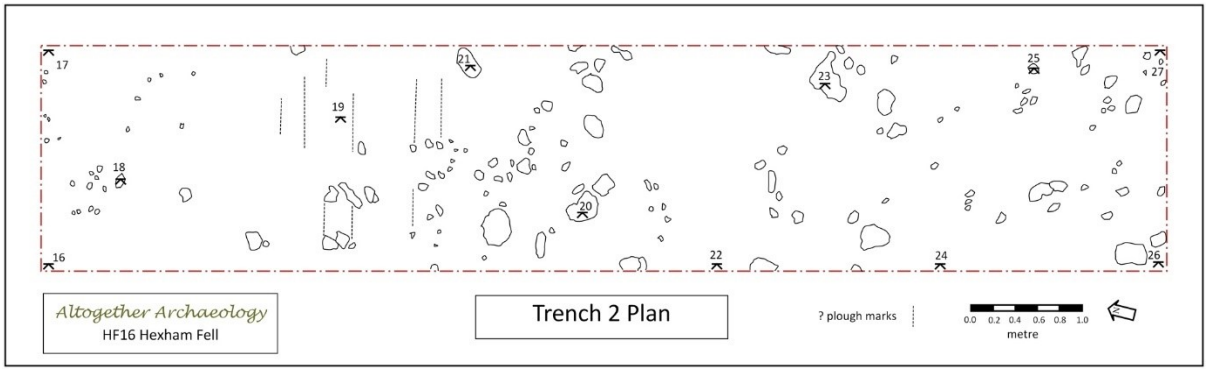
Key to context types: C: Cut D: Deposit
G: Geology S: Structure

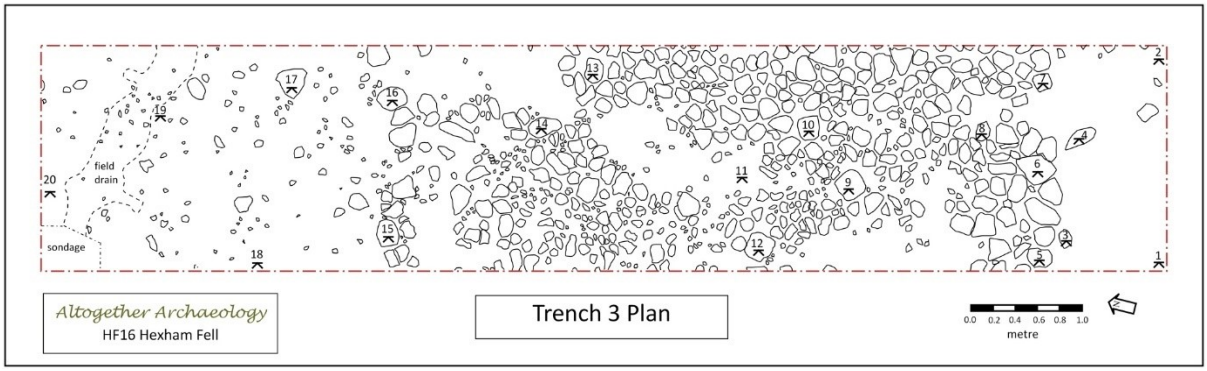
12 APPENDIX 4: TABLE OF LEVELS

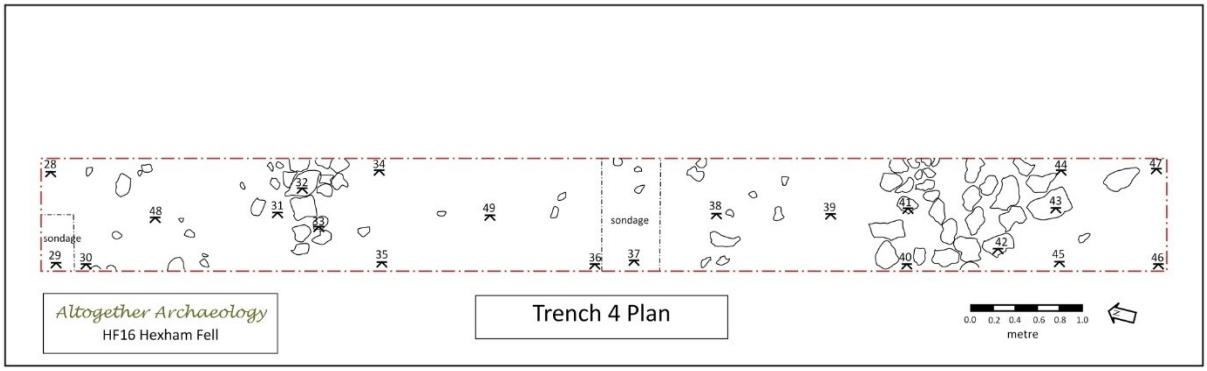
Level Number	Trench Number	Level O.D. metres	Level Number	Trench Number	Level O.D. (metres)	Level Number	Trench Number	Level O.D. (metres)
1	1	269.41	45	4	269.16	69	6	236.98
2	1	269.33	46	4	269.12	70	6	236.88
3	1	269.46	47	4	269.15	71	6	236.98
4	1	269.28	48	4	269.41	72	6	236.89
5	1	269.33	49	4	269.45	73	6	237.02
6	1	269.32	50	1 section	269.77	74	6	236.93
7	1	269.28	51			75	6	236.92
8	1	269.26	52	3 section	269.55	76	6	236.94
9	1	269.07	3-1	3	268.91	77	6	236.94
10	1	269.07	3-2	3	268.93	78	6	236.69
11	1	269.31	3-3	3	268.96	79	6	236.75
12	1	269.29	3-4	3	269.00	80	6	236.82
13	1	269.28	3-5	3	269.13	81	6	236.88
14	1	269.32	3-6	3	269.16	82	6 section	237.23
15	2 section	269.05	3-7	3	269.13	83	7 section	237.80
16	2	268.81	3-8	3	269.08	84	7	237.53
17	2	268.73	3-9	3	269.11	85	7	237.51
18	2	268.75	3-10	3	269.11	86	7	237.48
19	2	268.74	3-11	3	269.12	87	7	237.48
20	2	268.73	3-12	3	269.24	88	7	237.46
21	2	268.78	3-13	3	269.23	89	7	237.43
22	2	268.68	3-14	3	269.32	90	7	237.2
23	2	268.69	3-15	3	269.39	91	7	237.58
24	2	268.59	3-16	3	269.39	92	7	237.51
25	2	268.59	3-17	3	269.38	93	7	237.54
26	2	268.52	3-18	3	269.33	94	7	237.59
27	2	268.49	3-19	3	269.31	95	7	237.52
28	4	269.46	3-20	3	269.32	96	7	237.54
29	4	269.24	53			97	7	237.47
30	4	269.47	54	5 section	266.85	98	7	237.45
31	4	269.43	55	5	266.20	99	7	237.41
32	4	269.51	56	5	266.31	100	7	237.34
33	4	269.54	57	5	266.23	101	7	237.30
34	4	269.45	58	5	266.32	102	7	237.45
35	4	269.45	59	5	266.24	103	7	237.40
36	4	269.41	60	5	266.30	104	7	237.40
37	4	269.02	61	5	266.28	105	7	237.27
38	4	269.35	62	5	266.17	106	7	237.32
39	4	269.28	63	5	266.41	107	7	237.21
40	4	269.28	64	5	266.65	108	7	237.23
41	4	269.31	65	5	266.22	109	7	237.14
42	4	269.28	66	6	236.89	110	7	237.19
43	4	269.34	67	6	236.95			
44	4	269.16	68	6	236.98			

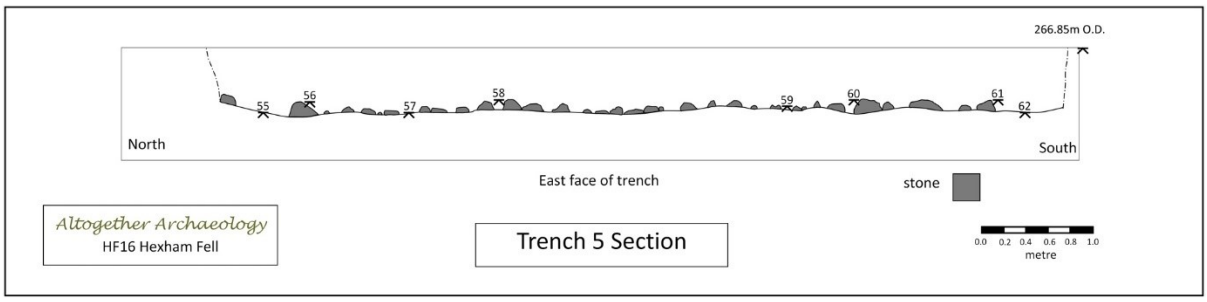
13 APPENDIX 5: TRENCH PLANS WITH LEVELS SHOWN

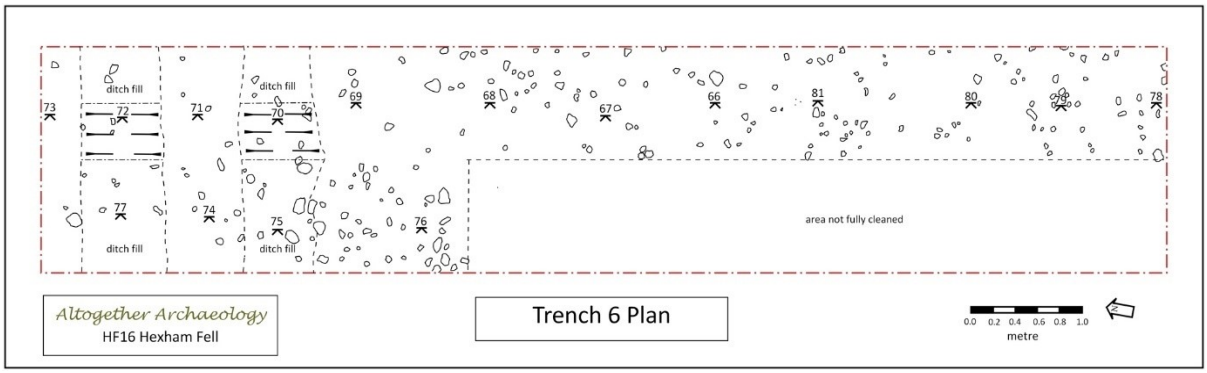


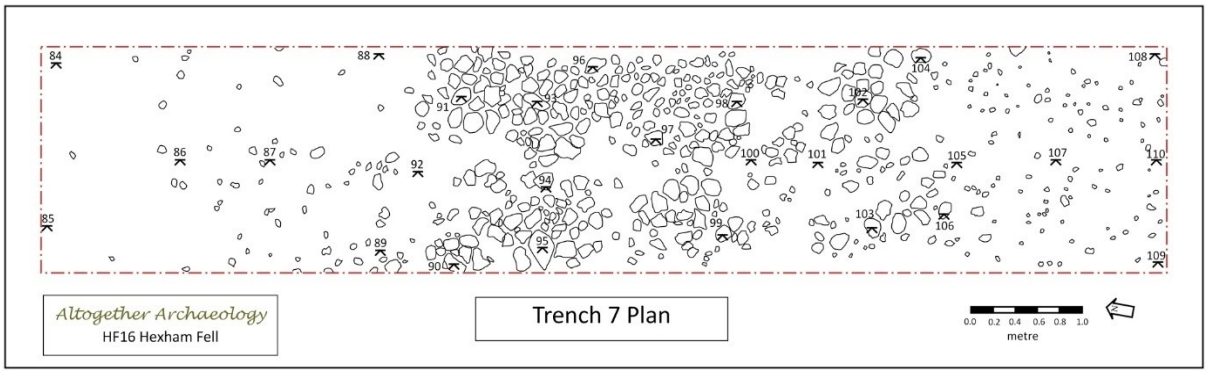







266.85m O.D.
55
56
57
58
59
60
61
62
North
South
East face of trench
stone
Altogether Archaeology
HF16 Hexham Fell
Trench 5 Section
0.0 0.2 0.4 0.6 0.8 1.0
metre


ditch fill
ditch fill
ditch fill
ditch fill
73
72
71
70
69
68
67
66
81
80
79
78
77
74
75
76
area not fully cleaned
Altogether Archaeology
HF16 Hexham Fell
Trench 6 Plan
0.0 0.2 0.4 0.6 0.8 1.0
metre


84
88
96
104
108
91
98
102
97
86
87
92
100
101
105
107
110
94
85
99
103
106
89
95
90
109
Altogether Archaeology
HF16 Hexham Fell
Trench 7 Plan
0.0 0.2 0.4 0.6 0.8 1.0
metre

14 APPENDIX 6: PHOTOGRAPHS OF TRENCHES

See also Appendix 2 which gives distortion-free vertical photogrammetric views of most trenches.

Photographs are in order of trench numbers

De-turfing Trench 1. Looking south-east. The farmer's stone-pile is in the background. The ranging-pole and string to the right edge of the photo mark the road position predicted from lidar.

Trench 1 during excavation. Looking east.

Trench 1. Looking north.

Trench 1. Southern kerb and adjacent road surface. Looking west.

Trench 1. Central road surface. Looking west. Part of the northern kerb can be seen on the extreme right.

Trench 1 Northern kerb. Looking west.

Trench 2. Looking south.

Trench 3. Looking north.

Trench 3. Southern kerb. Looking north.

Trench 3. Looking south-west. The abandoned farm of Low Stublick is in the background, with the valley of the Stublick Burn beyond it. Old maps show coal workings including a 'fire-engine' on the hillside to the left of the farm.

Trench 4. Looking north.

Trench 5. Looking north-east. The staff is placed on the road surface. The surface is exposed in the section along the boundary bank, from the northern kerb (0.8m to the left of the staff) to the right margin of the photo. Loose stones in the bank lie above it.

Trench 5. Looking east. Northern kerb and adjacent road surface. The higher stones in the boundary-bank were thrown up on the bank when the adjacent eighteenth-century ditch cut the road surface. The horizontal ranging-pole lies on the road surface.

Trench 5. Looking east. Southern kerb (at right of photo) and adjacent road surface. The horizontal ranging-pole lies on the road surface.

Trench 6. Looking south. The road-side ditches can be seen crossing the trench in the foreground.

Trench 6 roadside ditches. Looking east. The fill has been excavated from 50cm of each ditch.

Trench 6 roadside ditches. Looking west.

Trench 6 roadside ditches. Looking east. After excavation of fill.

Trench 7. Looking west. In the background is Trench 6 and, beyond it, the natural gully though the field.

Trench 7. Looking south.

Trench 7. Looking south-west.

Trench 7 road surface. Looking west.

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