Supported by The National Lottery® through the Heritage Lottery Fund

heritage lottery fund

Swaledale & Arkengarthdale SWAAG swaag.org Archaeology Group
Registered Charitable Incorporated Organisation No.1155775

The Swaledale Big Dig

Final Report

Swaledale and Arkengarthdale Archaeology Group

Table of Contents

1. Introduction 2

2. Aims & Objectives 4

3. Location 6

4. The Geology and Geomorphology of Swaledale 7

5. Historical Background 8

6. Training & Courses 29

7. Test Pitting and Methodology 32

8. Geophysical & Topographical Surveying 41

9. Community involvement 67

10. Analysis and Interpretation of the test pit programme 72

11. Acknowledgements 125

12. Appendix 1 Geophysics Report
by Mary Saunders , Bradford University 126

13. Appendix 2 Associated Activities 157

14. Appendix 3 Pottery finds report
by Jenny Vaughan, Northern Counties Archaeological Services 159

15. Appendix 4 The Grinton-Fremington Dykes 215

1. Introduction

The Swaledale and Arkengarthdale Archaeology Group (SWAAG), founded in 2009, is a group of enthusiasts in the northernmost Yorkshire dales who contribute to the knowledge base of the history of our dales through archaeological and related activity.

In May 2012, Dr Carenza Lewis, then of the University of Cambridge and now Professor for the Public Understanding of Research at the University of Lincoln, delivered the Reeth lecture, part of the Swaledale Festival programme, in which she explained the principles and results of the test-pitting project developed through Access Cambridge Archaeology (ACA) to involve local communities in archaeological investigation. ACA, established in 2004, operates across the country, developing and delivering new ways of promoting social and economic well-being through active participation in archaeology while raising interest in archaeology as an academic subject.

Dr Lewis's presentation motivated SWAAG to develop the Swaledale Big Dig Project based on ACA methodology and in consultation with Dr Lewis. A Project Group elaborated a proposal to the Heritage Lottery Fund HLF) which was submitted on 26 July 2013, approved by the HLF in October 2013 subject to various provisions, announced publicly in December 2013 and launched at an event in Reeth on 13 March 2014 attended by Dr Lewis, Dr Robert White, at the time Senior Historic Environment Office of the Yorkshire Dales National Park Authority (YDNPA), Dr Keith Sweetmore at the time Head of the North Yorkshire County Record Office (NYCRO) representing the HLF, local Councillors and members of SWAAG and the local community in Swaledale, Arkengarthdale and Wensleydale.

The Swaledale Big Dig was a community archaeology project designed to deliver community outcomes through involving local communities in archaeological and related disciplines.

The Project aimed to engage the communities of the civil parishes of Grinton and Reeth in uncovering the history of three villages. It involved local people, parish councils, schools and community groups in a process of discovery leading to digging a large number of test pits by members of the public overseen by the local archaeology group, SWAAG, and advised by colleagues at the Yorkshire Dales National Park Authority.

Uncovering, interpreting and recording the past history of the two settlements was a primary objective. A lasting legacy of skills was vital. External professional oversight was kept at the level necessary to achieve the project objectives whilst encouraging skills development within the community.

Phase One of the Project provided training in a wide range of conventional archaeological techniques including initial documentary research, field walking, geophysics and excavation so to provide an enduring skills base.

Phase Two saw the application of these techniques in the field.
Phase Three involved widespread dissemination of the results of the project through local meetings, this written report published by SWAAG, brochures and in the local media.

Over 160 individuals were involved over two years in digging 50 test pits. Each pit was a metre square hole into the past. We shifted and sieved over 70 cubic metres of soil weighing around 90 tonnes. We found glass, clay pipes, animal bones and over 4000 pieces of pottery weighing more than 12kg. We also found a large amount of metal work including horseshoes, clog irons, tools, a medieval key and an early medieval lock.

We carried out documentary research, studied aerial photography and lidar images and carried out topographical and geophysical surveys. These helped us gain a deeper understanding of the development of the area.

We worked closely with the local schools. Over 90 children took part in digging test pits, surveying and other activities enabling them to learn more about their local heritage.

We ran 24 free courses and 11 free guided walks. Over 500 people joined in the Big Dig in one way or another.

The Big Dig will leave a lasting legacy of skills in in the local community together with an increased interest in, knowledge and understanding of, the local heritage.

Although the Big Dig finished in April 2016, the interest generated led to the creation of a Local History Group which together with SWAAG will carry on the research into the history of our local area.

2. Aims and Objectives

The Project has two inter-related sets of aims and objectives:

1. Community Objectives

Summary

The Swaledale Big Dig aims to engage the local communities in a wide range of activities in order add to our knowledge of the development of the three villages over the ages; to stimulate greater informed interest in their heritage, and to embed a range of skills to enable the communities to continue to research, record and interpret their heritage in the future. A greater appreciation of the heritage landscape combined with the skills to understand it will also facilitate its better management. The project will increase our sense of ourselves as a community, enhance our understanding of the history of our dale for a period with few written records and attract welcome publicity widely.

Background and detail

The Swaledale Big Dig, supported by the local parish councils, the YDNPA, schools, community groups and landowners, provides the local community with the opportunity to investigate and understand the history of the wider local area whilst at the same time develop a range of transferable skills and enhance the spirit of community. Further, the proposal fits well with the YDNPA's aim to conserve, enhance and promote understanding of heritage assets in designated areas through an active programme of research. This is particularly true for that part of the project area which is classified as being of high archaeological sensitivity, notably the shrunken medieval village of Grinton. There has been no previous research into the development of the settlements in the two civil parishes of Grinton and Reeth. Very little is known of much of the archaeology underlying these settlements. We need to know what is there: if we do not, there is a strong risk from uninformed activity in these well used areas. That said, there is no known major risk at present to any of the land to be investigated. Much of the land in Grinton, for example, is currently subject to a stable agricultural regime but of course this might not last forever. Increased incentives for forestry have already led to one approach for change of land-use in Grinton. A change of regime to e.g. forestry or intensive dairying requiring ploughing the land might possibly destroy what lies below. Similarly a renewable energy project such as biomass or ground source heating could pose a significant threat.

2. Archaeological Objectives

Summary aims and objectives

The primary research aim is to:
Discover the history of the development of the settlements of Fremington, Grinton and Reeth, particularly in medieval times and earlier.

The research objectives are to:
1. Identify the location of the medieval core, if any, of each of the three settlements.
2. Identify the layout of each of the medieval settlements.
3. Determine the location of the medieval market(s).
4. Understand the pattern of settlement prior to the Norman Conquest.
5. Identify population changes in the settlements through an analysis of pottery regression.

Background and detail

The settlements in the civil parishes of Grinton and Reeth have long histories going back at least to Anglo-Saxon times and perhaps earlier. However, our knowledge of the development of the three villages which form the basis of this project is fragmentary. Reeth now has the appearance of a small planned Georgian market town centred on a large green. The history of Reeth after the granting of the market charter in

1694/5 is well understood but little is known prior to this apart from an entry in the Domesday Book of 1086 and before that the identification of an Iron Age settlement to the West of the village. Our knowledge of both Fremington and Grinton is similarly sketchy. Recently our group, the Swaledale & Arkengarthdale Archaeology Group (SWAAG), uncovered a Romano-British settlement to the East of Fremington and identified what appears to be a medieval long-house on the outskirts of Grinton. Like Reeth, both Fremington and Grinton have entries in the Domesday Book. Grinton has a parish church with 12th, 14th and 15th century architecture, and is also mentioned by John Leland in his Tudor Itinerary. Little else is known of what appears to have been the most important centre in mid-Swaledale for several centuries, but aerial photographs and Lidar images suggest the existence of a medieval village much larger than today; how this developed and subsequently declined is unclear. Similar evidence shows that Fremington appears to be a shrunken medieval village too.

Recent excavation projects of the Swaledale & Arkengarthdale Archaeology Group have revealed previously unknown aspects of the locality's history, notably a Romano-British settlement at Hagg Farm in Fremington. We believe the history of settlement in Swaledale to be much richer than generally known.

3. Location

Reeth and the neighbouring settlements of Fremington and Grinton are situated at SE 038993 in upper Swaledale within the Yorkshire Dales National Park and in the Richmondshire District of North Yorkshire. They are located on the B6270 about 11 miles west of Richmond and 23 miles east of Kirkby Stephen at the confluence of the River Swale and Arkle Beck, the meeting point of Swaledale with Arkengarthdale. They are overlooked by the surrounding fells of Calver Hill, Fremington Edge and Harkerside.

The 2011 population figures for the parishes encompassing Reeth, Fremington and Grinton totalled 904. Today the 3 settlements comprise a range of housing together with amenities including shops, pubs and cafes, garage/petrol station, hotel and guest houses plus churches, primary school, medical centre, museum, fire station, village hall and community office. All of these facilities combine to serve the resident population, the surrounding agricultural area and holiday visitors attracted by the magnificent scenery which affords fine walking and cycling opportunities. Reeth is particularly noted for its village green which hosts a weekly market and other community events and at Grinton there is the Church of St Andrew also known as the 'Cathedral of the Dale'.

4. The Geology and Geomorphology of Swaledale

The geology and geomorphology of the landscape determine where the archaeology of Swaledale is located. Our ancestors have used both the geology and geomorphology in their choice of settlement sites and transport routes.

Swaledale, in pre – history, was one of the main routes between the Vale of Mowbray, the Lake District and the North West Highlands of Scotland as evidenced by the flint, greenstone and obsidian transported between these locations. River valleys flowing off the Pennine north-south Variscan anticline, were the natural route ways for both glaciers and then people. Numerous glaciations over the last three million years have created the glacial trough that is Swaledale today. Glaciers ground their way past Reeth and eroded a Carboniferous trough.

The limestones were interspersed with sandstones and shales, collectively known as the Yoredale series. These rocks have varying degrees of hardness and resistivity to erosion. This gave the Dale its stepped valley profile.

Early settlements were located on the higher grass-covered limestone plateaus. The later settlements and farms migrated downhill to the shale shelf areas. Water was a key feature in settlement locations as lines of springs were used in the siting of farms and villages. Glacial till and loess envelop most of the Dale sides and this was used to cut platforms to site buildings like round houses and long houses. Strip lynchets were also cut into the boulders clay and show a more formalised and stable farming system.

Reeth is a nodal point developing at the meeting point of two valleys both created by glaciers. The Stainmoor Ice flowed down Arkengarthdale and joined a valley glacier flowing east along the Swale Valley past Reeth. The lateral moraines of these two glaciers coalesced at Reeth to form a medial moraine on which Reeth is sited. Fremington and Grinton owe their origin to a fording point which later became a bridging point over the River Swale.

The valley floor lacked settlements because of its propensity to flooding. It does have the best farm land in the Dale because of its glacial lacustrine deposits. A number of recessional moraines cross the valley floor and these indicate the decay and retreat of the last Devensian glacier. These moraines have been used as defensive sites in pre-history. A fine example of a defensive site can be seen cut into the Grinton recessional moraine.

The present day buildings and dry stone walls of the Dale are mostly made of sandstones: to adapt the Three Bears story, the shale is too soft and crumbles, the limestone is too hard and difficult to cut but the sandstone is just right.

5. Historical background

The historical background to the project is set in the context of the aims and objectives of the Swaledale Big Dig. The application to the Heritage Lottery Fund stated:

The settlements in the civil parishes of Grinton and Reeth have long histories going back at least to Anglo-Saxon times and perhaps earlier. However, our knowledge of the development of the three villages which form the basis of this project is fragmentary. Reeth now has the appearance of a small planned Georgian market town centred on a large green. The history of Reeth after the granting of the market charter in 1694/5 is well understood but little is known prior to this apart from an entry in the Domesday Book of 1086 and before that the identification of an Iron Age settlement to the West of the village. Our knowledge of both Fremington and Grinton is similarly sketchy. Recently our group, the Swaledale & Arkengarthdale Archaeology Group (SWAAG), uncovered a Romano-British settlement to the East of Fremington and identified what appears to be a medieval long-house on the outskirts of Grinton. Like Reeth, both Fremington and Grinton have entries in the Domesday Book. Grinton has a parish church with 12th, 14th and 15th century architecture, and is also mentioned by John Leland in his Tudor Itinerary. Little else is known of what appears to have been the most important centre in mid-Swaledale for several centuries, but aerial photographs and Lidar images suggest the existence of a medieval village much larger than today; how this developed and subsequently declined is unclear. Similar evidence shows that Fremington appears to be a shrunken medieval village too. The Swaledale Big Dig aims to engage these local communities in a wide range of activities in order add to our knowledge of the development of the three villages over the ages; to stimulate greater informed interest in their heritage, and to embed a range of skills to enable the communities to continue to research, record and interpret their heritage in the future.

Key to the Big Dig has been the pursuit of knowledge to '*add to our knowledge of the development of the three villages over the ages'.*

This section of the report derives from the work of those engaged in documentary research to support the Big Dig and particularly the work of the recently formed Swaledale & Arkengarthdale Local History Group.

The settlements of Fremington, Grinton and Reeth as seen today are products of developments over millennia which might usefully be divided into Pre-historic, Roman, Pre-conquest and Post-conquest periods. For the purposes of this section, Pre-historic may be further subdivided into Mesolithic, Neolithic, Bronze Age and Iron Age.

The Pre-historic period.

This period is well-described in a number of sources, notably by Robert White[1], Andrew Fleming[2] and the work of Tim Laurie; much of the latter may be found on the SWAAG website[3]. The following is a brief summary.

Following the end of the last Ice Age, around 10,000BC, pollen analysis and finds in the peat show that the Swaledale hills were colonized by a combination of willow, birch, hazel and pine, giving way

1 The Yorkshire Dales – A Landscape Through Time; Robert White; Great Northern Books; 2002

2 Swaledale – Valley of the Wild River; Andrew Fleming; Edinburgh University Press, 1998

3 www.swaag.org

to more substantial trees such as oak, ash, alder and elm around 6000BC[4]. Lithic finds (flint and chert tools) from this period indicate the presence of Mesolithic hunter-gatherer peoples in the area[5].

The Mesolithic period gave way to the Neolithic period around 4000BC when pottery making, cereal farming and managing livestock began to replace the hunter-gatherer lifestyle. There is good evidence of Neolithic peoples in this area; for example further lithic finds[6], the stone circle at Mud Beck in Arkengarthdale[7] and rock art[8].

Tim Laurie has described well the scene on the arrival of the first pastoral farmers in this area around 2400BC during the late Neolithic / early Bronze Age[9]. He states that "pollen evidence[10] indicates that at that time the south facing slopes of Swaledale were entirely covered with mixed deciduous woodland from the river to the highest limestone scars. Birch and stunted oak woodland covered the high plateau with light hazel scrub over limestone outcrop. Alder groves were present at spring flushed slopes. In response to increasing grazing pressures, the whole of the upper dale slopes were enclosed by a planned and managed landscape of parallel or co-axial field boundaries[11] now visible as substantial banks of rock and rubble bleached white where exposed by removal of overlying peat and heather. These ancient field boundaries can be interpreted as originating as fence lines which soon developed into hedgerows with hedgerow trees probably much as the Swaledale farms of pre-war days, being self-supporting with one or two milk cows, and goats but centred on sheep for intensive production of wool, cheese and meat. Copses of ash, elm, oak and lime trees and thickets of hazel and blackthorn were present on steep declivities of hard rock to complete …. a prehistoric dales landscape of tree lined fields rich in hay meadow flowers and of scattered woodlands teeming with aurochsen - the wild cattle, red and roe deer, hare and squirrel but no rabbits! The presence of wolf, bear, lynx, fox and marten imposed the necessity for constant shepherding and protection of stock within enclosure at night. This … supported the first seasonal, transhumant pioneering farmstead settlements of substantial timber round houses with attached paddock like fields located close to the most constant springs where the numerous burnt mounds[12] of fire cracked sandstone survive today interpreted as sweat house-saunas. In due course, following clearance of the more dense woodland of the lower slopes, the first permanent settlements were established on the lower dale slopes."

The mild climate of the 2nd millennium BC came to an abrupt end around 1250-1000BC, with average temperatures dropping as much 2°C, leading to a shorter growing season and perhaps competition for land. The Swaledale 'defended' hillforts such as those at Downholme[13], Low Whita and possibly How Hill, Grinton may well date from this time as the Bronze Age gave way to the Iron Age. It is unlikely that Maiden Castle on Harkerside belongs to this group as it hardly in a defensive position, the interior being overlooked by higher ground immediately to the south[14]. It seems more likely to have had some ritual or ceremonial function or was perhaps an administrative centre.

---

4 Fleming p118

5 See for example SWAAG database records 115, 174.

6 See for example SWAAG database records 115, 174, 784, 829

7 SWAAG database record 120

8 See for example SWAAG database records 121, 322, 770, 900

9 SWAAG database record 773

10 Fleming p138; SWAAG database record 389

11 See also Swaledale Ancient Land Boundaries Project - Interim Reports and Coaxial Field Systems in Swaledale: A Reassessment; Timothy C. Laurie, Norman W. Mahaffy, Robert F. White at https://www.swaag.org/publications_TimLaurie.htm

12 See for example SWAAG database record 10

13 White p31

14 See http://www.outofoblivion.org.uk/record.asp?id=342 and SWAAG database record 2

During the mid-late Iron Age the pollen record indicates a major clearance of trees around 500-400BC and again in the early first century AD[15]. There is good evidence of late Iron Age occupation of this area at the time of the Brigantes, with settlements identified at How Hill, Whitbecks and Plaintree farm on Harkerside for example[16]. The present open heather moorland landscape developed only at the end of the Iron Age with heather becoming dominant from the Roman period onwards, perhaps as a result of more intensive use of what was a relatively fragile environment.

The Roman period

The late Iron Age and early 1st century AD was a turbulent time. This area was under the control of the Brigantian Queen Cartimandua when the Romans under the Emperor Claudius invaded Britain in AD 43. It seems that she soon allied herself to the Romans and attempted to cement this relationship by handing over the Catvellaunian leader Caratacus who had sought refuge with the Brigantes. This led to a break in AD 69 with her husband Venutius and the subsequent Roman invasion of the Brigantian kingdom around AD 72[17]. It is possible that the Fremington hoard of Roman cavalry bronzes[18] may date to this unstable and violent time.

The evidence of Roman occupation of Swaledale is slight. It is has been suggested that there might have been a Roman fort in Reeth but no evidence has been forthcoming[19]. Further, despite there being a thriving lead industry in Swaledale in later medieval times, there is no evidence that the Romans mined lead ore here. However this is not surprising given the destructive nature of later mining. A pig of lead marked Hadrian is said to have been found near Hurst in the 19th century but has since disappeared; another Roman pig of 'black' lead is also said to have been found near Muker. The latter is said to have been melted down and used to hold field gate hinges in place and hence is also no more[20]. Nonetheless it must be likely that the Romans did mine lead ore in Swaledale.

Until recently there were not thought to be any Roman roads in or over Swaledale. However, it is now thought that there was a Roman road from the fort at Bainbridge, running North-East and crossing Swaledale on its way to one or more of Greta Bridge, Bowes or Barnard Castle. Recently members of SWAAG believe they have recorded a short section of the route over the Stang, Arkengarthdale[21]. In addition, Andrew Fleming has postulated the existence of a Roman road from the potential lead mines at Marrick Moor / Hurst to Ulshaw on the banks of the River Ure, whereby the lead could be transported down the river to Aldborough / Boroughbridge for onward transport by water or road[22].

Despite the paucity of evidence of Roman occupation here there is however good evidence of a Romano-British culture in Swaledale. Near Healaugh, to the West of Reeth, Andrew Fleming and Tim Laurie supervised the excavation of a Romano-British ovoid house built on top of an earlier Iron Age roundhouse. Pottery showed this site to have been occupied from late Iron Age through to the second century and perhaps later.[23] Further, recent work by SWAAG has uncovered another

---

15 Fleming p139

16 SWAAG database records 354, 150, 600

17 See White p34ff for more detail

18 ibid

19 A history of Richmond and Swaledale; R. Fieldhouse & B. Jennings; Phillimore; 1978; p4

20 Charles Hepworth; pers. comm.

21 SWAAG database record 848

22 Early Roads to the Swaledale Lead Mines; A. Fleming; Yorkshire Archaeological Journal, Vol 68, 1996; pp89-100

23 Fleming [1998] p147ff and SWAAG database record 410

Romano-British settlement at Hagg Farm, Fremington with evidence of occupation from the 1st century AD through to the late 4th century[24]. Interestingly neither site shows any sign of occupation after the Romans ceased to occupy and administer Britain around AD 410.

The Pre-Conquest period

If Swaledale in the Roman period was uncertain, then in the following six centuries it is opaque. Archaeological evidence is virtually non-existent for this whole period and documentary evidence is sparse.

Even before the Romans had left Anglo-Saxons were raiding the East coast. These raids intensified as time went on and by the beginning of the sixth century Anglians were settling in Yorkshire and had probably occupied York[25]. This became the capital of the Anglian kingdom of Deira which extended from the Humber, North to the Tees and from the North Sea to the Western edge of the Vale of York[26]; whether it included Swaledale is unclear. Anglian Bernicia was to the North and eventually the two kingdoms merged to form Northumbria at the beginning of the seventh century[27]. It is believed that Anglian peoples settled parts of Swaledale between the conversion to Christianity in the mid-7th century and the Scandanavian invasions of the late ninth century.[28]

Many local place names in Swaledale derive from this period. For example, 'Old English' place names include[29] :
Fremington – the tun (settlement) of Fremi's people
Grinton – Green tun
Reeth – stream or possibly a place run by a reeve

Recently an alternative interpretation of the meaning of 'Reeth' has been suggested[30]. The battle of Catraeth took place around the year 600 between the men of the Brittonic kingdom of Gododdin and its allies on the one hand and the Angles of Deira and Bernicia on the other. The battle is commemorated in the Welsh epic poem 'Y Gododdin'.[31] Most professional historians have interpreted and accepted Catraeth as being Catterick. Controversially, others have argued that the landscape described in the poem does not fit well with Catterick and that Reeth is a better fit. Thus Catraeth could be interpreted as 'the battle of Raeth' or even as 'the place below Raeth', raising the tantalising notion that the actual place of the battle could have been by Reeth in Swaledale. This would mean that Reeth is actually a much older place with a British/Celtic name, for which there are several possible interpretations, including a variant of rhyd meaning ford or rath meaning town or fort[32].

Although there is no archaeological evidence from this period, the Anglian settlers left their mark on the landscape. Reeth is typical of an Anglian nucleated settlement with homesteads grouped around or along a central open area which later evolved into a market area. Further, the common field

---

24 A number of reports and images may be found on the SWAAG website www.swaag.org
25 Anglian Eoforwic https://en.wikipedia.org/wiki/History_of_York#Anglo-Saxon_Eoforwic
26 https://en.wikipedia.org/wiki/Deira
27 https://en.wikipedia.org/wiki/Kingdom_of_Northumbria
28 Fieldhouse & Jennings; p5
29 See for example The Concise Oxford Dictionary of Place-names Eilert Ekwall 1960 or A Dictionary of British Place Names A. D. Mills Oxford University Press 2011
30 Private correspondence
31 https://en.wikipedia.org/wiki/Y_Gododdin
32 Will Swales; pers. comm.

systems of both Reeth and Fremington are thought to date from this time.[33] Grinton too probably had a common field system extending East, now difficult to discern. These shared strip-field systems consisted of long narrow terraces known as lynchets generally following the contours and can be clearly seen to the West of Reeth and to the North-West of Fremington. In addition there would have been common meadows to grow hay, common pasture, woodland and 'waste' to graze animals and collect wood for fuel and building.

Danish raids began to threaten the English kingdoms from around AD 830 on, culminating in AD 876 when the Anglo-Saxon Chronicle records[34] 'that year Healfdene [the Danish warlord] shared out Northumbrian land and they were ploughing and providing for themselves'. There is, however, no evidence that the Danes occupied Swaledale.

Later in the ninth century, Norsemen who had settled in Ireland began raiding the West coast and subsequently penetrated further inland, eventually taking control of York in 919.[35] Many of the place names in Swaledale attest to Norse settlement, including, for example:
Gunnerside – Gunnarr's saetr – Gunnarr's sheiling or summer pasture
Keld – spring
Thwaite – meadow, clearing, enclosure

There is little in the way of archaeological evidence of the Norse settlement in this area. Above Gunnerside there are the possible remains of a Norse longhouse[36], similarly on the Feldom ranges[37] and also near Cogden Hall[38], although the latter two are rather more speculative even than the Gunnerside site.

The Post-Conquest period

1. The 11th – 13th centuries.

Immediately following his victory at Hastings in October 1066, Duke William (William the Conqueror, later William I) dispossessed the Anglo-Scandinavian nobility and granted huge swathes of land to his close followers in order to consolidate his victory. Swaledale became part of the Honour of Richmond, a vast feudal estate, granted to Alan Rufus, a relative of William's, who led the Breton contingent to success in 1066[39]. The Honour of Richmond then remained in his family until Henry IV granted it to Ralph Neville, Earl of Westmoreland, in 1399[40].

The Lords of Richmond kept Arkengarthdale and New Forest in their own possession; a 'forest' being an administrative term not a botanical one, meaning an area of land subject to particular laws to protect the beasts of the chase (eg deer, wild boar) and their environment for hunting. The rest of Swaledale was divided up into subordinate lordships and granted to the Lord's followers as tenants. The largest of these was the Manor of Healaugh, sometimes known as the Manor of Swaledale, or of Reeth, occupying the whole of the valley from what is now the boundary with Ellerton (i.e. at Stolerston Stile[41]) westwards.

---

33 Fieldhouse & Jennings; p6
34 The Anglo-Saxon Chronicles; Anne Savage; Phillips/Heinemann; 1982; p96
35 Fieldhouse & Jennings; p7
36 Ibid p8
37 SWAAG database record 187
38 https://www.swaag.org/GEOPHYS%20DATA/ASDU%20Report%20220213-2959rev.pdf
39 https://en.wikipedia.org/wiki/Alan_Rufus
40 Fieldhouse & Jennings, p11
41 SWAAG database records 556, 557

Northern uprisings in 1068 and 1069 were easily quashed despite Danish support. William then embarked upon a systematic campaign of destruction to lay waste the northern shires and eliminate the possibility of further revolts. His army destroyed homes, stock and crops; men, women and children were slaughtered with many dying in the famine which followed.

The effect of this, known as the Harrying of the North[42], is clear from the entries in the Domesday Book, compiled nearly twenty years later in 1086, where all of the land in Swaledale is described as waste, with little evidence of any agricultural activity or indeed population.

The entries in the Domesday Book show that Count Alan of Brittany[43] was one of the most powerful and trusted men in the Kingdom. His land holdings in this area included the following:

*In **Ellerton Abbey** are 2 carucates[44] to the geld[45] and there could be two ploughs. Gospatric[46] had a manor there. Now the same man has it of the count and it is waste. The whole is one league[47] long and one broad. TRE[48] it was worth 13s[49].*

*In **Fremington** (Freminton) is 1 carucate to the geld and there could be one plough. Crin had a manor there. Now Count Alan [of Brittany] has it and it is waste. The whole is one league long and a half broad. TRE it was worth 5s.*

*In **Grinton** (Grintun)) is 1 carucate to the geld and there could be one plough. Thorfinnr had a manor there. Now Bodin[50] has it and it is waste. The whole is one league long and a half broad. TRE it was worth 5s.*

*In **Marrick** are 5 carucates to the geld and there could be two ploughs. Arnketil had a manor there. Now Gospatric has it and it is waste. There is scrubland. The whole is one league long and a half broad. TRE it was worth 20s.*

*In **Reeth** (Rie)[51] are 6 carucates to the geld and there could be three ploughs. Thorfinnr had a manor there. Now Bodin has it and it is waste. The whole is one league long and one broad. TRE it was worth 14s.*

---

42 https://en.wikipedia.org/wiki/Harrying_of_the_North

43 Domesday Book – a complete translation; Penguin; 2003 p815

44 The carucate (Medieval Latin: carrūcāta, from carrūca, "wheeled plough"), ploughland or plough (Old English: plōgesland, "plough's land") was a unit of assessment for tax used in most Danelaw counties of England. It was based on the area a plough team of eight oxen could till in a single annual season. It was sub-divided into oxgangs, or "bovates", based on the area a single ox might till in the same period, which thus represented one eighth of a carucate; the carucate was strongly analogous to the hide, a unit of tax assessment used outside the Danelaw counties.

Though a carucate might nominally be regarded as an area of 120 acres (490,000 m²) (0.49 km²), and can usefully be equated to certain definitions of the hide, its variation over time and depending on soil and fertility makes its actual figure wildly variable; see e.g. Stenton, F.M., 'Introduction', in Foster, C.W. & Longley, T. (eds.), The Lincolnshire Domesday and the Lindsey Survey, Lincoln Record Society, XIX, 1924, especially pp. ix-xix

45 Geld – the land tax

46 Possibly Gospatric II (died 1138) son of Gospatric I, sometime Earl of Northumbria and great-great-grandson of Ethelred II, aka Ethelred the Unready King of England (978–1013 and 1014–1016)

47 League - 1½ Roman miles of 1,000 paces. In medieval England it equalled 12 furlongs i.e. 1½ miles.

48 Tempore Regis Edwardi 'in the time of King Edward' i.e. before the Norman Conquest

49 Solidus or shilling being twelve silver pence.

50 Bodin was half-brother to Count Alan of Brittany

Count Alan of Brittany was succeeded by his brother Stephen. Early in the 12th century Count Stephen granted the Manor of Swaledale to Walter de Gant on the occasion of the latter's marriage to his daughter, Maud. This estate consisted mainly of Reeth, Grinton and Fremington.[52] By AD 1200, one Henry son of Hervey, held the forester-ship of Arkillesgardh (Arkengarthdale) and New Forest together with the Manor of Fremington.

Sometime around AD 1113 Walter de Gant founded Bridlington Priory to which his wife, Maud, gifted the church of St Andrew of Swaledale [Grinton] with Grinton and its surroundings[53]. This was the first of several such gifts by the Gants; for example:
(i) Gilbert de Gant gave Rievaulx Abbey pasture in Upper Swaledale, with various privileges including the right to take wolves[54].
(ii) Alice, daughter of Gilbert de Gant, gave Bridlington Priory pasture and herbage on the south side of Swaledale together with wood for making houses and folds[55].
(iii) Simon, her husband, gave pasture in Swaledale from Harker to 'Hawurdesdale' (Haverdale) beck to the same[56].
(iv) Simon also gave pasture in Swaledale sufficient for 20 mares with their foals to Bardney Abbey[57], and
(v) Robert de Gant later confirmed Alice's earlier gift including the right to make hay and take materials for making houses and folds for two vaccaries[58].

There is little documentary evidence of conditions in Swaledale until the death of Gilbert de Gant and the subsequent survey of his lands, an inquisition post mortem, towards the end of the 13th century.

A survey of the lands in Yorkshire held by Gilbert de Gaunt, 1273/4[59]
Writ dated at Westminster, 26 Jan., 2 Edw 1 (1273/4)

Extent and Inquisition as to how much land Gilbert de Gaunt held of the King in chief, in the county of York, on the day he died, and how much of others, and by what service, and how much those lands might be worth a year, and who might be his nearest heir, and of what age, taken before the Escheator on Wednesday after the Purification of the Blessed Mary, in the 2nd year (7 Feb 1273-4) by William de Fleynburge, Richard de Lascy,…. (and 16 others) … who say upon their oath, that Gilbert de Gaunt, who is dead, held of the King in chief and barony, the town of Hundemanby *(Hunmanby, nr Bridlington)* but that he granted the same town with its appurtenances without any exception, to Gilbert, his son and heir, in marriage with Lora de Balliol and gave her dower of it, and placed them a long time before his decease in full seisen *(possession)*.
He held the manor of Helage *(Healaugh)*, in Swaledale, of the grant of John of Brittany, Earl of Richmond, by the service of one pair of gilt spurs. There is in desmesne there, a capital messuage, worth 4s*. (This last sentence implies the existence of a manor house in Healaugh at the time).* One hundred acres of arable land worth 100s. A meadow in a place called Fytun *(Feetham)* and Skaleflat,

---

51 All of Swaledale on the North side from Fremington westwards.
52 Early Yorkshire Charters, vol 5; Farrer & Clay; Cambridge University Press 2013; pp2,341
53 Ibid p390
54 Rievaulx Cartulary, p304; this was the origin of the Manor Of Muker
55 Early Yorkshire Charters, vol 5 p343
56 Ibid p344
57 Ibid p344
58 Ibid p345; one vaccary being at Whallesheud, possibly near Dyke House, Grinton, the other at the as yet unidentified Frithloc
59 Yorkshire Inquisitions YASRS vol 12 (1892) pp137

containing 27½ acres, at 3s the acre. Sum £4 2s 6d. Another meadow of the sheep fold, containing six acres , at 16d. Sum 8s. A watermill, £4. *(Probably the one at Reeth recorded in 1293[60])*. In bondage 24 bovates of land, each bovate, with services, being worth 5s 9d. Sum, £6 18s. Nine Cottars[61] paying 22s 9d with services. In Helage 32 cottars holding 51 acres of arable land, and one rood *(¼ acre)* with tofts, and paying £4 3s 3d.
Vaccaries and pastures of the forest belonging to the manor of Helage , £47 0s 12d *(sic)*. Tenants at will of the lord, holding 12 acres of arable land, and three roods of meadow, paying 11s 10d. Four tenants in Ruckcroft *(Rawcroft, north of Reeth?)* holding 23½ acres with four tofts, paying 21s 8d. Nine tenants in Arkelgarth *(Arkengarthdale, perhaps Langthwaite?)* holding nine tofts and 29 acres of meadow, and paying 42s 6d. Free tenants. Hugh son of Henry holds the village of Fremyngton, by the service of the fourth part of one knight's fee, and pays yearly one sporting dog. William over Swale *(see Lay Subsidy below)* holds one carucate of land and one assart *(intake)* in Rythe *(Reeth)* by military service….. holds a bovate and a half of land in the same by the same service, and pays yearly …. John de Rythe holds a bovate and a half of land in the same by the same service, and pays yearly 6d. John Ode holds one bovate of land in the same, and pays yearly 4s. William de Dalton holds one bovate of land in the same, by military service, and pays yearly one pound of cumin. John …holds three acres of land in the same, and pays yearly 2d. The Prior of Bridlington holds the town of … *(Grinton)* … of which the church of the said town is dowered in pure almoign *(i.e free from all secular burdens)*. Also the Abbot of Ryevalle *(Rievaulx)* holds …. called Menhaker *(Muker?)*, and pays yearly, 66s 8d. He has no church in his gift.
Sum total of the manor of Helage in Swaledale £87 7s 7d.
Gilbert, his nearest heir, is of full age.
(N.B. the lower part of this document is almost illegible.)

Clearly, this survey and inquisition post mortem shows a valuable and apparently thriving community[62].

Soon after Gilbert de Gant's death Kirkby's Inquest took place. Properly known as 'The Survey of the County of Yorkshire', it was begun by John de Kirkby in 1285[63], with the Honour of Richmond surveyed in 1286/7. The survey was analogous to the Domesday Book some two hundred years earlier, in that it was carried out to clearly identify who owed military service to the then king, Edward I, and what land they held.

The entries for the local settlements are as follows:

(i) Reeth
The original Latin entry is as follows:

Comite, et Comes de rege.
RITHE, [ET] HELAGH HAMELETTA.[e] Sunt ibi iiij car. terræ, unde xij, etc.: de quibus Robertus de Heyer tenet j bov., Robertus Clericus et Robertus[f] de Rythe iij bov., Willelmus Overswale j car., Hugo filius Henrici ij car. de Gilberto de Gaunt; et idem Gilbertus illas tenet, et similiter aliam di. car., de Comite, et Comes de rege.

60 North Yorkshire County Record Office ref ZRL 3/25
61 A tenant who occupied a cottage (toft) with a small piece of land (croft) in return for labour.
62 See Fieldhouse & Jennings pp44 for an informative commentary
63 The Survey of the County of York, taken by John de Kirby, also known as Kirkby's Inquest; the Surtees Society, 1867; available via the University of Michigan http://quod.lib.umich.edu/m/moa/

Thus, Reeth and Healaugh together had four carucates under cultivation of which Robert de Heyer had 1 bovate (*⅛ carucate*), Robert the Clerk and Robert of Reeth together held 3 bovates, William Overswale held 1 carucate, Hugo son of Henry held 2 carucates (*as tenant*) of Gilbert de Gaunt whilst Gibert de Gaunt held the other half carucate[64].

(ii) Fremington is shown as having three carucates under cultivation of which John son of Warren held one carucate as tenant of Hugo son of Henry, and Hugo held that and the other two as tenant of Gilbert de Gaunt[65].

(iii) In Grinton the Prior of Bridlington had one carucate of land under cultivation, held 'freehold' from the de Gaunt family[66].

(iv) Marrick is shown as having three carucates under cultivation and Marske six[67].

The Domesday Book entry shows six carucates to be taxed in Reeth and one in each of Fremington and Grinton. Superficially it might seem that even after 200 years, Reeth had not recovered from the Harrying of the North whilst Grinton had and Fremington had tripled the land under cultivation. However, it seems more likely that some land which is assigned to Reeth in the Domesday Book is assigned to Fremington here as the total across the two surveys is eight carucates in both cases and thus it seems likely that the area as a whole has indeed recovered to pre-Conquest levels.

2. The 14th Century.

Taxation by the Crown evolved during the 13th century, with a number of taxes, known as subsidies, levied on the population of England as a whole, often to enable the Crown to wage war upon France or Scotland. Some of the records survive from this time, the first to provide any detail for Swaledale being the Lay Subsidy of 1301 which lists all the tax payers and amounts charged for the dale. This 'subsidy' was a tax levied on the whole population amounting to one-fifteenth of all 'moveable property', including livestock, hay, stocks of grain etc but with exceptions such as armour, tools, basic furniture and essential items of clothing. The full return for Grinton is shown below.

Grynton (Grinton)[68]

De Willelmo Overswale.	iiij*s*	vij*d*	o.q.
De Ada Carpentario.	iiij*d*		
De Paulino Sutore	ij*d*		o.q.
De Petro Haudex	xj*d*		q.
De Willelmo Fullone.	iiij*s*	iiij*d*	o.

64 Ibid p172
65 ibid
66 Ibid p158
67 Ibid p 174
68 The National Archive ref E179/211/2 also available on brithish-history.ac.uk

De Petro Capellano.	x*d*		o.
De Willelmo Longo.	ix*d*		q.
De Willelmo Diacono.	v*d*		q.
De Willelmo Schakelock'	ix*d*		o.q.
De Johanne filio Eudonis	ix*d*		o.q.
De Johanne Fabro	iiij*d*		o.q.
De Thoma Frost'	xvj*d*		
De Johanne Fox	xij*d*		
De Rogero filio Johannis	vij*d*		o.q.
De Stephano Collan	xj*d*		q.
De Stephano de Haverdale	x*d*		
De Henrico Wode	xj*d*		q.
Summa, xx*s* iij*d* o.q.			

The 1301 Lay Subsidy, the Inquistion Post mortem and Kirby's Inquest can tell us a lot about life in Swaledale at the turn of the 13th /14th centuries.

In 1301 the minimum paid in Reeth was 2½d equivalent to moveable property valued at a meagre 3s 1½d in total. Based on the 1297 subsidy of the West Riding this could be just one cow or perhaps a few sheep and a few bushels of wheat or oats. Seven people had moveable property valued at less than 9s, which had been the threshold for the 1297 subsidy, so had that threshold been applied in 1301 they would have been considered too poor to pay tax. On the other hand, six people had moveable property valued over £5 with Johanne de Gunnersete's (John of Gunnerside) amounting to £9 1s 3d, perhaps around £5000 in today's terms and a considerable sum in 1301. The average tax paid in Reeth by the 57 taxpayers was just under 3s equivalent total moveable property valued at £2 5s; say one ox, one horse, six cows, a dozen sheep, and a good stock of hay and corn.

Table 1

Settlement	Number of tax payers	Minimum paid	Maximum paid	Average
Reeth	57	2½d	12s 1d	2s 11½d
Fremington	10	1s 3½d	5s 1¼d	2s 8½d
Grinton	17	3¾d	4s 7¾d	1s 2½d
Healaugh	11	4d	3s 10¾d	2s
Marrick	19	7¼d	9s 11½d	2s 8½d
Marske	17	4d	8s 10¾d	3s 1d
Arkengarthdale[69]	11	1s	6s 8d	3s 5d

[69] This entry is shown as (Ap)ylgarthe in Yorkshire Lay Subsidy (1301) originally published by the Yorkshire Archaeological Society, 1897, at http://www.british-history.ac.uk/yorks-arch-soc/vol21/pp8-26#h3-0075. Some of the taxpayers seem to be missing from the list as the total shown is £4 3s 10¾d whereas the total of the 12 tax payers listed amounts to only £3 5s 8½d. This latter figure together with 12 tax payers is used in the comparisons given in this paper. Further, one tax payer, Roger Miniote, is charged £1 9s, being

The data shown in Table 1 hides some large inequalities in wealth as can be seen from Table 2.

Table 2

Percentage of tax payers by total value of moveable property[70]					
Settlement	£1 or less	£1.01 to £2	£2.01 to £3	£3.01 to £4	Over £4
Reeth	42%	19%	14%	9%	16%
Fremington	10%	50%	30%	10%	-
Grinton	88%	-	-	12%	-
Healaugh	46%	27%	27%	-	-
Marrick	48%	21%	5%	5%	21%
Marske	24%	35%	12%	12%	17%
Arkengarthdale[71]	8%	33%	17%	25%	17%

Grinton stands out as having a much higher proportion of relatively poor people particularly when compared with both Fremington and Arkengarthdale which both have few. The particularly high proportion of relatively poor in Grinton may be because much of that parish had been granted by this time by the De Gant (Gaunt) family to Bridlington Priory, probably leaving few significant holders of land. The proportions of relatively poor are similar for Reeth, Healaugh and Marrick whilst the proportions of relatively well-off are similar for Reeth Marrick, Marske and Arkengarthdale. The inhabitants of Fremington seem to be comfortably off for this area with few poor and none particularly wealthy.

It should also be noted that the 1301 subsidy was unusual in that property of the church was taxed, which was not the case in later subsidies, there then being a separate clerical subsidy such as applied in 1334. Thus the vaccaries in upper Swaledale were taxed in 1301 with returns as follows:

The Swaledale vaccaries of Rievaulx Abbey	
Location	Subsidy paid in 1301
Muker	42s 10d
Oxnop	13s 4¼d
Thwaite	12s 2¼d
Keld	17s 5½d
Birkdale	30s 5¾d
Total	£5 16s 3¾d

These vaccaries do not feature in subsequent subsidies.

Unfortunately subsequent subsidies do not show the same level of detail as the 1301. After this date there is no mention in the medieval period of Fremington or Healaugh, nor indeed of anywhere further up Swaledale such as Gunnerside or Muker; all are presumably lumped into the later returns for “Reeth cum hamlets” or similar descriptions.

Aggregating the data for Reeth, Fremington and Healaugh gives the 1301 equivalent of Reeth cum hamlets, as follows, which may be used for comparison with the later returns such as that of 1327 :

---

many times more than anyone else; he is perhaps the Lord of the Manor and is excluded from the comparisons in the above table.

[70] That is, fifteen times the tax paid giving the total value of the moveable property assessed per person

[71] Roger Miniote, charged £1 9s, is included in this comparison.

Settlement	Number of tax payers	Minimum paid	Maximum paid	Average
"Reeth cum hamlets"	78	2½d	12s 1d	2s 9½d

It is thought that in 1301 the tax collectors applied an unofficial minimum below which they did not collect the tax. This was presumably to avoid taxing the very poor so the population was probably greater than shown here, perhaps as much as double. The returns for Swaledale total 95 households; doubling this would give 190 households in Swaledale in 1301 with an average of perhaps 4½ people per household to allow for women, children and servants leading to a population of approximately 850 people in total.

These 190 households or thereabouts, would be supported by the produce of the eight carucates of cultivated land recorded in Kirkby's Inquest fifteen years or so before. A carucate is an imprecise measure but is thought be around 120 acres giving a total under cultivation of around 950 acres or 5 acres per household. This would be about right to enable a basic self-sufficient level of subsistence. At this time agricultural practices were based on the common field system using a simple rotation. Each family would work a number of lynchets (also known as selions) in the large strip fields such as those still to be seen to the West of Reeth. Crops would include wheat, barley, rye, oats, peas and beans and a range of simple vegetables. In addition there would have been meadows for grass to provide hay for the animals in winter, summer pasture for grazing and the uncultivated 'wastes' would have also have been used for grazing stock; for example, Reeth High Moor in the summer, Reeth Low Moor in the winter. The Lord of the Manor would have an orchard but small quantities of fruit would also have been cultivated by others, in addition to harvesting wild fruit in the hedgerows and woods.
A simple two or three field rotation would have been used in attempt to preserve the fertility of the fields; winter sown crops such as wheat and rye in one set of fields, spring sown crops such as barley, oats, peas and beans in another while the third area would have been left fallow.
This common field system required a great deal of cooperation between the whole community in order for it to effective. Agreement was required on when to till the land, when to plant, when to harvest, how many cattle to put onto the pasture and when and so on in much the same way as today's Moor Committees.[72]

It seems that throughout the 12th and 13th centuries the lot of the common people slowly improved to return to the level similar to that before the Norman Conquest. The 14th century was to see a marked deterioration.

The years 1314 – 1322 saw a succession of man-made and natural disasters, beginning in 1314 with some of the worst weather on record[73]. Written records for Swaledale from this period are sparse but records from elsewhere provide accounts of severe weather which led to crop failure and famine. The poor weather continued into 1316 with harvests and animal feedstock devastated, causing the chronicle of Lanercost Priory in Cumberland to state[74] "now in that year [1316] there was such a mortality of men in England and Scotland through famine and pestilence as had not been heard of in our time". To make matters worse in the winter of 1319/20 the same chronicle recorded that[75] "the plague and the murrain of cattle which had lasted through the two preceding years in the

[72] See Fieldhouse & Jennings, p41ff for more detail
[73] Fieldhouse & Jennings, p52
[74] The Chronicle of Lanercost; Sir Herbert Maxwell; James Maclehose & Sons, p217
[75] Ibid p228

southern districts, broke out in the northern districts among oxen and cows, which, after a short sickness, generally died; and few animals of that kind were left, so that men had to plough that year with horses". It is clear from the decline in tax and tithe returns that Swaledale did not escape these natural disasters[76].

At the same time as Britain was in the grip of what later became known as a 'mini ice age', the Scots defeated the English at the Battle of Bannockburn in 1314. Thereafter, for a period of 30 years, there were frequent raids by them into Northern England. In 1318 the Scots "destroyed" Marrick Priory[77]. In 1322 the greater part of the Archdeaconry of Richmond was said to be devastated[78] "with most of the religious buildings, villages and manors reduced to ashes and smouldering embers". In October 1342[79] "on Sunday after three weeks of Michaelmas, 16 Edward III, the king's enemies, the Scots, entered the priory of Ellerton in Swaldale[sic] …. and the priory was totally despoiled" . The defeat of the Scots at the Battle of Neville's Cross in Durham, on 17th October 1346 put an end to large scale raids although the threat remained for some time.

Interestingly, table 3 below suggests that Reeth and Grinton did not suffer as badly from the Great Famine and early Scots raids as elsewhere in Swaledale. Direct comparisons of the total tax collected from one subsidy to another is difficult because of the differing levels and thresholds of exemption. Nonetheless relativities can be useful; for example the tax collected from Reeth cum hamlets in 1327 was only 46% of that collected in 1301 whilst for Arkengarthdale, Richmond, Marrick and Marske it was considerably less. Quite why is unclear. Perhaps the people in this area of Swaledale had warning of the coming of the Scots and were able to take their animals and possessions further up the dale? Perhaps the Scots were wary of being trapped in upper Swaledale?

	1301	1327	Reduction
Reeth(+)[80]	£10 17s 5¾d	£5 0s 6d	46%
Arkengarthdale	£4 3s 10d	13s 0d	16%
Grinton	£1 0s 3d	13s 0¼d	64%
Richmond	£15 7s 10d	£2 6s 10d	15%
Marrick	£2 11s 5d	7s 6¾d	15%
Marske	£2 12s 6d	12s 6d	24%

Table 3 – A comparison of the 1301 and 1327 lay subsidies for Swaledale

Just as the area was beginning to recover from the Scots' raids it was hit by the Bubonic Plague which brought a new devastation to the whole country in May 1349. There were further major outbreaks in 1361 and 1369. Perhaps as many as 1.5 million people died out of a total population of around 4 million.

---

76 Fieldhouse & Jennings, p51ff

77 Cal Pat Rolls Edward II vol 3 p223

78 Fieldhouse & Jennings p56

79 Cal Pat Rolls Edward III vol 17 p453

80 Reeth cum hamlets i.e. all of Swaledale on the North bank including Fremington, Reeth and as far West as Birkdale

The fragmentary records which survive suggest that this area took a long time to recover. For example, rents of vaccaries in Arkengarthdale in the 15th century were still at only 70% of their 13th century level[81].

2.1 Population in the 14th Century.

It has already been shown how the medieval tax returns of 1301 might be used to estimate population.

The Poll taxes of the late 14th century can also give some indication of the population of Swaledale at the time[82]. The returns of 1377 are thought to be the most reliable with little evasion, unlike the following years. The tax was levied at one groat (4d) per head on the whole population, male and female, aged over 14, with beggars being the only exemption; married couples were treated as one. Some returns list the names and occupations of all who paid but for Swaledale in 1377 there are simply the totals; Reeth [cum hamlets] had 198 tax payers, Grinton 55. Analysis of other returns suggests that of these approximately 55% were couples, 45% being single people i.e. young adults, widows, widowers etc. Using a similar analysis to that applied above to the 1301 returns we can estimate that there were 253 x 0.55 = 140 married couples in Swaledale in 1377 and 113 single people. If we assume that every married couple had 2 children living with them (likely to be an over-estimate) then we get a total population of 140 x 4 (2 adults + 2 children) giving 560 plus the 113 single people, making a total population of 673. This is somewhat less than our estimate of 850 for 1301, suggesting a drop of perhaps 20%, admittedly rather speculative but perhaps the best we can do with the limited data available.

An alternative approach to estimating population is given in Fieldhouse & Jennings[83]. Assuming that the 1377 poll tax returns is made up of 140 married couples plus 113 single people over the age of 14, then this gives 280+113 = 393 'adults' over 14. If it is further assumed that 40% of the population was under 14 then the 393 people amount to 60% making the total population 655, similar to the previous estimate above of 673.

3. The 15th -17th Centuries

Throughout the medieval period agriculture was main focus of the Swaledale economy with lead mining growing in importance as time moved on. In the 12th- 14th centuries farming was based on the open-field system described above. During the 15th and 16th centuries this was replaced by a patchwork of mainly small fields in the dale bottom together with piecemeal enclosures of the moorland. Initially these fields and closes were probably shared but as time moved on they became tenanted by individuals although they remained the property of the feudal lord.

Prior to the Reformation much of this land in Swaledale was held by tenants of the Lord of the Manor based on custom. In essence this meant that land was transferred from one person to another through the Manor Court. On granting a tenancy a fee, known as a gressom, was paid to the feudal lord, followed by a small annual rent and then a fine was paid to terminate a tenancy. Over time tenants acquired various rights such as a rent fixed for all time and also the right to transfer

---

81 Fieldhouse & Jennings, p59.

82 Calendared in Carolyn C. Fenwick ed.;The Poll Taxes of 1377, 1379 and 1381, part 3, Wiltshire – Yorkshire

83 Fieldhouse & Jennings p481

'their' tenancy to family members, particularly through a will. Naturally the feudal lords tended to oppose the build-up of these rights.

The reformation brought about a major change in Grinton. The dissolution of the monasteries saw Ellerton Priory pass into private hands in 1538 and Marrick Priory in 1542. The Crown retained the lands of Bridlington Priory in Grinton until 1599 when this extensive estate, which was later to become known as the Manor of Grinton, was sold to Richard Wiseman, a London goldsmith. The Crown retained the mineral rights[84]. The customary tenure referred to above was extinguished and replaced by 21 year leases of property. Customary tenure did continue though in much of the rest of Swaledale, only being abolished by the Law of Property Act 1922[85] ; by the 19th century the rents paid had little more than peppercorn value[86].

In addition to customary tenure, land holdings were adversely affected by partible inheritance, also known as 'gavelkind' whereby on the death of the tenant the property was divided amongst all the primary heirs rather than the custom of primogeniture where property would be passed to the eldest male heir. For example in 1697[87] the tenancy of Thomas Peacock, deceased, was divided amongst his seven sons "the whole into Seven Equal parts to be Divided of the Ancient Yearly Rent of ten pence & [each] to pay Fine for the same [of] one Penny". This sub-division led to the gradual fragmentation of farms into uneconomic units with land scattered across Swaledale[88].

Surveys carried out in the 17th century indicate that the average size of farms in upper Swaledale (ie from Grinton westwards) was around 20 acres although often with a mix of limited (known as 'stinted') and unlimited grazing on the moorlands and commons. In addition to the rights of common grazing most tenants and freeholders would have rights to cut peat for fuel, ling (heather) for roofing, wood for building and fuel.

Arable farming was in decline in the17th century as the land in this area is more suited to grass than cereals; by the end of the 17th century almost all the enclosed land was either meadow, with grass to make hay for winter feed, or pasture. As early as the 1530's John Leland[89] observed that 'little corne is growith in Suadale.' Nonetheless it seems that the corn mills were still operating, presumably grinding some locally produced corn and perhaps some imported from lower down the dale.

The earliest record of a water powered corn mill in Swaledale is in the 1273/4 survey of the manor of Healaugh[90.] This is probably the Reeth mill on the Arkle Beck, referred to in a deed of 1293[91.] William Spenceley was the tenant in 1635[92]. The mill continued in use until at least the 19th century[93]. The power of the Arkle Beck was later harnessed to drive a saw mill near Reeth Bridge and by Mr William Handley Burton in 1911 to provide electricity in Reeth.

---

84 Fieldhouse & Jennings p114
85 Law of Property Act 1922 s128(1) Enfranchisement of Copyholds
86 Fieldhouse & Jennings p130
87 Healaugh & Muker Manor Book A p100
88 See Fieldhouse & Jennings p135ff for more detail
89 John Leland's Itinerary; John Chandler; Sutton Publishing; 1993; p564
90 YASRS Vol 12(1892) pp 137-8
91 ZRL 3/25 NYCRO
92 A history of Richmond & Swaledale, Fieldhouse & Jennings, pp150-1
93 Robert Metcalfe, Miller, Reeth; 1841 census

The first record of a corn mill in Fremington is in 1288[94]. It was replaced ca. 1677[95] by a new corn mill, now incorporated into the farm at Low Fremington. There were two corn mills in Grinton. The earliest mention of a Grinton corn mill is 1521-22 in the Charlesworth v Broderick papers[96]. It is unclear whether this is the one opposite the Church, or the one recently recognised at Swale Hall, Grinton[97].

3.1 15th – 17th century infrastructure

In the 1530's John Leland [98] noted that "Grinton is a small market town … some of its houses are roofed with [stone] slate, and some with thatch [ling]. Grinton market supplies corn and linen cloth for the population of Swaledale, whose principal occupation is the digging of lead ore. There are large hills on both sides of the dale and from these the ore is extracted." It is not known precisely where the market was held nor at what date it acquired its market charter, if ever. Presumably it was somewhere near the church and the centre of the village; perhaps in the field numbered 888 in Plate 1 below, although as yet no evidence has been found..

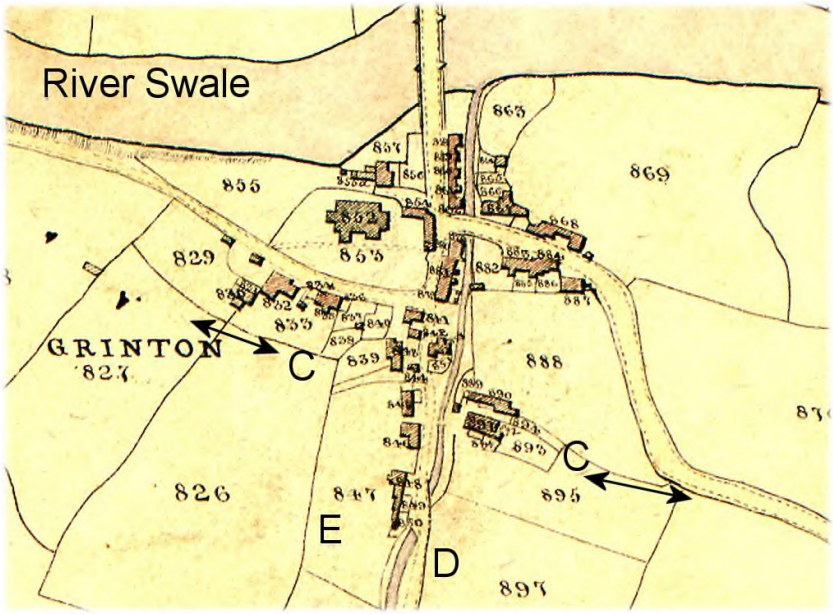

Plate 1 - Grinton Tithe Map, 1844

Leland refers to some of the houses having stone slate roofs and some thatched. The thatch used would have been heather, known locally as ling, collected from the moors and requiring a steeply pitched roof to enable rain run-off. If these houses still survive then the walls will have been raised to allow for the shallower pitch of a stone roof and it sometimes possible to see the thatch line in the gable ends[99]. Many of the houses from this period would have been single storey and have long-

94 http://www.outofoblivion.org.uk/record.asp?id=236

95 Fieldhouse & Jennings, p150

96 Regarding the late Monastery or Priory of Bridlington; The account of James Phillippes Collector of Rents of the Lord the King; 30 Henry VIII 1538/9

97 YASRS, vol. 5 (1888), Feet of Fines for the Tudor Period, Part II, 1571-82; F. Collins; p. 117; see also The Great Trial; Tim Gates (ed); YAS;2012; pp 67,142,258

98 Leland, p564

99 See for example A survey of The Green, Reeth; Reeth Vernacular Buildings Study Group; 2012; p11

since been disappeared. Some of those in Grinton might well have been washed away in the flood of 1701 – see section 3.2 below.

Leland also mentioned lead mining. This began to increase in importance in the 17th century; by so doing it highlighted the inadequate state of the local infrastructure.

Transportation out of the dale, whether lead or agricultural produce, together with goods in, was problematic. The roads were rarely surfaced, being little more than quagmires in wet weather and there were at least two major bridges to negotiate; one over the Arkle Beck at Reeth, the other over the Swale at Grinton. There are many references in the 17th century to the poor state of the local bridges. For example in July 1614[100] the North Riding Magistrates noted that " Forasmuch as Grindon bridge was fallen in decay, and if present remedy had not bene had, a great summe of monie would not have bene sufficient to repaire the same : and for a present helpe therein Sir Tim. Hutton did take such order as the decay thereof is repaired, and by this meane £13 is disbursed for the same …"

However only 17 years later in 1631 they noted[101] that "Grinton bridge is in great ruin; Reeth bridge the like." These issues would not be resolved until the 18th century rebuilding.

3.2 The medieval villages

It has been suggested[102] that Reeth Green was laid out following the granting of the market charter in 1694/5 and that prior to this the village consisted of two rows of tofts and crofts facing each other with space between for a small green , possibly as shown in plate 2 below.

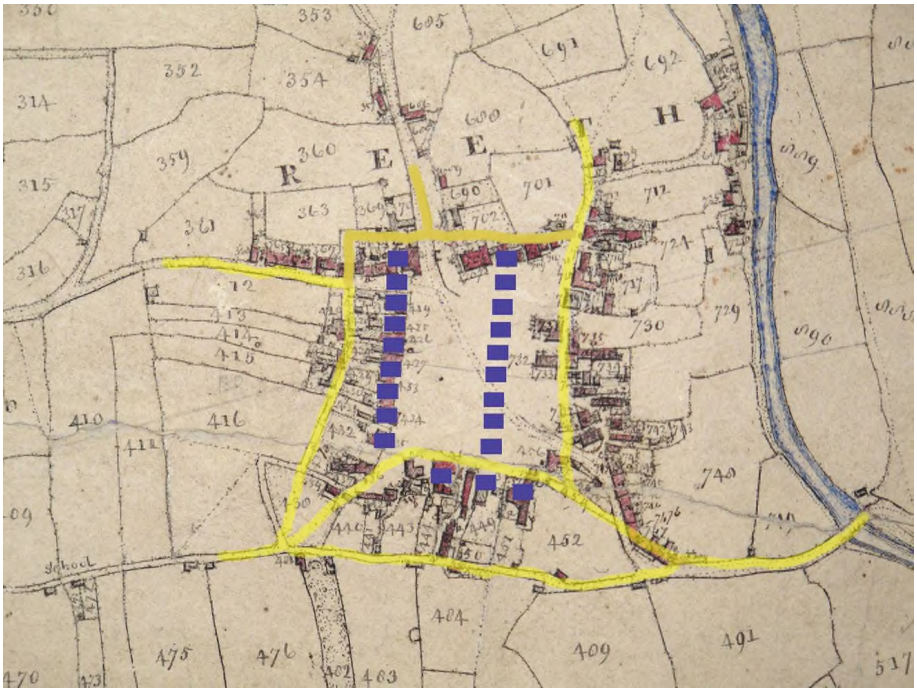

Plate 2 – a conjectural reconstruction of medieval Reeth, overlaid on the 1844 Tithe map

Key: dwellings (tofts) are shown in blue; probable trackways are shown in yellow.

100 Quarter Sessions Records; North Riding Recs Soc 1884 vol 2 p49
101 ibid vol 3 p 322
102 Fleming pp106-8

It is suggested that the main route into Reeth from the South and East crossed the Arkle Beck at the site of the current road bridge, then followed the current road before turning more gently to the North-West than the present route to follow the line of a very narrow field (no.454 on the tithe map) to proceed more gently uphill through what is now the Copper Kettle tearoom and then following the current road towards Anvil Square. This gives a gentler gradient than that up Back Lane as was suggested by Fleming.

With respect to Grinton, it is suggested that the main route into the settlement prior to the construction of the turnpike (see below) is shown on plate 1 above by the arrows labelled 'C'. The eastern end of this is a hollow-way to this day, whilst the western end heading towards Swale Lane follows an existing footpath.

It is notable that the fields numbered 888, 895 and 897 on the Grinton Tithe Map (plate 1 above) are devoid of housing. Aerial photography and Lidar images considered elsewhere in this report suggest that there were medieval tofts and crofts in these fields and indeed in the fields to the West of the Grinton-Leyburn road. It is suggested that some of these medieval tofts are the houses referred to as being swept away by a great flood in 1701, described below.

A major storm and flood in Grinton, June 1701[103]

A petition to the Justices of the Peace at the Northallerton Sessions (undated but apparently 15th July 1701) in which the inhabitants of Grinton" [numbering 17] state that *"on the 25th day of June last past there happened a great shower of rain in our town and the hills above which made our beck swell to that height as the like was never but once seen in the memory of man and poured down from the hills with such force and rapidity that carried several houses in our town away and hath done very much damage to sundry of your petitioners and it hath also carried away a stone bridge which was over the said beck and filled the channel of the beck so full of stone that it hath turned the water out of its normal course and with upon any the least flood much in danger the bridge over the River Swale which is a County Bridge and to which it hath already done some damage for it hath torn up part of the pavement and hath thrown down some of the South end (of) the bridge and filled one arch with rubbish.*
We do therefore humbly pray this Honourable Court that the premises considered and the great poverty of your petitioners and the loss they have sustained and their inability to rebuild the bridge over Grinton Beck and of the cheapest way to secure the bridge over the Swale is to rebuild that bridge over our beck you will be pleased to grant such a gratuity as will enable your petitioners to rebuild the bridge in such a manner as may be … to the bridge over [the] Swale and your petitioners as in duty bound will ever pray for your worships health and happiness long to continue "

[103] Transcribed from a photocopy of the original from Jonathan Dawson of Grinton

Plate 3 – Fremington Tithe Map 1844

It is not known where the heart of medieval Fremington lay. However, Lidar images considered elsewhere in this report suggest that there were medieval tofts and crofts in these fields numbered 903 and 909 on the tithe map (plate 3). This might suggest the settlement was initially developed to be a little nearer to the corn mill than it is today, but on higher, and therefore drier, ground.

4. The 18th century

The 18th century was a period of great change in Swaledale. It was a stable and prosperous time.

Lead mining expanded to become the dominant industry of the area, eclipsing agriculture. Until the middle of 17th century lead mining was undertaken by small groups of men and boys attracted by the possibility of a rich strike. They would search the moors for a productive vein, extract the ore using either open-cast techniques, including hushing, or shallow shafts, have their women and children prepare the ore for smelting (known as dressing) and possibly smelt the ore themselves using bales[104]. This approach had been the norm perhaps since Roman times and although it would continue on a small scale into the 19th century a more commercial approach soon came to dominate in the latter part of the 17th century and beyond.

Mines needed to go deeper and deeper as the easily found ore had been already been mined by the 'old man' as miners referred to their predecessors. Water became more of a problem, leading at first

[104] See for example Mining and Miners in Swaledale & Arkengarthdale; 2nd Ed; Alan Mills; 2011. Also Swaledale –its mines & smelt mills; Mike Gill; Landmark; 2003

to long low tunnels from the valley bottom to the workings to drain the mines, now mostly accessed by shafts. These were the forerunners of the larger 'horse levels', or adits, which were used to access the mine and haul the ore and waste material out in horse-drawn tubs on iron rails. Large numbers of men and boys were employed not just as miners, but as smelters, stonemasons, blacksmiths, carters and farriers. Women and girls continued to work preparing the lead for smelting as well as generating a small income from knitting and of course, at this time, raising the family and doing all the housework.

Thus, during the 18th century lead mining was transformed from a cottage industry into a commercial enterprise, requiring considerable investment. This, together with the earlier 'laissez-faire' approach to land ownership, led to several major disputes between the holders of the mineral rights, still often the Lords of the relevant manors. Such was the potential profit that these often ended in expensive court cases; for example the celebrated lawsuit between Thomas Lord Wharton and Reginald Marriott Esq over the Grinton lead mines, settled in the Court of Exchequer in 1708[105]. Similarly, the 'Beldi Hill' dispute in 1768[106] in the Court of Chancery saw Lord Pomfret and his wife disputing ownership of mining rights with Thomas Smith and others.

The expansion of lead mining led to a large influx of people. The population of Swaledale grew from around 4,000 at the end of the 17th century to around 6,400 by 1801.[107] As the population grew so did the local economy, which was no doubt stimulated by the granting of Reeth's Market Charter in 1694/5 thereby enabling Reeth to eclipse Grinton as the main market town in Swaledale. This, together with what became known as 'The Great Rebuilding', probably led to the creation of Reeth Green, replacing the medieval settlement described in section 3.2 above. The earlier small single storey houses and isolated farmsteads were replaced by the two and three storey stone-built Georgian houses which still stand around Reeth Green today.

The growing economy necessitated significant improvements in the infrastructure. In 1770 the Brough-Catterick turnpike road[108] was extended to the coal-pits at Tan Hill and down Arkengarthdale, terminating at the Buck in Reeth. Despite this new road, the old route from Reeth to Richmond over Reels Head continued to be widely used although the steep gradients meant that packhorses were often preferred to carts. After being damaged by severe floods, Reeth bridge was rebuilt in 1773[109] to facilitate the transport of lead out of the dale and Grinton Bridge was also rebuilt around this time, although only one carriage-way wide.

The 19th – 20th centuries

Throughout most of the 19th century the economy of Swaledale was built upon the twin pillars of lead mining and agriculture, supported in the early years of the century by knitting. The 'benefits' of the Industrial Revolution driving growth in Durham, Lancashire and the West Riding passed Swaledale by. Knitting, however, felt the cold winds of industrialisation as the adaptation of stocking frames to steam power caused the eventual collapse of the local hand-knitting industry[110]. Mining

105 The Great Trial; op.cit.
106 http://www.nmrs.org.uk/publications/pdf/M68/M68-79-84-documents.pdf
107 Fieldhouse & Jennings pp107-109
108 Ibid p458
109 Ibid p191
110 Ibid 452

began a gradual almost imperceptible decline in the early 1800's as the easily worked veins became exhausted and it was necessary to go deeper and deeper and work less-profitable veins. Nonetheless the population continued to expand peaking in the 1821 census at 8,279. Although it declined to 6214 by the time of the 1851 census, Reeth, now the market town of the dale was a thriving community. Many and varied shops and tradespeople supported the needs of this vibrant community. The census identified grocers, drapers, smithies, butchers, tailors, saddlers, shoemakers, weavers, carters and carriers, as well as miners, smelters, ore-dressers and stonemasons associated with mining. There were also at least seven public houses: the Buck Inn, Red Lion, Joiners Arms, Half Moon, Black Bull, Kings Arms and the Shoulder of Mutton.

In 1836[111], confidence in the local economy led to the building of the turnpike road from Richmond to Reeth, providing a through route from Brough to Richmond avoiding the steep inclines over Reels Head. Grinton Bridge was widened at this time to accommodate two-way traffic.

As the century progressed, lead mining accelerated into terminal decline. The cost of dealing with the water, the failure of lead prices to keep up with inflation and the importation of lead from Spanish and South American silver mines all undercut the profitability of the Swaledale mines. By 1901 most of the mines had closed and the population had declined to 2,346, 28% of its 1821 peak. Since then it has stabilised at around that level. The villages have changed significantly of course since then. Lead mining in Swaledale finished in 1914[112]. Chert quarrying provided a small amount employment from this time for a small number of men until the early 1950s but in the main the economy of dale the dale reverted back to agriculture. This was sufficient to support around 23 shops in Reeth in the 1950's[113], including a fish & chip shop, bakers, butchers, grocers, drapers, haberdashers, photographers, electrical shop, hardware store, bank and post office, making Reeth virtually self-sufficient. In the 1950's, Grinton, being much smaller, had only a small number of shops[114] including a general store,[115], post office and a café. Perhaps surprisingly for Swaledale, given its lack of industry, there was also a small factory in 1940s making Christmas crackers. As far as is known there have not been any shops or businesses in Fremington in recent times. Slowly the local shops went out business leaving just six shops in Reeth including the post office and three public houses whilst Grinton simply has the one public house remaining. Tourism is now the main plank of the local economy.

Alan Mills

May 2016

111 Ibid 459
112 Gill p117
113 David Allinson pers. comm.
114 Gearldine Coates, pers.comm
115 See http://2dales.org.uk/herbert-norris.html

6. Training and Courses

A list of all the free courses offered to the public, showing the numbers participating.

Date	Activity / Event	Presenter / Leader	Participants
	COURSES ONLY		
23rd Jan 2014	Documentary research One day course	Staff at the North Yorkshire County Record Office	18
24th March 2014	Geophysical surveying familiarisation / training – Reeth Green	Stephen Eastmead , Mike Walton - SWAAG	3
9th / 12th April 2014	Interpreting Landscape training course	Tim Laurie, Landscape Historian	36
24th April 2014	Reeth Gunnerside & Arkengarthdale Schools geophys training event	Sue Nicholson, Rob Nicholson, Mike Walton, Philip Bastow, Stephen Eastmead	43 KS2 children
28th April 2014	Reeth Gunnerside & Arkengarthdale Schools test pit training event	Sue Nicholson, Rob Nicholson, Mike Walton, Philip Bastow	43 KS2 children
16th April 2014	Geophysical surveying training - Healaugh	Stephen Eastmead , Mike Walton - SWAAG	5
2nd April 2014	Geophysical surveying training – Reeth Green	Stephen Eastmead , Mike Walton - SWAAG	6
April / May 2014	Archaeology of Britain course 2hrs / week for 5 weeks	Dr Roger Martlew Archaeology Lecturer	34
10th May 2014	Test pit training day	Members of SWAAG	44
18th June 2014	Geophysical surveying training – Reeth Green	Mike Walton - SWAAG	7
4th / 18th Sept 2014	Interpreting Aerial Photography & Lidar Images training course 2hrs/ week for 2 weeks	Robert White Yorkshire Dales National Park Authority	27
20th – 24th Sept 2014	Introduction to geophysical surveying practical training course; 4 days	Mike Walton SWAAG	16
Sept / Oct 2014	Delving into Archives training course 2hrs / week for 4 weeks	Marion Moverley Local History Lecturer	19
8th Nov 2014	Finds handling & identification training course 1 day	Jenny Vaughan, John Nolan, Northern Counties Archaeological Services	16
3rd Dec 2014	Introduction to Topographical Surveying training course 2hr evening class	Miles Johnson, Yorkshire Dales National Park Authority	13
7th Dec 2014	Introduction to Topographical Surveying training course 1 day practical	Miles Johnson, Yorkshire Dales National Park Authority	10 (15 individuals total)
3rd Jan 2015	Topographical surveying practical - Grinton	Miles Johnson, Yorkshire Dales National Park Authority	11
28th Feb 2015	Interpreting geophysical surveys course	Mary Saunders, Bradford University	26
14th Mar 2015	Finds handling & identification training course 1 day	Jenny Vaughan, John Nolan, Northern Counties Archaeological	15

		Services	
April / May 2015	Archaeology of Britain course 2hrs / week for 5 weeks	Dr Roger Martlew Archaeology Lecturer	39
12th Sep 2015	Interpreting geophysical surveys training	Mary Saunders, Bradford University	6
13th Sep 2015	Carrying out a geophysical survey training	Mary Saunders, Bradford University	6
19th Nov 2015	Topographical surveying training- Grinton	Miles Johnson, Yorkshire Dales National Park Authority	6
20th /21st Nov 2015	Topographical surveying practical - Grinton	Miles Johnson, Yorkshire Dales National Park Authority	6

Although we made a distinction in the original project plan between initial training courses and specialised courses with target numbers of 50 and 40 respectively, plus 10 at the initial documentary research session, in reality these distinctions turned out to be rather artificial. It is better to consider the total number participating, 249, versus a combined initial total target of 100 when considering the success of the courses programme.

During 2015, the views of 122 participants on a range of courses were sought by questionnaire, using Survey Monkey. The overall results are shown below.

			%	
	Yes	No	Yes	No
Did you enjoy the course?	92	2	98%	2%
Did you learn anything new?	89	5	95%	5%
Did the course increase your understanding of the subject area?				
A lot	60	0	64%	0%
Quite a lot	29	0	31%	0%
Not much	5	0	5%	0%
Not at all	0	0	0%	0%
Did you gain any new skills?				
A lot	36	0	38%	0%
Quite a lot	36	0	38%	0%
Not many	18	0	19%	0%
None	2	0	2%	0%
Was the time spent worth it?	92	2	98%	2%
Would you recommend the course to a friend?	75	7	90%	8%
Employement status: Are you				
Full-time	12	0	13%	
Part-time	7	0	7%	
Student	2	0	2%	
Retired	68	0	72%	
Other	4	0	4%	
Do you live in Swaledale or Arkengarthdale?	61	33	65%	35%
Ethnicity				
Asian (Bangladeshi ...)	0	0	0%	
Asian (Chinese)	0	0	0%	
Black (Caribbean etc)	0	0	0%	
White	90	0	96%	
Other	1	0	1%	
Do you have a disability?	6	87	6%	93%
Total responses	94			
No response	18			
Total sent	112			
Response rate	84%			

The results were very positive with 98% of the 92 respondents saying they enjoyed their course(s), and 95% saying they learnt something new. Only 2% said the time spent was not worth it.

7. Test Pitting and Methodology

7.1 Excavation Strategy

The excavation strategy for the Swaledale Big Dig involved the digging of 1m^2 test pits in the settlements of Reeth, Grinton and Fremington. Test pitting is an established method of investigation of occupied rural settlements and has been used extensively by Access Cambridge Archaeology (ACA) in the Cambridge area and East Anglia. This work has shown that by carrying out a series of these small-scale excavations the archaeological data gathered allows valid conclusions to be drawn about local settlement development.

Test pit locations were chosen from sites volunteered by residents, land owners and tenants together with public spaces e.g. Reeth Green. Before a site was included for excavation, a site visit took place to assess its suitability. Factors such as access, drainage/service routes, evidence of recent building activity, the likely presence of tree roots etc. were all taken into account before selection for test pitting. In addition, some sites were assessed using results from geophysical surveys and occasionally, where circumstances dictated, a cable avoidance tool was used. Not all offered locations were found suitable.

7.2 Excavation Methods

50 test pits in all were excavated over the course of the project by something in excess of 160 people. These were SWAAG members, residents, other volunteers, members of the Yorkshire Dales Young Archaeologists' Club together with their parents, guardians and leaders, plus children and teachers from Arkengarthdale, Reeth and Gunnerside and Richmond Methodist Schools.

Apart from the test pits in public areas, which could not be left open overnight for Health and Safety reasons, digging was scheduled to take place over two days.

An initial training course, attended by 44 people, was held to explain the principles and methods of test pit digging and this core knowledge was subsequently shared as new diggers joined the project. Although there was not a designated leader at each pit (an intentional decision to try and foster a more collaborative process) there was always at least one appropriately skilled person assigned to each pit.

A comprehensive, standard tool kit was supplied to each team of diggers (see below) and first aid kits located centrally.

The test pits were excavated in accordance with the following documentation produced by ACA and purchased from them;

"Digging an Archaeological Test Pit, A Step-by-Step Guide"
"Digging an Archaeological Test Pit, Excavation Record"

The use of standardised documentation and pro-forma recording booklets ensured consistency of excavation techniques and allowed participants with no prior archaeological experience to record in an appropriate manner.

Test pits were laid out at 1m^2, located by measurement to nearby fixed points (e.g. corners of buildings, gateposts etc) and also by GPS using a Promark 120.

Where present, turf was removed and the pit excavated in 10cm layers or contexts.

Digital photographs were taken at the top of each 10cm layer and included in the shot (on a blackboard) were the site code, pit and context number and North indicated by means of an arrow.

The record booklet was completed for each context with details of finds, soil composition and colour plus any other relevant details. The top of each layer was also drawn.

All soil was sieved through 1cm mesh garden sieves or a commercial archaeological sieve (RGC Sieve Grader, Fine Limit Welding, Essex). Excavators were encouraged to keep anything thought to be of possible interest.

7.3 Archaeological Supervision

Professional archaeologists from the Yorkshire Dales National Park provided advice relating to the excavation techniques, identification of natural deposits, unusual stratigraphy and drawing and recording conventions.

7.4 On Site Finds Identification and retention

All finds were washed on site at the time of excavation and kept separately by context in seed trays on newspaper to dry. Initial screening discarded stones and other natural items.

Typically, coal and coke were recorded and discarded.

All other items with the exception of certain modern artefacts e.g. confectionary wrappers and plastic items were retained.

On the 2nd day of each weekend Jenny Vaughan & John Nolan of Northern Counties Archaeological Services (NCAS) attended to help with finds identification and pottery spot dating. NCAS also ran two full day finds identification courses, which were attended by 31 people.

7.5 Closing and Backfilling

The excavation continued in 10cm layers to a maximum of 1.2m or until natural deposits were reached. Occasionally certain features (e.g. stone culvert, drainage channel) resulted in excavation being abandoned and more rarely time constraints meant a pit could not be completed.

Once a pit was identified as being completed, section drawings were made or photographs taken and the base of the pit recorded.

If necessary a sondage was excavated in one corner to confirm natural layers had been reached.

Pits were carefully backfilled whilst compacting the soil and turf replaced.

7.6 Recording

Test pits were recorded using ACA pro forma booklets.

A series of site codes were employed to differentiate between geographical areas together with a year suffix as follows.

SBDR14 & SBDR15 Swaledale Big Dig Reeth
SBDF15 Fremington
SBDG15 Grinton

Each test pit was allocated a unique number, which was used in conjunction with the appropriate site code on all booklets, finds bags, digital images and reports.

A full report was written on each test pit including an excavation report, finds report and conclusions reached. These may be found on the SWAAG website as follows:

Reeth test pit reports (36)
https://www.swaag.org/HLF/ReethReports/ReportsMenu.htm

Grinton test pit reports (6)
https://www.swaag.org/HLF/GrintonReports/GReportsMenu.htm
Fremington test pit reports (8)

https://www.swaag.org/HLF/FremingtonReports/FReportsMenu.htm

The full finds report, covering all 50 test pits, may be found at
https://www.swaag.org/HLF/ReethReports/SWAAGfindstext2014-2015.pdf

7.7 Finds Processing and Recording

Once dry, following a further sorting/discarding process to remove stones and other natural items the finds were bagged by material type and context in suitably labelled press seal bags.

Dating and analytical recording of finds focussed on the pottery assemblages.

Pottery and CTP fragments were where possible assessed, described and dated and a detailed report and access database produced.

Metal was kept for examination and recording and items were x-rayed and conserved, retained or discarded as appropriate.

With one notable exception, significant faunal remains were not recovered. A local veterinary surgeon and the professional archaeologist identified the intercutting burials of canine and bovine remains in TP25 in the garden of the Buck Hotel.

Significant amounts of Ceramic Building Materials (CBM) were not recovered.

7.8 Ownership and fate of finds

Ownership of finds rests with the landowner unless other legislation relating to Treasure or Human Remains takes precedence.

With the landowner's consent, certain finds were retained for display or to form part of a reference collection. The remainder were either returned to the landowner, lodged with the main archive or stored locally.

7.9 Test Pits – Evaluation

In order to evaluate the test-pitting programme a survey was sent via email using *SurveyMonkey* to those people who had participated in the digging of test pits. 55 people responded from a distribution list of nearly 100.

The questions were designed to determine previous experience and also to collect information regarding the acquisition of new skills, knowledge and whether there would be any lasting legacy of interest and activity.

We also wanted to gather information about peoples' experiences - good or bad. As one member had memorably said when we cancelled a pit digging session because it was snowing and the wind chill forecast was minus some degrees centigrade…

Community archaeology should be enjoyable, not a penance!

Participants were also asked about their location and given a free text box where they could comment further about their experience.

The questions, response options and number of replies are given below. It should be noted that some respondents did not answer all questions and so the totals in some cases do not tally.

1. **Have you taken part in Archaeological digs before?**

   31 Yes
   23 No

2. **Do you plan to do more Archaeology in the future?**

   54 Yes
   1 No

3. **Did you learn new skills?**

   23 Yes - lots
   29 Yes – some
   2 No

4. **Did you learn more about the history of Reeth, Fremington & Grinton?**

   23 Yes – lots
   29 Yes – some
   3 No

5. **Do you plan to get involved in more local history or SWAAG events in the future?**

   44 Definitely yes
   9 I might
   1 No

6. **Where do you live?**

   22 Swaledale
   2 Arkengarthdale
   12 Wensleydale
   2 Other Yorkshire
   8 Other – please specify*

7. **How did you rate your Big Dig experience?**

   34 Great
   20 Good
   1 Neither good nor bad
   0 Bad
   0 Very bad

8. **Would you participate again?**

   52 Yes
   2 No

9. **Please let us know…**

   What we did well
   What we could have done better
   Any other comments

Response via a free text box**

*Responses in relation to location

Two for Darlington and one each for Scotland, Neighbouring County, Co Durham, Easington Nr Saltburn, West Sussex, Newcastle upon Tyne.

** Free text box responses (34 commented)

- Organisation and explanations were good.
- Great team and very good range of activities, Well Done!
- It was good that I was working with other more experienced members, as this was my first dig. Each step was clearly explained, and I had the opportunity to practice every activity. It was great making new friends with interests similar to my own. A valuable and informative day all round!
- Excellent support in terms of equipment & information. Good leader for the group meant everyone had a chance to be involved in the different tasks. Great that children could participate and enjoy the thrill of finding something.
- The Test Pit Digging was very well organised and there were some very good lectures.It was great to assist with the geophysical work.
- Although the weather when I did the Big Dig was dreadful, the experience was such fun! The quality of training has been excellent I have found out lots about the area and really enjoyed taking part It has rekindled my interest in archaeology - thank You
- Very well organised and coordinated. Support for everyone taking part and very friendly. People meeting and learning together and appreciating thei area. Some days the weather could have been better!!
- Friendly and communicative people
- Fine example of local community action, to better understand a 'sense of place', and examine what is distinctive in the history of local village(s). Felt that a wide range of skills, and experiences, from diverse professional backgrounds, were brought together through SWAAG teamwork, and a VERY great deal of volunteer time and input. Well done to all.
- everything was well organized, good record keeping, everyone knew what they were doing and even though I hadn't been on one of your digs before I was made to feel really welcome and valued. Thank you all for a wonderful experience
- Loads of support, friendly and made to feel very welcome.
- The whole project has been run with enthusiasm and good organisation by the leaders and we have been kept well informed. As a very senior citizen I did not get involved in digging, but followed all the up- dates and reports and visited some of the sites. I found some of the findings relevant to work on the Swaledale history which I am attempting. I have been more actively involved in other Swaag digs.
- Maybe a facebook group for people who do not look at their emails often
- More test puts easily accessible to public would be great

- Particularly appreciated the willingness of people to share knowledge and explain things. The range and quality of courses provided was also good.

- Awnings might be handy for wet / showery days.

- I thought the organising was very good but maybe the pits could be rectangular in future. There was not sufficient room for using a mattock properly.

- Everyone was very helpful and welcoming. Even though we are new to archaeology, we were included in everything and hope to improve our practical skills. We have taken this opportunity to expand our interest in local history and beyond.

- The whole project was extremely well organised.

- The information before & after digs is good and we are kept up to date with progress and meetings.

- Good organisation - all the right equipment in all the right places.

- Test pit in our garden was dug very professionally. It was very interesting to observe.

- The project was well organized. We were very well informed about what was going on and its relevance to the project. The presence of professionals made it feel authentic.

- The logistics of finding sites to dig, getting equipment and groups of people together was handled really well so that, as a volunteer, I could just turn up and join in a range of activities which were varied - both physically and mentally. The background from documentary research at Grinton and Fremington was also really helpful in giving some context as to why we were test pitting. I would have liked to have been asked to read the Cambridge Uni guidance on how to set up, dig and record a test pit before we started - or had someone who had dug test pit before talk through the main points to follow and consider during the process. In the pits I was digging, we didnt actually dig below 700mm. But, at that depth, it becomes quite difficult to have more than one person in the pit. I feel that the Big Dig isn't complete until we have some expert analysis of the finds and a summary of what we have learnt from all the test pit activity.

- school days - excellent. - whole Big Dig was most enjoyable. Met loads of people, local and others from Britain and around the world.

- Loved the fact that everyone was so welcoming and I was given the chance to try a variety of activities. People always willing to answer my questions. I am very impressed with the dedication of the members of SWAAG and the wide variety of events they offer throughout the year.

- The dig in the garden was well done, very professionally with minimal inconvenience. Communications of fines was extremely interesting.

- Get together local people

- Okay - this may sound funny, but I worried about where to go to the loo!! I'm someone who's fine about nipping behind a wall, but this wasn't an option on the first dig in someone's garden! Otherwise, i loved it!

- Well organised event

- Organisation and communication was superb throughout. On the one test-pit dig I attended it would have been better to have had one person nominated as test-pit leader.

- Thoroughly enjoyable. I hope to get more involved subject to family and other commitments.

- Well organised, friendly, helpful team Shared roles so everyone had a go at different things.

- People are made welcome by SWAAG members and the events are well organised and friendly. Continuity is also very good via the talks, follow-up finds event and newsletters giving feed-back on progress. I think SWAAG members have worked hard to make the Big Dig a success.

- Made me feel welcome and explained things very well. The SWAAL website is fantastic and I look at it often. I only went to one of the big digs but now I get regular emails and texts of future events which makes me feel part of it all. I have been very busy due to family commitments but if I have free time then I would definitely consider attending a SWAAL event. If you would like to do a Big Dig in Wensleydale let me know and I'll see if I can get you some land. Thank you Jan

From the responses to the survey, it is pleasing to see that The Swaledale Big Dig engaged the local community, implanted new skills and knowledge, engendered awareness in the “sense of place“ and has, without doubt, resulted in a wider interest in local history and archaeology.

7.10 The Big dig tool kit per test pit

THE SWALEDALE BIG DIG TOOL LIST	
item	***quantity***
Spade	1
Shovel	1
Mattock	1
Mattock Handle	1
Hand mattock	1
Trowel	2
Builders Bucket	2
Hand shovel	1
Hand brush	1
Kneelers	2
Sieve	1
Mason's line	some
nails	6
Spoil sheet	1
100m tape	1
Hand Tape	1
Safety Glasses	1
Clipboard	1
Biro	1
Pencil	1
Eraser	1
Pencil sharpener	1
Sharpie pen	1
Compass	1
Sponge	1
Blackboard & Chalk	1
Finds Tray	10
Bowl	2
Tooth Brush	2
Nail Brush	1
Paper clips	some
Finds Bags 3.5"x4.5"	some
Finds Bags 6"x9"	some
Finds Labels	some
Digging Guide	1
Record Booklet	1

SWALEDALE BIG DIG PROJECT
2014 - 2015

GEOPHYSICAL AND TOPOGRAPHICAL SURVEY REPORT

Report written by: Mike Walton and David Brooks, January 2016

Contents:

1. Summary
2. Introduction
3. Methodology
4. Survey Objectives
5. Reeth
    - 5.1 Site Background
    - 5.2 Site Geology and topography
    - 5.3 Archaeological Background
    - 5.4 Geophysics Survey Results
    - 5.5 Discussion
6. Grinton
    - 6.1 Site Background
    - 6.2 Site Geology and Topography
    - 6.3 Archaeological Background
    - 6.5 Geophysics Survey Results
    - 6.6 Topographic survey results
    - 6.7 Discussion
7. Fremington
    - 7.1 Site Background
    - 7.2 Site Geology and Topography
    - 7.3 Archaeological Background
    - 7.4 Geophysics Survey Results
    - 7.5 Topographic survey results
    - 7.6 Discussion
8. Appendix
    - Grinton Geophysical Survey Field School, Grinton, North Yorkshire: Geophysical Survey Report, Project No: SWAAG001 written by MK Saunders BA MSc, University of Bradford

Acknowledgements

SWAAG would like to thank the Reeth Parish Council for their permission to survey the Reeth Market Green. We should also like to thank Mr Simon Barningham and Mr and Mrs Ronnie Bailey for permitting us repeated access to their fields in Grinton and Fremington respectively for these surveys. Thanks are also due to the Yorkshire Dales National Park Authority for its support and guidance and particularly for making available to us Mr Miles Johnson and Ms Mary Saunders, two accomplished archaeologists and surveyors without whose technical skills, expertise and patience we almost certainly would not have completed the surveys to the level set out in this report. We should also like to thank the members of SWAAG and the public who participated in the surveys and in particular Mr Mike Keenan for his his hard work in pulling together the Grinton surveys and turning them into the plan in this report. Finally we should like to thank the Heritage Lottery Fund for their grant which made the Big Dig and these surveys possible.

1. Summary

In 2013 The Swaledale and Arkengarthdale Archaeology Group (SWAAG) was awarded a grant of £76000 by the Heritage Lottery Fund to fund the Swaledale Big Dig Project over the period 2013 to 2015. The objectives of the project were to foster amongst the local communities a greater level of knowledge, interest and understanding of their local heritage and to embed a range of skills to enable the community to continue to research, record, appreciate and interpret their heritage, and to facilitate its better management.

Research questions pertaining to the history of, and relationship between, the villages of Reeth Grinton and Fremington formed the basis of the project.

This report describes the survey work carried out by SWAAG members and members of the public in the three villages during the two year's of the project. It also includes surveys carried out as part of training courses designed to provide the participants with sufficient knowledge and skills to undertake further surveying exercises in the future. The geophysical training was provided by Mary K Saunders of Bradford University and the topographic survey training by Miles Johnson of the Yorkshire Dales National Park Authority.

Geophysical surveys were undertaken with a Bartington Grad601-2 gradiometer and a Geoscan Research RM85 resistivity meter and PA20 probe array. Topographical surveying was carried out by a combination of tape and offset techniques coupled with GNSS using a Spectra Precision Promark 120 Professional Grade GPS/GLONASS GNSS Receiver.

The surveys were carried out on the Reeth Market Green, in five fields adjacent to and on the eastern side of the Grinton - Leyburn Road, Grinton and in a field on the western edge of Fremington. The sites were chosen on the basis that they contained, or were suspected of containing, earth works and possible archaeology of which further knowledge would help to address the research questions established for the Big Dig project.

The surveys confirmed in all sites, the presence of possible archaeology largely consistent with what can be seen on Lidar images of the area. In order to gain more information on the archaeology it will be necessary to undertake targeted archaeological excavations.

As a result of these exercises, SWAAG members and members of the public have gained an insight into the surveying techniques and methodologies used by archaeologists to investigate non-destructively sites of archaeological interest. A core of people has been established, who will be able to take these skills forward in the further exploration of Swaledale and the wider areas of the Dales.

2. Introduction

Over the period 2014 through 2015 SWAAG led a community archeological project: The Swaledale Big Dig focussing on local heritage and in particular on the three villages of Reeth, Grinton and Fremington; see Figure 1 for their respective locations. Sites in and around each village were identified for surveying based upon the presence of possible earth works and other possible archaeological features and on proposals to dig test pits in or near to the sites.

The surveys included magnetic and earth resistance surveys and topographic surveys, although not all sites were surveyed by each method. Also some of the surveys were carried out as part of training programmes for the members of SWAAG and the local community in order to embed skills which might be available for use beyond the completion of the Big Dig project. The training

courses were provided by Mary Saunders, Bradford University, for the geophysics and Miles Johnson, Yorkshire Dales National Park Authority for the topographic surveys.

Magnetic surveys were undertaken with a Bartington Grad601-2 Gradiometer and soil resistance surveys with a Geoscan Research RM85 Resistivity Meter and PA20 Probe Array. The the grids were set out using an optical square, and/or geometry. Topographical surveying was carried out by a combination of tape and offset techniques coupled with GNSS using a Spectra Precision Promark 120 Professional Grade GPS/GLONASS GNSS Receiver. Participants were also given instruction in computerised manipulation of the data in order to be able to produce plans and maps of the survey areas. For further details see section 3 of this report.

Figure 1: Map showing the respective locations of REETH, FREMINGTON and GRINTON

The descriptions of the surveys carried out at each site and the results achieved are described and considered in relationship to the results of Test Pits dug in or near to each site in the appropriate separate sections of this report. The results the test pits are set out in the Test Pit section of the Big Dig Report and discussed in the section of the Big Dig Report entitled: An Analysis and Interpretation of the Results of the 2013 - 2015 Test Pit Programme.

3. Survey Objectives

The survey objectives were:

- to enable participants in the Big Dig and members of SWAAG to gain new, and hopefully lasting, skills in several types of surveying; and
- to provide survey data from specific areas of interest to the Big Dig project to help in the interpretation of the relationship between the three villages of Reeth, Fremington and Grinton.

4. Methodology

Geophysical surveys were undertaken with a Bartington Grad601-2 Gradiometer and a Geoscan Research RM85 Resistivity Meter with a PA20 Probe Array. Grids of 30m or 20m were set out using an optical square, and/or geometry and their precise locations were established with a Spectra Precision Promark120 Professional Grade GPS/GLONASS GNSS Receiver. The following is a summary of the techniques and instruments used in the survey together with a summary of the data processing methodologies; additional details of the Grinton survey supervised by Ms. Mary Saunders of Bradford University can be found in the Appendix to this report:

Magnetometry	
Instrument	Bartington Grad601-2 Gradiometer
Grid Size	20m by 20m (one Grinton survey only, see Appendix), or 30m by 30m (all other surveys)
Sampling along the traverses	0.25m
Traverse intervals	1m
Collection mode	Zig-Zag
Settings	Range 100nT; resolution 0.03nT
Direction of traverse	East-West (Grinton see Appendix), Other surveys direction to suit topography

The raw data was downloaded into Terrasurveyor version 3.0.28.1. It was destriped, destaggered, where necessary, and then clipped and interpolated.

The data plots were imported into QGIS, a free, Open Source Geographic Information System programme where it was superimposed on the grids located with the ProMark 120 GNSS (see below). The processed survey data was superimposed on Google Satellite View images using the GNSS data to fix its position. LIDAR (at 60% transparency) was also superimposed on Google Satellite View images to show topographical features for comparison.

Resistivity	
Instrument	Geoscan Research RM85 Resistivity Meter & PA20 Probe Array
Array	Twin Parallel Probe, 4 probe
Probe Spacing	0.5m
Grid Size	20m by 20m (one Grinton survey only, see Appendix), or 30m by 30m (all other surveys)
Sampling along the traverse	1m (one Grinton survey see Appendix); otherwise 0.5m
Traverse intervals	1m
Collection mode	Zig-Zag
Settings	Gain x10; Frequency 122.5Hz; Output 45V
Direction of traverse	East-West (Grinton see Appendix), Other surveys direction to suit topography

The raw data was downloaded into Terrasurveyor version 3.0.28.1, despiked, clipped and interpolated.

The data plots were imported into QGIS and manipulated as described above for the magnetometry.

GPS	
Instrument	Spectra Precision ProMark 120 Professional Grade GPS/GLONASS GNSS receiver
Receiver Operation	Single rover with external antenna

The raw data was processed using GNSS Solutions software with corrections made using OSNet 1 minute Rinex data from the Richmond (North Yorkshire) reference station. The instrument was used for surveying both landscape and survey grids. Typical accuracy <30cm.

The data plots from the GNSS were imported into QGIS and manipulated as described above.

Topographic surveys were carried at Fremington and Grinton.

The Fremington survey used tape and offset methodology and the PromMark120 GPS. The raw data from the Promark 120 GPS was processed as described above and imported into Inkscape, a free Open-Source Vector Graphics Editor, where it was combined with the data from the tape and offset work and hachures added.

At Grinton the survey was carried out exclusively using the Promark 120 GPS. The raw data was processed as described above to produce a plot of the site to which the hachures were added manually.

5. Reeth

Reeth is situated at the junction of Swaledale and Arkengarthdale in North Yorkshire, centred on SE038 994, Figure 1. It is a small, planned Georgian market town centred on its large green, Figure 2. It was granted its market charter in 1694/5 and its history after that date is well understood, but little is known prior to that time.

A Big Dig objective was to explore the history of Reeth to seek information about medieval Reeth and to answer question such as; was there a Roman Fort at Reeth; has Reeth always had a market green of the size and layout as we presently see it. Test pits were dug in the market green and elsewhere in Reeth, and the green was also geophysically surveyed to identify any possible significant structural and archaeological features.

This section of the report considers the surveys carried out on Reeth Green. The results and conclusions of the several test pits and the overall conclusions from the project are set out elsewhere in the Big Dig Report.

5.1 Site Background

The market green is centred on grid reference SE038 994 and is approximately in the centre of the village. As can be seen from Figure 2, the green is not continuous but is sub-divided by roads into several sectors. Large areas of the green to the west are cobbled and are used today for the weekly market and for the parking of vehicles.

5.2 Site Geology and Topography

Reeth is sited north and above the River Swale, and a short distance to the west of Arkengarthdale and Arklebeck, Figure 1. It is built on the medial moraine formed during the last Ice Age, some 12,000 years ago, at the junction of two glaciers, one which moved eastwards down Swaledale and and the other southwards down Arkengarthdale. The underlying morphology of the green is glacial till, a mixture of soil and rock. Below those glacial deposits is the Yoredale Series of rocks, the basic building blocks of the Northern Dales, laid down in the Carboniferous Period. The Series largely comprises repeated layers of limestone, shale and sandstone.

The market green lies at a height of approximately 210m. The topography of the green is varied; although there is a general slope down from north to south many of the sectors of the green are at differing heights and slope in different directions.

The green would appear to have been built up in some areas and most of it is grassed which is regularly mown.The green at the western side has considerable areas of old cobbled surface.

5.3 Archaeological Background

Little is know about Reeth prior to the granting of its market charter in 1694/5; it may have looked quite different to what we see today. Fleming in his book “Swaledale: Valley of the Wild River” suggests that there may have been two rows of tofts (houses) and crofts (gardens) facing each other and aligned north-south. Fieldhouse and Jennings in their “A History of Richmond and Swaledale” suggest a Roman fort built on a platform to the west of the green, perhaps where the Black Bull and Kings Arms now stand.

The three areas of the green which were surveyed are indicated as A, B, and C on Figure 2 which is formed from LIDAR overlain on a Google Satellite View of the green. Figure 2 shows a possible track(s) running north east-south west in area A, a possible short track running north east-south west towards the south side of B and other faint features towards the south east corner of B.

Those possible tracks may be consistent with tracks shown crossing the green on early maps. However, if as suspected (and subsequently confirmed by the test pits dug on the green) it has, over the years, been worked over, built up and perhaps even cultivated, it is possible that any archaeology underlying the green may have become obscured. The four metal quoits pitch covers can be seen clearly in the north west corner of B.

5.4 Geophysics Survey Results

Sectors A, B and C of Reeth Green, Figure 2, were surveyed using magnetometry and resistivity as described in the above Methodology section, (section 3) of this survey report.

Figure 3 shows for all three areas, the raw data traces from the magnetic survey alongside the processed data.

In Figures 4 the magnetic, processed data is shown superimposed on the green and in Figure 5 an interpretation is offered.

All three raw data trace plots, Figure 3, show widespread, strong, bipolar responses, some of which can be attributed to nearby parked cars, road signs, and the metal covers over the quoits pitches (area B at its north west corner). There is a strong anomaly crossing sector B from north west to south east and which may possibly be a water pipe. There is also a hint of a possible former trackway across the upper green (A) from the middle of the eastern edge and going towards the north western corner; Figures 4 and 5. The other smaller sized bipolar responses are probably ferrous scatter and are so widespread that it is difficult to identify with any certainty any possible archaeological features.

A ground resistance survey was conducted only on the upper sector of the green, A. The data plot from the survey is shown in Figure 6. Several anomalies are apparent perhaps indicative of archaeology:

1. A broad high resistance anomaly running from the north east corner of the A, heading south west and then turning west north west - possibly a boundary wall or a track.

2. A narrow high resistance anomaly from the north east corner of A, running south west across the green. As this lies approximately on the line between the old water pumps , one just to the north of A and a second adjacent the bandstand (flat square in area B), it is possible that the anomaly could represent a water pipe, or it could be a trackway.

3. A broad medium resistance anomaly running along a similar line to 2 above, possibly a track way.

4. Three or four circular high resistance anomalies, could they be small enclosures or early gravel pits.

5. Medium resistance shading which is reminiscent of the possible trackway also seen in the magnetics, above.

6.Two curved medium resistance shadows near the south end of A. Possible archaeology. Could they be early enclosures.

5.5 Discussion

Reeth Green is, and has been, well used for village activities and parking so it is perhaps not surprising that the magnetic survey has shown a widespread ferrous scatter, but it is unfortunate that the scatter maybe obscuring possible archaeology. Both the magnetic survey and the earth resistance survey revealed indications of a range of below ground features which may be of archaeological interest.

Also, as became clear when test pits were dug on the green, it has been well worked perhaps for early cultivation or other low level activity, that too may have helped obscure the archaeology,

The stratigraphy and finds from the test pits which were dug on the green have suggested the possible occupation of the green prior to the 17th C and of the green possibly being “worked” and built-up. Such activities may be consistent with circular resistance anomalies (Figure 5, and point 4 above) being enclosures or walls from dwellings which were at one time on the green. For a detailed review of the tests pits and the finds and the implications, see the section of the Big Dig Report entitled: An Analysis and Interpretation of the Results of the 2013 - 2015 Test Pit Programme.

The surveys of Reeth green have raised the possibilities of archaeology underlying the green, and which would require targeted excavation to explore further.

6. Grinton

Grinton is sited on a fording point across the River Swale, east of Reeth, Figure 1. It is in the Domesday Survey of 1068 but is not shown as having a church. By about 1120 it had acquired a church and it and the village were granted to Bridlington Priory, suggesting that Grinton was at the time the most important and possibly the largest village in the Dale.

6.1 Site Background

The 5 areas (A, B, C, D, E) surveyed are centred on approximately SE 048 983 and all lie to the east of the present day Grinton to Leyburn Road and south of Grinton Bridge and the River Swale, Figure 7. Today the fields are grassed and largley used for grazing livestock.

6.2 Site Geology and Topography

The areas surveyed are a series of adjacent, fields running from behind the houses on the present day Richmond Road up the hill towards Leyburn, Figure 7. The fields in generally slope upwards from the north to the south, although there are other lesser slopes which may be have been caused by farming practices or even by water during the retreat of the glaciers and the period of the large glacial lakes.

The underlying geology is the Yoredale Series of rocks, principally limestone, sandstone and shale overlain with a mixture of glacial till and in the lower areas with alluvium deposited during the period that the Grinton recessional moraine held back melt-water forming a large glacial lake.

Figure 8, is a photographic over view of the survey areas B and C.

6.3 Archaeological Background

Figure 7 is a combination of a Lidar and a Google Satellite View image. It shows very clearly at the western side of the fields an area of earthworks stretching up the hill and adjacent to what is now the Grinton-Leyburn Road and the bed of Grinton Gill, perhaps these are the remains of the crofts and tofts of an older larger Grinton. Similarly earthworks are also visible on the western side of the Grinton-Leyburn Road, more crofts and tofts.

It may be relevant to note that in 1701 there was a petition from residents of Grinton, to the Justices of Peace at Northallerton seeking help as severe flooding had carried away several houses and damaged others and a bridge. Might these be the the the crofts and tofts referred to above.

6.4 Geophysics Survey Results

Figure 9 shows the survey areas with the processed magnetic data overlain. Note that in field B (Coates Middle Field) the smaller grids extending to the east are those carried out with the assistance of Mary Saunders of Bradford University (for further details see the Appendix).

Figure 10 is the processed magnetic data with the underlying Google data removed with alongside it a possible interpretation of the anomalies.

All of the sites show a wide scatter of distinct bipolar responses, some can be securely attributed to wire fences, transformer poles, etc., whilst others are possible archaeology, for example possible house platforms in C, a rectilinear enclosure in B, ridge and furrow plough marks in A, and possible archaeology in D and E, Figure 9.

The ground resistance survey was limited to areas in fields B and C, Figure 7; that in field B was carried out with the assistance of Mary Saunders of Bradford University.

This survey has revealed areas of high resistance in both B and C, Figure 11, speculatively identified as possible lines of walls and areas of rubble. Although the two areas surveyed are not contiguous it is possible that the tentative wall in area B is part of the same wall as seen in area C. These features can be seen clearly in Figure 12.

6.5 Topographic Survey Results

The topographical survey was restricted to site B (Coates Middle Field) and a small part of site C (Calf Garth). The survey data, Figure 13, shows an array of clearly delineated possible enclosures and tracks, which match up well with the geophysical survey results as well as with the Lidar image in Figure 7. The possible wall on both sides of the field wall is probably the wall seen on the earth resistance survey. The long east-west terrace may be the edge of the old Richmond road which it is thought originally ran through this field or may be a river terrace formed during the retreat of the glaciers and the period of the glacial lake.

6.6 Discussion

The survey results consistently indicate that the survey areas, particularly B and C, contain l archaeology. Whether or not that archaeology is the remains of the putative crofts and tofts is unclear but it is likely that the area has been occupied for some undefined use. That suggestion is supported by the evidence from the two test pits which were opened in Fields B (Coates Middle Field) and C (Calf Garth); pottery finds strongly suggested habitation in the medieval period (13th

early 14th C) and later. Additional targeted excavation will be necessary if it is desired to answer these questions more fully.

For a detailed review of the tests pits, the finds and the implications, see the section of the Big Dig Report entitled: An Analysis and Interpretation of the Results of the 2013 - 2015 Test Pit Programme. For a further analysis of the Grinton survey carried our with the assistance of Mary Saunders, see the Appendix.

7. Fremington

Fremington - High and Low - is situated east of Reeth, Figure 1. It is recorded in the Domesday Book of 1068 as waste, possibly due to the consequences of the harrying of the north or the reversion of farming from arable to rough grazing. Today Fremington village comprises a group of traditional dales houses, possibly dating back to the 17th Century, spreading along and back up the side of the valley (ie north) from the Reeth Richmond Road. To the west of Fremington in the modern fields there are the outlines of strip fields - lynchets - possibly from the medieval period or even earlier, Figure 14.

7.1 Site Background

The site is a grassed field centred on SE045992. It is on a south facing slope overlooking Arkle Beck. It is immediately to the west of the road running up to High Fremington, Figure 14.

7.2 Site Geology and Topography

The site, labelled A, in Figure 14 is formed largely from the Lower Carboniferous rocks of the Yoredale Series - repeating sequences (Cyclothems) of limestone, shale and sandstone. The site comprises two areas, that at the south (bottom) is flat and there is evidence of water-deposited alluvium, probably from the glacial lake formed by the Grinton recessional moraine. Moving north off this area the field rises steeply and is terraced. The terraces are probably a reflection of the differing levels of hardness in the rocks, together with farming activity creating lynchets. The terraces are covered with glacial till.

7.3 Archaeological Background

Figure 14 is a combined Lidar and a Google Satellite View image and clearly show a series of terraces (lynchets) running east - west with, at their eastern end, earthworks reminiscent of them being the remains of early tofts and crofts. Note that several of the lynchets go under the western field wall suggesting that they predate it; they are possibly medieval in origin.

Figure 15 is views of the site and show its terraced nature. In the lower picture at the left handside foreground there is an possible enclosure or base of a building and also on the left handside half way up there is a trackway leading up the hill through the terraces.

Going further north into adjacent fields there are similar earth works.

7.4 Geophysics Survey

Figure 16 shows the magnetic survey raw data trace alongside the processed data for the surveyed area.

Figure 17 shows the processed data overlain on a Google Satellite image of the area.

Several bipolar anomalies are visible in the raw data plot. Those at the north are probably metal fencing in the top field wall. Towards the southern end of the plot there are two large bipolar anomalies which are probably ferrous deposits.

The plots clearly show the lynchets together with suggestions of enclosures, walls, trackways, etc. The processed data plots in Figures 16 and 17 reflect the features on the Lidar (Figure 14): and in the topographic survey Figure 18.

This site was not surveyed for earth resistance.

7.5 Topographic Survey Results

A combination of GNSS and tape and offset were used to survey the site. Those surveys were combined, and hachures drawn in to give the the plot in Figure 18, a copy of which has also been annotated.

The survey reveals the lines of the lynchets, several trackways and possible house platforms and/or enclosures, and is consistent with the LIDAR and the results of the magnetic survey.

7.6 Discussion

The results of the surveys support the view gained from the Lidar and field walking that the eastern side of the field probably contains buried archaeology. Whether or not that archaeology is the remains of the putative crofts and tofts is unclear but it is likely that the area has been occupied for some undefined use. That conclusion is supported by the finds evidence from two test pits in the field: occupation or other significant activity in the immediate vicinity in the medieval period, (13th/early 14th C) followed by abandonment in the late medieval. Thereafter some evidence of cultivation or other low level activity in the 17th/18th C. Further targeted excavation will be required to provide evidence to support, or otherwise, these theories.

For a detailed review of the tests pits, the finds and the implications, see the section of the Big Dig Report entitled: An Analysis and Interpretation of the Results of the 2013 - 2015 Test Pit Programme.

Figure 2: Reeth, showing green and survey sites.
LIDAR over Google Satellite view

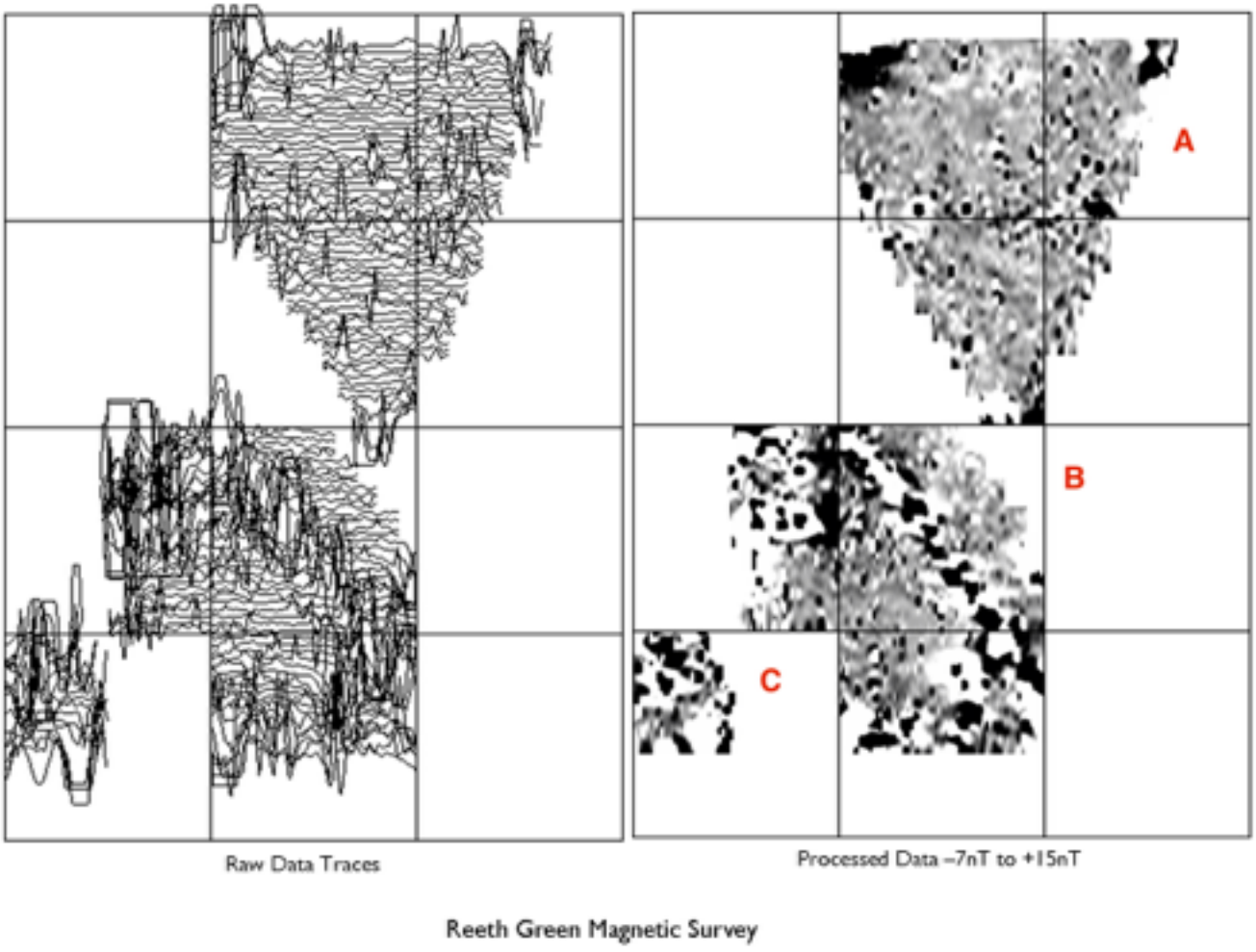

Figure 3: Reeth Green, Magnetic Data Survey

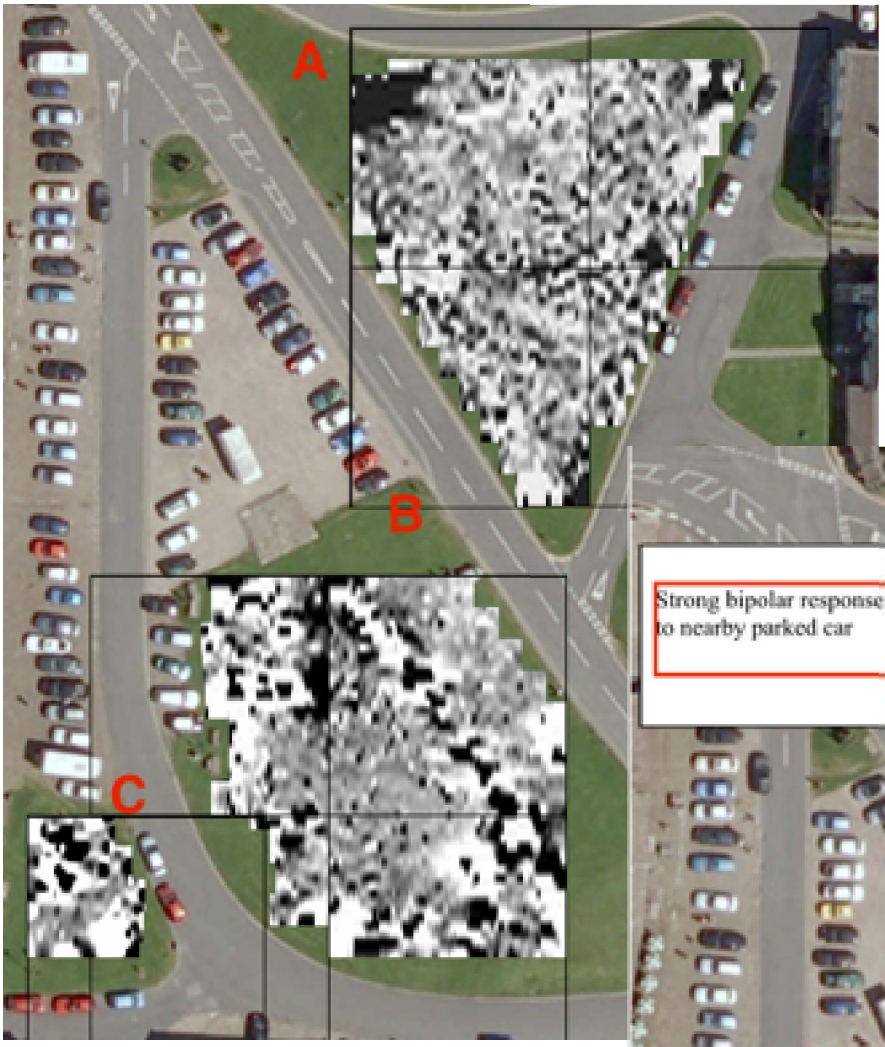

Figure 4: Reeth, Processed Magnetic Data overlain on the Green

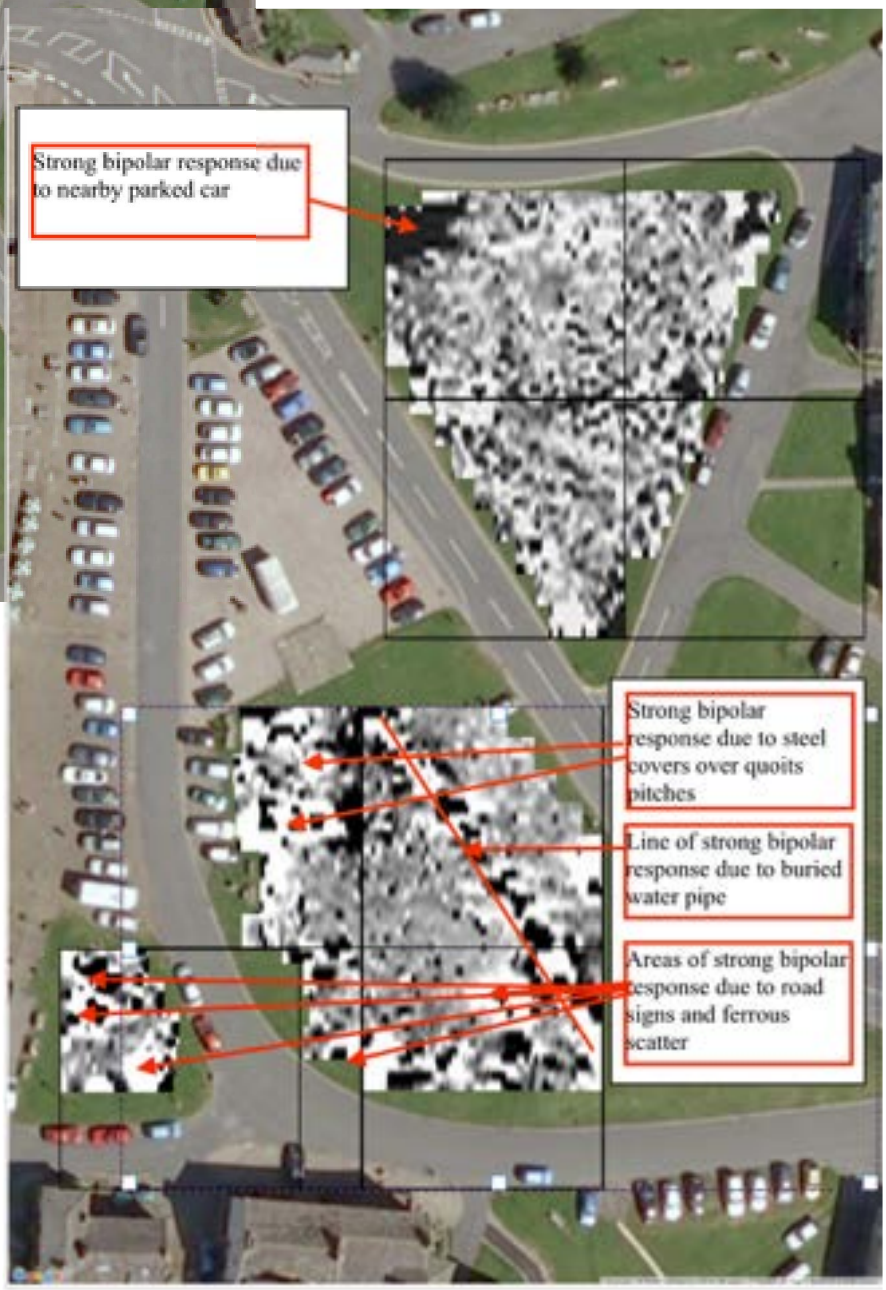

Figure 5: Reeth, Processed Magnetic Data: an interpretation

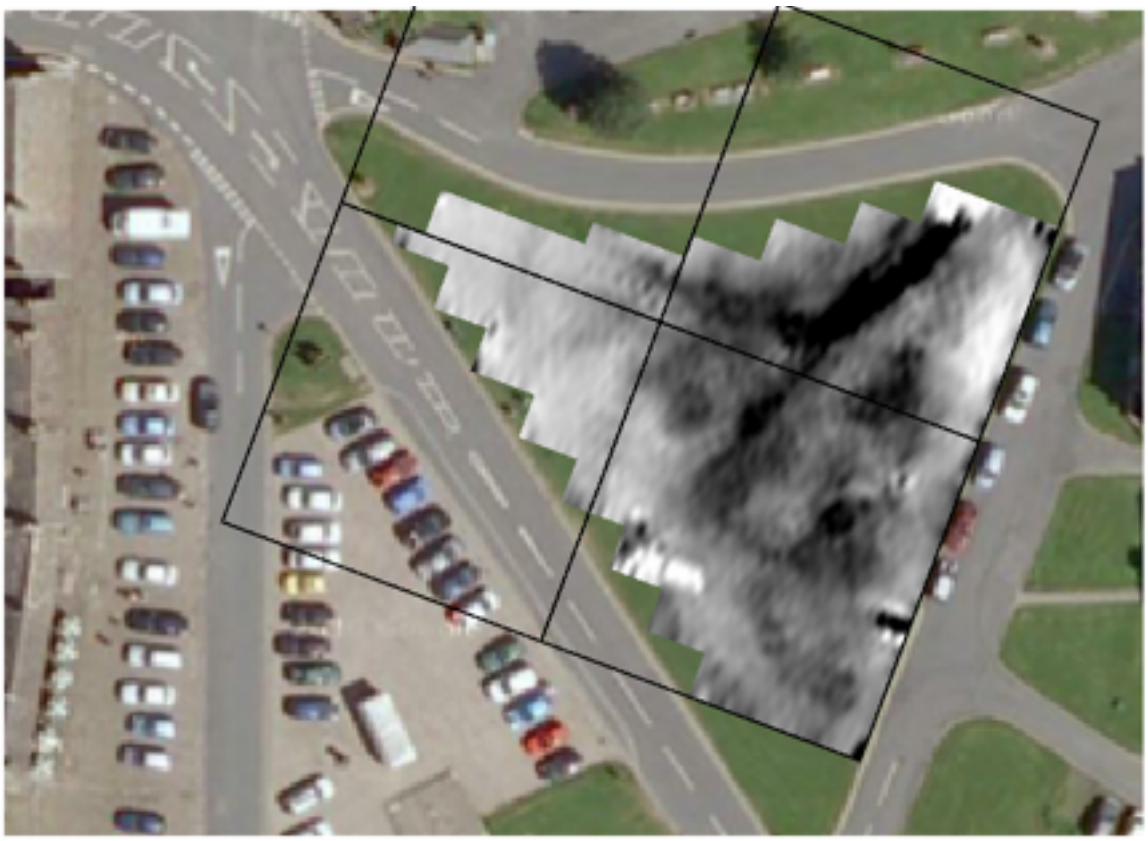

Figure 6: Reeth, Ground Resistance survey superimposed on the green

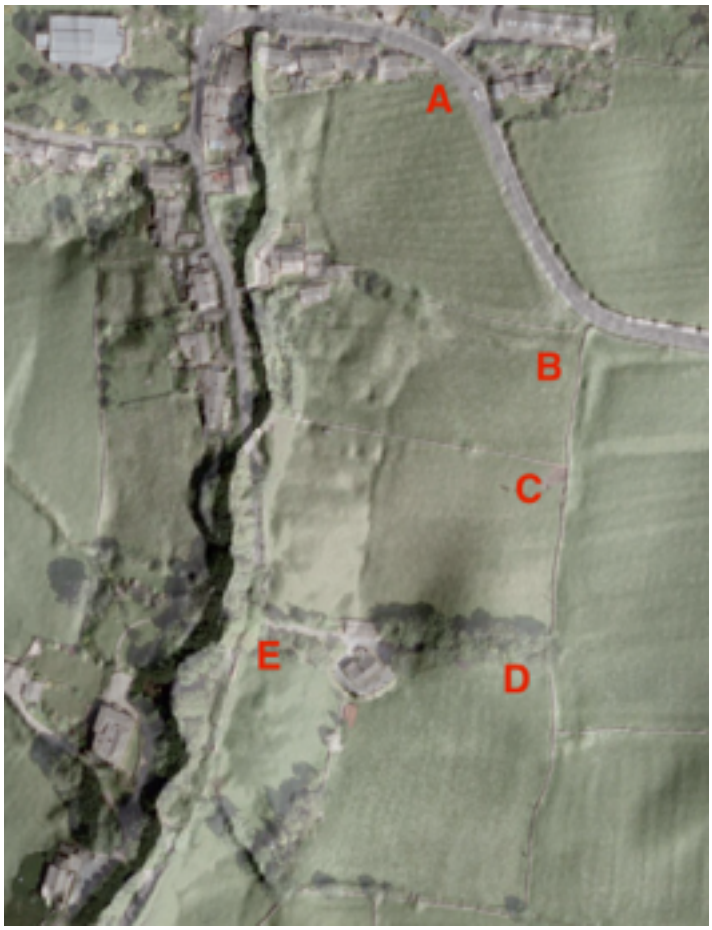

Figure 7: Grinton Survey area. Lidar over Google Satellite view

Figure 8: Grinton: Overview of survey areas B (lower picture) and B and C (top) upper picture

Figure 9: Grinton: Earth Magnetism Survey superimposed on Google Satellite View

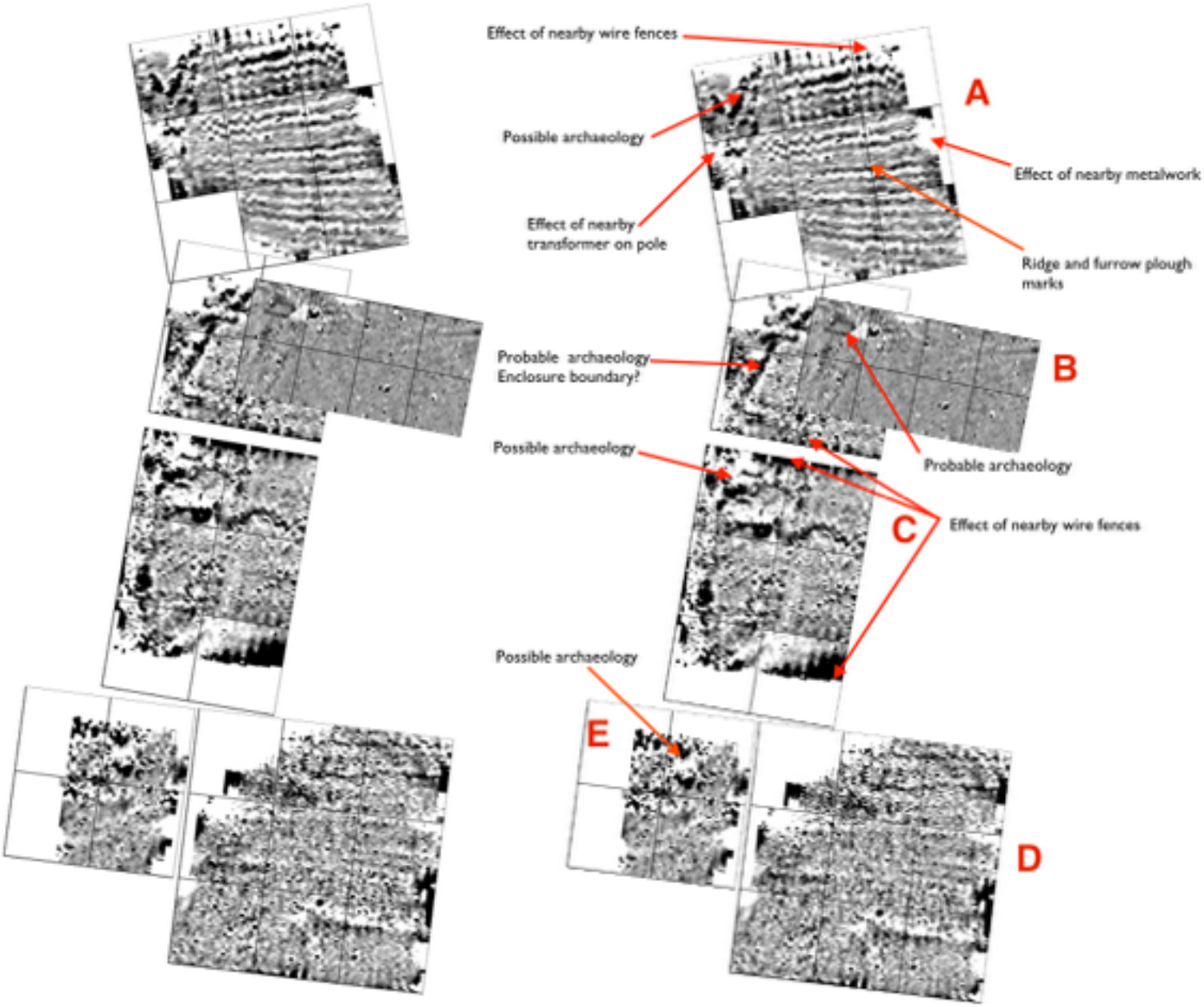

Figure 10: Grinton: Processed Magnetic Data and a possible interpretation

Figure 11: Grinton: Earth Resistance survey superimposed on Google Satellite View

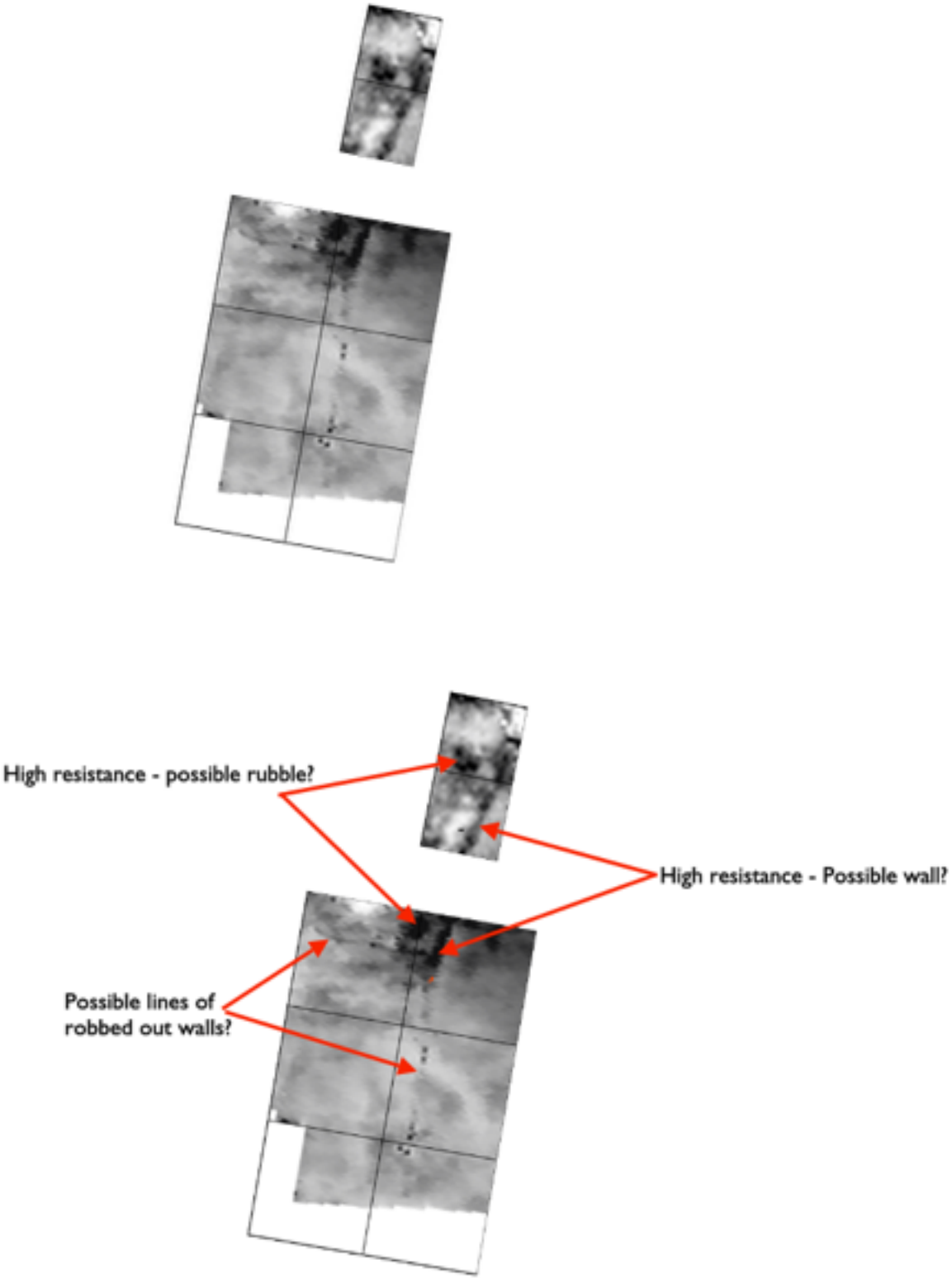

Figure 12: Grinton Earth Resistance Survey and a possible interpretation

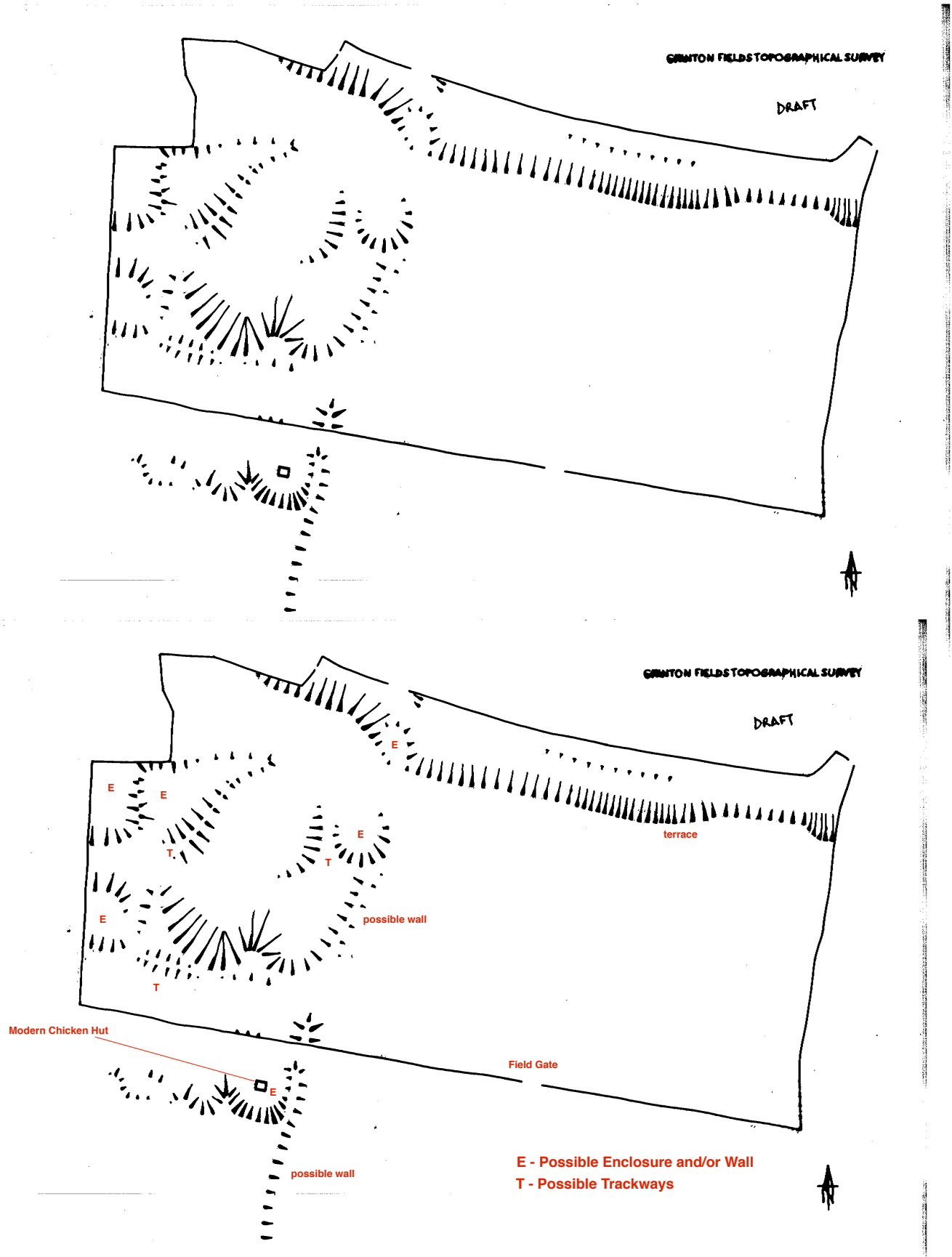

Figure 13: Grinton, Topographical Survey

Figure 14: Fremington, Survey Site.
LIDAR over Google Satellite view

Figure 15: Fremington, Overview of Survey Site

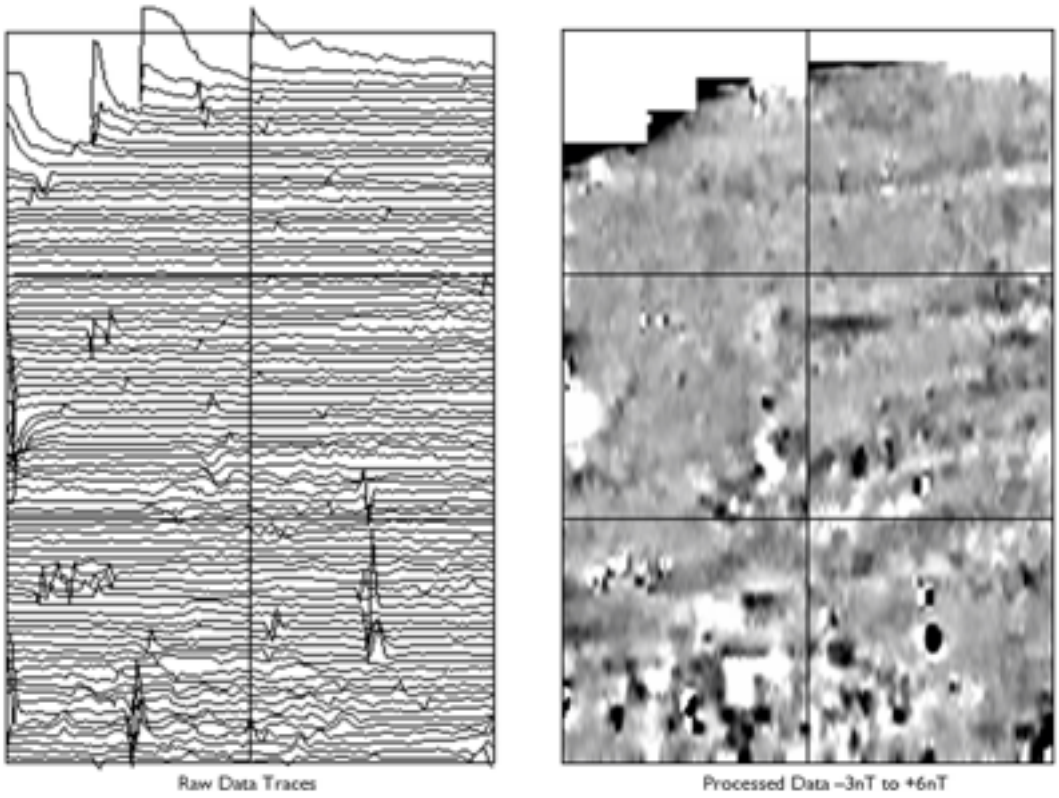

Figure16: Fremington, Raw and Processed Magnetic Data

Figure 17: Fremington, Processed Magnetic data superimposed on Google Satellite View

Figure 18: Fremington Topographical Survey, as drawn and annotated

9. Community Involvement

335 individuals were involved over two years in digging 50 test pits.

We worked closely with the local schools. Over 90 children took part in digging test pits, surveying and other activities enabling them to learn more about their local heritage.

We ran 24 free courses and 11 free guided walks. Over 1000 people joined in the Big Dig in one way or another.

The Big Dig will leave a lasting legacy of skills in in the local community together with an increased interest in, knowledge and understanding of, the local heritage.

Our work with local schools was a significant feature of the Big Dig project. Six days were spent with 94 Key Stage 2 children from three local primary schools: Reeth /Gunnerside, Arkengarthdale and Richmond Methodist. The activities are fully described and evaluated below.

A further significant feature of the Swaledale Big Dig was our offering the public the opportunity to participate in a large number of free courses and guided walks. In all we ran 24 free courses ranging from introductory courses such as British Archaeology through to quite specialised and technical courses such as Geophysical Surveying, theory and practice. We also led 11 guided walks looking at aspects of our local heritage. Details of the courses and walks, including numbers participating and an evaluation of the courses, are given in section 6 above and Appendix 2 below respectively.

Members of the public were kept in touch with the Big Dig through three main means of communication:
1. a regular newsletter. Fourteen editions were produced and distributed by email to nearly 200 individuals and organisations and posted on the SWAAG website.
2. Twitter - @SwaledaleDig – with more than 100 followers
3. via the Big Dig pages on the SWAAG website, and
4. occasional articles in the Reeth Gazette, a free magazine widely distributed in the local area.

It is hoped that the Swaledale & Arkengarthdale Archaeology Group, its associated Local History Group and members of the communities of the three villages will continue the research and build upon this very successful project.

Evaluation of the Schools' Programme, Swaledale Big Dig

Scope

Three local schools were invited to take part in the Big Dig: Reeth/ Gunnerside (a split-site Primary School with around 60 pupils), Arkengarthdale (a Primary School with around 30 pupils) and Richmond Methodist Primary School which is federated with Arkengarthdale and has approximately 300 pupils.

After discussion with teachers it was decided to involve the 45 Key Stage 2 children from the two village schools in 2014 and the whole of Year 6 (44 children) from Richmond Methodist in 2015, a total of 89 children. The schools' days were planned for June when SATs would be over and a programme of activities in and around Reeth was put together for each school group.

Objectives from original project plan

- Enhance the sense of place and belonging for members of the local community and local school pupils
- Practical application of Science and Maths (eg learning about rocks and fossils through practical activities, measuring out a test pit).
- Develop a range of skills eg communication, problem solving, observation, drawing and reporting
- Raising the profile of local history and archaeology with teachers and development of teaching materials through discussion with them.
- To give local children an interesting, rewarding and enjoyable experience

Activities

1. Pre-Dig

A few weeks before the 2014 "Dig Day", Reeth/ Gunnerside and Arkengarthdale had two Archaeology Days at Gunnerside School run by SWAAG members and including Geophysics, Finds Processing, Rocks and Fossils, Measuring and Aligning a Test Pit and a safety briefing.
In 2015 Richmond Methodist School also had a visit from SWAAG members to talk about Archaeology and Finds and how their Dig Day would be organised. They were shown a video made by a SWAAG member of the previous year's Schools Day. They also had a safety briefing.

2. School Dig Days

A carousel of activities was organised in Reeth for both 2014 and 2015 comprising:

- Visit to the Swaledale Museum with hands-on interpretation of artefacts, close observational drawing and a "treasure hunt"
- Walk around Reeth looking at the development of vernacular architecture
- Walk around the local area looking at Geology of the Dale and its social history
- Digging, sieving and washing finds at a test pit

The two walks were supported by worksheets which the children took back to school along with their drawings.

3. After the Dig

SWAAG members were invited to Arkengarthdale School to lead sessions on the history of the school (which dates back to 1659) and also to lead a walk exploring the history of lead mining in the area. The school archive log books from 1875 to 1947 and Managers Minute Book to 1970 have been scanned and

transferred to CDs so that the archive can be accessed for research without further exposure of the originals.

Feedback

Children participating in the School Dig days were engaged, clearly enjoying themselves and learning. This is evidenced by photo's taken at the time. Children were communicating and interacting with people of a wider age range and from a wider variety of backgrounds than they would normally encounter at school.

The children and teachers of Reeth/ Gunnerside and Arkengarthdale responded very positively with comments and a "Thank-you" card.
The subsequent talk and walk led by SWAAG members were reported in the local press.

The children of Richmond Methodist School completed a questionnaire. An analysis of replies is as follows:

Pupil Feedback Questionnaire

40 questionnaires were completed by participating Year 6 children.
Of these only one reported having taken part in an archaeological dig before.

When asked to say which single activity they had enjoyed most, 58% chose "digging the pit" and a further 23% chose "sieving and washing finds" : a total of 81%

Of the other activities, 5 children said they liked the Museum activities best and 3 chose the Geology/ History walk as their favourite.

Children were then asked to identify areas of knowledge which they might like to learn more about. They responded as follows:

Geology 35%
Local History 38%
Architecture 20%
Archaeology 58%

Finally children were asked what they thought they had gained from their day with the Big Dig. There were some general comments such as “Everything!” and “Knowledge”

Of those replies specifying areas of learning, the main subjects identified were:

38% Geology
30% Archaeology processes and skills
25% History
20% Architecture

Estimated Minimum Volunteer contributions in kind

Contributor	Hours
Co-ordinator (see time sheet)	164.5
Excavations co-ordinator (see time sheet)	63
Activity Leaders (4 at 48hrs each)	192
SWAAG members (6 at 45 hours each)	270
Additional volunteers (1 at 45 , 1 at 9 hours)	54
Total	743.5

** In-school Archaeology days 9hours*
Schools’ dig days in Reeth including set up and closing pit 4x 9 hours

Leaders' preparation est. 3 hours

Specialist Professional support

Professional Archaeologists supporting 4 schools' digs 32 hours
Museum Curator 24 hours

Legacy of the Big Dig

By taking part in the Big Dig School Days, children were able to explore and think about Reeth from a variety of new perspectives. They also had the opportunity to use skills learned in school such as drawing, reporting, measuring, using observation and deduction, in different practical situations. Their existing knowledge of History and Geography was reinforced and extended in a real-life context. For example 38% identified Geology as an area they had learned a lot about as well as 25% identifying History and 20% Architecture. All the children could identify at least one subject they would like to know more about in the future. Through its Big Dig programme, SWAAG also now has an ongoing connection with the local Young Archaeologists group.

Teachers had the opportunity to discuss History resources, the new curriculum, Local History and Archaeology with SWAAG members. Although they declined the offer of paper "topic box" resources they were interested in having SWAAG members organise further activities which may be repeated in future years as part of their topic cycle. The local museum is working with SWAAG members to compile an archive resource to support work on the history of education in the Dales. Documentary evidence such as old school log books is being scanned and transferred to CDs to enable further research without further exposure of the originals.
Finally, the project has clearly enthused local children about using archaeology to find out about the local area. When asked what they had enjoyed the most during the day, over 80% of children chose an archaeological activity. Only one child reported having done some archaeology before yet 58% said they would now like to know more about it.

10. An analysis and interpretation of the results of the 2013-15 test pit programme

1. Introduction

This analysis and interpretation of the results of the 2013-15 test pit programme is based primarily upon the pottery finds[1] from the 50 test pits dug in Fremington, Grinton and Reeth in the period April 2013 – July 2015 supported by documentary research together with the results of the various geophysical and topographical surveys, reported upon elsewhere in this Big Dig final report.

The tables on the following pages, and reproduced in aggregate in Appendix A, show the pottery finds from each of the Big Dig test pits, classified by period with the number and weight of finds from that period. The periods used for the purposes of the analysis are as follows:

(i) Medieval, being 13th – early 14th Century
(ii) Late medieval, being from the early 14th – 16th Century
(iii) 17th – early 18th Century
(iv) early 18th to the early 19th Century
(v) Modern, being from the early 19th Century to the modern day

An objective of the Big Dig was to use the test pit methodology to attempt to obtain a better understanding of how each of the three settlements of Reeth, Fremington and Grinton developed over time and in particular, how the areas of human occupation evolved. The methodology developed by Dr Carenza Lewis[2] and her colleagues at the University of Cambridge suggests that where a test pit reveals five or more sherds of pottery from a particular period then it is likely that human habitation was in the immediate vicinity[3]. This form of interpretation is reflected in the following table using a system of colour coding.

Colour	Meaning
	Five sherds or more suggests habitation or other substantial activity in the immediate vicinity
	Three or four sherds suggests possible habitation or other substantial activity in the immediate vicinity
	One or two sherds suggests probable cultivation or other low level of human activity
	No evidence of human activity in this period

The finds from each of the three settlements are now considered in turn.

[1] See the full Finds Report
[2] Now Professor of Public Understanding of Research, the University of Lincoln
[3] Lewis, C. 2014. 'The Power of Pits: Archaeology, outreach and research in living landscapes' in K. Boyle, R. Rabett and C. Hunt (eds) Living in the Landscape. Cambridge, McDonald Institute for Archaeological Research Monograph. pp 321-338; p325 in particular.

2. The analysis and interpretation of the pottery finds

2.1 Reeth

Location	Pottery analysis by period (Reeth only)									
	Medieval 13th/e.14th		Late Medieval 14th-16th		17th – e. 18th C		e. 18th - e. 19th C		"Modern"	
	No.	Wt	No.	Wt	No.	Wt	No.	Wt	No.	Wt
TP01 Reeth GREEN	0	0	0	0	1	3	0	0	14	13
TP02 11 SILVER St	3	7	0	0	4	14	24	63	106	170
TP05 SORRELL SYKES	4	10	2	11	7	39	13	50	16	25
TP06 SOWDENCOTT	0	0	0	0	2	3	16	52	18	32
TP07 ARKLE COTT	0	0	0	0	0	0	0	0	30	70
TP08 BECKSIDE	0	0	0	0	9	34	67	99	0	0
TP09 BURGOYNE FRONT	0	0	0	0	0	0	9	11	54	103
TP11 SCHOOL HOUSE	0	0	0	0	1	2	2	5	7	5
TP12 THE NOOK	1	5	0	0	1	3	3	6	54	49
TP13 HEATHERDALE	1	1	0	0	2	5	18	22	56	83
TP14 GARDENHOUSE	0	0	1	9	0	0	13	38	47	48
TP16 PARKLEA	0	0	0	0	0	0	0	0	19	75
TP18 HILLTOP (*)	1	5	0	0	0	0	0	0	0	0
TP19 ANVIL SQ	3	2	3	20	61	586	0	0	0	0
TP20 Rth GREEN FESTIVAL	7	24	0	0	5	9	10	29	35	41
TP21 Rth GREEN R&GSCHOOL	0	0	0	0	0	0	7	11	19	10
TP22 Rth GREEN A'DALE SCH'L	0	0	0	0	0	0	0	0	19	31
TP23 VICTORIA COTT	9	28	10	9	1	1	31	70	16	60
TP24 BURGOYNE REAR	2	11	0	0	1	2	15	22	10	16
TP25 BUCKHOTEL	9	37	1	2	1	1	3	4	0	0
TP29 DALEHOLM	4	26	0	0	0	0	22	52	273	518
TP31 APPLEGARTH	0	0	0	0	0	0	2	27	10	15
TP32 Rth GREEN	1	4	3	10	3	5	0	0	96	60
TP33 BLACKBULL	2	20	0	0	16	90	44	105	55	81
TP34 Rth GREEN	0	0	0	0	6	41	11	22	50	82
TP38 WELLBECK	1	3	6	881	4	8	3	5	20	17
TP39 LEESIDE	4	14	5	116	7	26	19	33	23	27
TP40 TYNEDALE	2	22	0	0	1	3	11	42	103	189
TP41 LANE HOUSE	0	0	0	0	0	0	0	0	27	53
TP42 Rth GREEN RICH' SCHOOL	0	0	0	0	0	0	1	1	41	136
TP43 8 LANGHORNE DR	2	9	0	0	2	10	5	4	12	11
TP44 14 HILL CLOSE (~)	16	41	6	52	13	19	24	46	84	246
TP45 THE NOOK 2	2	10	1	7	1	6	15	11	98	95
TP46 Rth GREEN	0	0	0	0	5	16	9	36	108	325
TP49 CONG CHAPEL	5	20	11	157	12	48	9	15	141	167
TP61 29 LANGHORNE DR Rth	3	50	1	3	9	24	12	38	150	205
Totals	82	349	50	1277	175	998	418	919	1811	3058
(*) also 1 x Roman sherd										
(~) also 1 x poss Roman sherd										

Table 1 – Reeth pottery finds colour coded to represent likelihood of habitation nearby

Plate 1 – the location of the 36 test pits in Reeth © Google Earth

2.1.1 An interpretation of the implications of the classification of the finds from each of the Reeth pits.

TP01 The Green, Reeth. There is no evidence of activity until the 17th century when there is some evidence of cultivation or other low level of activity, followed by abandonment in the 18th century. The significant number of pot sherds from the modern period possibly reflects the use of the Green for the Reeth Market and St Bart's Fair rather than a dwelling in the immediate vicinity.

TP02 11 Silver St, Reeth. The three medieval sherds raise the possibility of a dwelling or other significant activity in the immediate vicinity. The absence of finds from the 14th – 16th century period suggests the area was abandoned at that time, to be re-occupied from the 17th century onwards, consistent with the dating of the house by the Yorkshire Vernacular Buildings Study Group[4].

TP05 Sorrel Sykes, Reeth. The four medieval sherds found raise the possibility of a dwelling in the immediate vicinity, supported by the finding of a medieval barrel lock in context 6. Two sherds from the late medieval period (14th – 16th centuries) suggest some low level of activity or more likely are associated with the strong evidence from this period found at TP 38 and TP39, next door. Thereafter there is good evidence of occupation through to the modern period.

TP06 Sowden Cottage, Reeth. There is no evidence of activity until the 17th century and then the two sherds found are not strong evidence of occupation in that period and may be associated with cultivation or occupation of the adjacent Congregational Chapel site. Thereafter there is good evidence of occupation through to the modern period.

TP07 Arkle Cottage, Reeth. There is no evidence of occupation or other activity until the modern period.

TP08 Beckside, Reeth. There is no evidence of occupation or other activity in the medieval or late medieval periods. There is good evidence of occupation in the 17th century and very strong evidence in the 18th century, with no activity apparent in the modern period.

TP09 The Burgoyne (front garden), Reeth. There is no evidence of occupation or other activity prior to the beginning of the 18th century; thereafter there is good evidence of occupation or other significant activity through to the modern period.

TP11 School House, Reeth. There is no evidence of occupation or other activity in the medieval or late medieval periods. There is some evidence of cultivation or other low level of activity in the 17th and 18th centuries, with good evidence of occupation in the modern period.

TP12 The Nook (2014 pit), Reeth. The single sherds in both the medieval and 17th century periods suggest cultivation or some other low level of activity, with abandonment in the late medieval. The 18th century finds raise the possibility of occupation or other significant activity in the immediate vicinity. There is strong evidence of occupation in the modern era.

TP13 Heatherdale, Reeth. The small number of sherds in both the medieval and 17th century periods suggest cultivation or some other low level of activity, with abandonment in the late medieval. There is strong evidence of occupation in the immediate vicinity in the 18th century, continuing into the modern period.

[4] Yorkshire Vernacular Buildings Study Group report no. 1716; 2006

TP14 Gardenhouse, Reeth. There is no evidence of any activity in either the medieval or 17th century periods but some of possible cultivation or other low level of activity in the late medieval. There is strong evidence of occupation in the immediate vicinity in the 18th century, continuing into the modern period.

TP16 Parklea, Reeth. There is no evidence of any occupation or activity before the modern period.

TP18 Hilltop, Reeth. Only two sherds were recovered from this location; one probably Roman, the other medieval, suggesting cultivation in these periods.

TP19 Anvil Square, Reeth. There is some evidence of possible occupation or other significant activity in the immediate vicinity during both the medieval and late medieval periods and very strong evidence of the same during the 17th century. There is no evidence of any later activity.

TP20 The Green, Reeth. There is strong evidence of occupation or other significant activity in the immediate vicinity during the medieval period, with abandonment in the late medieval, followed by good evidence of occupation or other activity in the 17th century, increasing into the modern era; the latter may well associated with the Reeth Market and St Bart's Fair.

TP21 The Green, Reeth. There is no evidence of any occupation or activity until the 18th century, when there is good evidence of occupation or other significant activity continuing into the modern era. This may well be associated with the Reeth Market and St Bart's Fair.

TP22 The Green, Reeth. There is no evidence of any occupation or other activity until the modern period when there is good evidence of occupation or other significant activity which may well be associated with the Reeth Market and St Bart's Fair.

TP23 Victoria Cottage, Reeth. There is strong evidence of occupation in the medieval and late medieval periods and in the 18th century though to the modern era. Only one sherd from the 17th century suggests the site was abandoned for a period.

TP24 The Burgoyne (rear), Reeth. There is some evidence of cultivation or other low level of activity during the medieval and 17th century periods with abandonment in the late medieval. There is good evidence of occupation or other significant activity during the 18th century and through into the modern era.

TP25 The Buck Hotel, Reeth. There is strong evidence of occupation or other significant activity in the immediate vicinity during the medieval period, followed by cultivation or other low level of activity during the late medieval and 17th century. The three finds from the 18th century suggest that there might have been occupation here in that period. There are no finds from the modern era.

TP29 Daleholme, Reeth. The four medieval sherds found raise the possibility of occupation or other significant activity in the immediate vicinity. There is no evidence of any activity in the late medieval period nor the 17th century but thereafter there is substantial evidence of occupation or other significant activity.

TP31 Applegarth, Reeth. There is no evidence of any activity until the 18th century with two sherds from that period suggesting cultivation or some other low level of activity. Thereafter there is good evidence of occupation.

TP32 The Green, Reeth. There is some evidence of cultivation or other low level of activity in the immediate vicinity during the medieval period, followed by possible occupation or other significant activity during the 14th – 17thC, no activity in the 18thC and finally substantial activity in the modern period, the latter possibly associated with Reeth Market and the St Bart's Fair.

TP33 The Black Bull, Reeth. There is some evidence of cultivation or other low level of activity in the immediate vicinity during the medieval period, followed by abandonment in the late medieval. Thereafter there is strong evidence of occupation or other significant activity from the 17th century onwards.

TP34 The Green, Reeth. There is no evidence of any activity during the medieval and late medieval periods, followed by strong evidence of occupation or other significant activity from the 17th century onwards, the latter possibly associated with Reeth Market and the St Bart's Fair.

TP38 Welbeck, Reeth. There is some evidence of cultivation or other low level of activity in the immediate vicinity during the medieval period and good evidence of occupation or other significant activity in the late medieval period. The evidence suggests that this might have continued into the 17th and 18th centuries with strong evidence of occupation or other significant activity in the modern period

TP39 Leeside, Reeth. The four medieval sherds raise the possibility of occupation or other significant activity in the immediate vicinity. Thereafter there is good evidence of occupation through into the modern period.

TP40 Tynedale, Reeth. There is some evidence of cultivation or other low level of activity in the immediate vicinity during both the medieval period and the 17th century but with no activity in between. Thereafter there is good evidence of occupation in the 18th century and into the modern period.

TP41 Lane House, Reeth. There is no evidence of any occupation or other activity before the modern period .

TP42 The Green, Reeth. There is no evidence of any occupation or activity before the 18th century when there is some evidence of cultivation or other low level of activity in the immediate vicinity. There is substantial evidence of activity in the modern period, possibly associated with Reeth Market and the St Bart's Fair.

TP43 8 Langhorne Drive, Reeth. There is some evidence of cultivation or other low level of activity in the immediate vicinity during the medieval period, followed by abandonment in the late medieval. Cultivation or other low level of activity picks up in the 17th century and thereafter there is good evidence of occupation or other significant activity in the 18th century and into the modern period.

TP44 14 Hill Close, Reeth. There is strong evidence of occupation or other significant activity in the immediate vicinity in all periods, from the medieval through to the modern.

TP45 The Nook, Reeth. (2015 pit). There is some evidence of cultivation or other low level of activity in the immediate vicinity during the medieval period and continuing into the 17th century. Thereafter there is good evidence of occupation or other significant activity in the 18th century and into the modern period.

TP46 The Green, Reeth. There is no evidence of any activity in the medieval and late medieval periods. Thereafter there is good evidence of occupation or other significant activity in the 17th century and through into the modern period, possibly associated with Reeth Market and the St Bart's Fair.

TP49 Congregational Chapel, Reeth. There is strong evidence of occupation or other significant activity in the immediate vicinity in all periods, from the medieval through to the modern.

TP61 29 Langhorne Drive, Reeth. The three medieval sherds raise the possibility of occupation or other significant activity in the immediate vicinity. There is some evidence of cultivation or other low level of activity in the late medieval and thereafter good evidence of occupation or other significant activity in the immediate vicinity in the 17th century and through into the modern era.

2.1.2 Interpretation

Plate 2 – the location of the test pits in the centre of Reeth

2.1.2.1 The Roman period

The pottery distribution map below, plate 3, shows that the 36 test pits in Reeth yielded only two pieces of Roman pot. It has been suggested that there might have been a Roman fort[5] in Reeth just to the West of the Green, near Hudson House. A test pit in the Community Garden would have tested this hypothesis but unfortunately we were unable to get permission to put a test pit there.

[5] A history of Richmond and Swaledale; R. Fieldhouse & B. Jennings; Phillimore; 1978; p4

Nonetheless, had there been a fort in that area it seems likely that at least one of the nearby pits would have produced some Roman pottery. Whilst 'the absence of evidence is not evidence of absence' it seems unlikely that there was Roman fort in this area.

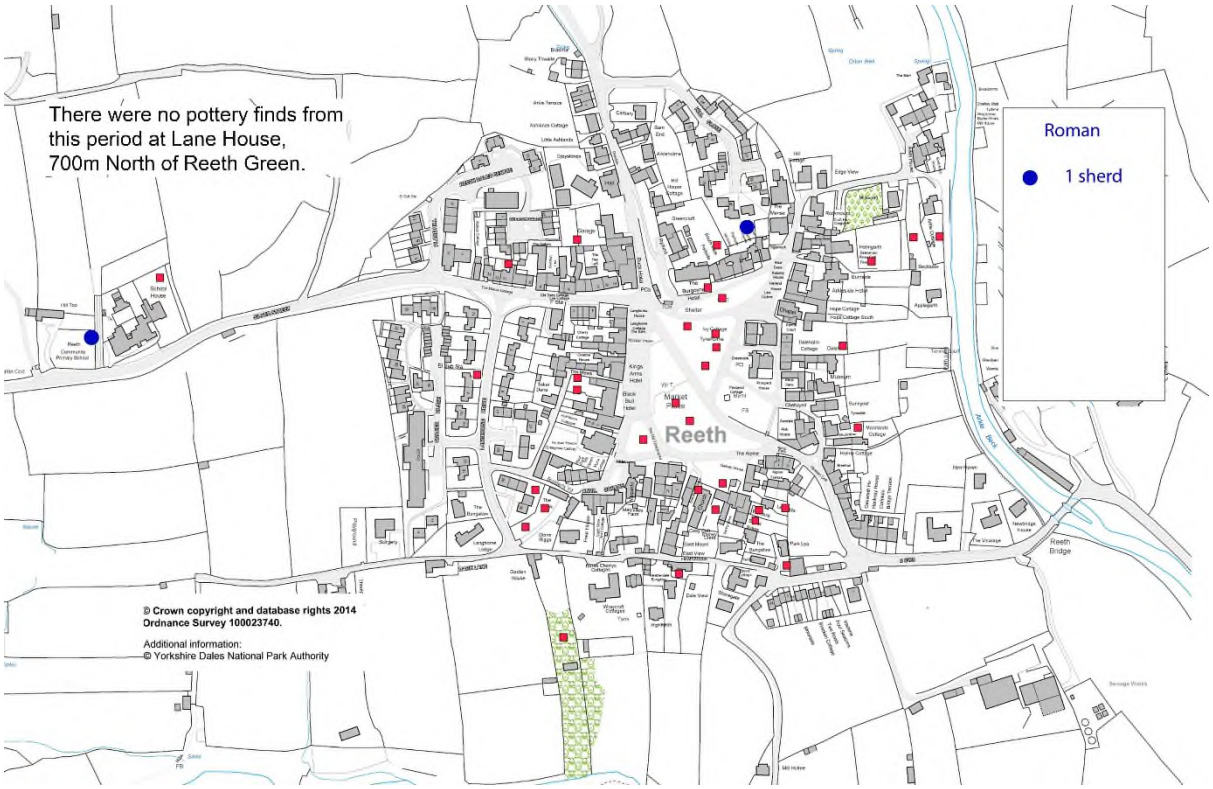

Plate 3 - the distribution of Roman pottery finds from the 36 test pits in Reeth

There is however clear evidence of Romano-British settlements in the general area, ca. 2km to the East at the Hagg[6] and ca. 1.5km to the West near Healaugh[7]. The two finds in Reeth from this period suggest manuring of cultivated fields possibly associated with the as yet un-investigated potential settlement at the top Skelgate[8], ca. 1km North-west of the centre of Reeth.

2.1.2.2 The Anglo-Saxon, pre-Conquest period

No evidence of occupation in this period was forthcoming. This is perhaps not surprising as the peoples of this period tended to prefer wooden vessels to pottery and the former does not survive well. It is however likely that Reeth was occupied at this time[9].

2.1.2.3 The medieval period

The 36 test pits in Reeth yielded 82 pieces of Medieval (13th-early 14th C) pottery weighing 349 gms. The pottery distribution map below, plate 4, illustrates the distribution of these finds across the village.

[6] A number of reports and images may be found on the SWAAG website www.swaag.org
[7] Swaledale Valley of the Wild River; Andrew Fleming; Edinburgh University Press; 1998; p147ff and SWAAG database record 410
[8] Tim Laurie; pers. comm.
[9] See the pre-Conquest section of the Historical Background for information on this area in this period

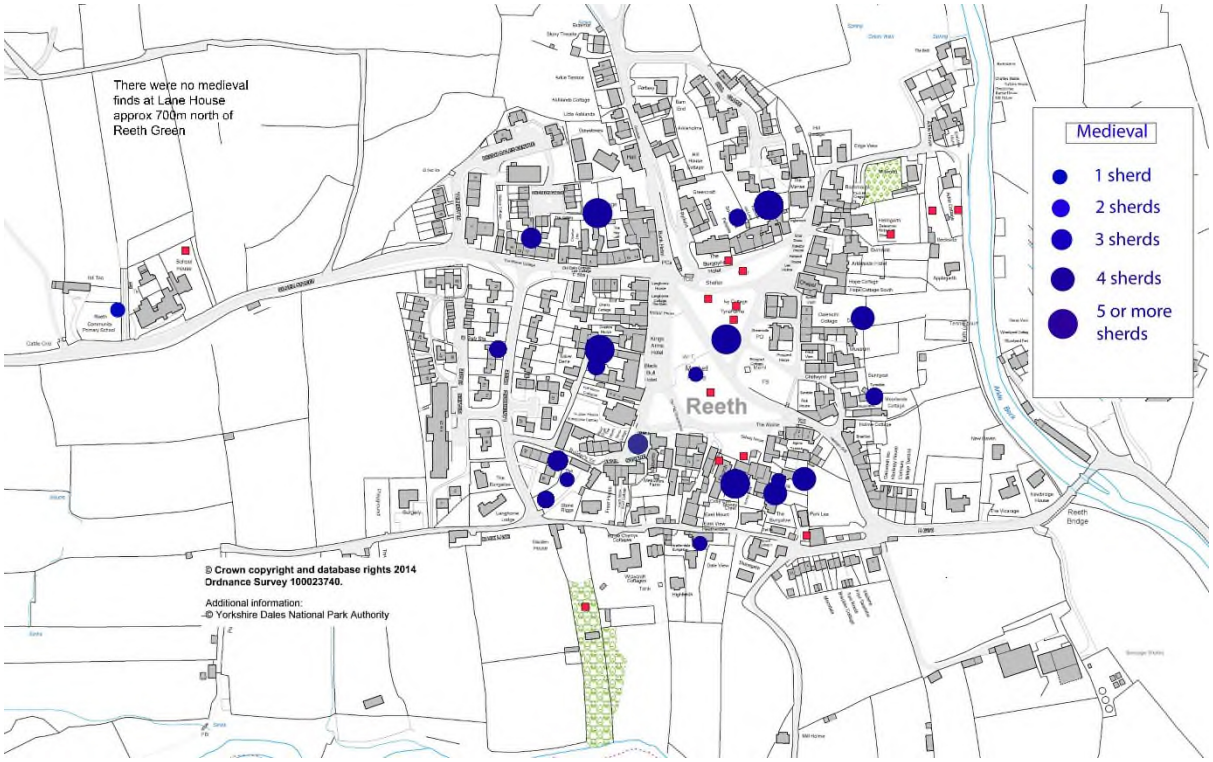

Plate 4 - the distribution of medieval pottery finds from the 36 test pits in Reeth

There are five potential medieval occupation sites each with 5 or more sherds of pottery from this period. One of these (TP20) is on what is now the Green and would seem to have a medieval surface at context six, below the medieval pot finds[10]. This test pit, TP20, is located within the potential enclosure "D" shown in the earth resistance survey, plate 10 below; thus the potentially medieval surface might well be that of a medieval or earlier enclosure or yard.

The Hill Close site (TP44) has the strongest evidence of medieval habitation with 16 sherds, 20% of the total from this period. There is also a strong cluster in the south-east corner near the Congregational Chapel (TP05,38,39,49) where the finding of a medieval barrel lock (TP05) suggests someone nearby had something worth protecting. The other two potential sites are in the north-west corner (TP25) and on High Row (TP23). The lower-level cluster in the south-west corner might suggest some occupation nearby. The remaining finds suggest cultivation on the periphery of the village. This distribution is in accord with the possible layout of the village suggested by Fleming[11] and considered further in the Development of Reeth section 2.1.4 below.

2.1.2.4 The late medieval period

Finds from the late medieval period (14th-16thC) show a marked decline in both quantity, from 82 in the previous period to 50, and in distribution. The possible medieval site at the Buck Hotel seems to have been abandoned and reverted to cultivation, whilst the site on the Green, TP20, seems to have been abandoned altogether. Although there are still potentially five areas of occupation, three are clustered in the south-east corner of the village (TP 38, 39, 49) with one in High Row and the other at Hill Close. The decline in pottery finds from the medieval period to the late medieval is probably due

[10] See Appendix B for further details.
[11] Fleming; pp106-8

to a combination of factors, notably the Great Famine of the early 14th century, the Scots raids in the first half of the 14th century and the Bubonic Plague from the middle of the 14th century onwards[12].

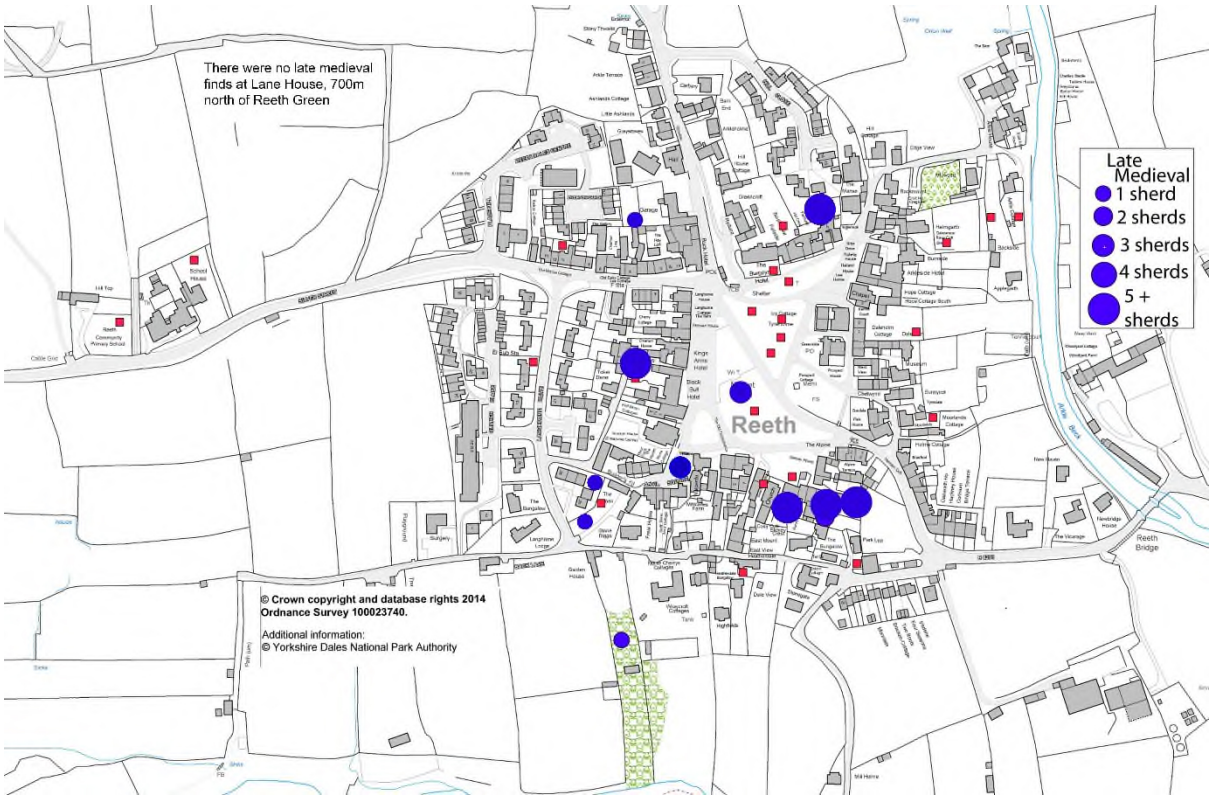

Plate 5- the distribution of late medieval pottery finds from the 36 test pits in Reeth

2.1.2.5 The 17th century

Finds from this period show a marked increase in number; 175 from this period compared with 50 from the late medieval period. Eleven test pits yielded five sherds or more from the 17th –early 18th century suggesting occupation in the immediate vicinity. The increase in occupied sites reflects the increasing population of Swaledale in the 17th C[13]. Beckside, TP08, appears to be occupied for the first time, as do TP19, the Anvil Square site, TP33 the Black Bull, and TP61, Langhorne Drive in the south-west corner of the village, together with two sites on the Green, TP 34 and TP 46, the latter being the 'smithy' site. TP23, Victoria Cottage, on High Row, occupied in the medieval era, abandoned in the late medieval, came back into occupation in the 17thC.

[12] See the Historical Background section of this report
[13] Fieldhouse & Jennings, pp106-7

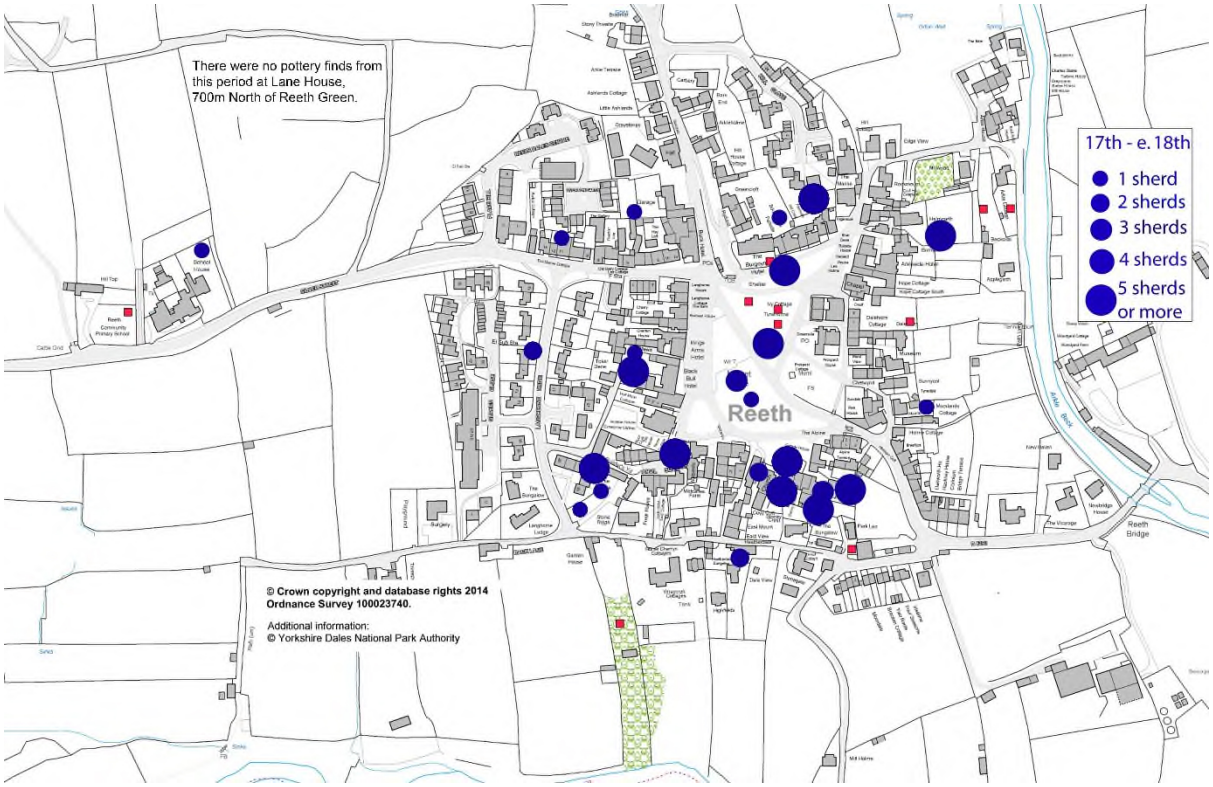

Plate 6 - the distribution of 17th C to early 18th C pottery finds from the 36 test pits in Reeth

2.1.2.6 The 18th century

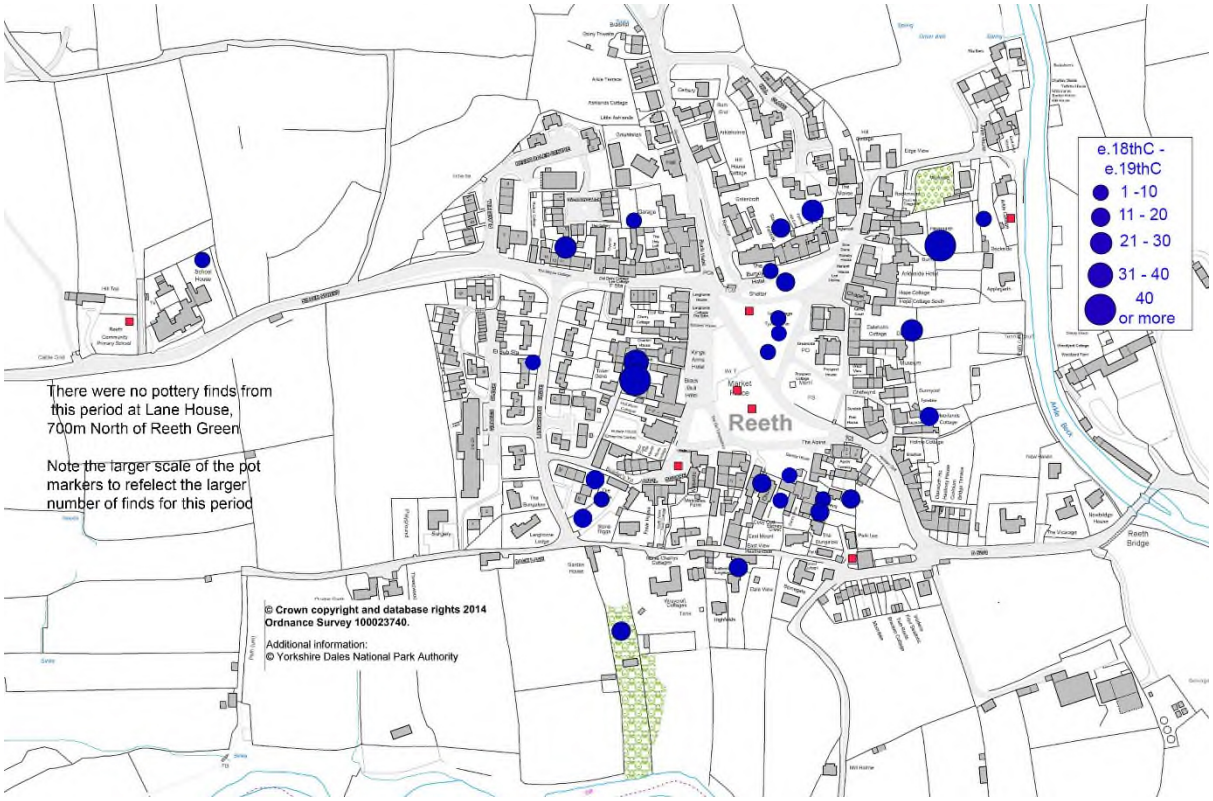

Plate 7 - the distribution of 18th – early 19th C pottery finds from the 36 test pits in Reeth

During the 18th century the population of Swaledale[14] continued to expand, from around 4,000 at the end of the 17th century to around 6,500 by the end of the 18th. This growth is reflected in the number and distribution of finds as illustrated in plate 7 above. This suggests that the number of occupied sites doubled, rising from eleven in the 17th century to twenty-two in the 18th. Only eight of the thirty-six test pits had no finds which could be clearly dated to this period, three only had 1 or 2 sherds, suggesting cultivation or other low level activity, whilst a further three had 3 sherds suggesting that there might have been occupation nearby.

2.1.2.7 The 19th century to date

The 19th century was a time of boom and bust[15] with the former represented in the large number of pottery finds, increasing from 418 in the 18th century to 1811 in this period. No distribution chart has been produced as there is little differentiation between the pits in terms of likely habitation. Thirty-two of the thirty-six pits showed strong evidence of habitation in the immediate vicinity, with only four having no pottery from this period.

2.1.3 Reeth Surveys

2.1.3.1 Aerial photography

Plate 8 – an aerial photograph of Reeth & environs, 1959 ©Historic England

The aerial photograph from 1959, plate 8 above, shows little of significance visible on Reeth Green apart from the tracks also shown on the 1912 OS (plate 16, Appendix B below) some of which are no longer to be seen. The lynchets to the West are clearly visible, as also in the following Lidar image, plate 9.

[14] ibid
[15] See the Historical Background section

2.1.3.2 Lidar

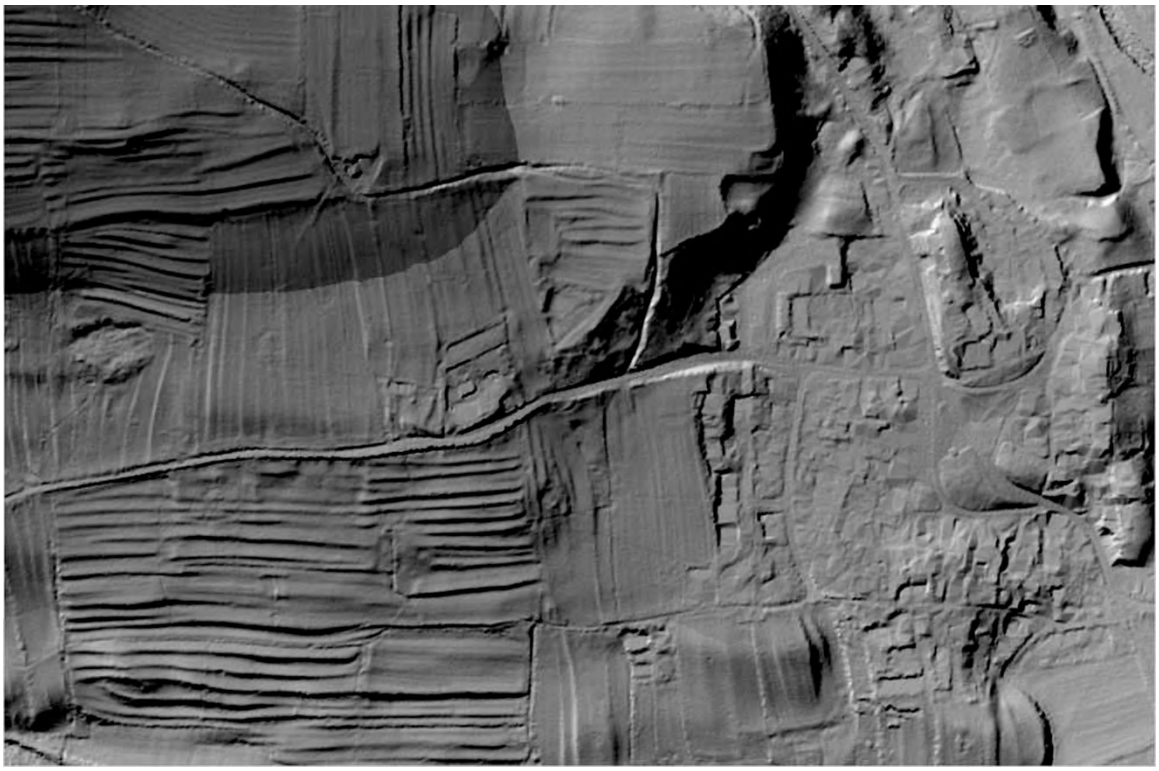

Plate 9 - Lidar image of Reeth and the West field system © Environment Agency

2.1.3.3 Geophysical surveys

Several geophysical surveys of Reeth Green were carried out and are reported upon elsewhere in this report.

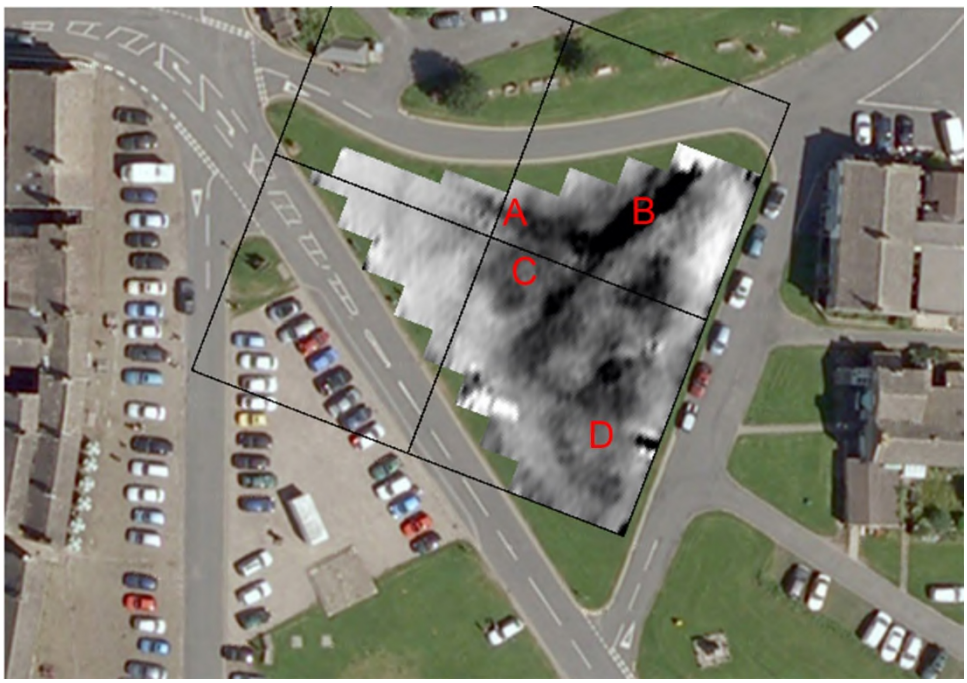

Plate 10 – Earth resistance survey of part of Reeth Green

One of our archaeologists has suggested[16] that plate 10 is reminiscent of an Iron Age landscape; it might equally be medieval. Feature "A" might be a trackway or a boundary wall, "B" a trackway across the Green, whilst "C" might be small paddock about 8m square and "D" might be a larger enclosure.

2.1.3.4 Topographical surveys

A topographical survey of Reeth Green was not carried out.

2.1.4 The development of Reeth – an interpretation

There is little evidence of any significant Roman activity in Reeth apart perhaps from cultivation of fields in the area of Hilltop (TP18) and Hill Close (TP44). The first substantial evidence of habitation is in the 13th/early 14th century.

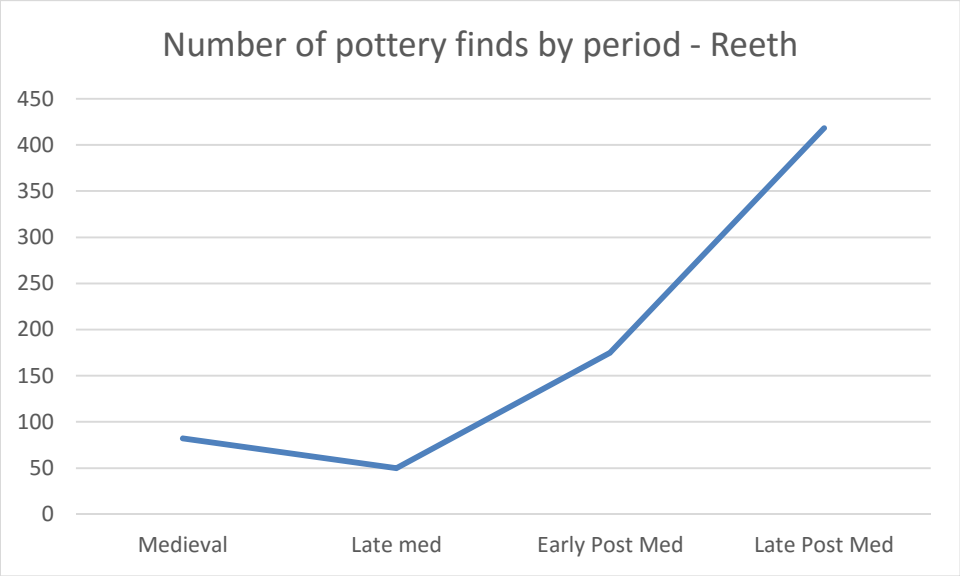

Plate 11

The number of pottery finds shows a marked decline in the late medieval period, as illustrated in plate 11 above, suggesting a real fall in prosperity and population. The reasons for this seem to be the Great Famine of the early 14th century, the Scots raids post-Bannockburn and the Bubonic Plague of the latter 14th C and on; this is considered further in the Historical Background section of this report, where it is suggested that the tax returns from this time indicate that Upper Swaledale suffered less than lower down the Dale.

The population and economy of the area recovered during the 17th century such that it was felt appropriate to seek a Royal Charter for a market in Reeth which was granted in 1694/5. The distribution of the pottery finds from the medieval period through to and including those from the 17th century (plates 4, 5 & 6) suggest, but do not prove, that Reeth had a somewhat different layout at the end of this period and that it might well have been significantly developed post-1694/5 to allow for the expansion of the Green to accommodate the market. In particular, test pits 44 (Hill Close), 34 (Green), 20 (Green) and 49 (Congregational Chapel) suggest a possible line of medieval

[16] John Nolan; pers.comm.

dwellings stretching from North to South across what is now the eastern edge of the Green, as described below.

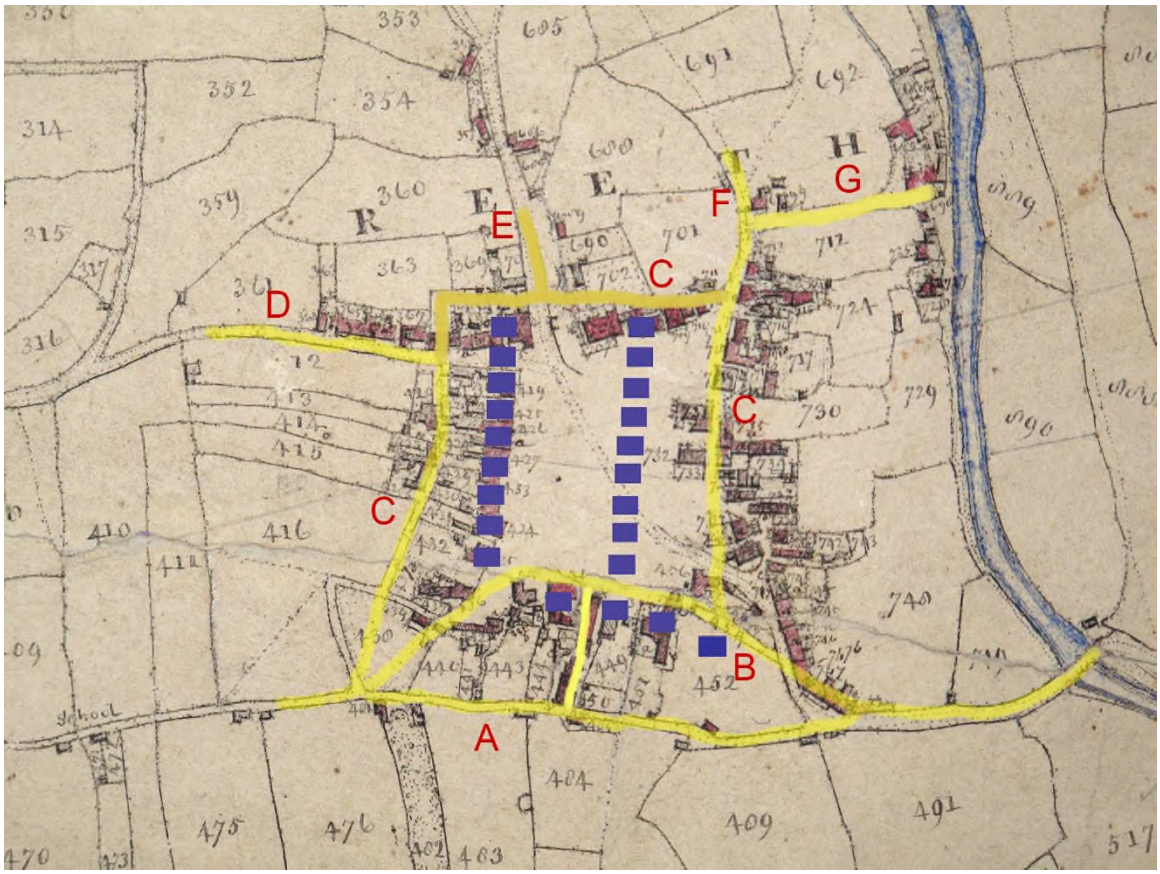

Plate 12 –conjectural reconstruction of medieval Reeth, overlaid on the 1844 tithe map

Plate 12 shows a possible layout for Reeth in the medieval period with two rows of medieval tofts and crofts running north-south, facing one another across a narrower green. A possible layout of the major routes in, out and around the settlement is also shown.

Key to the routes:
A – the line of the current Back Lane, providing a through route to Healaugh following the existing rights of way.
B - the main route into Reeth from the south and east. This follows the line of a very narrow 'field', 454 on the tithe map, too narrow for agricultural use and likely to be an old trackway. This route provides less steep gradients than the main route preferred by Fleming[17] which climbs up Back Lane and then turns 90° north into the village. This latter route would be difficult, although not necessarily impossible, for heavily laden packhorses or carts.
C – possible continuation of the medieval Back Lane.
D – leading to the Reeth West Field system of lynchets; also to grazing on Reeth High and Low Moors and possibly an alternative route to Healaugh.
E – leading to Reeth Low Moor and possibly to Arkengarthdale.
F – following the existing right of way to Town End Farm and then on to Arkengarthdale.
G – leading to Reeth Mill on Arkle Beck.

[17] Fleming; pp106-8

Support for this theory is found by considering the dating of the possible cobbled surfaces, discussed in Appendix B below. The surfaces found in test pits 20, 21 and 32 all seem to date from the 18th century making it clear that there was substantial work on the Green at that time. In addition there is the possibility of a contemporaneous surface in TP01 also on the Green. Further, there is a good surface in TP19, Anvil Square, dated from the pottery finds to the 18th century, thought to be an extension to the market area and possibly an 18th century 'car park' for the horses and carts of those visiting the Market.[18]

Some slight further support to this theory is found in the buildings on High Row, to the West of the Green and facing onto the Green, which are all clearly 18th century or later, whilst the oldest known building bordering the Green, dated to the early 17th century[19], is oriented North-South with its gable end towards the Green.

As mentioned above, there was a significant increase in the number of test pits showing strong evidence of habitation in the 18th century. The finds from TP46 suggest that although the smithy next to the Congregational Chapel might have been founded earlier it was certainly active from the 18th century onwards. Beckside, TP08, is also interesting in this period. There is no evidence of occupation or other activity in the medieval or late medieval periods but good evidence of occupation in the 17th century and very strong evidence in the 18th century, with no activity apparent in the modern period. It is possible that this is the site of tannery said[20] to have operated in this area.

Reeth in the 19th and 20th centuries was a time of 'boom and bust' with the number of finds reflecting the 'boom' but not the 'bust'. Lead mining drew in more and more people with the population peaking around 1820 followed by a dramatic decline[21] resulting in the abandonment of many dwellings.

[18] Richmond Review 2015; Market Parks; Doug Waugh; p45
[19] A survey of The Green, Reeth; Reeth Vernacular Buildings Study Group; 2012
[20] Gordon Walker, pers.comm.
[21] See the Historical Background section of this report.

2.2 Fremington

Plate 13 – the location of the 8 test pits in Fremington © Google Earth

Table 2 below shows the pottery finds from the Fremington test pits classified by period.

Location	Pottery analysis by period (Fremington only)									
	Medieval 13th/e.14th		Late Medieval 14th-16th		17th – e. 18th C		e. 18th - e. 19th C		"Modern"	
	No.	Wt	No.	Wt	No.	Wt	No.	Wt	No.	Wt
TP47 FREMINGTON FLDS 1	36	108	0	0	0	0	1	1	0	0
T 48 FREMINGTON FLDS 2	6	21	1	4	6	5	0	0	0	0
TP50 ROWAN COTT FREM'	5	28	4	7	0	0	0	0	0	0
TP51 WEST COTT FREM'	0	0	0	0	2	5	3	4	76	271
TP 52 BRAMBLES FLD 1 FREM'	33	96	1	3	4	18	1	1	2	1
TP53 WAYSIDE COTT FREM'	0	0	0	0	0	0	0	0	118	512
TP54 BRAMBLES FLD 2 FREM'	0	0	0	0	4	4	8	18	13	26
TP55 ROSE COTT FREM'	0	0	0	0	1	2	1	2	63	279
Totals	80	253	6	14	17	34	14	26	272	1089

Table 2 – Fremington pottery finds colour coded to represent likelihood of habitation nearby

2.2.1 An interpretation of the implications of the classification of the finds from each of the Fremington pits.

TP47 Fremington fields #1. There is strong evidence of occupation or other significant activity in the immediate vicinity in the medieval period, followed by abandonment in the late medieval and thereafter only some evidence of cultivation or other low level activity in the 18th century alone.

TP48 Fremington fields #2. There is good evidence of occupation or other significant activity in the immediate vicinity in the medieval period, followed by cultivation or other low level of activity in the late medieval, re-occupation in the 17th century with no activity thereafter.

TP50 Rowan Cottage, Fremington. There is good evidence of occupation or other significant activity in the immediate vicinity in the medieval period, possibly continuing into the late medieval, but no evidence of activity thereafter. It is understood that the garden was landscaped in recent times.

TP51 West Cottage, Fremington. There is no evidence of any activity in the medieval periods, followed by some evidence of cultivation or other low level of activity in the 17th century. There is evidence of possible occupation or other significant activity in the immediate vicinity in the 18th century, continuing into the modern era.

TP52 Brambles fields #1, Fremington. There is strong evidence of occupation or other significant activity in the immediate vicinity in the medieval period, followed by cultivation or other low level of activity in the late medieval, possible re-occupation in the 17th century with cultivation thereafter.

TP53 Wayside Cottage, Fremington. There is no evidence of any occupation or other activity before the modern period.

TP54 Brambles fields #2, Fremington. There is no evidence of any occupation or activity before the 17th century when there is some evidence of occupation or other significant activity in the immediate vicinity, with good evidence thereafter.

TP55 Rose Cottage, Fremington. There is no evidence of any activity before the 17th century when there is some evidence of cultivation or other low level of activity which continues into the 18th century followed by strong evidence of occupation or other significant activity in the immediate vicinity in the modern period.

2.2.2 Fremington Pottery Distribution Maps

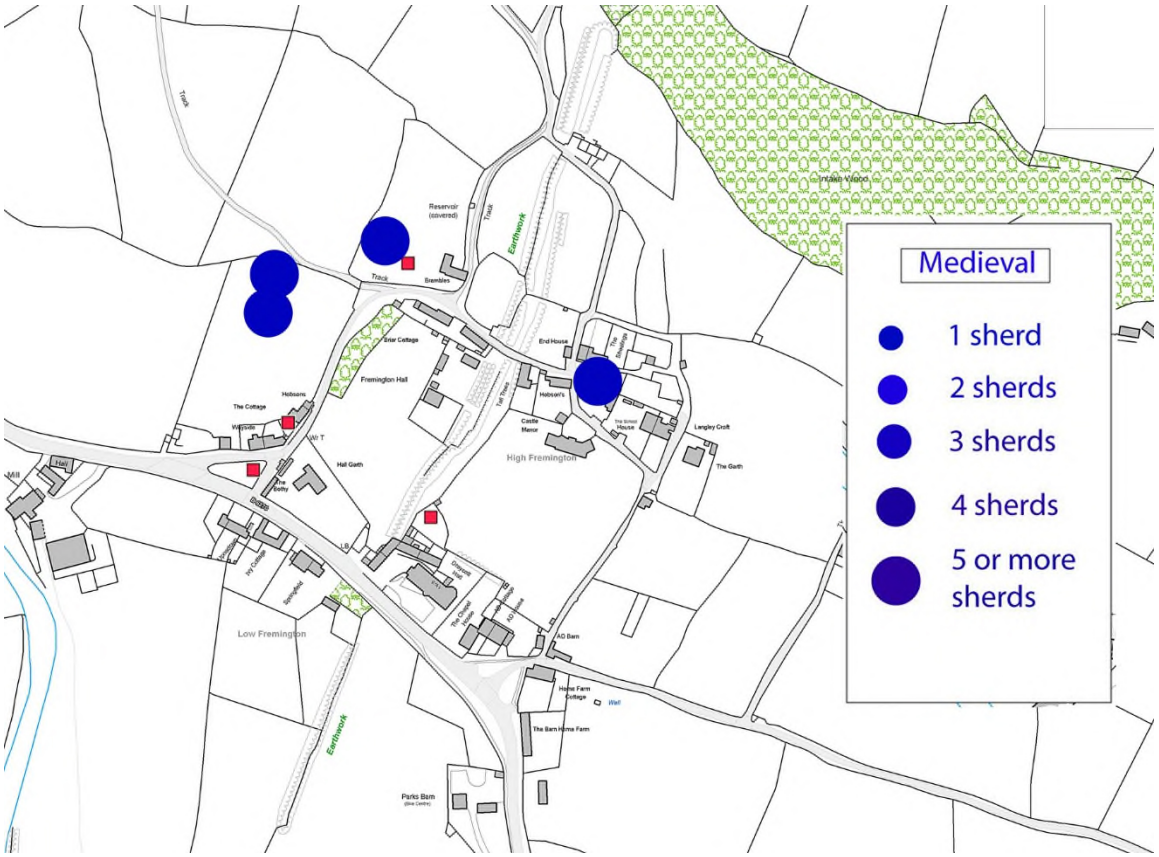

Plate 14 - the distribution of medieval pottery finds from the 8 test pits in Fremington

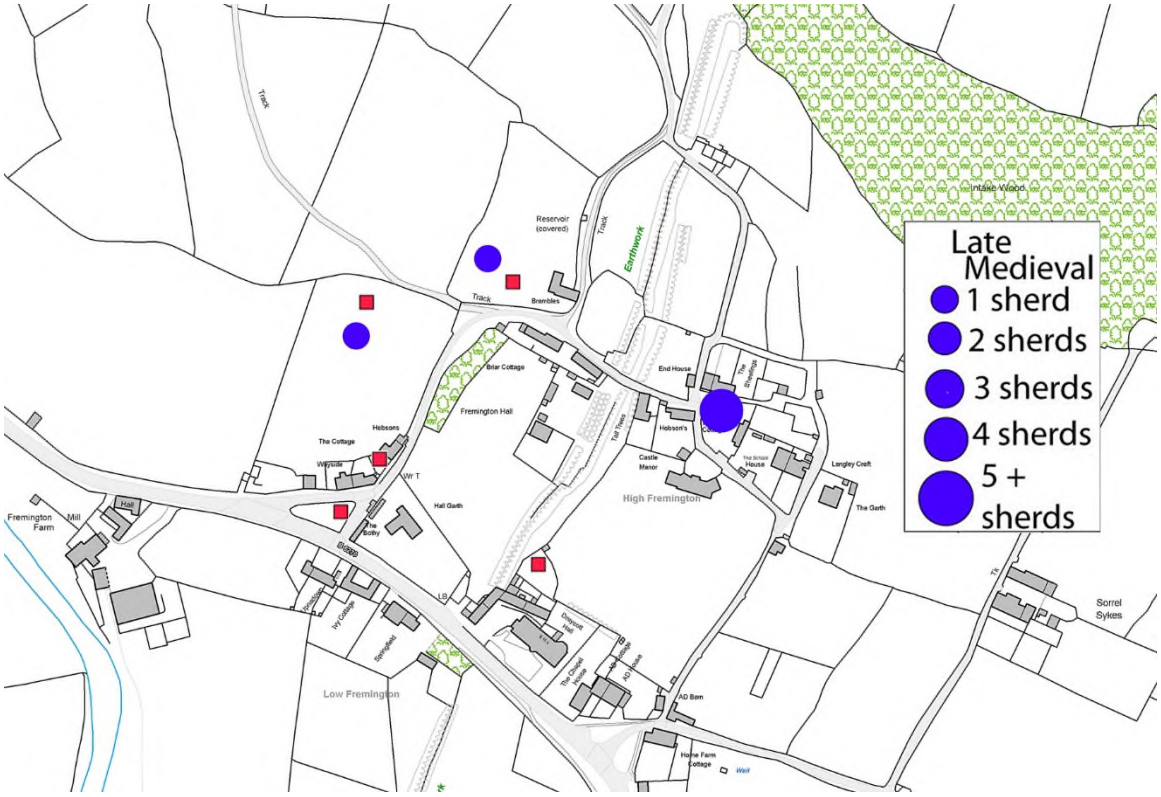

Plate 15 - the distribution of late medieval pottery finds from the 8 test pits in Fremington

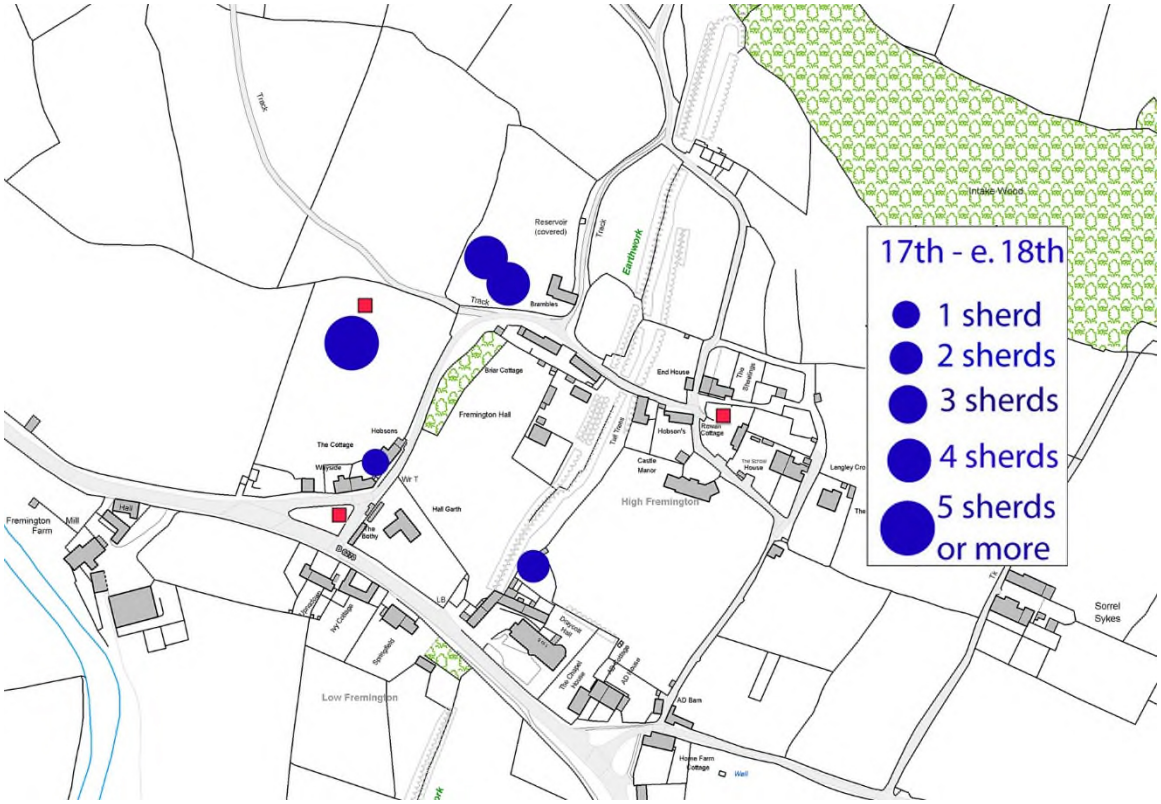

Plate 16 - the distribution of 17th C to early 18th C pottery finds from the 8 test pits in Fremington

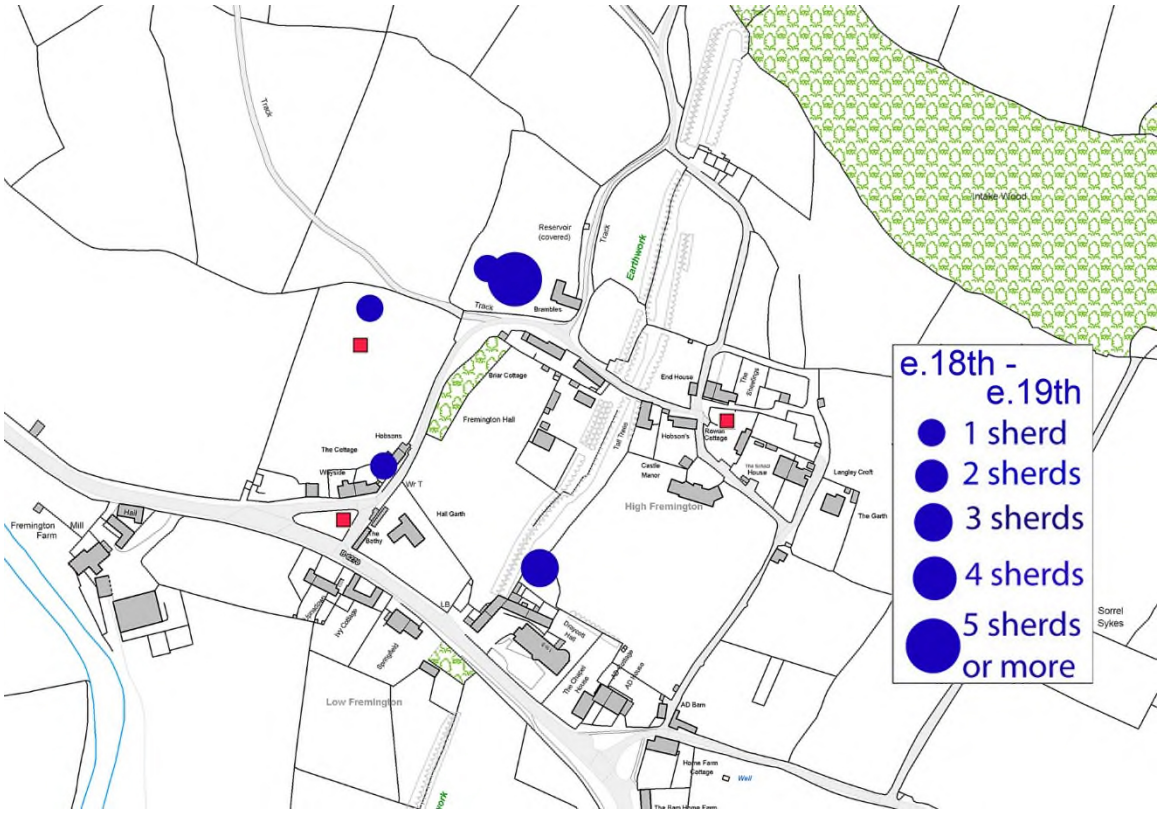

Plate 17 - the distribution of 18th C to early 19th C pottery finds from the 8 test pits in Fremington

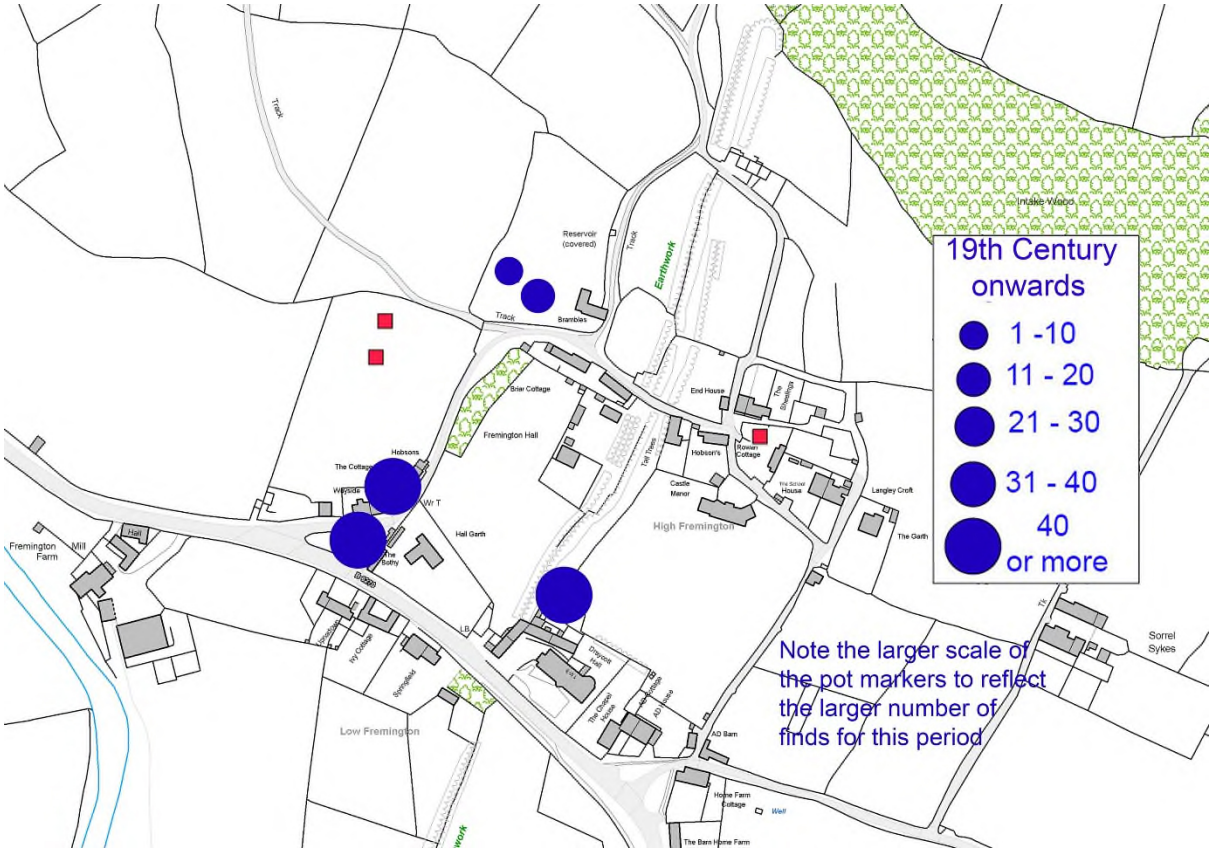

Plate 18 - the distribution of 'modern' pottery finds from the 8 test pits in Fremington

2.2.3 Fremington Surveys

Aerial photography

Fremington is partially covered by the 1959 aerial photograph, plate 8. The fields to the North-West of the village are shown in the lower right-hand corner to the North of the main road. It is just possible to discern what seems to be a medieval field system; this was to become one of the main focuses of the work in Fremington.

Lidar

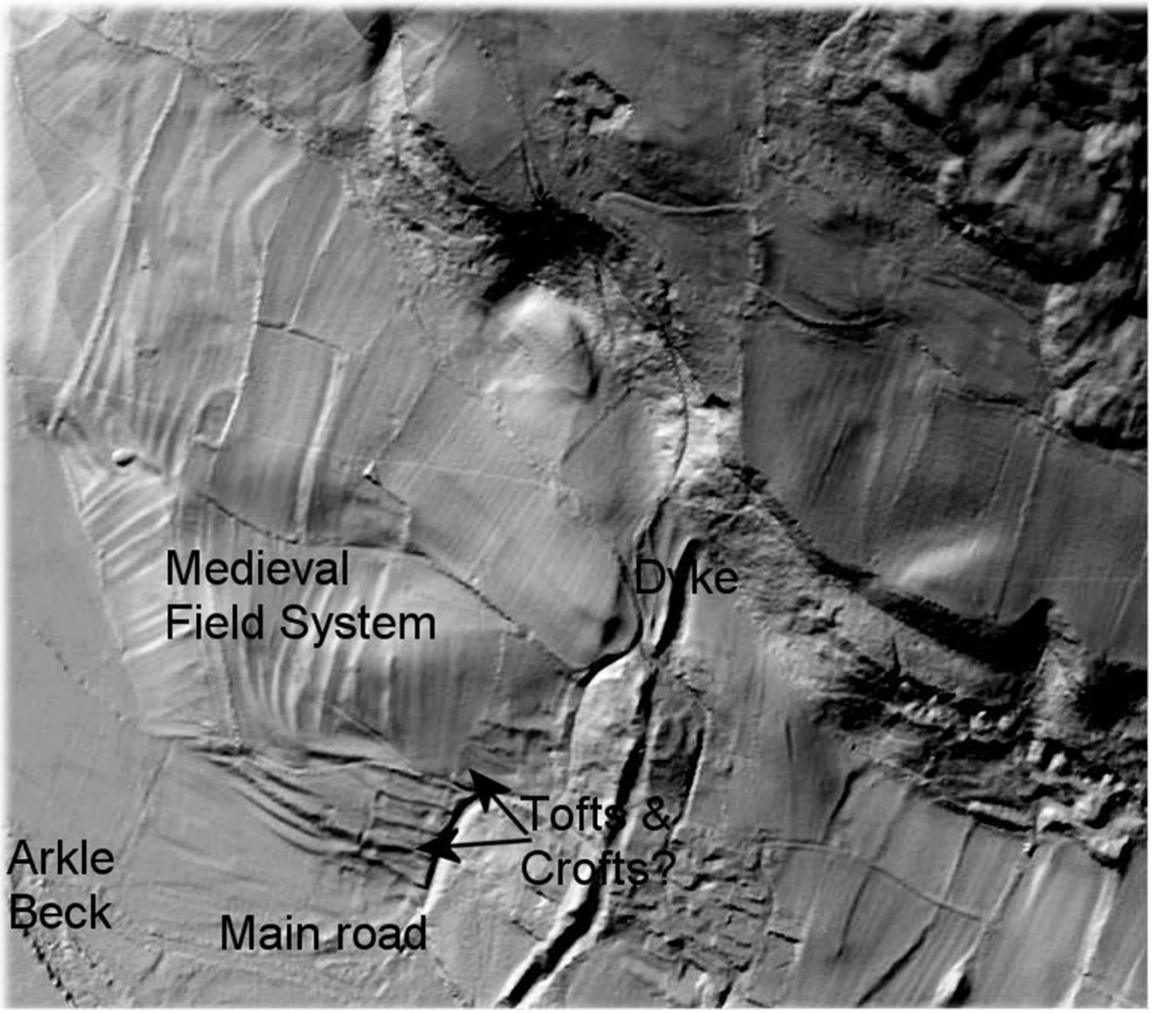

Plate 19 – Lidar image of Fremington © Environment Agency

The potential medieval settlement of tofts and crofts shows up well on the Lidar image, plate 19. Test pits TP47, 48, 52 & 54 were placed in this area.

Geophysical surveys

The potential medieval tofts and crofts show up quite well on the magnetic survey, below, plate 20. The red markers appear to be house platforms extending to the East, with plot boundaries fairly well defined, and crofts to the West.

Plate 20 – Fremington magnetic survey

Topographical surveys

Plate 21 below shows the topographical survey of the same area as plate 20 above; again the probable tofts and crofts show up fairly well. Further detail is provided in “The Swaledale Big Dig Project ; Geophysical and Topographical Survey Report” section of this report.

Plate 21 – the topographical survey of Fremington

2.2.4 The development of Fremington – an interpretation

The test pits have not revealed any evidence of habitation in Fremington prior to the medieval period.

There is strong evidence of habitation in the medieval period at four of the five sites in High Fremington, dropping to at most one in the late medieval, presumably for the same reasons as for Reeth; the Great Famine, Scots raids, the plague.

Fewer sites seem to be occupied in the 17th C than in the medieval period with strong evidence of habitation at only one site, in the fields opposite Fremington Mill Farm. The finds suggest possible habitation in the High Fremington fields by The Brambles with Low Fremington being developed for agriculture.

By the 18th century, the Brambles' site, TP54, is occupied again with this continuing into the modern period. None of the other seven sites has convincing evidence of habitation in their immediate vicinity. The 19th century finally sees the development of Low Fremington with all three sites having strong evidence of habitation.

The small number of test pits, eight in all, makes it difficult to draw any general conclusions about the development of the settlement. What can be said is that it is clear that a focus of habitation in medieval times was in High Fremington, with a settlement of four or more tofts and crofts in the fields opposite Fremington Mill farm, and extending North into the field to the West of the Brambles. These sites were largely abandoned in the late medieval with the focus moving later to the East in High Fremington and to the South in Low Fremington. No pottery earlier than the 17th century was found in the three pits in Low Fremington with nothing to suggest habitation there until the 19th century.

2.3 Grinton

Plate 22 – the location of the six test pits in Grinton

Table 3 below shows the pottery finds from the Grinton test pits classified by period.

Location	Pottery analysis by period (Grinton only)									
	Medieval 13th/e.14th		Late Medieval 14th-16th		17th – e. 18th C		e. 18th - e. 19th C		"Modern"	
	No.	Wt	No.	Wt	No.	Wt	No.	Wt	No.	Wt
TP56 MANOR HOUSE1 GRIN' (+)	27	107	1	22	4	7	7	12	4	3
TP57 CALF GARTH GRIN'	22	57	8	98	7	9	0	0	1	1
TP58 COATES MIDDL FLD GRIN'	20	69	1	11	23	201	2	2	11	18
TP59 SWALE HALL GRIN'	0	0	5	45	2	23	42	63	59	183
TP60 GREEN GRINTON	0	0	0	0	0	0	0	0	309	645
TP62 MANOR HOUSE 2 GRIN'	6	23	0	0	0	0	0	0	6	9
Totals	75	256	15	176	36	240	51	77	390	859
(+) also 1 x poss Prehistoric										

Table 3 – Grinton pottery finds colour coded to represent likelihood of habitation nearby

2.3.1 An interpretation of the implications of the classification of the finds from each of the Grinton pits.

TP56 Manor House #1, Grinton. There is strong evidence of occupation or other significant activity in the immediate vicinity in the medieval period, followed by cultivation or other low level of activity in the late medieval and possible re-occupation in the 17th century. Thereafter there is good evidence of occupation or other significant activity in the 18th century with slightly weaker evidence for the modern period.

TP57 Calf Garth, Grinton. There is strong evidence of occupation or other significant activity in the immediate vicinity in the medieval period, continuing at a lower level into the 17th century, with abandonment in the 18th, followed by cultivation or other low level of activity in the modern period.

TP58 Coates' Middle Field, Grinton. There is strong evidence of occupation or other significant activity in the immediate vicinity in the medieval period, the 17th century and the modern period with some evidence of cultivation or other low level of activity in between these three periods, in the late medieval and 18th century.

TP59 Swale Hall, Grinton. There is no evidence of activity in the medieval period but good evidence of occupation or other significant activity in the immediate vicinity in the late medieval, followed by cultivation or other low level of activity in the 17th century. Thereafter there is strong evidence of occupation or other significant activity in the immediate vicinity in the 18th century and modern era.

TP60 The Green (Waterford House), Grinton. There is no evidence of any occupation or activity before the modern period.

TP62 The Manor House #2, Grinton. There is good evidence of occupation or other significant activity in the immediate vicinity in the medieval and modern periods with abandonment in between.

2.3.2 Grinton Pottery Distribution Maps

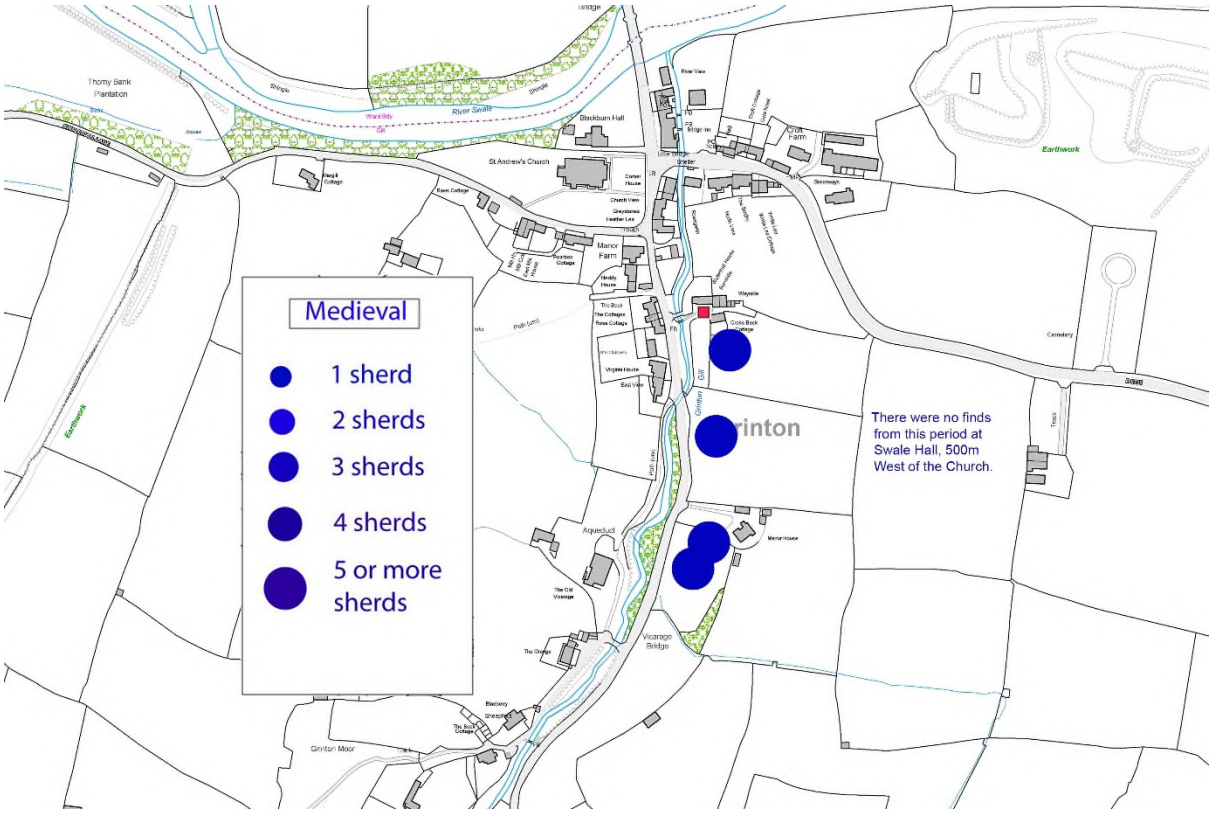

Plate 23 - the distribution of medieval pottery finds from the 6 test pits in Grinton

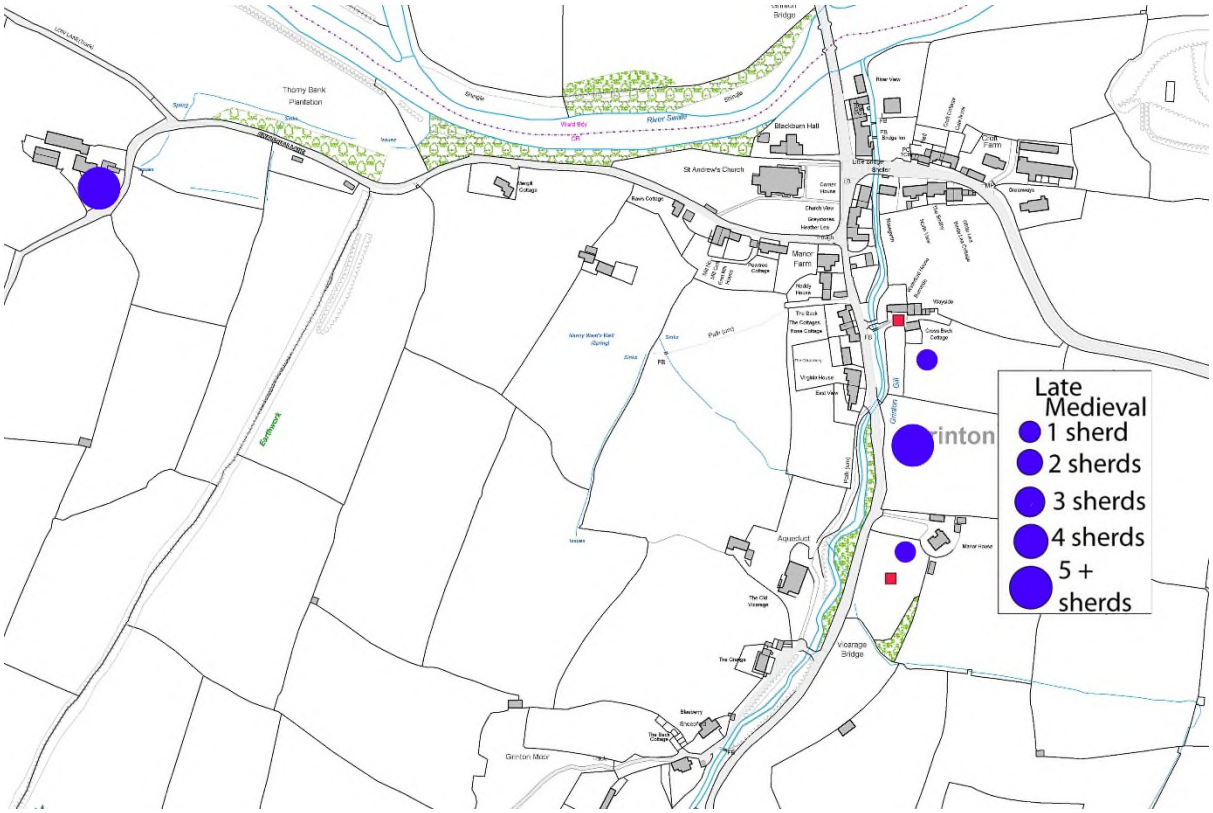

Plate 24 - the distribution of late medieval pottery finds from the 6 test pits in Grinton

Plate 25 - the distribution of 17th – early 18th century pottery finds from the 6 test pits in Grinton

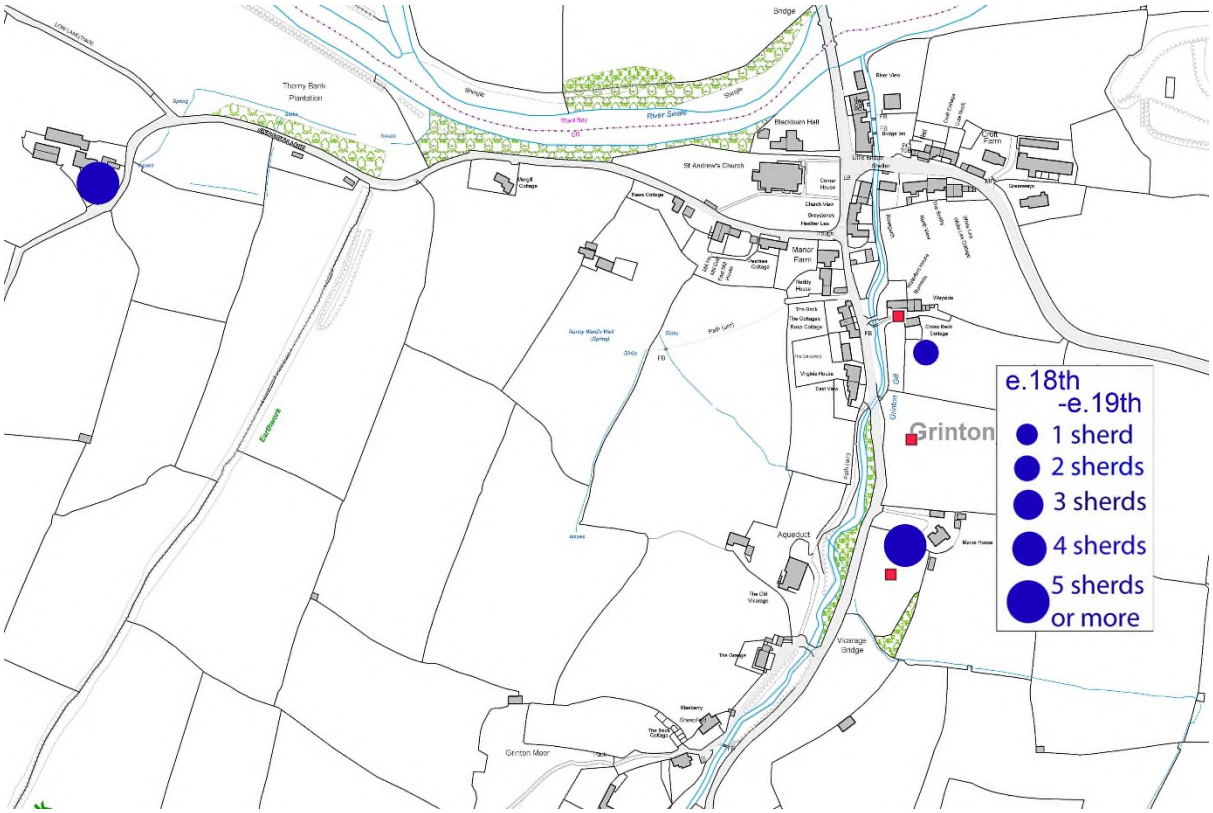

Plate 26 - the distribution of 18th – early 19th century pottery finds from the 6 test pits in Grinton

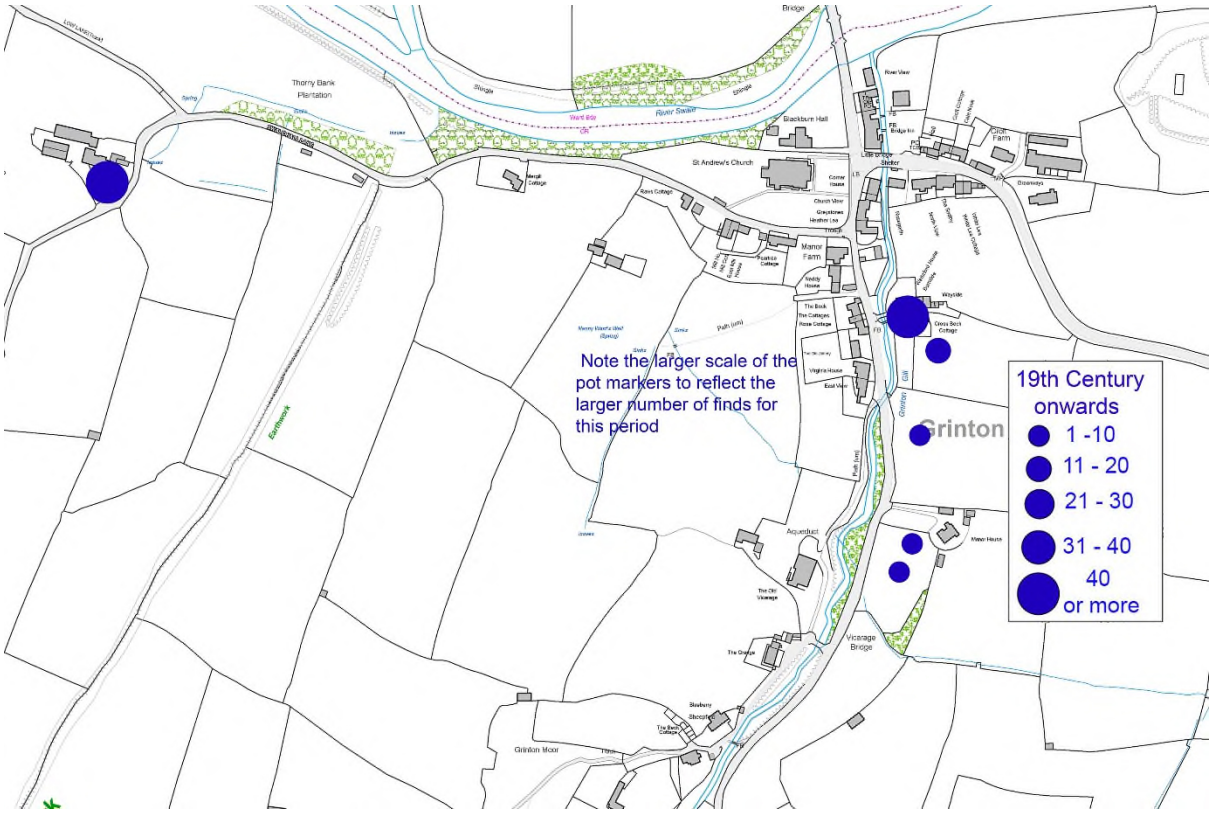

Plate 27 - the distribution of 'modern' pottery finds from the 6 test pits in Grinton

2.3.3 Grinton Surveys

Aerial photography

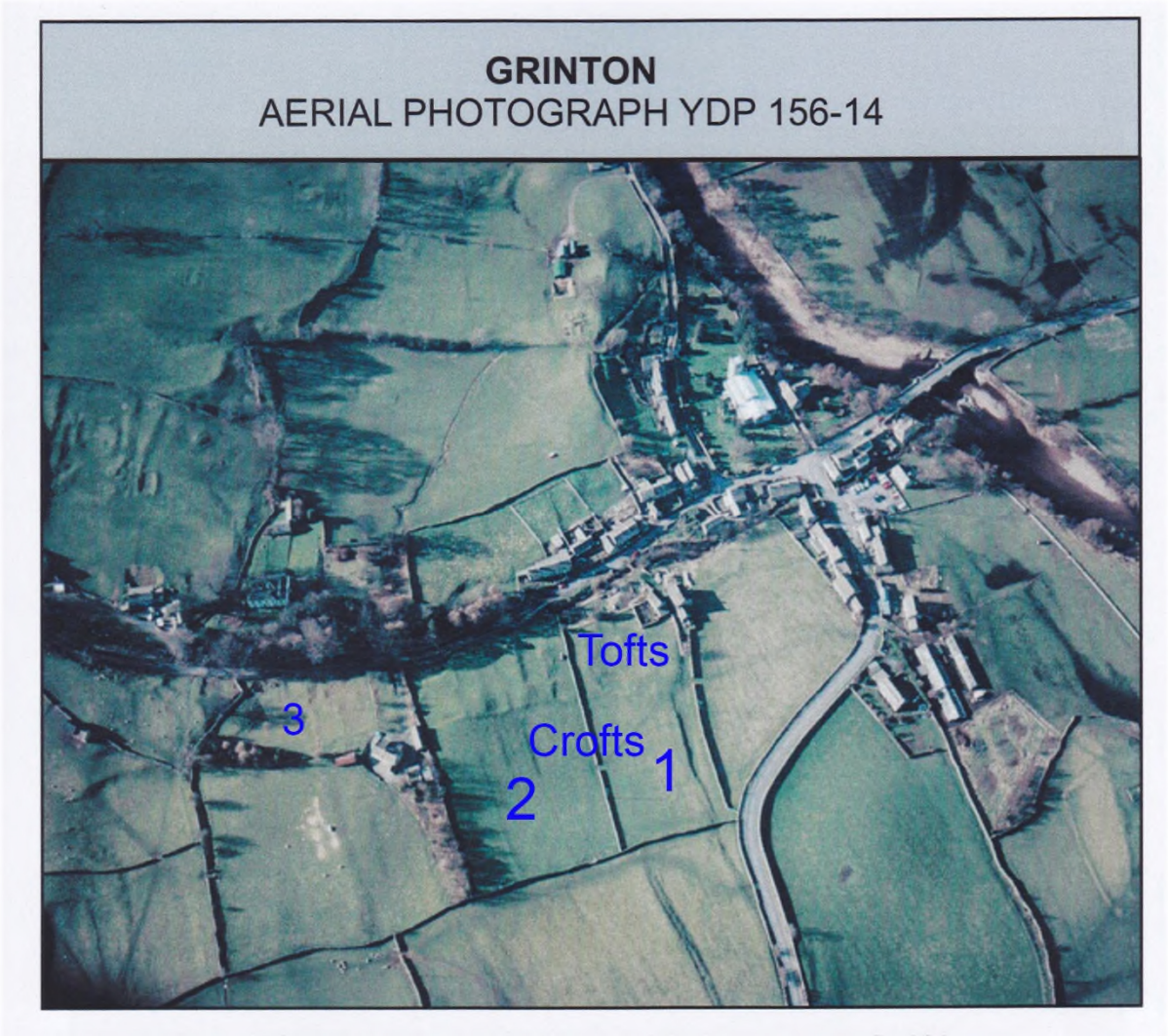

Plate 28 – Aerial photograph of Grinton © YDNPA

Probable medieval tofts and crofts are clearly visible in the fields labelled 1 (Coates Middle Field), 2 (Calf Garth) & 3 (Macknight's Front Pasture) to the East of the Grinton – Leyburn road; similarly on the West side of the road, but unfortunately permission was not forthcoming to investigate there.

Lidar

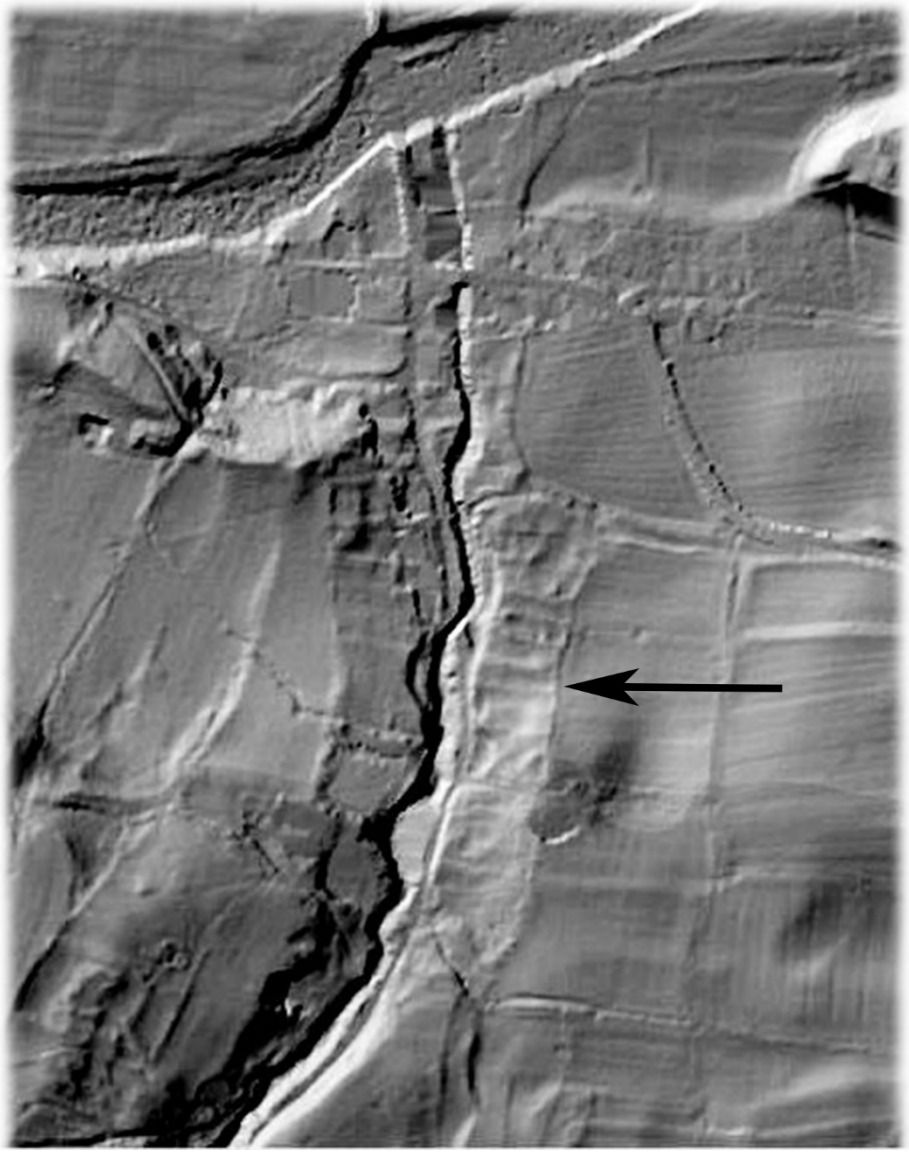

Plate 29 – Lidar image of Grinton © Environment Agency

The probable medieval tofts and crofts are clearly visible; those to the East of the Grinton-Leyburn road in the field labelled “2” (Calf Garth) above, plate 28, are indicated by the arrow.

Geophysical surveys

SWAAG members carried out a number of magnetic and earth resistance surveys of the fields in Grinton to the East of the Grinton-Leyburn road. These are reported on in more detail elsewhere in this report.

Plate 30 shows the results of the magnetic surveys overlaid on a Google Earth image. From the top, in the field known as Coates Bottom field, the magnetics seem to show ridge & furrow. The next field to the South, field “1”, Coates Middle Field, has what might be interpreted as a recti-linear enclosure in the Southwest corner. Below, in field ”2”, indicated by the arrow, is what might be a house platform, with faint traces of a further three to the South.

Plate 30 – a composite of the magnetic surveys of the Grinton fields ©Google Earth

A further small scale survey[22] carried out in October 2015 [in field 1 above, Coates Middle Field] under the guidance of Mary Saunders, Bradford University, generated a number of interesting responses. “It is unclear whether the extant earthworks are indicative of the reputed presence of

[22] Grinton Geophysical Survey Field School, M K Saunders 2015

medieval tofts and crofts, but it does seem likely that the area did have a quite specific function. Targeted excavation … may shed light on what this use may have been.
It is clear from the pottery recovered from the area that intense activity occurred in this area during the 13th and 14th centuries but it may be that this was not related to domestic settlement, with the most likely alternative explanation being the presence of a small-scale 'cottage' industry of some description.
[Further, whilst] the route of a medieval hollow-way has always been thought to run through this field, there is no geophysical evidence from this particular survey to support these claims and the escarpment may be a natural feature relating in some way to the river and flood plain[23]."

Topographical surveys

See "The Swaledale Big Dig Project ; Geophysical and Topographical Survey Report" elsewhere in this report.

2.3.4 The development of Grinton – an interpretation

The test pits have not revealed any evidence of habitation in Grinton prior to the medieval period although one fragment from the lowest level reached in TP56 in Macknight's Front Pasture may be prehistoric.

There is particularly strong evidence of habitation in the medieval period at three of the four sites (TP56,57,58) in the fields to the East of the Grinton – Leyburn road and strong evidence for the fourth (TP62). In addition to 22 pieces of medieval pot, TP57 in Calf Garth, field 2 above, also yielded a piece of daub, perhaps indicating a wattle & daub building nearby. Habitation in these fields dropped to only one site in the late medieval, presumably for the same reasons as for Reeth; the Great Famine, Scots raids, the plague; of note is that Swale Hall became occupied in the late medieval period.

Activity picked up in the 17th century with two of the 'field sites' showing good evidence of habitation in the immediate vicinity, and perhaps a third too. The small number of finds from the Swale Hall pit suggest a low level of occupation.

By the 18th century, only one of the 'field sites' seems to be occupied, TP56, in Macknights Front Pasture. This might reflect occupation of the nearby Manor House itself, believed to be of a mid-late 17th century date[24]. One of the other two fields seems to have been abandoned altogether whilst the third yielded only two pieces of 18th century pot. It is possible that the houses said to have been swept away in the 'great flood' of 1701[25] were located in the fields, Coates Middle Field and Calf Garth, "1" and "2" above, and that this resulted in these two fields going out of use. Forty-two pieces of pot from the Swale Hall pit indicate a high level of activity in the 18th century which continued into the modern period.

The 19th century saw habitation continue in the area of the Manor House, as expected, but also pick up in field "1", although it is clear from the tithe map and subsequent OS maps that there were no buildings present from 1840 onwards; perhaps the pot finds are indicative of some non-domestic human activity, as suggested by the geophysical survey, above. The pit on Grinton Green, adjacent to Waterford House, yielded over 300 pieces of 19th century and later pot, but none from earlier periods. This is perhaps surprising given its location in the middle of apparent medieval settlement.

[23] Ibid p16
[24] Fieldhouse & Jennings p242
[25] See the Historic Development section of this report

The small number of test pits, six in all, makes it difficult to draw any general conclusions about the development of the settlement. What can be said is that it is clear that there was a focus of habitation in medieval times in the fields to the East of the Grinton – Leyburn road. This seems to have been largely abandoned in the 18th century, apart from the Manor House itself which lies back off the road and would be unlikely to have been affected by the 1701 flood.

3. Conclusions

It is clear that the Swaledale Big Dig has been a very successful community archaeology project. Over 160 people were involved over two years in digging 50 test pits. The team shifted and sieved over 70 cubic metres of soil weighing around 90 tonnes. They found glass, clay pipes, animal bones and more than 4000 pieces of pottery weighing more than 12kg. They also found a large amount of metal work including horseshoes, clog irons, tools, a medieval key and an early medieval lock.

There was no real evidence of Roman or Romano-British occupation in the villages apart from a couple of sherds suggesting cultivation; neither was there any evidence of Anglo-Saxon settlement.

The presence of a previously unknown medieval settlement in Fremington, now abandoned in the fields opposite Fremington Mill Farm, was confirmed as was the existence of an extensive medieval settlement in Grinton, again abandoned, in fields to the East of the Grinton - Leyburn Rd.

The finds show that Swaledale suffered heavily in the 14th / 15th C presumably as a result of the Great Famine in the early 14thC, the Scots raids following their victory at Bannockburn and later, the Black Death. Interestingly, medieval tax returns suggest that Reeth and Upper Swaledale suffered less than nearby Marrick, Marske & Richmond.

The pottery finds also raise the possibility that present day Reeth with its large central green was planned following the granting of its market charter in 1694/5.

Documentary research, aerial photography, lidar images, topographical and geophysical surveys all aided analysis and interpretation of results from the test pits leading to a deeper understanding of the development of the area.

The Big Dig team worked closely with the local schools. Over 90 children took part in digging test pits, surveying and other activities enabling them to learn more about their local heritage.

Twenty-four free courses and 11 free guided walks were offered to the public.

More than 500 people participated in one way or another leaving a lasting legacy of skills and increased knowledge in the community.

It is hoped that the Swaledale & Arkengarthdale Archaeology Group, the Swaledale & Arkengarthdale Local History Group and members of the communities of the three villages will continue the research and build upon this very successful project.

Alan Mills

January 2016
Revised April 2016

Appendix A

The table on the following pages shows the pottery finds from each of the 50 Big Dig test pits dug in Fremington, Grinton and Reeth in the period April 2013 – July 2015, classified by period together with the number and weight of finds from that period. The periods used for the purposes of the analysis are as follows:

(i) Medieval, being 13th – early 14th Century
(ii) Late medieval, being from the early 14th – 16th Century
(iii) 17th – early 18th Century
(iv) early 18th to the early 19th Century
(v) Modern, being from the early 19th Century to the modern day

The methodology developed by Dr Carenza Lewis[26] and her colleagues at the University of Cambridge suggests that where a test pit reveals five or more sherds of pottery from a particular period then it is likely that human habitation was in the immediate vicinity[27]. This form of interpretation is reflected in the following table using a system of colour coding.

Colour	Meaning
	Five sherds or more suggests habitation or other substantial activity in the immediate vicinity
	Three or four sherds suggests possible habitation or other substantial activity in the immediate vicinity
	One or two sherds suggests probable cultivation or other low level of human activity
	No evidence of human activity in this period

[26] Professor of Public Understanding of Research, the University of Lincoln, 2015 on
[27] Lewis, C. 2014. 'The Power of Pits: Archaeology, outreach and research in living landscapes' in K. Boyle, R. Rabett and C. Hunt (eds) Living in the Landscape. Cambridge, McDonald Institute for Archaeological Research Monograph. pp 321-338; p325 in particular.

Location	Pottery analysis by period									
	Medieval 13th/e.14th		Late Medieval 14th-16th		17th – e. 18th C		e. 18th - e. 19th C		"Modern"	
	No.	Wt	No.	Wt	No.	Wt	No.	Wt	No.	Wt
2013 TP1 Rth GREEN	0	0	0	0	1	3	0	0	14	13
2013 TP2 11 SILVER St	3	7	0	0	4	14	24	63	106	170
TP05 SORRELL SYKES	4	10	2	11	7	39	13	50	16	25
TP06 SOWDENCOTT	0	0	0	0	2	3	16	52	18	32
TP07 ARKLE COTT	0	0	0	0	0	0	0	0	30	70
TP08 BECKSIDE	0	0	0	0	9	34	67	99	0	0
TP09 BURGOYNE FRONT	0	0	0	0	0	0	9	11	54	103
TP11 SCHOOL HOUSE	0	0	0	0	1	2	2	5	7	5
TP12 THE NOOK	1	5	0	0	1	3	3	6	54	49
TP13 HEATHERDALE	1	1	0	0	2	5	18	22	56	83
TP14 GARDENHOUSE	0	0	1	9	0	0	13	38	47	48
TP16 PARKLEA	0	0	0	0	0	0	0	0	19	75
TP18 HILLTOP (*)	1	5	0	0	0	0	0	0	0	0
TP19 ANVIL SQ	3	2	3	20	61	586	0	0	0	0
TP20 Rth GREEN FESTIVAL	7	24	0	0	5	9	10	29	35	41
TP21 Rth GREEN R&GSCHOOL	0	0	0	0	0	0	7	11	19	10
TP22 Rth GREEN A'DALE SCH'L	0	0	0	0	0	0	0	0	19	31
TP23 VICTORIA COTT	9	28	10	9	1	1	31	70	16	60
TP24 BURGOYNE REAR	2	11	0	0	1	2	15	22	10	16
TP25 BUCKHOTEL	9	37	1	2	1	1	3	4	0	0
TP29 DALEHOLM	4	26	0	0	0	0	22	52	273	518
TP31 APPLEGARTH	0	0	0	0	0	0	2	27	10	15
TP32 Rth GREEN	1	4	3	10	3	5	0	0	96	60
TP33 BLACKBULL	2	20	0	0	16	90	44	105	55	81
TP34 Rth GREEN	0	0	0	0	6	41	11	22	50	82
TP38 WELLBECK	1	3	6	881	4	8	3	5	20	17
TP39 LEESIDE	4	14	5	116	7	26	19	33	23	27
TP40 TYNEDALE	2	22	0	0	1	3	11	42	103	189
TP41 LANE HOUSE	0	0	0	0	0	0	0	0	27	53
TP42 Rth GREEN RICH' SCHOOL	0	0	0	0	0	0	1	1	41	136
TP43 8 LANGHORNE DR	2	9	0	0	2	10	5	4	12	11
TP44 14 HILL CLOSE (~)	16	41	6	52	13	19	24	46	84	246
TP45 THE NOOK 2	2	10	1	7	1	6	15	11	98	95
TP46 Rth GREEN	0	0	0	0	5	16	9	36	108	325
TP47 FREMINGTON FLDS 1	36	108	0	0	0	0	1	1	0	0
T 48 FREMINGTON FLDS 2	6	21	1	4	6	5	0	0	0	0
TP49 CONG CHAPEL	5	20	11	157	12	48	9	15	141	167
TP50 ROWAN COTT FREM'	5	28	4	7	0	0	0	0	0	0
TP51 WEST COTT FREM'	0	0	0	0	2	5	3	4	76	271
TP 52 BRAMBLES FLD 1 FREM'	33	96	1	3	4	18	1	1	2	1
TP53 WAYSIDE COTT FREM'	0	0	0	0	0	0	0	0	118	512
TP54 BRAMBLES FLD 2 FREM'	0	0	0	0	4	4	8	18	13	26

Location	Pottery analysis by period									
	Medieval 13th/e.14th		Late Medieval 14th-16th		17th – e. 18th C		e. 18th - e. 19th C		"Modern"	
	No.	Wt	No.	Wt	No.	Wt	No.	Wt	No.	Wt
TP55 ROSE COTT FREM'	0	0	0	0	1	2	1	2	63	279
TP56 MANOR HOUSE1 GRIN' (+)	27	107	1	22	4	7	7	12	4	3
TP57 CALF GARTH GRIN'	22	57	8	98	7	9	0	0	1	1
TP58 COATES MIDDL FLD GRIN'	20	69	1	11	23	201	2	2	11	18
TP59 SWALE HALL GRIN'	0	0	5	45	2	23	42	63	59	183
TP60 GREEN GRINTON	0	0	0	0	0	0	0	0	309	645
TP61 29 LANGHORNE DR Rth	3	50	1	3	9	24	12	38	150	205
TP62 MANOR HOUSE 2 GRIN'	6	23	0	0	0	0	0	0	6	9
Totals	237	858	71	1467	228	1272	483	1022	2473	5006
(*) also 1 x Roman sherd										
(+) also 1 x poss Prehistoric										
(~) also 1 x poss Roman sherd										

An interpretation of the implications of the classification of the finds from each of the 50 pits.

TP01 The Green, Reeth. There is no evidence of activity until the 17th century when there is some evidence of cultivation or other low level of activity, followed by abandonment in the 18th century. The significant number of pot sherds from the modern period probably reflects the use of the Green for the Reeth Market and St Bart's Fair rather than a dwelling in the immediate vicinity.

TP02 11 Silver St, Reeth. The three medieval sherds raise the possibility of a dwelling or other significant activity in the immediate vicinity. The absence of finds from the 14th – 16th century period suggests the area was abandoned at that time, to be re-occupied from the 17th century onwards, consistent with the dating of the house.

TP05 Sorrel Sykes, Reeth. The four medieval sherds found raise the possibility of a dwelling in the immediate vicinity, supported by the finding of a medieval barrel lock in context 6. Two sherds from the late medieval period (14th – 16th centuries) suggest some low level of activity or more likely are associated with the strong evidence from this period found at TP 38 and TP39, next door. Thereafter there is good evidence of occupation through to the modern period.

TP06 Sowden Cottage, Reeth. There is no evidence of activity until the 17th century and then the two sherds found are not strong evidence of occupation in that period and may be associated with cultivation or occupation of the adjacent Congregational Chapel site. Thereafter there is good evidence of occupation through to the modern period. (ADD IN NEXT SECTION – disappointing given age of building)

TP07 Arkle Cottage, Reeth. There is no evidence of occupation or other activity until the modern period.

TP08 Beckside, Reeth. There is no evidence of occupation or other activity in the medieval or late medieval periods. There is good evidence of occupation in the 17th century and very strong evidence in the 18th century, with no activity apparent in the modern period. (ADD IN NEXT SECTION – maybe this was the site of the tannery?)

TP09 The Burgoyne (front garden), Reeth. There is no evidence of occupation or other activity prior to the beginning of the 18th century; thereafter there is good evidence of occupation or other significant activity through to the modern period.

TP11 School House, Reeth. There is no evidence of occupation or other activity in the medieval or late medieval periods. There is some evidence of cultivation or other low level of activity in the 17th and 18th centuries, with good evidence of occupation in the modern period.

TP12 The Nook (2014 pit), Reeth. The single sherds in both the medieval and 17th century periods suggest cultivation or some other low level of activity, with abandonment in the late medieval. The 18th century finds raise the possibility of occupation or other significant activity in the immediate vicinity, confirmed by those from the modern era.

TP13 Heatherdale, Reeth. The small number of sherds in both the medieval and 17th century periods suggest cultivation or some other low level of activity, with abandonment in the late medieval. There is strong evidence of occupation in the immediate vicinity in the 18th century, continuing into the modern period.

TP14 Gardenhouse, Reeth. There is no evidence of any activity in either the medieval or 17th century periods but some of possible cultivation or other low level of activity in the late medieval. There is strong evidence of occupation in the immediate vicinity in the 18th century, continuing into the modern period.

TP16 Parklea, Reeth. There is no evidence of any occupation or activity before the modern period.

TP18 Hilltop, Reeth. Only two sherd were recovered from this location; one probably Roman, the other medieval, suggesting cultivation in these periods.

TP19 Anvil Square, Reeth. There is some evidence of possible occupation or other significant activity in the immediate vicinity during both the medieval and late medieval periods and very strong evidence of the same during the 17th century. There is no evidence of any later activity.

TP20 The Green, Reeth. There is strong evidence of occupation or other significant activity in the immediate vicinity during the medieval period, with abandonment in the late medieval, followed by good evidence of occupation or other activity in the 17th century, increasing into the modern era which may well associated with the Reeth Market and St Bart's Fair.

TP21 The Green, Reeth. There is no evidence of any occupation or activity until the 18th century, when there is good evidence of occupation or other significant activity continuing into the modern era. This may well be associated with the Reeth Market and St Bart's Fair.

TP22 The Green, Reeth. There is no evidence of any occupation or activity until the modern period when there is good evidence of occupation or other significant activity which may well be associated with the Reeth Market and St Bart's Fair.

TP23 Victoria Cottage, Reeth. There is strong evidence of occupation in the medieval and late medieval periods and in the 18th century though to the modern era. Only one sherd from the 17th century suggests the site was abandoned for a period.

TP24 The Burgoyne (rear), Reeth. There is some evidence of cultivation or other low level of activity during the medieval and 17th century periods with abandonment in the late medieval. There is good evidence of occupation or other significant activity during the 18th century and through into the modern era.

TP25 The Buck Hotel, Reeth. There is strong evidence of occupation or other significant activity in the immediate vicinity during the medieval period, followed by cultivation or other low level of activity during the late medieval and 17th century. The three finds from the 18th century suggest that there might have been occupation here in that period. There are no finds from the modern era.

TP29 Daleholme, Reeth. The four medieval sherds found raise the possibility of occupation or other significant activity in the immediate vicinity. There is no evidence of any activity in the late medieval period nor the 17th century but thereafter there is substantial evidence of occupation or other significant activity.

TP31 Applegarth, Reeth. There is no evidence of any activity until the 18th century with two sherds from that period suggesting cultivation or some other low level of activity. Thereafter there is good evidence of occupation.

TP32 The Green, Reeth. There is some evidence of cultivation or other low level of activity in the immediate vicinity during the medieval period, followed by possible occupation or other significant activity during the 14th – 17thC, no activity in the 18thC and finally substantial activity in the modern period, the latter possibly associated with Reeth Market and the St Bart's Fair.

TP33 The Black Bull, Reeth. There is some evidence of cultivation or other low level of activity in the immediate vicinity during the medieval period, followed by abandonment in the late medieval. Thereafter there is strong evidence of occupation or other significant activity from the 17th century onwards.

TP34 The Green, Reeth. There is no evidence of any activity during the medieval and late medieval peroiods, followed by strong evidence of occupation or other significant activity from the 17th century onwards, the latter possibly associated with Reeth Market and the St Bart's Fair.

TP38 Welbeck, Reeth. There is some evidence of cultivation or other low level of activity in the immediate vicinity during the medieval period whilst there is good evidence of occupation or other significant activity in the late medieval period. The evidence suggests that this might have continued into the 17th and 18th centuries with strong evidence of occupation or other significant activity in the modern period

TP39 Leeside, Reeth. The four medieval sherds raise the possibility of occupation or other significant activity in the immediate vicinity. Thereafter there is good evidence of occupation through into the modern period.

TP40 Tynedale, Reeth. There is some evidence of cultivation or other low level of activity in the immediate vicinity during both the medieval period and the 17th century but with no activity in between. Thereafter there is good evidence of occupation in the 18th century and into the modern period.

TP41 Lane House, Reeth. There is no evidence of any occupation or other activity before the modern period .

TP42 The Green, Reeth. There is no evidence of any occupation or activity before the 18th century when there is some evidence of cultivation or other low level of activity in the immediate vicinity. There is substantial evidence of activity in the modern period, possibly associated with Reeth Market and the St Bart's Fair.

TP43 8 Langhorne Drive, Reeth. There is some evidence of cultivation or other low level of activity in the immediate vicinity during the medieval period, followed by abandonment in the late medieval. Cultivation or other low level of activity picks up in the 17th century and thereafter there is good evidence of occupation or other significant activity in the 18th century and into the modern period.

TP44 14 Hill Close, Reeth. There is strong evidence of occupation or other significant activity in the immediate vicinity in all periods, from the medieval through to the modern.

TP45 The Nook, Reeth. (2015 pit). There is some evidence of cultivation or other low level of activity in the immediate vicinity during the medieval period and continuing into the 17th century. Thereafter there is good evidence of occupation or other significant activity in the 18th century and into the modern period.

TP46 The Green, Reeth. There is no evidence of any activity in the medieval and late medieval periods. Thereafter there is good evidence of occupation or other significant activity in the 17th century and through into the modern period, possibly associated with Reeth Market and the St Bart's Fair.

TP47 Fremington fields #1. There is strong evidence of occupation or other significant activity in the immediate vicinity in the medieval period, followed by abandonment in the late medieval and thereafter only some evidence of cultivation or other low level activity in the 18th century alone.

TP48 Fremington fields #2. There is good evidence of occupation or other significant activity in the immediate vicinity in the medieval period, followed by cultivation or other low level of activity in the late medieval, re-occupation in the 17th century with no activity thereafter.

TP49 Congregational Chapel, Reeth. There is strong evidence of occupation or other significant activity in the immediate vicinity in all periods, from the medieval through to the modern.

TP50 Rowan Cottage, Fremington. There is good evidence of occupation or other significant activity in the immediate vicinity in the medieval period, possibly continuing into the late medieval, but no evidence of activity thereafter. It is understood that the garden was landscaped in recent times.

TP51 West Cottage, Fremington. There is no evidence of any activity in the medieval periods, followed by some evidence of cultivation or other low level of activity in the 17th century. There is evidence of possible occupation or other significant activity in the immediate vicinity in the 18th century, continuing into the modern era.

TP52 Brambles fields #1, Fremington. There is strong evidence of occupation or other significant activity in the immediate vicinity in the medieval period, followed by cultivation or other low level of activity in the late medieval, possible re-occupation in the 17th century with cultivation thereafter.

TP53 Wayside Cottage, Fremington. There is no evidence of any occupation or other activity before the modern period.

TP54 Brambles fields #2, Fremington. There is no evidence of any occupation or activity before the 17th century when there is some evidence of occupation or other significant activity in the immediate vicinity, with good evidence thereafter.

TP55 Rose Cottage, Fremington. There is no evidence of any activity before the 17th century when there is some evidence of cultivation or other low level of activity which continues into the 18th century followed by strong evidence of occupation or other significant activity in the immediate vicinity in the modern period.

TP56 Manor House #1, Grinton. There is strong evidence of occupation or other significant activity in the immediate vicinity in the medieval period, followed by cultivation or other low level of activity in the late medieval and possible re-occupation in the 17th century. Thereafter there is good evidence of occupation or other significant activity in the 18th century with slightly weaker evidence for the modern period.

TP57 Calf Garth, Grinton. There is strong evidence of occupation or other significant activity in the immediate vicinity in the medieval period, continuing at a lower level into the 17th century, with abandonment in the 18th, followed by cultivation or other low level of activity in the modern period.

TP58 Coates' Middle Field, Grinton. There is strong evidence of occupation or other significant activity in the immediate vicinity in the medieval period, the 17th century and the modern period with some evidence of cultivation or other low level of activity in between these three periods, in the late medieval and 18th century.

TP59 Swale Hall, Grinton. There is no evidence of activity in the medieval period but good evidence of occupation or other significant activity in the immediate vicinity in the late medieval, followed by cultivation or other low level of activity in the 17th century. Thereafter there is strong evidence of occupation or other significant activity in the immediate vicinity in the 18th century and modern era.

TP60 The Green (Waterford House), Grinton. There is no evidence of any occupation or activity before the modern period.

TP61 29 Langhorne Drive, Reeth. The three medieval sherds raise the possibility of occupation or other significant activity in the immediate vicinity. There is some evidence of cultivation or other low level of activity in the late medieval and thereafter good evidence of occupation or other significant activity in the immediate vicinity in the 17th century and through into the modern era.

TP62 The Manor House #2, Grinton. There is good evidence of occupation or other significant activity in the immediate vicinity in the medieval and modern periods with abandonment in between.

Appendix B

The Swaledale Big Dig
An analysis of the cobbled surfaces found in the Reeth test pits.

Introduction

Thirty-six test pits have been completed in Reeth over three years: two trial pits in 2013, twenty-five test pits in the 2014 season, and a further nine in 2015. Thirteen of these pits revealed potential cobbled surfaces; some are rather more convincing than others. This paper considers whether consideration of the likely nature of these potential surfaces, together with the dating of the finds in the pits both above and below the surfaces might help us determine when the surfaces were laid and thus inform the development of Reeth.

The surfaces

Each of the potential surfaces is considered in turn:

TP01 – Reeth Green

This trial test pit was dug in 2013 to prove the test pit process. It was not dug to the same high standard as subsequent pits in 2014 and 2015; for example, the soil was not sieved.

Plate 1 – TP01

Plate 1 shows the possible roughly cobbled surface in TP01, covering the Eastern half of the pit at a depth of around 20cm, the top of context 3.

The dateable finds in the pit are inconclusive as far as dating the surface is concerned. All that can be said is that it is possible that this is part of a roughly cobbled surface associated with Reeth Market, post 1694/5.

TP06 - Sawdon Cottage, Reeth

The test pit exposed the top of a good cobbled surface at a depth of 10-12cm, the top of context 2, as can be seen in Plate 2 below. The well-cobbled surface had been cut through by a trench for a ceramic drain pipe located at a depth of 65cm.

Plate 2 – TP06

The soil in the pit had been severely disturbed such that 19th century pottery was evident down to context 7 making it impossible to date the laying the cobbles. The cobbled surface is thought to have been a lane from the Green to Back Lane, pre-dating the adjacent Congregational Chapel but probably re-laid when the latter was extended in the mid-19th century.

TP09 - Burgoyne Hotel, Reeth - front garden

Plate 3 – TP09

The test pit exposed what was thought to be a possible part-cobbled surface, at a depth of around 30cm, the top of context 4 as shown in plate 3. It seemed to consist of small pieces of flag stones. This was interpreted in the test pit report as possibly the remains of a path. Significant amounts of lime mortar were present throughout the contexts, so the stones might equally be demolition waste, perhaps roof flags or the remains of a floor.

It is thought that buildings in this area were demolished in the late 18th to make way for Hill House which later became the Burgoyne Hotel. All contexts had been heavily disturbed such that it is not possible to reliably date this possible surface.

TP14 – Garden House, Reeth

Plate 4 shows what might be interpreted as a roughly cobbled surface at a depth of approximately 40cm, the top of context 5.

Dateable finds above this possible surface are 18th C or later; below was one small flake of burnt white-ware and a fairly substantial 9gm sherd of late medieval reduced ware, 15th/16thC. It is possible that this is a 17th / 18th surface but somewhat less than convincing.

Plate 4 – TP14

TP19 - Anvil Square, Reeth

The test pit exposed a roughly cobbled surface at around 20cm, the top of context 3, as shown in plate 5.

There are ten pieces of 19th C or later pot in context 3, amongst and immediately below the cobbles; there are fifty-nine sherds below the cobbles dating to the 17th/18th C or earlier. It is likely that the ten pieces of pot dated to the 19thC or later were deposited on top of the cobbled surface and worked their way into context 3.

Plate 5 – TP19

The finds indicate that this cobbled surface was probably laid in the late 17th or early 18th C.

This is contemporaneous with the granting of the Reeth market charter in 1694/5 and suggests that this area of Anvil Square was an extension of the market area. It has been suggested that this might have been a medieval 'car park' for the horses and carts of those attending the market[28].

TP20 - Reeth Green

The test pit exposed two roughly cobbled surfaces, one occupying much of contexts 3 and 4, between 20 – 30cm, the other at a depth of 50cm, the top of context 6.

The majority of the finds in contexts 5 and 6, below the higher roughly cobbled surface, are 18th C or earlier. It is likely that the three pieces of pot dated to the 19thC or later immediately beneath the cobbles were deposited on top of the cobbled surface and worked their way into context five. It is possible that the same applies to the single piece of 18th/19th C pot in context 6.

Plate 6 – TP20 context 3

On balance, it seems that this cobbled surface was probably laid in the 18th C. It might have been an extension of the market area or could be the surface of one of the tracks shown on later maps (e.g. the OS map of 1910) crossing the Green in this area.

Plate 7 shows the second of the roughly cobbled surfaces at context 6. Context 7, below this lower surface, was sterile. There were six pieces of medieval pot in context 5 above the lower surface, and one in context 6 itself.

[28] Richmond Review 2015; Market Parks; Doug Waugh; p45

The medieval pot was from four different vessels suggesting that there was a medieval dwelling in the immediate vicinity. Mortar fragments were found in context 6, raising the possibility that this area of Reeth Green was cleared of dwellings in the 18th C to make way for the market. The roughly cobbled surface might be a yard associated with the dwelling.

Plate 7 – TP20 context 6

TP21 – Reeth Green

The test pit exposed a roughly cobbled surface occupying much of contexts 3 and 4, between 20 – 30cm, similar to but rather better than the surface in the nearby TP 20.

Plate 8 – TP21

With 18th C or later finds above the roughly cobbled surface and no finds below, it seems that the cobbled surface was probably laid in the 18th C. Like the surface in TP 20 at a similar depth, this surface might have been an extension of the market area or could be the surface of one of the tracks shown on later maps (e.g. the OS map of 1912) crossing the Green in this area.

Lime mortar and charcoal were also evident in context 3, supporting the view that there might well have been a building in the vicinity at one time.

TP25 – The Buck Hotel, Reeth

A gravel layer was evident in the northern half of the test pit in contexts 2/3. It was interpreted by the digging team as being the remains of a (20thC?) path.

Plate 9 – TP25

TP29 - Daleholme, Reeth

The test pit exposed a good cobbled surface at around 58cm, the top of context 7.

There were four pieces of 19th C or later pot below the cobbles and three pieces of medieval pot; the rest of the finds in context 7 and below are probably 18thC. It is possible that the four pieces of pot dated to the 19thC or later were deposited on top of the cobbled surface and worked their way into context 8; thus it seems that the cobbled surface was probably laid in the late 18thC or early 19thC.

Plate 10 – TP29

The garden of Dalehlome is adjacent to the Swaledale Museum, originally the Wesleyan Methodist Day School built in 1836 on the site of two earlier cottages. When the Quakers built the new school in Reeth in 1862 it became a Sunday School[29]. The cobbled surface in the garden of Daleholme is thought to be a play area for the children at the school. The near

[29] Helen Bainbridge, Curator, Swaledale Museum

60cm of soil above the cobbled surface was probably brought in to level the garden when the house was built in the early 20th C.

TP32 – Reeth Green

The test pit exposed a surface comprising well-laid large cobbles occupying much of contexts 2 and 3, from a depth of between 10cm to 30 cm. The cobbled contexts were heavily disturbed with finds ranging from Medieval to Modern.

Plate 11 – TP32

The finds below the cobbles were 17th/18th C or earlier apart from 2 small pieces of 19th/Modern whiteware which might well have been worked down from above the cobbled surface. The finds are consistent with the cobbles having been laid in the late 17th C or early 18th, around the time of the Reeth Market Charter, 1694/5 as an extension to the currently visible cobbled area.

TP 34 – Reeth Green

Plate 12 – TP34

The soil in this pit on the Green in front of the Burgoyne Hotel had been heavily disturbed by the laying of a cast-iron water pipe encountered at ca. 75cm. The group of possible cobbles encountered at context 3, around 20cm, cannot be dated but may be the remains of an extension to the market area. They do not seem to be on the line of any known track.

TP40 – Tynedale, Reeth

Context 5 produced a rough cobbled surface which could possibly have been a yard or the interior of a building. It seemed to continue to the South to a lower depth.

Plate 13 – TP40

The stones making up the surface were approximately 8-10 cm in diameter. There was a lot of lime mortar at this depth suggesting that this was a demolition layer. The finds in context 5 were principally 18th C with six small pieces of the ubiquitous 19th C whiteware.
The small stones continued through context 6. This context yielded one piece of 12th/13th C 'Tees Valley Ware' and three pieces of black-glazed red earthenware.

The finds are consistent with the surface being laid in the 17th / 18th C

TP46 – Smithy site, Reeth Green
This was the site on one of two smithies in Reeth until the mid-20th C.

Context 5 produced a shallow layer of rough cobbles.
There was no evidence of any activity in the medieval and late medieval periods. There is good evidence of occupation or other significant activity in the 17th century and through into the modern period, including large amounts of slag and metal.

Plate 14 - TP46

Context 4 produced a significant amount of lime mortar, suggesting the demolition of an earlier building nearby, possibly in the 18th C; this would be consistent with the deeds of the adjacent Congregational Chapel which refer in 1797 to "all that Messuage or Dwellinghouse lately consisting of Two Tenements but now partly demolished and the remaining part a Blacksmiths Shop".

Although it is possible that earlier dating evidence was below the excavated level as the natural was not reached, the finds are consistent with a surface being laid in the 18th C to form the yard of the 18th C smithy referred to above.

Conclusions

Thirteen of the thirty-six test pits in Reeth revealed fourteen potential cobbled surfaces- TP20 revealed two, one above the other. All these surfaces have been considered above. Five are somewhat less convincing of which three cannot be dated (TP01, TP09, TP25) whilst the remaining two, if indeed they are roughly cobbled surfaces, would seem to date to the 17th/18th C.

Of the remainder, one of the well laid cobbled surfaces is thought to be a lane leading from the Green to Back Lane (TP06).

Four of the pits contained rough cobbling with evidence suggesting they were laid in the 17th/e.18th C and associated with the market (TP19, TP20, TP21, TP32); at least one of these (TP20) might be the surface of a track crossing the Green; see plate 16 below.

The lower surface in TP20 would seem to be medieval (or earlier) and possibly associated with a medieval dwelling in the immediate vicinity; perhaps a yard.

The well laid cobbled surface in TP29 is probably the play area of the nearby 19th C Methodist Sunday School.

The remaining two surfaces would seem to be yards, one (TP46) associated with the 18thC (or earlier) smithy, the other (TP40) with a demolished building.

Plate 15 shows this analysis in pictorial form.

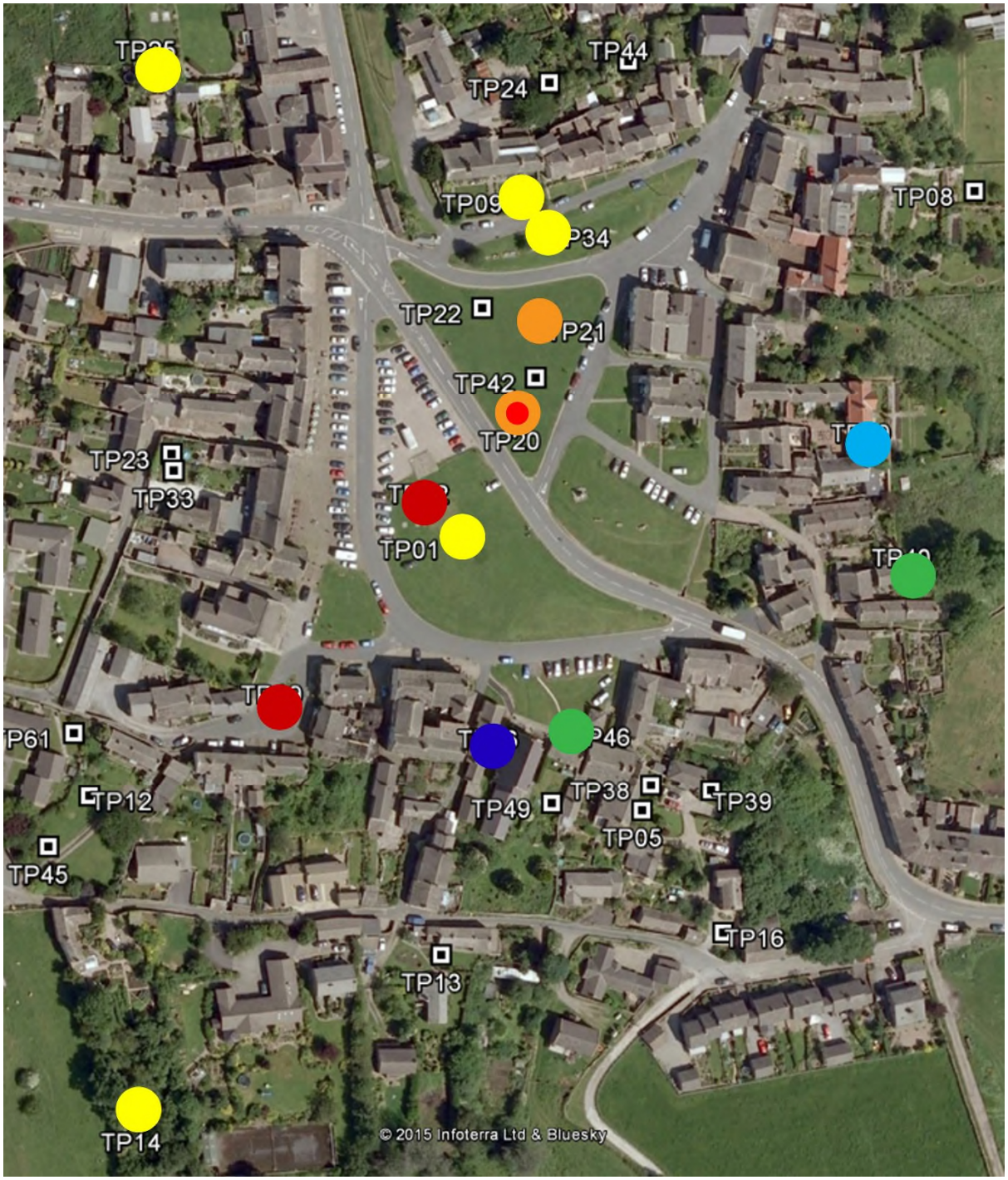

Plate 15 - the location of the cobbled surfaces

Key

Yellow	: possible roughly cobbled surface; not very convincing
Red	: cobbled surface, probably late 17th /e.18th C, and part of market area
Orange	: roughly cobbled surface, probably early 18thC, part of market area or surface of track across the Green
Orange /Red	: medieval or earlier roughly cobbled surface, possibly a yard
Dark Blue	: cobbled surface; lane from the Green to Back Lane
Light Blue	: cobbled surface, part of Sunday School play area
Green	: roughly cobbled surface, probably a yard

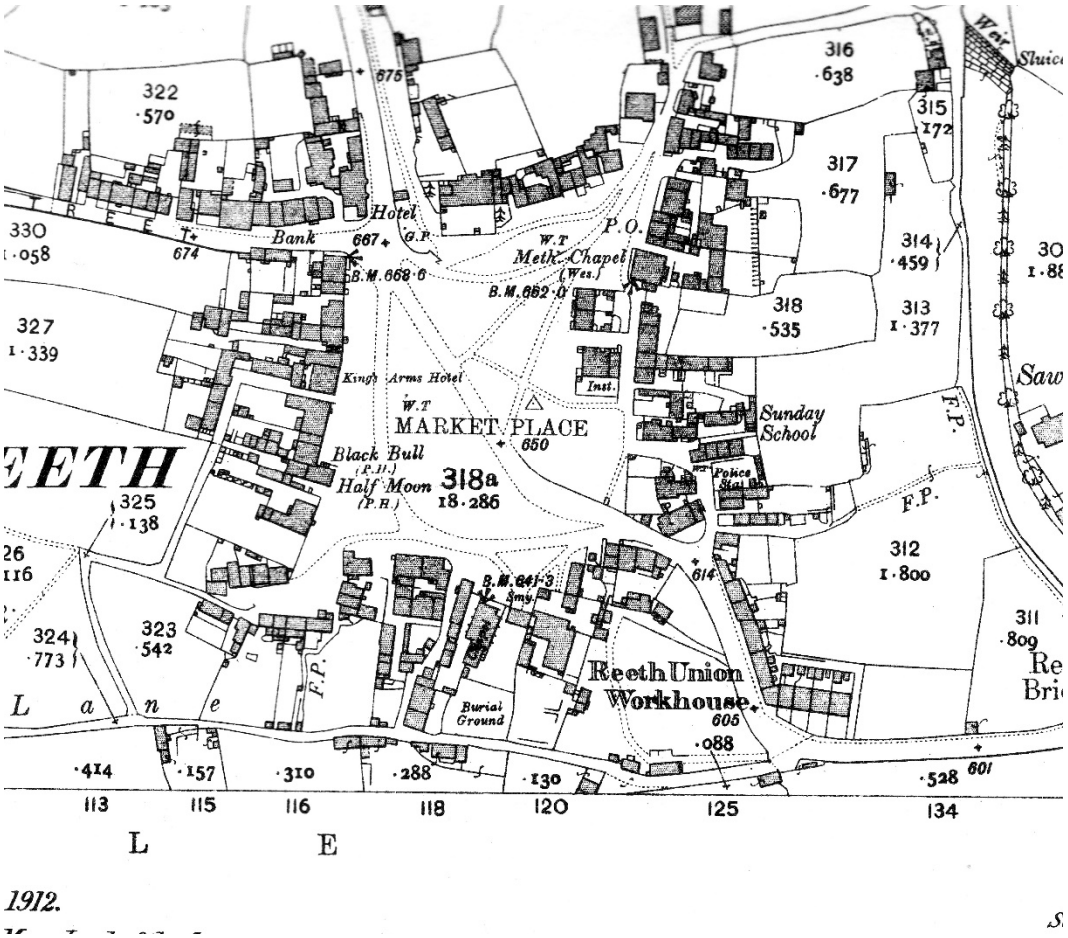

Plate 16 - an extract from the 1912 OS map showing a number of tracks across the Green

Alan Mills
May 2016

11. Acknowledgements

Thanks to all those residents of Fremington, Grinton and Reeth who offered their gardens for a test pit, to Grinton and Reeth Parish Councils, the Yorkshire Dales National Park Authority, Professor Carenza Lewis and the Swaledale Museum for their support. Thanks also to Ron & Sue Bailey, Simon & Mandy Barningham, Paul & Claire Brown and Swaledale Estates for allowing us to dig pits and carry out surveys on their land. Thank you to all who joined in whether in digging, surveying, supporting or in any other way. You have helped make the Big Dig the big success it is. Finally, thanks to the Heritage Lottery Fund; without their support this project would not have been possible.

UNIVERSITY of BRADFORD

October 2015

Grinton Geophysical Field School

Grinton, North Yorkshire

Geophysical Survey Report

Mary K. Saunders BA MSc
Department of Archaeological Sciences
University of Bradford, Richmond Road, Bradford, BD7 1DP
07801 074698
m.k.saunders@student.bradford.ac.uk
www.bradford.ac.uk

Grinton Geophysical Survey Field School
Grinton
North Yorkshire

Geophysical Survey Report

Project No: SWAAG001

MK Saunders BA MSc
University of Bradford
Richmond Road
Bradford
BD7 1DP

Project Manager: Mary K. Saunders

Report and figures: MK Saunders

Fieldwork: Members of Swaledale and Arkengarthdale Archaeology Group

Project File Location:
C:\Users\Mary\Google_Drive\Dropbox\PhD\Documents\Reports\SWAAG\SWAAG_Grinton_191015.odt

Final issue by: MKS	Date: 29/10/15

Summary of works

This work was undertaken as part of a weekend field school on geophysical survey and geophysical data processing given to members of the Swaledale and Arkengarthdale Archaeology Group (SWAAG). The workshop was delivered by Mary K. Saunders (University of Bradford), on behalf of the Yorkshire Dales National Park Authority and was held on the 12th and 13th September 2015.

The geophysical survey was undertaken over the course of one day, with the primary objective being to allow SWAAG members the opportunity to use a Bartington Grad 601-2 dual gradiometer and a Geoscan RM85. As such, the area covered during the survey was relatively small, particularly during the earth resistance survey.

Despite the size of the survey, the results obtained show several anomalies of interest, particularly within the context of previous work carried out by SWAAG to the west and south-west of the current survey area. Of greatest interest is a sub-circular anomaly in the north west corner of the magnetic survey, which appears to correspond to a depression visible on the ground. Although this response is considerably stronger than what one might expect over a generic archaeological deposit, it is not strong enough to be suggestive of a feature relating to intensive industrial processes, such as a kiln. The results of the previous work hint at the area to the south and south-west as having some kind of non-domestic function and this anomaly may be related to that. Excavation would be required to establish the precise nature of the feature giving rise to this response.

The earth resistance data, which only covered part of the magnetic survey area, also showed a sub-circular high resistance anomaly encircling the location of the response mentioned above and this could suggest the presence of an associated structure, although this interpretation must be cautious given the coarse resolution of the data.

Excavation would be required to definitively determine whether a holloway is present along the base of the escarpment and the interesting sub-circular anomaly, together with another sub-circular response in the adjacent survey area, would also benefit from intrusive investigation. These responses may also be candidates for further geophysical investigation using more specialised techniques such as electrical resistivity tomography (ERT) or ground penetrating radar (GPR).

Contents

1. Overview 1
2. Site Background 1
  2.1. Location 1
  2.2. Geology, pedology and topography 2
  2.3. Ground and weather conditions 3
3. Archaeological Background 3
4. Survey aims 4
5. Survey Methodology 4
  5.1. Outline methodology 4
  5.2. Magnetic survey 5
  5.3. Earth resistance survey 5
  5.4. Survey location 6
6. Results 6
  6.1. Magnetic survey 6
  6.2. Earth resistance survey 8
7. Discussion 10
8. Conclusions and and suggestions for future work 11
9. Acknowledgements 11
10. Bibliography 11
Appendix 1. Technical Background 13
  Appendix 1.1. Setting out and tying in 13
  Appendix 1.2. Magnetic survey 13
  Appendix 1.3. Earth resistance survey 13
Appendix 2. Data Processing 15
  Appendix 2.1. Magnetic survey 15
  Appendix 2.2. Earth resistance survey 15

Figures

Figure 1.	Location of survey area	1:2500
Figure 2.	Processed gradiometer data	1:500
Figure 3.	Gradiometer survey interpretation	1:500
Figure 4.	Processed gradiometer data overlain with basic aerial photographic transcription	1:500
Figure 5:	Raw gradiometer data	1:500
Figure 6.	Gradiometer data, XY trace plot	1:500
Figure 7:	High pass filtered earth resistance data	1:500
Figure 8.	Earth resistance survey interpretation	1:500
Figure 9.	High pass filtered earth resistance data overlain with basic aerial photographic transcription	1:500
Figure 10.	Processed earth resistance data	1:500
Figure 11.	Raw earth resistance data	1:500

Plates

Plate 1: Looking south-west across the survey area. An escarpment thought to indicate the edge of a trackway can be seen in the foreground. 2

Plate 2: One of the SWAAG members undertaking magnetic survey. 5

1. Overview

Geophysical survey was undertaken by members of the Swaledale and Arkengarthdale Archaeology Group (SWAAG) under the supervision of Mary K. Saunders, University of Bradford. The work was designed primarily as a training exercise and formed part of a weekend workshop on geophysical survey and geophysical data processing. This was delivered to SWAAG members on behalf of the Yorkshire Dales National Park Authority.

The survey area was located in the village of Grinton in North Yorkshire, around 260 m south-south-east of Grinton Bridge (see Figure 1). A series of earthworks are visible on aerial photographs of the area and these are thought by SWAAG to represent medieval toft and crofts, together with an associated holloway. An area to the west and south west of the current survey area were previously investigated by SWAAG members using magnetic and earth resistance survey and the data generated by this work was reprocessed by society members during the first day of the weekend course. This earlier survey showed greater magnetic enhancement than is commonly seen over archaeological features and this, together with other aspects of the data, suggest that this area may have had a light industrial function.

During the course of the weekend workshop, 0.32 Ha of magnetic survey (8, 20m grids) and 0.08 Ha of earth resistance survey (2, 20m grids) were collected. The SWAAG volunteers were also trained in setting out survey grids using an optical square and tape measures. Although this work was primarily a training exercise, it was hoped that the survey would shed further light on the extant earthworks also visible in this area.

The workshop took place over the weekend of the 12 th and 13th September 2015. The work was undertaken, and this report was prepared, in accordance with the standards and guidance specified by English Heritage (2008) and the IfA (2008; 2011).

2. Site Background

2.1. Location

The area of investigation is centred on SE 048 983 and lies approximately 260 m south-south-east of Grinton Bridge, immediately to the south of the hamlet of Grinton in North Yorkshire (Figure 1). The position and size of the survey area was determined by the number of full 20 m grids which could be easily fitted into the field and the location of the

previous work. The location of magnetic and earth resistance survey areas can be seen in Figure 1.

Plate 1: Looking south-west across the survey area. An escarpment thought to indicate the edge of a trackway can be seen in the foreground.

2.2. Geology, pedology and topography

The survey area lies at a height of 190 m O.D., around 260 m south of the River Swale, on the edge of the flood plain. At the northern edge of the field, there is a prominent escarpment (see Plate 1), postulated as being the edge of an early trackway running into the village, but which may equally be a natural river terrace. The field slopes gently upwards from north to south, with a number of earthworks visible, particularly in the western part of the survey area.

The underlying solid geology is formed by limestone containing subordinate sandstone and argillaceous rocks, part of the Alston Formation and dating to the Carboniferous period. This is overlain by alluvial fan deposits of sand and gravel in the western half of the field and Devensian Till in the eastern portion of the area. Both of these superficial deposits date to the Quaternary Period (BGS 2015). The soil found in the survey area is a freely draining, slightly acidic loamy soil with low fertility (Cranfield 2015).

2.3. Ground and weather conditions

The short pasture in the survey area made it relatively easy to set out grids and collect data, however, some of the more marked changes in topography caused some difficulties in maintaining a consistent pace during magnetic survey and may have contributed to stagger error within the resultant data.

There was torrential rain the day before the work was undertaken, however, since the period prior to this had been very dry, conditions for earth resistance survey, and the detection of electrical contrast, should have been almost ideal.

3. Archaeological Background

A brief a summary of the archaeological background of the area is presented here. This is based on excavation and research previously conducted by SWAAG.

The earthworks visible in this field and in the field to the south have been identified as possible medieval tofts and crofts, with the escarpment running along the northern edge of the survey area interpreted as a holloway. This is thought to indicate the original line of the road coming in from the east and suggests that this entered the village several hundred metres further south than the modern route (Muir 2007: 106). A 1701 petition to the Justices of the Peace at Northallerton (SWAAG 2015a) reports of a major flood in Grinton that destroyed several houses and a bridge and it has been suggested that this refers to the same area of tofts and crofts mentioned above, however there is no concrete evidence that is the case. Maps dating from 1712 and 1841 show nothing of particular note in the vicinity of the the survey area (SWAAG 2015b)

The most compelling evidence for the occupation and use of this area comes from test pits excavated by SWAAG during the course of their Big Dig project (SWAAG 2015c) (see Figure 1). Immediately to the west of the current survey area, test pit 58 indicated that there had been occupation or intensive activity in this vicinity during the 13 th and 14th centuries and again during the 17 th and 18th centuries, while in the field to the south, the pottery recovered from test pit 57 suggested intense 13 th and 14th century activity and probable agricultural manuring throughout the later medieval and post-medieval periods.

4. Survey aims

The survey was intended to give members of SWAAG the opportunity to undertake earth resistance and magnetic survey, using a Bartington Grad 601-2 and Geoscan RM15, in an area of some potential archaeological interest within their local area. The participants were also trained in how to set out grids using an optical square, with the size of grid and the method of setting out within each grid differing to what they had encountered previously.

5. Survey Methodology

5.1. Outline methodology

The weekend workshop concentrated on the use of magnetic and earth resistance survey, together with low-tech methods of survey set out. SWAAG, as an organisation, have their own Bartington Grad 601-2 fluxgate gradiometer, together with a Geoscan RM85 and were desirous that more members were trained to use these instruments. Survey grids were set out using an optical square in order to demonstrate that it is possible to use a very simple device to achieve a fast and accurate set out, without the need to use a GNSS system. Participants were also encouraged to think about how to use field boundaries and other features to establish a solid baseline on which the rest of the grid would be based. Although the society often uses 30 m grids, the author prefers to survey using 20 m grids and since these also fit more easily into small fields, this was the grid size chosen here. The method of data collection within the grids was also determined by the professional practice of the the author and was new to the workshop participants.

A summary of the techniques and instrumentation employed during the survey is outlined below:

Magnetometer survey	
Instrument	Bartington Grad601-2
Grid size	20 by 20 m
Sampling along the traverses	0.25 m
Traverse intervals	1 m
Collection mode	Zig-Zag
Total area covered	0.32 Ha (8 grids)

Earth resistance survey	
Instrument	Geoscan Research RM85
Array	Twin probe
Configuration	Parallel twin, 4 probe
Probe spacing	0.5 m
Grid size	20 by 20 m
Sampling along the traverses	1 m
Traverse intervals	1 m
Collection mode	Zig-Zag
Total area covered	0.08 Ha (2 grids)

5.2. Magnetic survey

Magnetic survey followed a standard methodology, as employed by the author in commercial contexts. Magnetic surveys over these types of superficial geological deposits can give mixed results, particularly where the parent material is a carboniferous limestone, as is the case here (EH 2008: 15), however, since the previous survey by SWAAG had produced useful data, this indicated that magnetic survey would also be effective in this case.

Plate 2: One of the SWAAG members undertaking magnetic survey.

5.3. Earth resistance survey

Earth resistance survey was undertaken using a traverse and sample interval of 1 m. This comparatively low resolution was chosen simply to allow a larger area to be covered in a short amount of time and would not routinely be employed in other circumstances.

5.4. Survey location

The precise location of the survey within the Ordnance Survey grid was determined by one of the SWAAG members using the society's GNSS system.

6. Results

6.1. Magnetic survey

Minimally processed magnetic survey data is shown in Figure 2, while the anomalies referred to in the following text are shown on an interpretation diagram in Figure 3. The relationship between the gradiometer data and earthworks visible on a vertical aerial photograph can be seen in Figure 4, while the raw data and an XY trace are provided in Figures 5 and 6, respectively. The processed data are displayed at a plotting level of -2 to 4 nT. This is a broader plotting range than would routinely be chosen but reflects the level of enhancement encountered across the survey area.

The anomaly of greatest interest in this survey (1) measures approximately 2 to 3m in width and forms a doughnut-like, sub-circular feature with dimensions of some 10 m by 7m. Although there is a large ferrous response evident immediately to the east (2), the strength and form of (1) indicates that it represents some kind of archaeological feature, although it is unclear what this may be. The maximum value of the measured response is around 12 nT and although much stronger than the anomalies often obtained over standard features like pits and ditches, this level of enhancement is not indicative of something like a kiln, although it could be related to some sort of light industrial process. The location of this anomaly is contained by an area of high resistance (B) in the earth resistance survey and this may suggest that it is some type of pit or other negative feature. The author has discussed this particular response with another experienced geophysicist, with neither being able to offer a satisfactory interpretation for it. The conclusion was reached that this would be an interesting anomaly over which to carry out further specialised geophysical survey or small scale excavation.

Immediately to the south of anomaly (1) are a pair of positive, linear responses (3). In places, these anomalies are not particularly coherent, but their correlation with the extant earthworks suggests that they are indicative of enhanced material, possibly relating to agricultural practices, being deposited against an extant feature.

An area of general magnetic enhancement (4) can be seen between and around anomalies (3). This may indicate that this area has been used or treated in a different way to the area to the east, perhaps through differential manuring or other similar agricultural activities.

A strong, circular anomaly is visible on the eastern limit of the survey (5). The response may well represent a pit or similar type of feature, however, it is impossible to say anything further about its origin.

A short linear response (6) seems to equate with the eastern portion of the escarpment, however, this anomaly does not appear to continue to the west along the line of the earthwork, but instead becomes much weaker and turns uphill towards the centre of the field (7). If the escarpment did once form the southern boundary of a major medieval route way, one might expect that corresponding anomaly running parallel to it, particularly as magnetic enhancement is evident over other features (e.g. 3) thought to date to the same period. It should be noted that in many cases, trackways appear as negative anomalies.

A further weak, linear response (8), together with trends (9) and (10) may represent the continuation of (5) and (6) and seems likely to relate to recent agricultural activity.

A curvilinear positive anomaly (11) may, in part, equate with the route between the northern and southern gates within this field, although it may also have been caused by other agricultural practices. Anomaly (12) is a small, relatively weak response, thought likely to be indicative of the presence of a small pit. Again this is likely to reflect the agricultural activities that have occurred in this field through time.

An area of positive anomalies(13) is evident to the east of the large response (1), although these have been partly obscured by the presence of the large ferrous anomaly (2). These responses are not particularly coherent in plan, although they do seem to roughly equate with the location of the escarpment and a second earthwork to the south. It is possible that these anomalies could reflect the build up of enhanced material from the area to west, particularly if (1) does relate to light industrial activity. Equally, the responses may be the result of manuring with enhanced material, or another agricultural activity.

A further group of responses (14) can be seen in the north-western corner of the survey area, immediately to the west of anomaly (1). These appear to be bounded by some of the extant earthworks which may indicate that this area had a slightly different function to the adjacent area to the south. It is again possible that these amorphous anomalies relate to the function and use of anomaly (1).

A series of weak positive responses are evident on the northern edge of the survey (15). there are very difficult to interpret, both because of their position on the edge of the dataset but also because of their proximity to the field boundary. An agricultural origin seems most probable, however, other explanations are also possible.

A negative, linear anomaly (16) seems to be associated with a series of trends (17) crossing the field from north-west to south-east. These may be associated with drainage features within the field or other agricultural activities.

A number of weak trends (18) seem to form a reasonably coherent pattern within the data. Since these are approximately aligned with anomalies (3), it is possible that they are contemporary with them, should this be the case, then it is likely that these trends are indicative of medieval cultivation. It is also possible that the trends reflect the orientation of underlying modern field drains.

The large ferrous response (2) seems likely to be indicative of substantial modern disturbance, while anomaly (19) equates with the magnetic field generated around the electricity pole positioned at the edge of the field. To the west, a further large ferrous response (20) seems to relate to the position of the field gateway, where modern ferrous debris has collected over time. Other ferrous responses (21) found all across the survey area relate to small pieces of ferrous debris within the top soil, most likely originating from modern agricultural activities within this area.

6.2. Earth resistance survey

High pass filtered earth resistance data is shown in Figure 7, while the anomalies referred to in the following text are shown on an interpretation diagram in Figure 8. The relationship between the earth resistance data and earthworks visible on a vertical aerial photograph can be seen in Figure 9, while the processed and raw data are shown in

Figures 10 and 11, respectively. The high pass filtered data are displayed at a plotting level of -2 to 4 nT.

Although the earth resistance survey only covered a small area and at a coarse resolution, the data still contain several anomalies of interest, particularly when viewed in conjunction with the magnetic survey and transcription of the earthworks.

The sub-circular area (A) corresponds with anomaly (1) in the magnetic survey, although the former is noticeably larger than the later, and this region sits within a depression created by several of the extant earthworks. The high resistance anomalies (B) surrounding (A) could be indicative of the presence of high resistance material such as stone or compacted earth, with regularity of the response in plan perhaps hinting at the presence of some sort of structure, however, the very coarse sampling used in this survey should also be born in mind. It is possible that the high resistance responses are the result of extant earthworks draining more freely that surrounding areas, however, this does not give a satisfactory explanation for the magnetic responses which were also observed.

To the south of (A) and (B) are two parallel lines of slightly segmented high resistance anomalies (C). These appear to correspond to the location of the extant earthworks and are likely to be indicative of more solid material used to create a bank or wall and/or could be a reflection of the differential drainage of the area after heavy rain. The low resistance areas (D) between and adjacent to these responses probably shows areas in which water has collected against the extant features, creating a localised, very conductive matrix.

Low resistance areas (E) seem to be interspersed around high response (B) and may relate to it. However given that this data has been high pass filtered, it is possible that these low resistance area are partly an artefact of applying this particular process.

Other obvious responses, such as (F), are difficult to interpret because they lack context within the survey, while other small scale and weaker anomalies seem likely to indicate small pedological changes. A much larger area would have to be investigated, at a much higher resolution, in order to determine if any of these responses are of archaeological significance.

7. Discussion

This area investigated by this survey seems to have had a predominantly agricultural function, with some very interesting responses seen at the western end, where a number of extant earthworks remain visible. Of greatest interest is a large sub-circular doughnut-shaped, positive magnetic anomaly which seems to sit within a high resistance area identified by the earth resistance survey. This is a very unusual response and interpretation is therefore difficult, however, although not extremely magnetically enhanced, the response may relate to some kind of light industrial process, particularly if the level of enhancement seen in the adjacent survey area is also taken into consideration. Further areas of enhancement around this major anomaly, particularly to its east, also suggest that material associated with this feature may have been deposited in these areas. This anomaly would certainly warrant further investigation, through non standard geophysical survey techniques such as ERT or GPR and by excavation.

Areas of slightly increased magnetic enhancement in the western portion of the survey area, apparently enclosed by earthworks, are indicative of these areas having had a slightly different function from the area to the east. This may suggest that manuring was more intensive or that these areas also had a function relating to the large anomaly to the north (1).

Although the escarpment at the north of the field shows a weak magnetic response at the eastern end, there is no specific anomaly, positive or negative, which is indicative of the location of the postulated holloway. It is possible that the terrace visible in the field is a natural feature, relating to the course and behaviour of the River Swale in the past. The presence of alluvial fan deposits in this area (see 2.2.) certainly suggests that water borne material was dumped here during the Quaternary period. It is also possible that if a holloway did run through this area, its construction, maintenance and use have not generated any measurable geophysical contrast, however, given that paths and trackways of many dates have been detected in previous work, this seems unlikely. A test pit may be the only means of conclusively determining whether a routeway is present in this vicinity.

8. Conclusions and and suggestions for future work

Although small scale, this survey has generated a number of interesting responses which warrant further study. It is unclear whether the extant earthworks are indicative of the reputed presence of medieval tofts and crofts, but it does seem likely that the area did have a quite specific function. Targeted excavation over the sub-circular response in this survey, together with another sub-circular anomaly seen in the area to the south, may shed light on what this use may have been.

It is clear from the pottery recovered from the area (SWAAG 2015c) that intense activity occurred in this area during the 13th and 14th centuries but it may be that this was not related to domestic settlement, with the most likely alternative explanation being the presence of a small-scale 'cottage' industry of some description.

Although, due to the presence of the prominent escarpment, the route of a medieval holloway has always been thought to run through this field, there is no geophysical evidence from this particular survey to support these claims and the escarpment may be a natural feature relating in some way to the river and flood plain. Excavation would be required to determine whether this feature is indeed man made and to determine if a holloway also exists in this area.

9. Acknowledgements

The author would particularly like to thank the members of SWAAG for their hard work in collecting the survey data outlined in this report. Mike Walton was also instrumental in setting up the field school and was kind enough to provide the author with the relevant survey data and the archaeological background information referred to in this document.

10. Bibliography

British Geological Survey (BGS) (2015) *Geology of Britain Viewer,1:50000 Data*. Available at *mapsapps.bgs.ac.uk/geologyofbritain/home.html* Accessed 21st October 2015

Cranfield University (Cranfield) (2015) *Cranfield Soil and Agrifood Institute: Soilscapes.* Available at *http://www.landis.org.uk/soilscapes/#* Accessed 21st October 2015

English Heritage (EH) (2008) Geophysical Survey in Archaeological Field Evaluation. Swindon: English Heritage

Gaffney CF and Gater JA (2003) Revealing the buried past: geophysics for archaeologists Stroud: Tempus Publishing Ltd

Institute for Archaeologists (IfA) (2008), Standard and Guidance for Archaeological Field Evaluation. Reading: Institute for Archaeologists

Institute for Archaeologists (IfA) (2011), Standard and guidance for archaeological geophysical survey. Reading: Institute for Archaeologists

Muir R (2007) Be your own landscape detective. Sutton Publishing, Stroud.

SWAAG (2015 a) Transcription of a petition to the Justices of the Peace at Northallerton Session (attributed to 15th July 1701). SWAAG: Unpublished.

SWAAG (2015 b) *1841 tithe map and 1712 map* in Grinton A3 Panel. SWAAG: Unpublished.

SWAAG (2015c) Swaledale Big Dig – An analysis and interpretation of pottery finds from 2008 to 2015 test pits. SWAAG: Unpublished.

Appendix 1. Technical Background

Appendix 1.1. Setting out and tying in

The limits of the survey area were determined using an optical square and tape measures and were located in the OS grid by another member of SWAAG using the society's survey grade GNSS system. These data were then post processed and the corrected information provided to the author as a DXF file readable in AutoCAD. SWAAG should be contacted directly for this locational information.

Appendix 1.2. Magnetic survey

Magnetic survey was undertaken using a fluxgate gradiometer. This type of instrument measures the strength of the magnetic field at any given location and is known as a passive technique because no electrical currents or magnetic fields need to be passed directly through the ground surface in order to obtain a measurement. The coils used in this type of magnetometer are very sensitive along one axis and because they are usually mounted vertically, they preferentially measure the Z component of the surrounding magnetic field. In very simple terms, where an increase in magnetic susceptibility is encountered a change occurs in the frequency of an alternating field, in the first coil, directly related to the level of the enhancement present, and this is detected within a secondary coil. A gradiometer uses two magnetometers mounted vertically, allowing broad-scale background variations to be filtered out. This means that the recorded measurements only relate to small scale variations in the immediate vicinity of the instrument. The Bartington Grad601-2 used here employs a 1m magnetometer spacing, with measurements expressed in nano Tesla (nT) (Gaffney and Gater 2003: 40 - 41).

Appendix 1.3. Earth resistance survey

Earth resistance survey was undertaken using a Geoscan RM85 earth resistance meter, employing a twin probe array, in a parallel twin configuration. In this arrangement, two readings, on adjacent traverses, can be taken at each measurement point, thus increasing the speed of the survey.

Earth resistance survey is considered as an active technique because a current must be passed into the ground in order to achieve a measurement. Any earth resistance array requires the use of four electrodes, two current electrodes and two potential electrodes.

As a current is passed between the current electrodes, the potential difference across it is sampled by the potential electrodes and this value mathematically converted into resistance. Where the resistance of the subsurface changes due to the presence of underlying archaeological features, the measured potential difference changes accordingly. In the twin probe array, now standard for archaeological geophysical surveys, the configuration uses a pair of mobile and a pair of remote probes, with each pair made up of one current and one potential electrode. The mobile probes are used for measurement, while the remote probes remain in a fixed location. Since the 1970s, the twin probe array has been generally accepted as the most appropriate choice for planar archaeological survey for a number of practical and response related reasons (see (Schmidt 2013: 114) for a fuller discussion). Earth resistance measurements are expressed in ohms (Ω).

Appendix 2. Data Processing

Appendix 2.1. Magnetic survey

The magnetic survey was downloaded using the Bartington Grad601 software and processed using DW Consulting Terrasurveyor. The very minimum of processing was applied to the data. A 'De-stripe' was used to correct for heading error between lines, while any stepping errors were also corrected using 'De-stagger'. Following this, the data interpolated twice in y-axis and once along the x-axis to improve their appearance. XY trace plots were also generated.

Appendix 2.2. Earth resistance survey

The earth resistance data were downloaded directly into Terrasurveyor before minimal processing was applied. The data were first 'cleaned' to correct dummy values which had been handled incorrectly by the software, before a 'De-spike' was used to correct for errors in contact resistance. The data were then interpolated in the x and y axes to allow them to be interpreted more easily. The raw data were then separately high pass filtered. This process has the effect of removing large scale background changes, such as those caused by the underlying pedology and geology and highlights small-scale changes in resistance which are potentially of archaeological significance. Following the application of the high pass filter, these data were also interpreted in X and Y to improve appearance. At this stage it was decided that the high pass filtered data were of most use in making an archaeological interpretation of this survey.

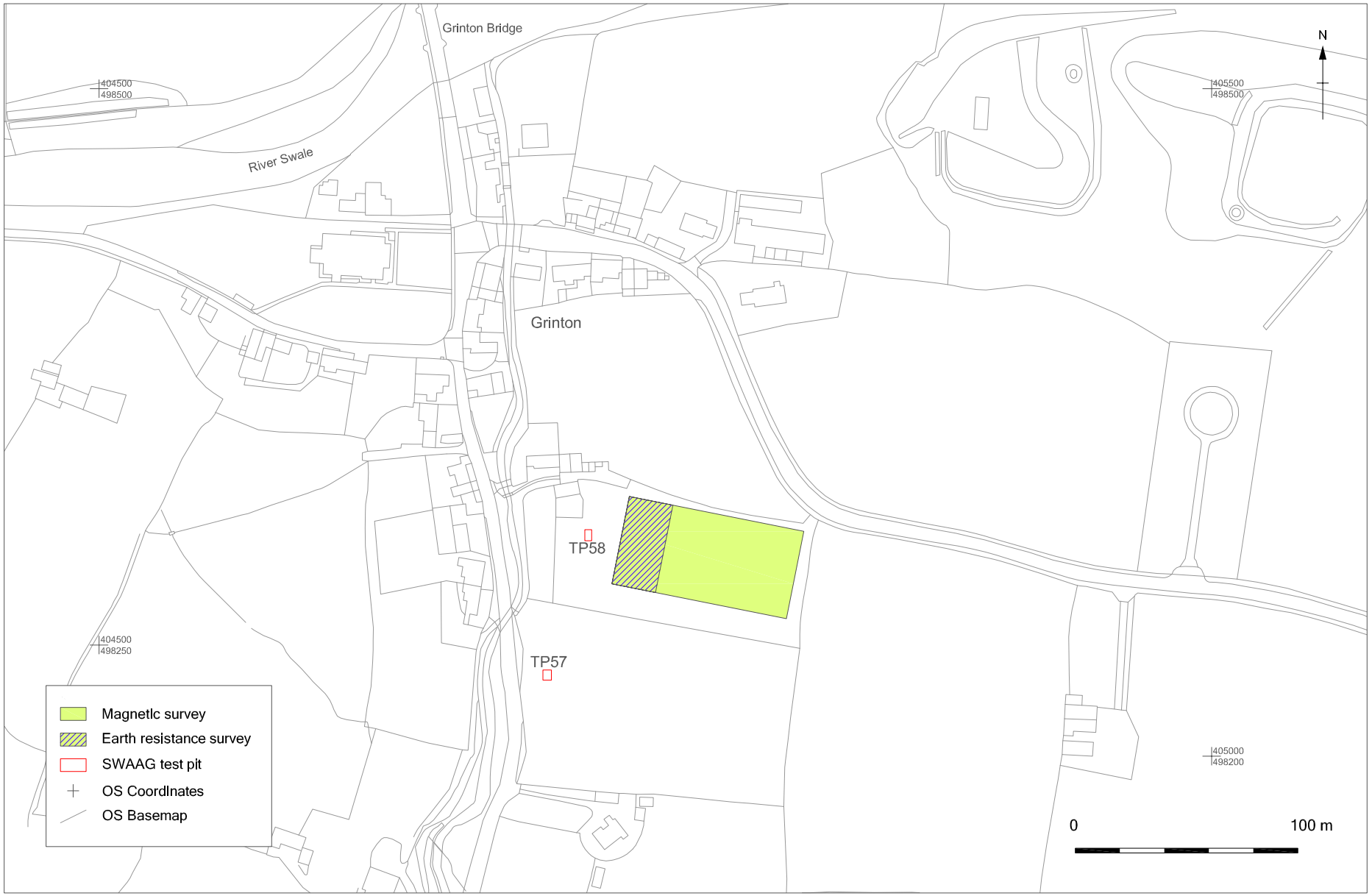

Figure 1: Location of survey areas

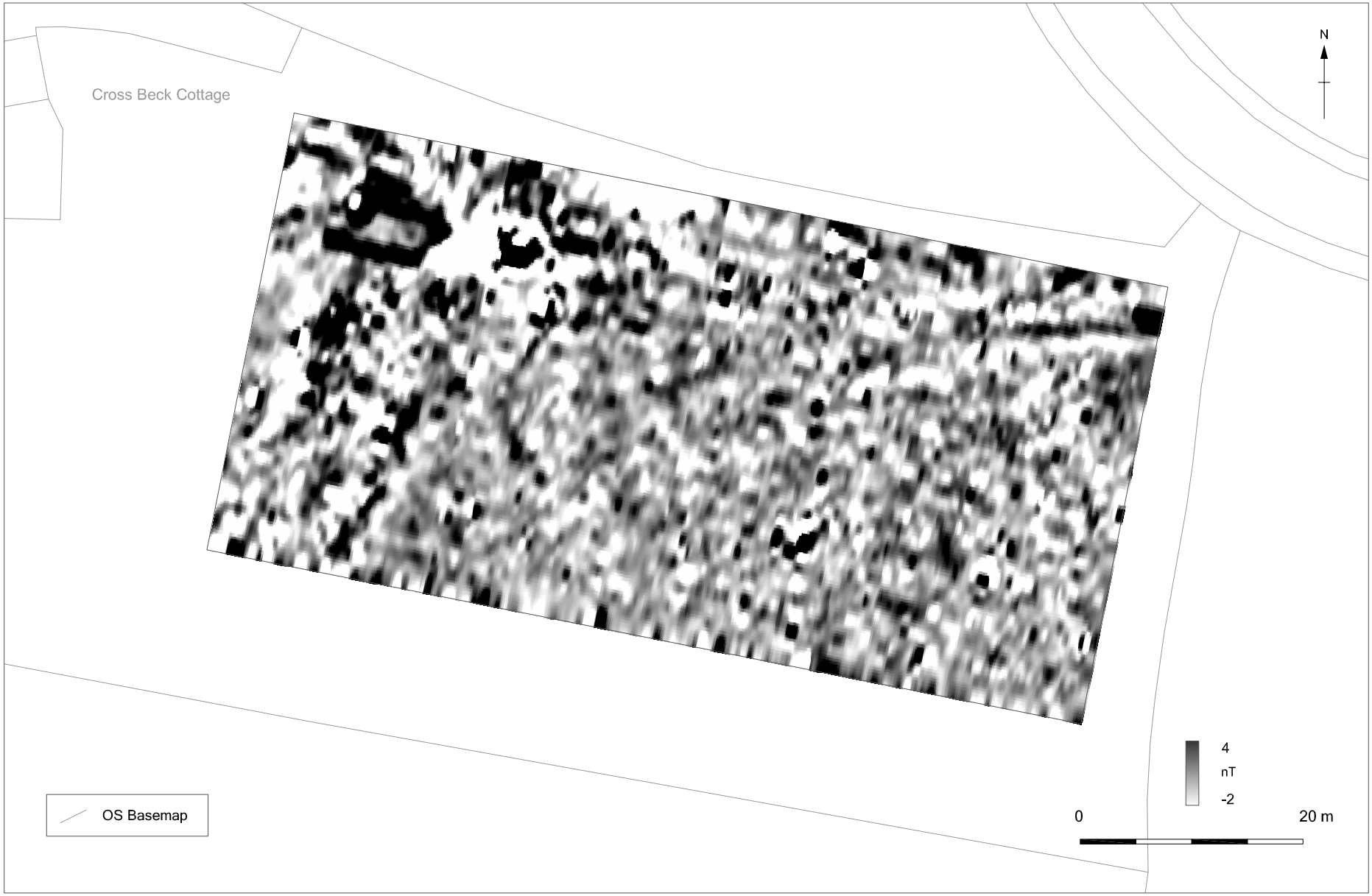

Figure2: Processed gradiometer data

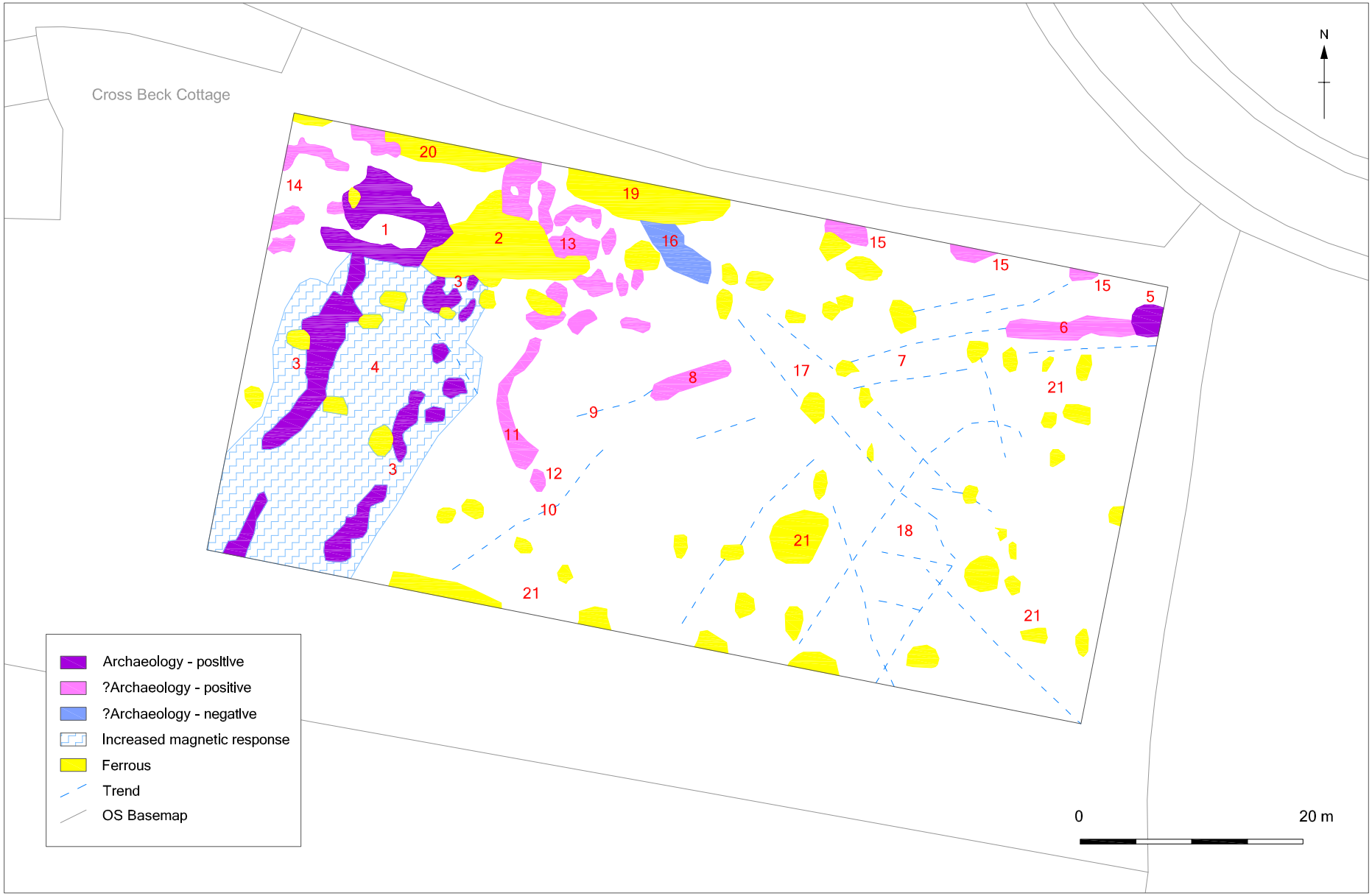

Figure 3: Gradiometer survey interpretation

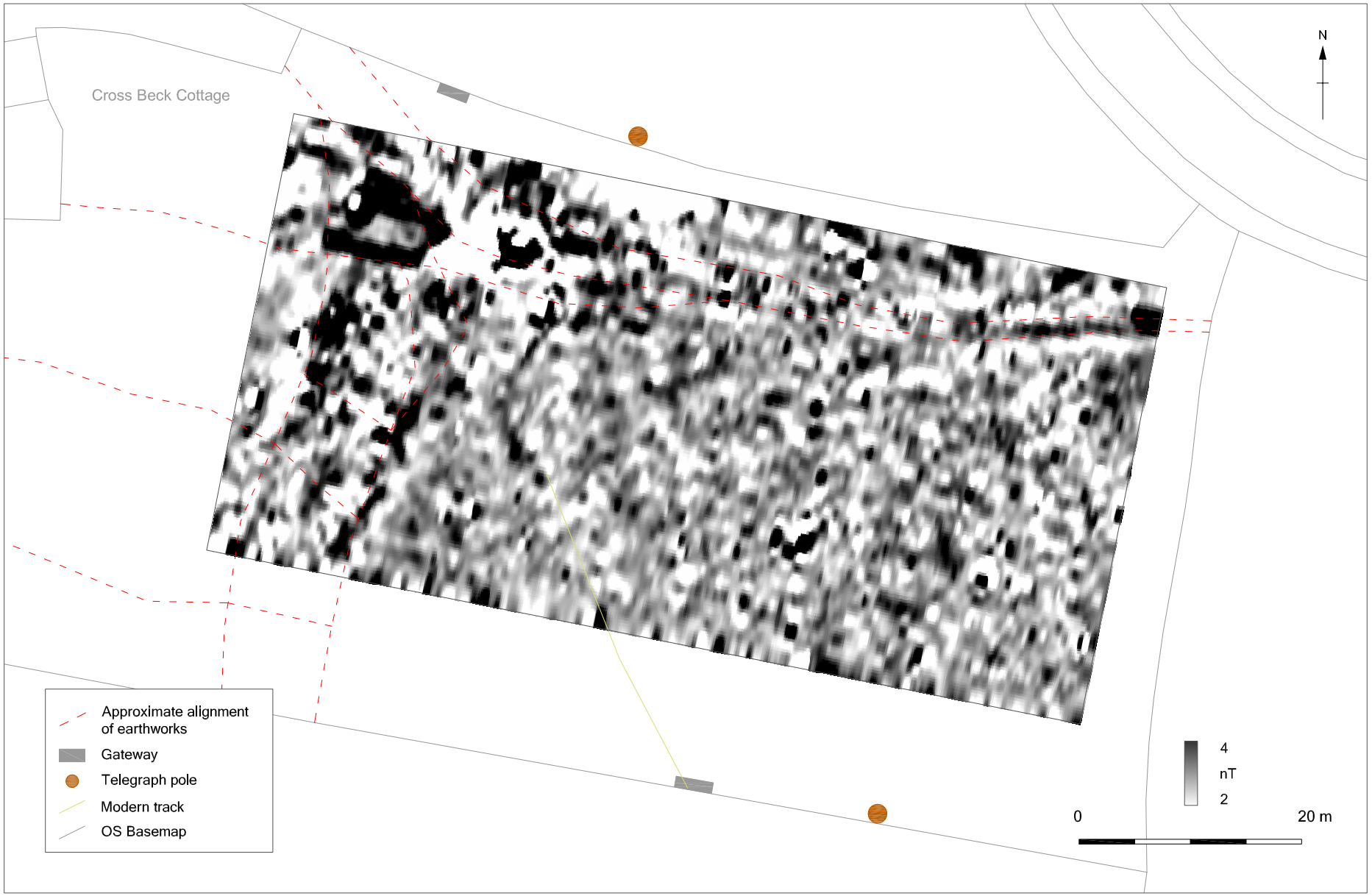

Figure4: Processed gradiometer data overlain with basic aerial photographic transcription

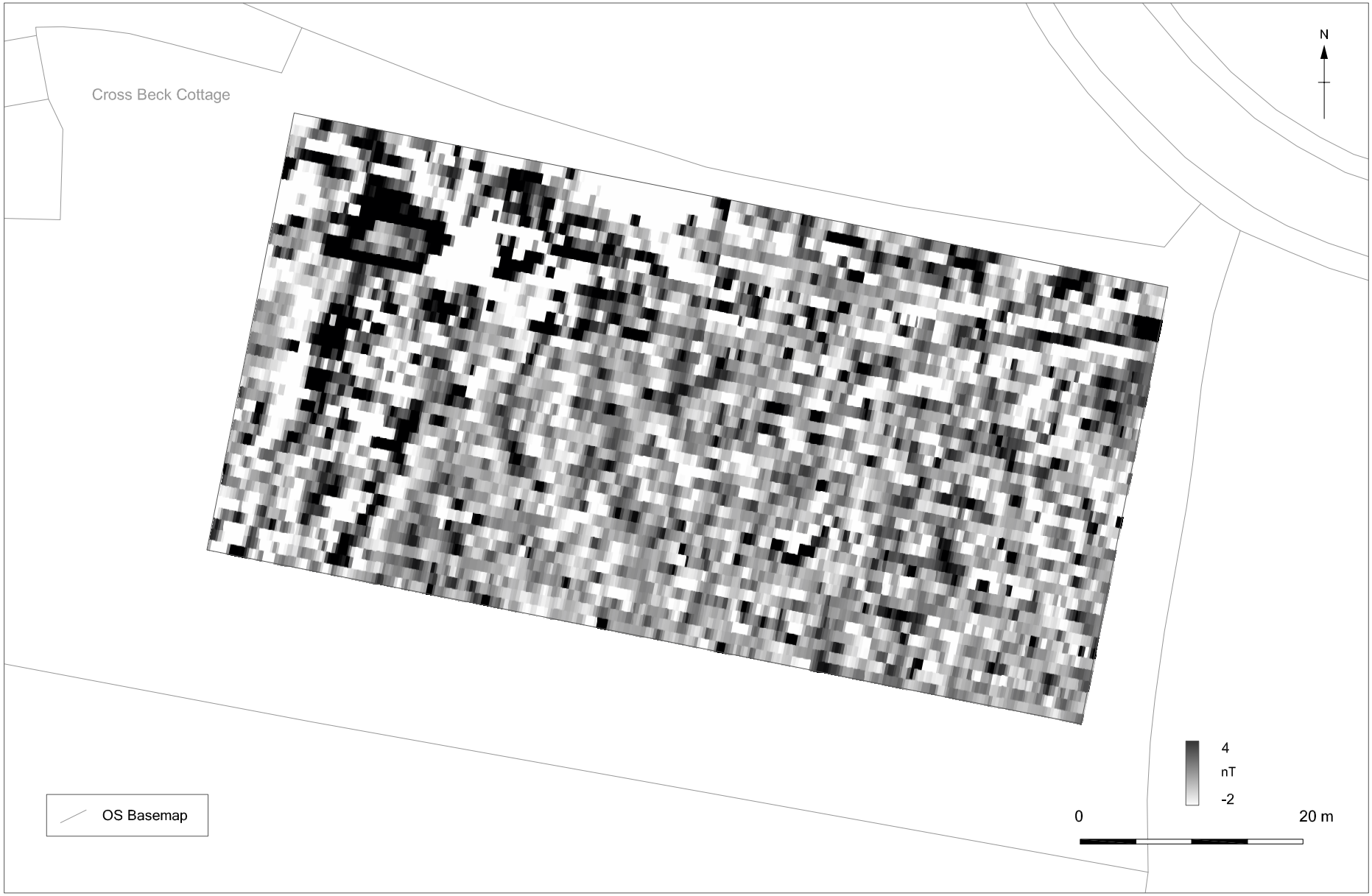

Figure 5: Raw gradiometer data

C:\Users\Mary\Google_Drive\PhD_not_backed_up\GIS\SWAAG\SWAAG_shapes\CAD\Grint_digitising.dwg(Mag_XY)*Grinton Weekend Workshop*Mary* 29 Oct 2015

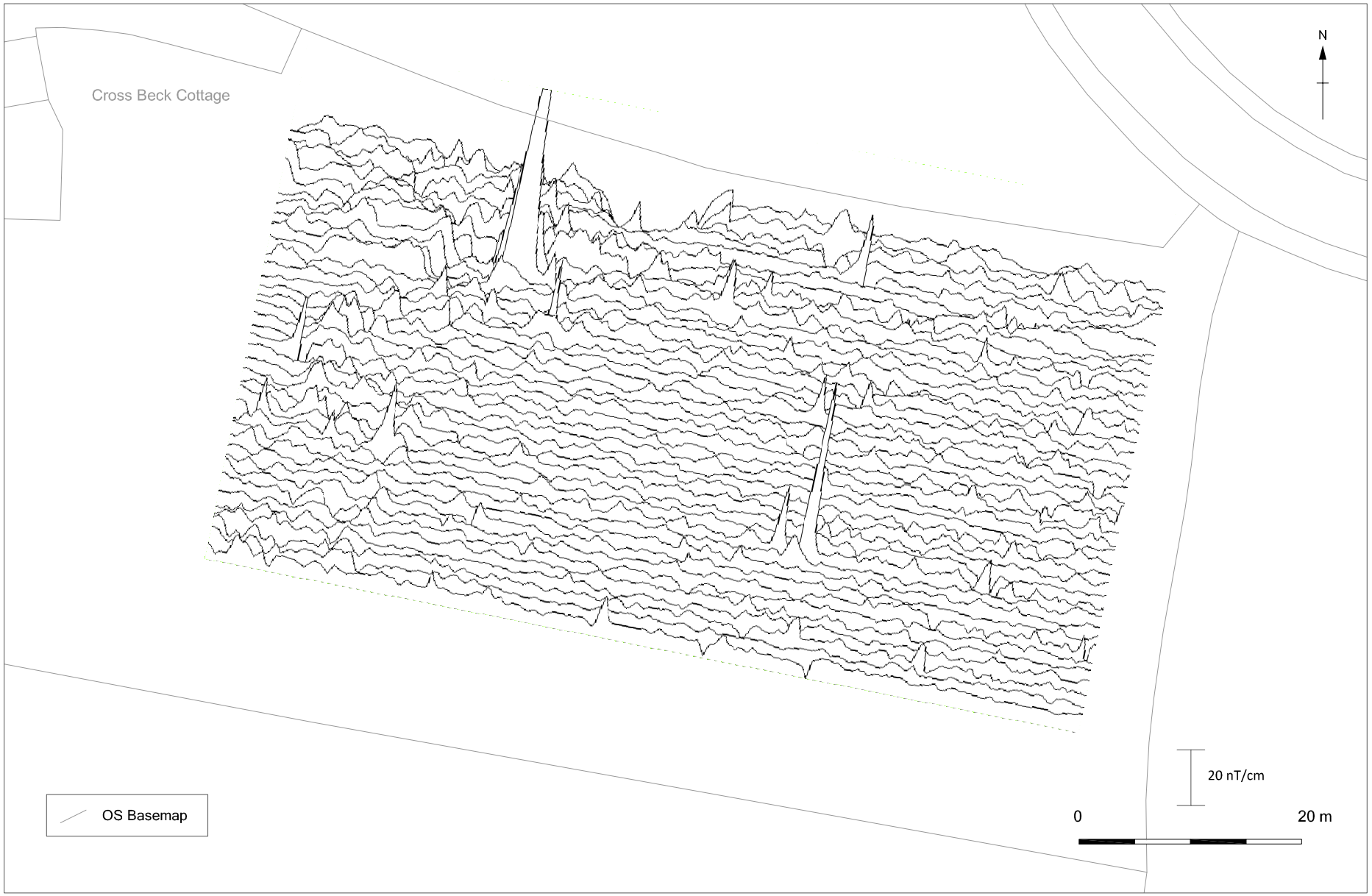

Figure 6: Gradiometer data, XY trace plot

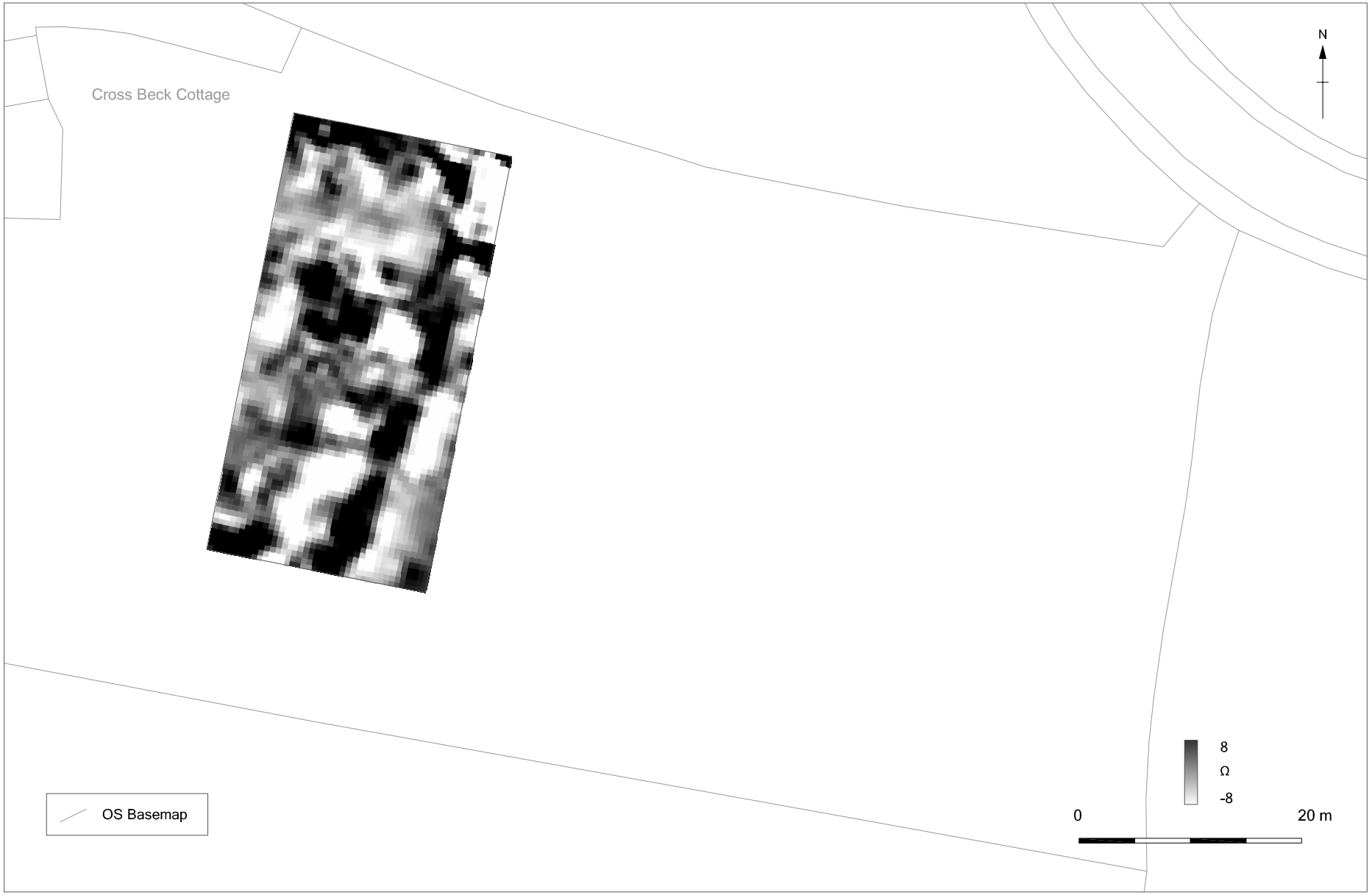

Figure 7: High pass filtered earth resistance data

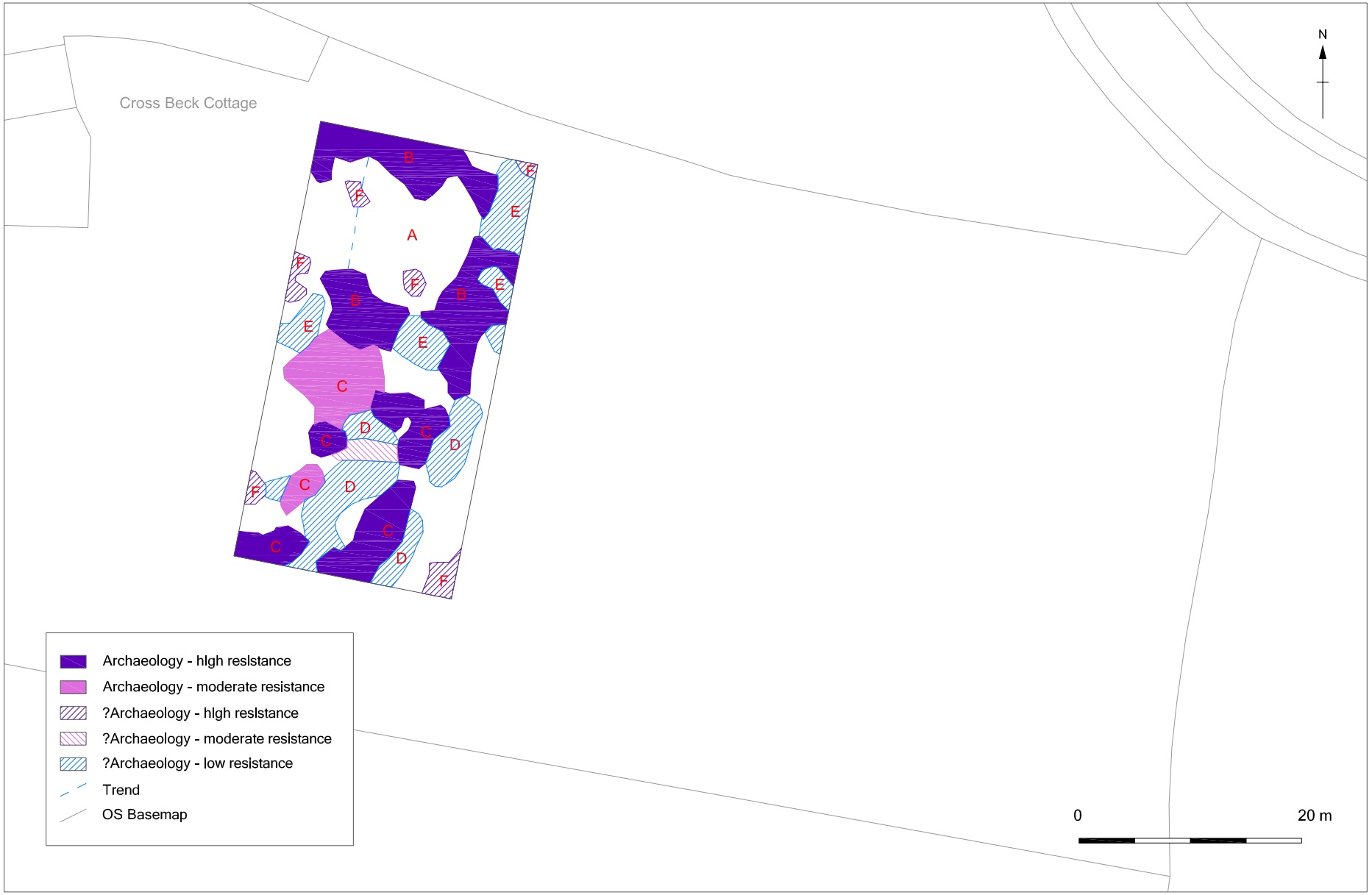

Figure 8: Earth resistance survey interpretation

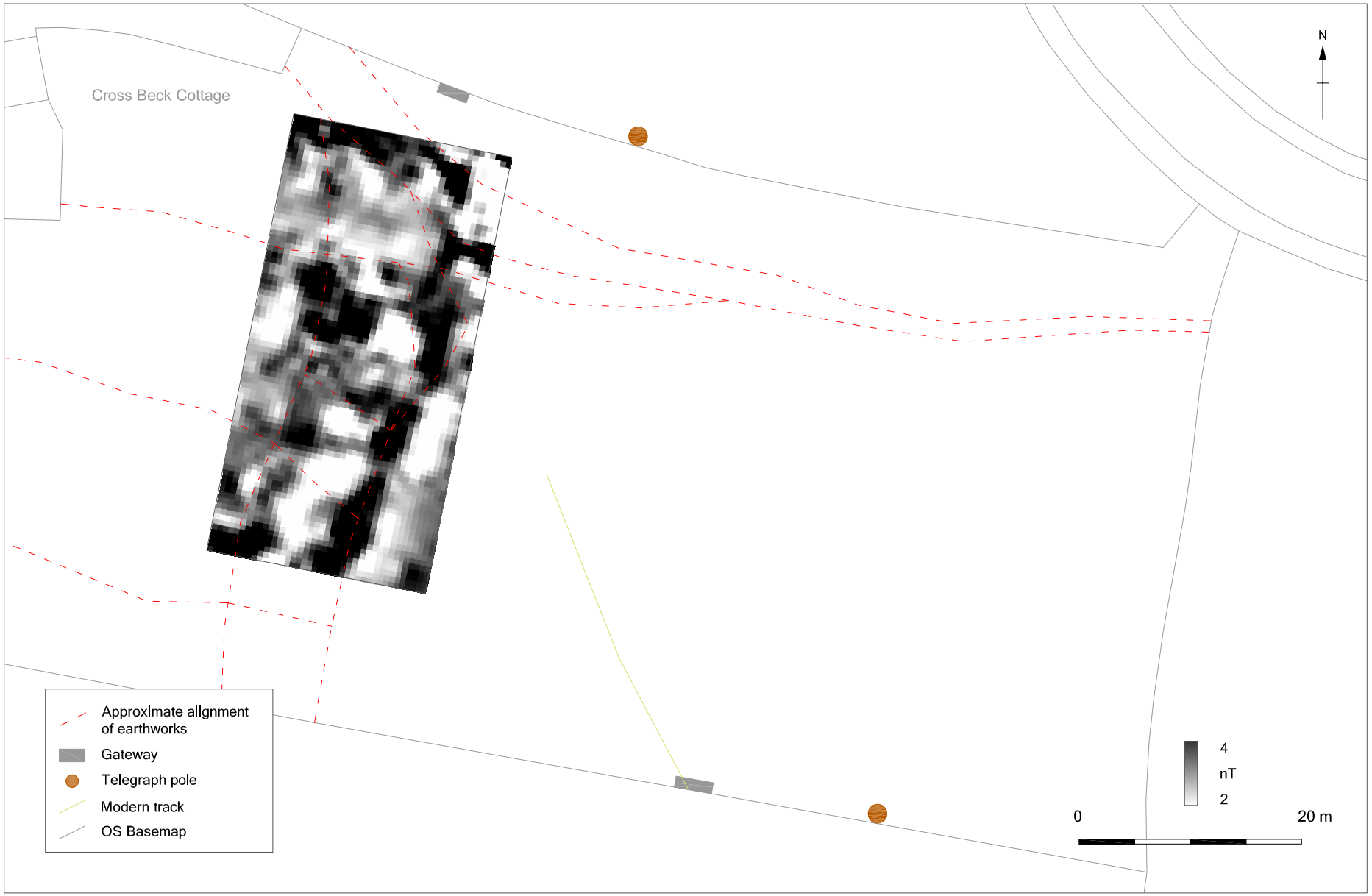

Figure 9: High pass filtered earth resistance data overlain with basic aerial photographic transcription

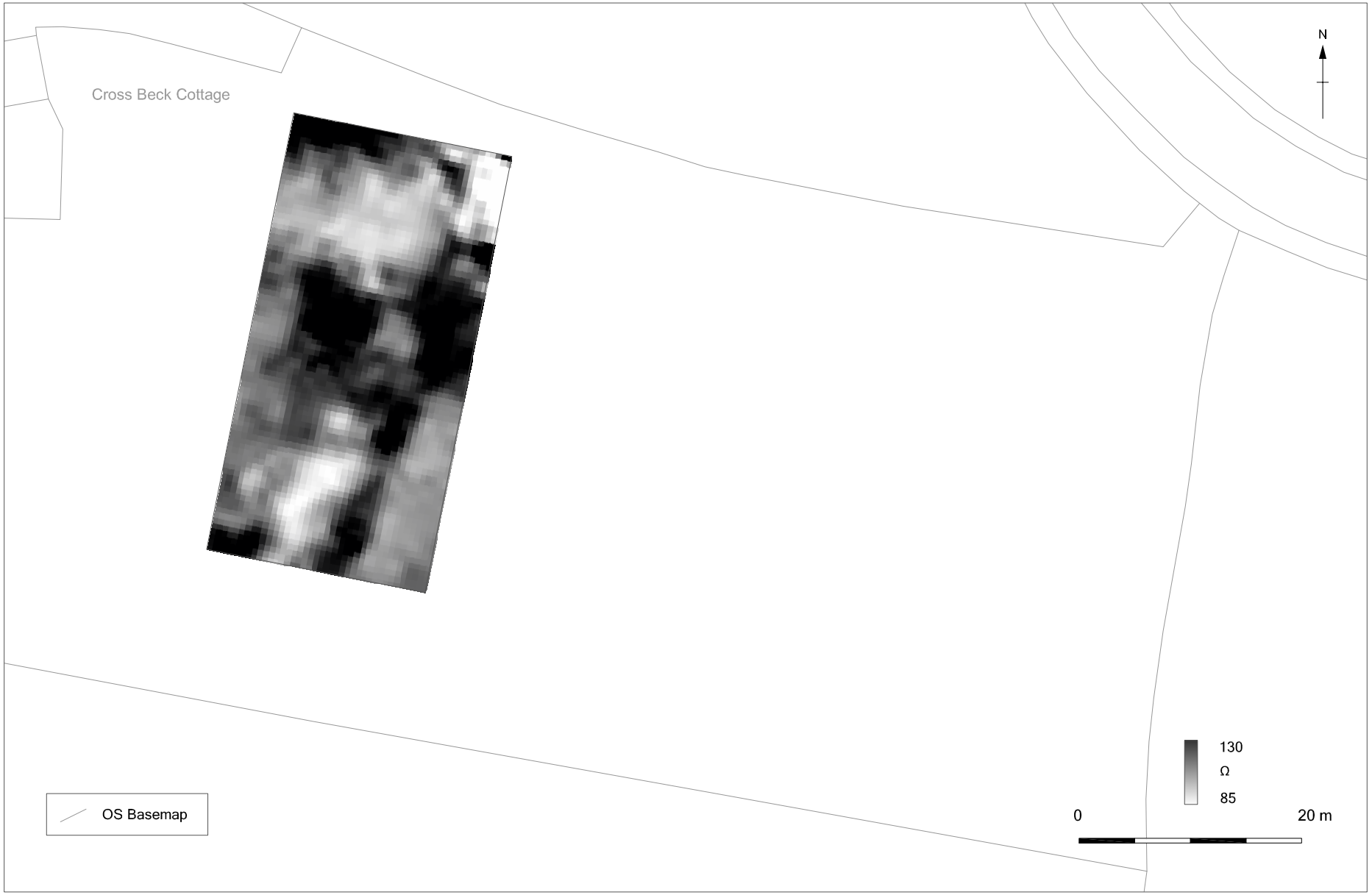

Figure 10: Processed earth resistance data

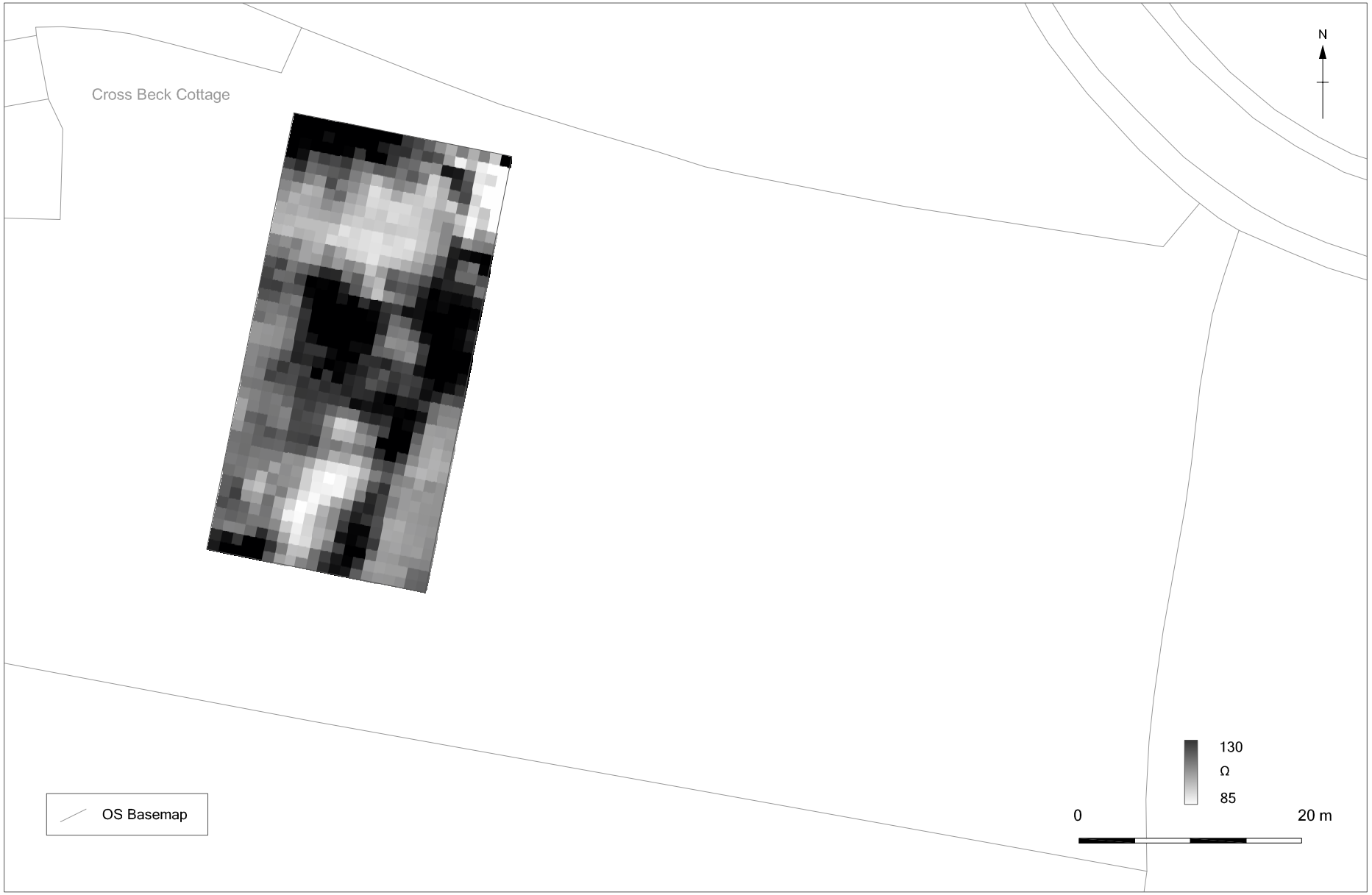

Figure 11: Raw earth resistance data

13. Appendix 2. Associated Activities

Guided walks

Date	Activity / Event	Presenter / Leader	Participants
27th May 2014	"Stationary" guided walk for those with limited mobility	Peter Denison-Edson, SWAAG	16
6th Jun 2014	Guided walk – Reeth's social history	Alan Mills, SWAAG	20
2nd July 2014	Arkengarthdale School – mining heritage guided walk	Alan Mills, SWAAG	18 KS2 children
26th August 2014	Guided walk – Explore Swaledale's Geology	John Russell, David Brooks SWAAG	21
27th August 2014	Guided walk – Explore Swaledale's history & archaeology	Peter Denison-Edson, SWAAG	10
28th August 2014	Guided walk – Explore Swaledale's Historic Environment	Ric Carter & John Russell, SWAAG	11
29th August 2014	Guided walk – Explore Grinton's Mining Heritage	Alan Mills, Judith Mills, SWAAG	9
1st June 2015	"Stationary" guided walk for those with limited mobility	Peter Denison-Edson, SWAAG	10
3rd Sep 2015	Guided walk – Explore Grinton's Mining Heritage	Alan Mills, Judith Mills, SWAAG	16
5th Sep 2015	"Stationary" guided walk for those with limited mobility	Peter Denison-Edson, SWAAG	6
6th Sep 2015	Guided walk – Explore Swaledale's Historic Environment	John Russell, Dave Brooks, SWAAG	17

Presentations and related activities

10 March 2014	Presentation to Upper Wharfedale Field Society	Peter Denison-Edson SWAAG	30
19 July 2104	Open Day for Council for British Archaeology Festival	SWAAG members on site	90
27 Sept 2014	Exhibition stand at Middleham and Dales Local History Day	Peter Denison-Edson and David Brooks, SWAAG	40+
6 December 2014	Presentation to Yorkshire Archaeological Society	Peter Denison-Edson SWAAG	30
14 March 2015	Exhibition stand at NYCRO Local History Exhibition, Harrogate	David Brooks, Judith Mills, SWAAG	50+
18 April 2015	Presentation to Yorkshire Dales Historic Environment Day School	Alan Mills, SWAAG	150
18 July 2015	Open Day during Council for British Archaeology Festival	SWAAG members on site	100
June 2015	Article in CBA Yorkshire annual journal Forum	Alan Mills & Peter Denison-Edson, SWAAG	
17 Nov 2015	Presentation to Middleham and Dales Local History Group	Alan Mills & Peter Denison-Edson, SWAAG	30
30th April 2016	Presentation to the Medieval Research Group Conference, Lincoln University	Alan Mills & Peter Denison-Edson, SWAAG	c. 80

Pottery

Generally speaking a meaningful date bracket cannot be applied to a large proportion of the sherds recovered from the test pits. Other than the medieval material present there are other datable types such as tin-glazed earthenware, white salt-glazed stoneware and creamware; but red earthenware, of all types, for instance, has a long life and particularly when only small fragments are present, is not closely dateable. Where it is associated with say, creamware or tin-glazed earthenware it could well be 18th century. For most redwares a date category has not been assigned. However, some Test Pit summaries may indicate how strong the earlier dating indicators are. Anything with no date against it in the catalogue falls into the general late post-medieval (lpm) background noise category.

A few more abbreviations have crept into the catalogue. I hope most will be obvious (eg. gl for glaze or glazed, misc for miscellaneous, int (inside) and ext (outside)). Let me know if not.

Some explanations of wording used in the 'types' column

- *red slipped* is the standard post-medieval kitchenware with internal white slip coating
- *red slip dec* means there is trailing or banding rather than an overall slip coat
- *red* on its own is any plain glazed red earthenware
- *black glazed red* is difficult to date especially in small fragments as there are black-glazed redwares in the later 16th and 17th centuries as well as throughout the 18th and into the 19th century.
- *whiteware* refers to the refined table wares of 19th century onwards which can be transfer printed (eg. willow pattern), sponged etc.
- *yellow,* i.e. yellow ware refers to the 19th century type of pottery often found with white slip bands and sometimes 'mocha' decoration. Used for good quality kitchenwares, and vessels such as chamber pots. Sometimes within this category are other non-white glazed fragments which appear to be generally the same type, i.e. the background glaze colour may be buff or pale pinkish-buff rather than yellow.
- *local post-medieval* and *local red* are wares probably with a fairly local source. Similar types elsewhere in North Yorkshire are called Ryedale and Osmotherley type wares. The fabric can vary from light red to orange and buff or be partly reduced grey. Glazes often have a greenish tinge. Typical vessels would be bowls, dishes and jars.
- *creamware* is as described! The date assigned is 18th century. It is still around in the early 19th c. but is basically a mid to late 18th type. There is a general chronological trend to a lighter colour glaze so small later fragments may just get included with 'whiteware' in the table. Conversely when only small flakes are present dating must be open to some doubt.
- *pearlware* begins in the later 18th century and continues into the early 19th gradually becoming 'whiteware' as the blue-grey tint to the glaze lightens - again a broad chronological trend. Mostly decorated, frequently with shell edge rim mainly in blue. It is not easy to identify in small fragments.

Apart from the late reduced wares the medieval pottery present was mainly buff, buff/pink or more iron-rich orange/oxidised wares. Although there was much that was not clearly diagnostic most of this material can probably be described as Tees Valley ware.

Pottery

Test Pit 1 (SBDR 13): 35 sherds, 67 grams

There was one sherd of Staffordshire type slipware from (2) and a clay pipe stem from (3) with a large bore. These were the only fragments indicating a date earlier than 19th century.

TP 01

context	type	count	weight	dating	comment
2	?	3	6		Don't know what this is, hard white fabric with matt grey outer
2	staffs type	1	3	17th/18th	
2	red slipped	1	0		
2	black gl red	1	2		
2	whiteware	3	5		1 has sponge dec, 1 may be yellow ware
2	pipe stem x 1	0	0		with moulding
3	black gl red	7	24		some are chunky frags
3	red slipped	4	7		
3	red	4	12		perhaps a 'refined' red
3	whiteware	11	8		
3	pipe stem x 1	0	0	17th/18th	large bore
3	pipe stem x 1	0	0		

Test Pit 2 (SBDR 13): 169 sherds, 386 grams

There were three small fragments of medieval pottery in this pit, two from (7) and one from (4). The latter was possibly Tees Valley type B, an iron-rich fabric used to make glazed decorated jugs. There was some creamware present, a single piece of white salt-glazed stoneware and another possible early post-medieval earthenware (see catalogue) but the great majority of sherds were broadly 19th century or later.

TP 02 (SBDR 13)

context	type	count	weight	dating	comment
1	yellow	1	10		with white bands
1	whiteware	26	49		misc
1	stoneware	1	4		
1	red slipped	1	5		
1	red	1	1		
1	creamware?	4	14	18th?	
1	china	2	6		1 is base with HARROGATE , ?motto above ?coat of arms

Pottery

context	type	count	weight	dating	comment
1	black gl red	1	5		
2	whiteware	27	14		
2	white salt gl stoneware	1	1	18th	
2	stoneware	1	3		
2	2 pipe stem	0	0		decorated
2	pipe stem	0	0	17th/18th	large bore
2	creamware	1	2	18th	
2	?	1	2		? But late
3	whiteware	25	56		ring base (largest!) misc dec and undec
3	ungl red	2	5		
3	stoneware	2	5		1 is ridged jam jar, other flake of brown gl
3	red	4	17		1 v thick
3	pipe stem	0	0		
3	misc lpm	3	9		
3	creamware	2	6	18th	
3	brown gl stoneware	1	9		ink bottle?
4	whiteware	14	13		misc
4	Tees V?	1	1	13th	pinkish orange frag, small but has green gl and applied scale ext so may be TV B
4	red slipped	3	13		
4	red	3	11		1 is thin flake
4	3 pipe stem	0	0		
4	pipe bowl frag	0	0		small decorated frag
4	early post med?	1	3	18th?	buff with yellow gl and brown slip dec
4	creamware	8	15	18th	
4	brown gl stoneware	1	2		
4	black gl red	2	3		
5	whiteware	10	16		misc
5	refined red slip	1	4		
5	red slipped	4	40		
5	red	1	1		small rim, ?18th, slip line round
5	porcelain	1	2	?	
5	pipe stem	0	0		
5	pipe bowl frags	0	0		2 joining
5	early red	1	5	17th/18th	looks early, light orange-red with orange gl x2

Pottery

context	type	count	weight	dating	comment
5	creamware	7	22	18th	
5	China	1	1		
6	Red	1	5		bit of base
6	pipe stem x 1	0	0		
7	medieval oxidised	1	4	13th	
7	Medieval	1	2	13th/14th	grey with white ext margin and some green gl but doesn't look late

Test Pit 5: 62 sherds, 238grams

There were five small sherds of medieval pottery from this pit. One was a rim of a jug or cistern. It was partly oxidised but may be from a later reduced ware vessel, as the area round the rims of these vessels is often not fully reduced. Context (5) contained a relatively large sherd of a creamware plate rim with typical moulded decoration There was other fragments of creamware in (2) and (3), at least some of them from the same vessel. Other late 17th/18th century types present were white salt-glazed and brown-glazed stoneware, Staffordshire type slipware and three sherds of local post-medieval pottery. There is a relatively small proportion of ceramics which are necessarily later than 18th century in this pit as the redwares could all be part of this 18th century group.

TP 05

context	type	count	weight	dating	comment
1	ungl red	1	2		rim
2	creamware	6	6	18th	
2	early red	1	3	17th	may be an import
2	stoneware	1	8	15th/16th?	looks German but could be later
2	medieval	2	8	13th	both orange-red, 1 has traces gl
2	yellow	1	7		with white and blue bands
2	whiteware	5	7		misc. 1 has light and dark brown bands
2	red slipped	3	14		
2	pipe stem x 1	0	0		
2	china	1	2		
2	?	1	2		possibly tin glaze without the glaze
3	white salt gl stoneware	2	8	18th	
3	creamware	3	8	18th	part of plate
3	local post med	2	16	17th/18th	rim
3	pipe stem x 1	0	0	17th	

Pottery

context	type	count	weight	dating	comment
3	black gl red	1	3	17th	
3	ungl pink	1	1	?	
3	whiteware	9	9		misc transfer and painted
3	red slipped	3	30		rim
4	creamware	1	27	18th	plate rim with moulded dec
4	brown gl st	1	1	18th	with fine ribbing ?Notts type
4	salt gl st	1	7	17th/18th?	English copy
4	local post med	1	9	17th/18th	
4	red slipped	3	7		
4	red	2	11		
4	post med reduced?	1	3		glazed int and ext, not sure
4	pipe stem x 1	0	0		
4	black gl red	1	4		shiney - could be 18th
5	Staffs type	1	1	17th/18th	mixed slips
5	pipe stem x 1	0	0	17th	
5	medieval	1	3	14th/15th	rim of jug/cistern part oxidised
5	medieval pink	1	1	13th/14th	
5	pipe stem x 2	0	0	?	
5	red slipped	1	19		bottom of strap handle attachment
5	burnt	1	3		whiteware?
5	black gl red	1	2		rim
6	medieval buff	1	1	13th	
6	red slipped	1	5		
6	pipe stem x 1	0	0		

Pottery

Test Pit 6: 51 sherds, 269 grams
Contexts had been split into As and Bs. Where there was pottery from both the A and the B I have made a note in the comment field (in case it was thought significant). I prefer to have the context field as numeric as it makes sorting easier.

There was no medieval pottery from this test pit but there was a small piece of early 17th century German slipware from context (5). The presence of white salt glazed stoneware in the top three contexts, most came from (2), is a clear indication of 18th century activity. None of the pottery is necessarily particularly late.

TP 06

context	type	count	weight	dating	comment
1	black gl red	1	76		base, gl internally
1	pearlware?	3	6	l.18th/e. 19th	slight blue tinge to gl
1	red	6	85		thick walled, dark red, internal brown gl
1	white salt gl stoneware	2	5	18th	base
1	whiteware	2	8		
2	black gl red	1	1		2b - chip of rim or handle
2	brown gl st	1	4		2b - chipped neck/top
2	china	1	2		2b - rim with transfer print
2	pearlware?	2	3	l.18th/e. 19th	2a - slight blue tinge to gl
2	tin-glazed	1	1	17th/18th	2b - rim with blue paint
2	white salt gl stoneware	2	5	18th	2a - part of plate flange with seed moulded dec
2	white salt gl stoneware	6	30	18th	2b - plate rim with seeds as in '2a'
2	whiteware	3	2		2b
2	whiteware	2	2		2a - one has bit of mocha slip dec
3	red slipped	1	5		
3	white salt gl stoneware	1	3	18th	
3	whitew	1	1		
4	buff stoneware	2	9		
4	china	1	1		grey transfer
4	red	1	1		possibly early but really small
4	whiteware	6	5		
4	yellow	1	10		this is the 19th c. yellow gl ware.
5	china	1	0		tiny
5	German slip	1	2	e. 17th	chip from rim of Weser dish
5	whiteware	1	1		

Pottery

context	type	count	weight	dating	comment
7	yellow	1	1		

Test Pit 7: 30 sherds, 70 grams

Only three contexts were excavated in this pit. None of them produced any pottery or clay pipe datable to earlier than the mid-late 19th century.

TP 07

context	type	count	weight	dating	comment
1	red slipped	2	6		rim
1	red	2	6		
1	stonew	1	5		base of jam jar
1	whiteware	4	4		
1	yellow	1	0		yellow gl with some white slip bands
1	pipe stem x 2	0	0		
1	pipe bowl frag	0	0		
2	ungl red	3	25		flower pot
2	whiteware	9	10		
2	stoneware	1	3		
2	misc	3	1		Very small
2	pipe stem x 2	0	0		
3	red	1	7		base
3	whiteware	3	3		miscellaneous
3	pipe stem x 1	0	0		

Pottery

Test Pit 8 : 145 sherds, 308 grams
Pottery was only recovered from contexts (1), (3) and (4). None was medieval but over 50% of the sherds were within the 17th/18th century date range as well as several clay pipe fragments. Sherds included two creamware plate rims and a Staffordshire type press-moulded rim. There were also three sherds of 'local' early post-medieval redware.

TP 08

context	type	count	weight	dating	comment
1	brown gl stoneware	2	3	18th	1 may be Notts type
1	creamware?	16	12	?18th	
1	pearl?	1	4	e.19th	base with bit of handle
1	pipe stem x 2	0	0	17th/e.18th	
1	pipe stem x 6	0	0	?	
1	post-med ew	2	5	17th/18th?	light pinkish buff earthenware with some orange-brown gl, possibly an early post-med vessel
1	scratch blue	2	4	18th	bit of base, discoloured
1	tin-glazed	2	3	17th/18th	
1	white salt gl stoneware	3	3	18th	
3	blackware	3	7	18th?	
3	creamware	17	20	18th	frags of 2 rims and small bits of ring bases
3	pipe stem x 1	0	0	e. 18th?	
3	red	10	14	18th?	possibly some sherds same vessel as in (1) with some trailed slip dec
3	Staffs type	2	9	17th/18th	rim of press moulded dish and small piece of a hollow ves both slip dec
3	white salt gl st	5	18	18th	
4	creamware	2	3	18th	
4	local red	3	17	17th/18th	with green-brown gl.
4	pipe bowl frag	0	0	?18th	1 other v small bowl frag
4	pipe stem x 1	0	0	17th/e.18th	
4	red	2	1	18th?	?same ves as in other contexts
4	red slipped	2	9	18th	not the same ves, one has some brown swirls on the slipped surface, other is chipped rim
4	white salt gl st	2	1	18th	hollow ves

Pottery

Test Pit 09 : 96 sherds, 208 grams
There were only a handful of small sherds from this Pit which could be earlier than the 19th century.

TP 9

context	type	count	weight	dating	comment
1	whiteware	5	6		transfer print
2	yellow	3	2		2 have white slip bands
2	whiteware dec	15	19		mainly transfer
2	whiteware	13	25		misc plain
2	stoneware	2	11	?	off white
2	stoneware	1	2	?	grey
2	scratch blue?	1	0	18th	sgrafitto dec
2	red slipped	4	28		
2	red	2	3		
2	porcelain	1	0		
2	pearlw?	1	1		painted dec
2	creamware	5	6	18th	
2	china	2	3		
2	black gl red	1	5		rolled rim
3	yellow	1	1		with blue band
3	whiteware	11	15		
3	ungl red	2	3	?	
3	stoneware	1	1		
3	refined red	1	0		small rim with white int slip and ext slip bands
3	red slipped	1	5		
3	red	4	7		
3	mottled gl	2	3	?	white fabric with light brown with darker brown streaks
3	black gl red	2	3		
3	?	1	0		
4	whiteware	1	1		rim - plain
4	white stoneware	1	1		not salt gl
4	red slipped	1	1		
5	creamware?	2	4		
6	whiteware	1	3		
6	ungl red	1	17		flower pot, or could be flake of tile
6	red slipped	1	2		
6	red	1	5		?chip of floor tile
6	brown gl	1	1	18th?	with impressed wavey lines

Pottery

context	type	count	weight	dating	comment
	stoneware				
6	black gl red	1	3		
7	white stoneware	1	5		?jam jar
8	whiteware	2	16		flaked upper part of dish rim with blue marbling, late 19th

Test Pit 11: 51 sherds, 114 grams

Most of the sherds from this test pit were unglazed red earthenware, probably flower pot. There was one small fragment possibly of an early post-medieval redware.

TP 11

context	type	count	weight	dating	comment
1	black gl red	1	2		
1	ungl red	18	33		some maybe cbm, otherwise flower pot!
1	whitew	2	1		
2	early red?	1	2	17th/18th	rather worn, dark brown gl ext and some thin yellowish/green int.
2	floor/wall tile?	1	9		white gl
2	late pm	2	5		buff fabric with cream coloured gl but not creamwaare.
2	ungl red	20	56		some maybe cbm, otherwise flower pot!
2	whiteware	5	4		
3	ungl red	1	2		

Pottery

Test Pit 12 : 71 sherds, 87 grams
There was one sherd of medieval pottery from this pit, in context (3). Two other sherds were of earlier post-medieval date but the rest were broadly 19th century or later.

TP 12

context	type	count	weight	dating	comment
1	whiteware	3	4		1 transfer
1	ungl red	1	2		
1	red slipped	2	4		
1	china	1	2		base chip
1	?	1	2		v hard fired dark red, thin
2	yellow	1	2		with blue wavey band
2	whiteware	33	29		many small flakes, some transfer
2	white st	1	1		
2	slip dec	1	2	18th	pale orange with dark and lighter brown swirls
2	red slipped	1	1		worn
2	pipe stem x 8	0	0		
2	pipe bowl frag	0	0		with leaves on seam
2	local post-med	1	3	17th/18th	pale orange with greenish gl
2	creamware?	2	4	?18th	
2	china	2	4		ring base seems burnt, plate rim with trace of overglaze gold band
2	black gl white	1	1		
3	whiteware	11	7		
3	red	3	7		
3	pipe stem x 1	0	0		
3	pipe bowl frag	0	0		small
3	medieval buff	1	5	13th	
3	lpm	1	1		?yellow ware
4	whiteware	3	3		
4	black gl red	1	3		

Pottery

Test Pit 13 : 82 sherds, 134 grams
There was a single small flake of medieval pottery in context (3) which also produced a sherd of early blackware and a tiny piece of tin-glazed earthenware. A pipe stem with large bore in (1) also suggested an early post-medieval date. Other than this small sherds of creamware and possible pearlware point to later 18th and early 19th century activity but the rest of the pottery was later with a relatively large group of 19th century yellow ware.

TP 13

context	type	count	weight	dating	comment
1	yellow	5	15		white and dark brown bands
1	whiteware	5	5		1 has blue and brown bands, others undec
1	pipe stem x 1	0	0	17th/18th	
1	pipe bowl frag	0	0		
1	pearlware?	3	6	e.19th	painting rather than transfer
2	yellow	19	36		base, brown and white bands
2	whiteware	17	17		
2	red slipped	1	8		
2	pearlware	6	5	e.19th	same ves as in (1)
2	creamware	9	11	18th	
2	black gl white	5	5		tea pot?
2	black gl red	4	15		misc
3	yellow?	1	1		
3	whiteware	4	4		1 is burnt
3	tin glazed	1	0	17th/18th	teeny tiny
3	pipe stem x1	0	0		
3	pipe bowl frag	0	0		decorated - v small
3	medieval	1	1	13th	small flake
3	early blackware	1	5	17th	actually very dark brown but as early blackwares

Pottery

Test Pit 14 : 86 sherds, 155 grams
There was a fragment of late medieval reduced ware from (5). Context (4) produced two fragments of creamware, and some black glazed redware which could also be 18th century, as are a small fragment of tin-glazed earthenware from (3) and one of scratch blue stoneware in (2). Two clay pipe bowls with cross-hatched hearts indicate later 19th century activity.

TP 14

context	type	count	weight	dating	comment
1	whiteware	1	1		
1	china	2	5		1 has applied sprig
2	whiteware	24	22		
2	ungl red	3	4		
2	stoneware	1	2		grey, probably jam jar
2	scratch blue	1	2	18th	rim ?bowl
2	red slipped	1	2		
2	pipe stem x 7	0	0		
2	pipe bowl frags x 6	0	0		2 have cross hatched hearts so later 19th c.
2	other	1	1		type of yellow?
2	factory slip	1	4	post 1810	rim of ves with wormed dec
2	china	1	2		
2	black gl red	2	3		
3	yellow	2	2		
3	whiteware	15	9		incl bit of shell edge rim
3	tin glazed	1	1	18th	
3	stoneware	1	4		
3	red slipped	2	4		
3	red	5	8		strap handle, thin frags
3	pipe stem x 3	0	0		
3	pipe bowl frag	0	0		possibly 18th
3	china	1	6		plain
3	black gl red	5	4		
4	whiteware	1	1		
4	red slipped	1	2		
4	red	2	1		
4	pipe stem x 2	0	0		
4	creamware	2	8	18th	flaked moulded rim
4	brown gl stoneware	1	24		
4	black gl red	7	23		2 rims and handle, probably 18th
5	late medieval reduced	1	9	15th/16th	

Pottery

context	type	count	weight	dating	comment
5	burnt white	1	1		

Test Pit 16 : 26 sherds, 159 grams

TP 16

context	type	count	weight	dating	comment
3	yellow	1	0		
3	whiteware	4	4		
3	?	1	5		some sort of electrical fitting?
4	whiteware	2	24		rim with brown transf, plain ring base
4	ungl red	1	51		large rim - horticultural
4	red slipped	3	19		
5	ungl red	1	6		
5	stoneware	3	28		'modern'
5	china	1	10		small cup
6	whiteware	1	2		sponge stamped
7	whiteware	6	7		
7	stoneware	1	2		
7	?	1	1		another electrical fitting

There was no pottery dateable to before the 19th century from this pit and the possible electrical fitting from context (7) indicated relatively recent disturbance.

Test Pit 18: 2 sherds, 9 grams

TP 18

context	type	count	weight	dating	comment
2	grey ware	1	4	Roman?	
2	pipe stem x 1	0	0		
3	medieval buff	1	5	13th	
3	pipe stem x 2	0	0		

Pottery

Test Pit 19: 103 sherds, 681grams
This pit produced an interesting range of pottery. Six were medieval and included some late medieval reduced ware. A group of early post-medieval pottery (17th to early 18th century) was much larger. This included material which is likely to be locally or regionally produced (see catalogue). The fragments were abraded and glazed flaked off but there were several joins although no profiles or clear indications of vessel forms. There were also a few small fragments of Staffordshire type early post-medieval wares. Most interesting was a rim with lug handle formed from a loop which had then been pushed into join the rim in the middle. This was in a hard pale orange-red fabric with a thin layer of white slip covered with orange glaze. The rim was from context (6). There were base fragments from this vessel in (4) and another bit of the rim in (5). Unfortunately I don't know where this vessel comes from but am confident it is of the same date range as the other associated pottery (i.e. 17th/early 18th century). [Normally one does not introduce 1st person to reports but I don't know how else to say this!] Clay pipe fragments from this pit confirm this dating although the two more complete bowls suggest 17th rather than 18th century.

TP 19

context	type	count	weight	dating	comment
1	whiteware	3	2		
1	ungl red	2	2		Probably flakes of cbm
2	red	1	15	?	possibly a small bit of roof furniture, splashes of gl
2	whiteware	10	14		
2	china	2	4		
3	pipe stem x 4	0	0	17th/e. 18th	
3	local pm	19	280	17th/18th	off-white/pale orange-buff fabric with green gl x2 on wall sherds, abraded and flaked, several join including bits of base, thick walled
3	Staffs type	4	26	17th/18th	some combed dec, base mottled gl
3	local red?	6	37	17th	joining frags of sooted vessel with horizontal grooves, 1 poss not same ves.
3	local red?	10	60	17th	jar rim, some joining sherds with greenish brown very flaked gl may belong,
3	late medieval reduced	1	1	15th/16th	
3	pm pink?	1	4	?	may be slipware but very abraded and chipped.
3	black gl red	1	3		rim
3	red slipped	5	11		
3	whiteware	10	6		all small chips
3	pipe bowl frags x 3	0	0		
4	pipe stem x 3	0	0	17th/e. 18th	

Pottery

context	type	count	weight	dating	comment
4	pipe bowl frags x 2	0	0	17th/e. 18th	
4	red with slip	3	55	17th/18th	base, internal white slip with orange glaze, fabric is light orangey red so not like usual 'red slipped'
4	Staffs	1	1	17th/18th	brown ext yellow int
4	red	6	33	17th	base and some flakes with green gl - as in (3)
4	local pm	2	19	17th	1 is same vessel as in (3)
4	black gl red	1	2	17th	
4	pipe bowl	0	0	17th	Yorkshire bulbous type
4	pipe bowl	0	0	17th	
5	local pm?	1	2	17th?	mid grey fabric with some thin int gl.
5	pipe stem x 4	0	0	17th/e. 18th	
5	red with slip	1	10	17th/18th	rim, clubbed, seems to be same ves as in (4)
5	red	5	18	17th	most with green gl as other contexts, small bits of base
5	medieval	1	3	13th c.	pink/buff
5	?with slip	1	6	?17th/18th	flake with ext half gone, pale brown fabric with white slip
6	red with slip	1	37	17th/18th	rim with lug handle, same ves as other sherds in (4) and (5). ?provenance
7	late medieval reduced	2	19	15th/16th	
7	medieval pink	1	2	13th/14th	some yellow and green gl
7	?	1	1		not sure what this is
8	medieval	1	8	13th/14th	buff/grey fabric

end of TP 19

Pottery

Test Pit 20: 91 sherds, 205 grams
Six sherds of medieval pottery (broadly 13th century) were recovered from context (5) and another single sherd from the lowest context excavated (6). Context (5) also contained a number of sherds of 17th/18th century wares – e.g. tin-glazed earthenware and 18th century type stonewares. A few fragments of clay pipe stems with wide bores confirmed there was a 17th/18th century element in this pit. [Sorry – the hard black bit got separated from its bag and not sure if I've put it in the right context.]

TP 20

context	type	count	weight	dating	comment
2	whiteware	9	21		incl. willow pattern rim
2	stoneware	1	4		
2	red slipped	1	4		light red so could be earlier than 19th
2	?	1	1		pale fabric with brown gl x 2
2	pipe bowl frag			?	
3	pearlware	1	6	e. 19th	shell edge rim
3	whiteware	6	7		
3	red slipped	4	16	?	1 main bit with brown and green mottling
3	red	6	11		some slip lines
3	?	1	1		black gl buff fabric
3	basalt	1	9	18th	
4	floor tile?	1	18		thick fragment with black gl one side
4	black gl red	8	17		small rim
4	red slipped	6	14		
4	whiteware	17	12		
4	brown gl stoneware	1	4	?	base
4	pipe stem x 4			18th/19th	
5	tin-glazed	4	6	17th/18th	pale blue
5	medieval buff	6	18	13th	
5	black gl red	3	15		2 joining, 1 small
5	brown gl stoneware	5	7	18th?	
5	white salt gl	2	3	18th	
5	whiteware	3	1		tiny?
5	red	1	0		
5	?	1	1		
5	Local red?	1	3	17th/18th	
5	pipe stem x 2			17th/18th	small!

Pottery

context	type	count	weight	dating	comment
6	medieval	1	6	13th	greenish gl
6	pipe stem x 1			17th/18th	
6	pipe stem x 1			18th/19th	

Test Pit 21: 48 sherds, 84 grams
The biggest group of pottery from this pit were thick sherds of black glazed redware which are basically undateable. A few small fragments of creamware were present but no very clear indication of any pre-19th century activity.

TP 21

context	type	count	weight	dating	comment
1	china	2	2		
2	whiteware	14	6		
2	creamware	3	3	18th	
2	red slipped	1	1		
2	pipe stem x 1	0	0		
3	black gl red	17	58		chunky chips with gl one side
3	red slipped	4	4		
3	creamware?	4	8	18th?	
3	whiteware	3	2		

Test Pit 22: 30 sherds, 67 grams
There is no clear evidence of anything earlier than the 19th century from this pit.

TP 22

context	type	count	weight	dating	comment
2	whiteware	17	27		some transf some sponged stamped
2	red slipped	1	12		rim
2	whiteware	1	4		possibly utilitarian jam jar type ves
2	mottled	1	2		pale fabric
2	brown gl stoneware	1	0		tiny
2	pipe stem x 5	0	0		
3	black gl red	5	18		chunky
3	red	2	2		
4	red	1	2		tiny trace of slip dec
4	whiteware	1	0		

Pottery

Test Pit 23: 129 sherds, 292 grams
Nine of the sherds were medieval of broadly 13th century date, six of them coming from context (5). Creamware and a few other sherds of probable 18th century types occurred, particularly in context (3), so it is possible that some of the less closely datable sherds are also 18th century. Two fragments of heavily patinated green bottle glass from (3) could also fit into this date range. Otherwise a range of transfer printed wares and other broadly 19th century 'refined' whitewares were present.

TP 23

context	type	count	weight	dating	comment
1	red slipped	2	2		flakes
1	creamware	4	3	18th	
1	red	3	2		
1	whiteware tp	4	8		transfer printed, same vessel in (2)?
1	miscellaneous	10	9		i.e. misc late post med
1	ungl red	1	1		
2	medieval	1	4	13th	orange buff fabric
2	black gl red	3	8		
2	red slipped	2	14		
2	creamware	6	7	18th	
2	whiteware tp	10	26		transfer printed, rim with classical profile.
2	whiteware	16	31		
2	china	2	7		
3	creamware	12	50	18th	
3	whiteware	18	30		
3	whiteware	1	7		base, painted dec
3	black gl red	1	19		handle ?tea pot
3	water worn	1	7		very worn
3	red slipped	4	12		1 main bit
3	white salt gl	1	2	18th	
3	mottled gl	1	1	18th	red fabric
3	slipware	1	2	18th	red fabric with slip dot
3	ungl red	2	3		
3	Local red?	1	1	17th/18th	red fabric with greenish gl
3	?	1	1		
3	pipe stem x 3			18th/19th	
4	medieval	2	7	13th c.	quartz gritted
4	creamware	5	5	18th	
4	red	3	3		1 has slip
4	black gl red	2	2		
4	whiteware	1	0		
4	pipe stem x 1			19th	

Pottery

context	type	count	weight	dating	comment
5	medieval buff	3	8	13th	one also with some grey
5	medieval pink	3	9	13th	
5	whiteware	1	1		
5	creamware	1	0	18th	
5	pipe stem x 1			18th/19th	

Test Pit 24: 58 sherds, 101 grams
Most of the sherds were very small. The lowest spit excavated ([7]) produced two pieces of medieval pottery, broadly 13th century. These were two of the larger fragments from the pit! Much of the rest of the group is not closely dateable and almost all could be encompassed within the 'late 18th/19th century' date range. The tin-glazed earthenware, creamware and some of the stoneware suggest a 18th century element which could also include the black-glazed and other redwares, although these can equally well fit into a 19th century group.

TP 24

context	type	count	weight	dating	comment
1	black gl red	3	3	18th/19th	
1	tin-glazed	1	2	17th/18th	
1	creamware	1	2	18th	
1	white stoneware	1	1	18th	
1	salt gl stoneware	1	1	?	grey
2	red slipped	1	4	18th/19th	rim
2	red	1	1	?	
2	creamware	8	9	18th	
2	whiteware	3	2	19th	with decoration
2	stoneware	1	9	19th	
2	brown gl white	1	1		
2	pipe stem x 1	0		?18th	
3	black gl red	2	4		
3	china	1	5		
3	whiteware	5	4		miscellaneous
3	lustre dec.	1	2	19th	
4	brown gl stoneware	1	3	18th ?	
4	jam jar	1	2	19th	
4	black gl red	2	3		
4	red slipped	2	2		
4	whiteware	4	3		1 mottled gl

Pottery

context	type	count	weight	dating	comment
5	red slipped	1	8		rim
5	red	2	3		
5	ungl red	1	4		
5	whiteware	4	3	19th	1 has lathe cut green and brown check
5	miscellaneous	2	3	?	
6	black gl red	1	1		
6	whiteware	4	5		
6	medieval	2	11	13th	1 pink, 1 pink/grey, fairly coarse

Test Pit 25: 16 sherds, 46 grams
There were ten sherds of medieval pottery from this pit including a jar rim of the 'bifid' form typical of Tees Valley wares. All the other sherds, except one from (3) were, or are likely to be, 18th century.

TP 25

context	type	count	weight	dating	comment
2	tin-glazed	1	1	17th/18th	blue on blue
2	medieval buff	2	3	13th	
2	pipe bowl frag	0	0		
3	whiteware	1	1		blue inside so poss mixing bowl
3	pipe stem x 2	0	0		
4	late medieval reduced	1	2	15th	
4	medieval buff	1	5	13th	
4	medieval misc	3	9	13th/14th	worn
4	black gl	1	2	?18th	seems to be a mix of red and white clay so may be marbled
5	medieval	1	2	13th	pale orange fabric
6	red	1	1		
7	medieval buff	1	2	13th	
7	pipe stem x 2	0	0	17th/e. 18th	
8	Tees Valley	1	16	13th	'Bifid' rim in pinkish fabric with ext margin/surface buff, typical TV.
8	white salt gl stoneware	1	1	18th	
8	creamware	1	1	18th	

Pottery

Test Pit 29: 359 sherds, 916 grams
This was by far the largest pit assemblage from the Big Dig. The largest group within this assemblage were whitewares of 19th century, or indeed later, date. There were four sherds of medieval pottery. Context (3) produced the profile of a white salt-glazed stoneware plate and part of a plate rim also came from (5) with other small fragments from (1), (7) and (8). There were other indications of pre-19th century activity including several clay pipe stems, see catalogue, but most were associated with later material.

TP 29

context	type	count	weight	dating	comment
1	brown gl stoneware	2	37		bowl rim, grey int
1	brown gl white	1	1		
1	china	4	9		2 are burnt, other 2 seaweed transfer
1	pipe stem x 3	0	0		
1	red	3	5		
1	red slipped	3	12		
1	white salt gl stoneware	1	1	18th	
1	whiteware	12	10		misc
1	yellow	1	0		
2	brown gl stoneware	1	1		small rim
2	brown gl whiteware	3	29		joining, ?tea pot
2	burnt	2	4		a whiteware probably
2	creamware	1	0	18th	small hollow ves frag
2	misc late	3	6		
2	pearlware	1	2	e. 19th	shell edge rim
2	pipe stem x 3	0	0		also small frag bowl
2	red	4	25		one main bit - clubbed base, 1 small sherd with trace of slip trail, one chip may be earleir
2	red slipped	7	40		rim
2	stoneware	7	102		base ridged jam jar
2	whiteware	51	74		misc - transfer, sponged and plain
2	yellow	7	12		2 have white bands
3	black gl red	3	18		
3	brown gl stoneware	1	19		same vessel as in (2)
3	burnt	3	4		
3	china	2	3		
3	creamware	6	5	18th	flakes
3	mottled	2	6		brown mottled white fabric, strap handle

Pottery

context	type	count	weight	dating	comment
3	porcelain	1	1		
3	red	4	23		
3	red slipped	4	19		
3	stoneware	5	13		ridged jam jar
3	stoneware	2	7		'modern'
3	white salt gl stoneware	1	16	18th	plate profile
3	whiteware	47	59		misc - transfer, sponged and plain
3	yellow	5	6		
4	black gl red	2	1		
4	brown gl white	2	4		
4	burnt	3	4		small handle, these look like whiteware
4	china	5	15		base with transfer (willow), ?cup with gold band, silver lustre
4	medieval	1	11	13th	pale orange-buff with thin grey core, abraded
4	pipe bowl frag	0	0		with writing - prob late 19th
4	pipe stem	0	0	18th	
4	red	1	1		
4	red slipped	5	9		
4	stoneware	1	12		ribbed jam jar
4	whiteware	29	33		misc, 1 has bright yellow gl and gold band, rest usual mix
4	yellow	6	11		1 has white and brown bands
5	black gl red	1	1		flake
5	brown gl white	1	2	?	
5	china	1	2		
5	pipe bowl frag	0	0		decorated
5	pipe stem x 4	0	0		
5	red	3	9		
5	red slipped	4	18		
5	white salt gl stoneware	1	3	18th	bit of rim flange
5	whiteware	18	33		transfer and sponge
5	yellow	3	3		
6	black gl red	1	1		
6	brown gl white	1	1		
6	china	1	3		
6	figurine?	1	1		small bit moulding
6	lustre	3	6		pink lustre dec
6	pipe stem x 4	0	0		1 has green gl

Pottery

context	type	count	weight	dating	comment
6	red	2	28		
6	red slipped	2	32		
6	whiteware	24	38		1 piece says HO with ..ERS below
6	yellow	1	4		
7	?	1	1		
7	creamware	4	7	18th	
7	creamware?	2	1		flakes, 1 has blue and brown bands
7	pipe bowl frag	0	0		small
7	red	1	1		with slip dec, thin
7	red slipped	2	2		
7	white salt gl stoneware	1	1	18th	
7	whiteware	7	4		
8	black gl red	5	16	18th?	2 vessels represented: bottom of handle, out-turned rim (shiney)
8	brown gl stoneware	1	4		thick
8	burnt	1	1		
8	medieval buff	1	9	13th	very worn
8	pipe bowl frag	0	0	?	and v small stem frag
8	pipe stem x 1	0	0	17th/18th	
8	red	3	2		thin, 1 has slip dec
8	white salt gl stoneware	1	1	18th	
8	whiteware	4	5		
9	pipe bowl frag	0	0		
9	pipe stem x 4	0	0	l.17th/18th	1 stem has spur
10	medieval buff	2	6	13th	

end of TP 29

Pottery

Test Pit 31: 19 sherds, 103 grams
Apart from a small clay pipe bowl (17th) there was nothing clearly earlier than the 19th century.

TP 31

context	type	count	weight	dating	comment
1	brown gl st	0	0		
1	pipe bowl frag	0	0	17th	a small early bowl
1	pipe stem x 1	0	0		
1	whiteware	1	0		
1	yellow	2	5	19th	with white and blue bands
2	late pm	3	2		May be yellow ware
2	pipe stem x 1	0	0		
2	red	3	14		
2	red slip dec	2	27		joining with int slip trail ?18th
2	red slipped	4	47		1 main bit - abraded base
2	whiteware	3	8		shell edge rim, others v small
3	whiteware?	1	0		

Test Pit 32: 141 sherds, 150 grams
There were four fragments of medieval pottery from this pit, two each from contexts (2) and (4). Three sherds of tin-glazed earthenware and some of the clay pipe fragments present indicate 18th century activity but the great majority of sherds were 19th century or later although much of this was very highly fragmented.

TP 32

context	type	count	weight	dating	comment
1	china	8	6		incl frags of a figurine
1	red slipped	1	3		
1	whiteware	2	2		
2	?	1	1		grey fabric with brown gl ext greenish int.
2	black gl red	2	3		
2	brown gl st	8	6		
2	china/porcelain	7	5		probably parts of same figurine as in (1)
2	medieval	2	7	14th	mid grey with orange int, brownish gl
2	pipe bowl frag	0	0	17th	
2	pipe bowl frag	0	0	?	
2	pipe stem x 1	0	0	17th/18th	
2	pipe stem x 7	0	0		one is decorated
2	red	4	8		
2	red slipped	20	41		

Pottery

context	type	count	weight	dating	comment
2	tin glazed	1	2	17th/18th	plain
2	ungl red	2	9		
2	whiteware	61	34		most very small
2	yellow	16	12		
4	late medieval	1	3	14th/15th	not classic reduced ware, grey int but rest is light firing
4	medieval gritty	1	4	12th/13th	orange surfaces, grey core, thin
4	tin glazed	2	3	17th/18th	with purple mottling
4	whiteware	2	1		

Test Pit 33: 149 sherds, 373grams
There were two fragments of medieval pottery present, both from context (6). There were also significant quantities of creamware and white salt-glazed stoneware together with a few fragments of tin-glazed earthenware, possible local early post-medieval wares and one or two other sherds of 17th/18th century types. It is possible that the tiny fragments of porcelain are also 18th century rather than later. There appears to be little mixing with necessarily later material. Several fragments of clay pipe were recovered from this test pit and a number of the stems had large bores, again indicating a 17th/early 18th century date. Three fragments of decorated bowls are later than this but not necessarily 19th century.

TP 33

context	type	count	weight	dating	comment
2	blue	1	1		blue fabric
2	china	1	1		
2	pearlw?	1	3	e. 19th	
2	pipe stem	0	0	?	
2	red	2	7		
2	red slipped	1	5		
2	stonew	3	7		misc. 'modern'
2	ungl red	2	4		
2	whiteware	14	18		very misc.
3	blue	1	2		as in 2
3	china	2	4		
3	pipe stem x 3	0	0		1 may be 17th/18th
3	red	1	0		
3	red slipped	1	1		
3	whiteware	14	19		
4	black gl red	2	2		
4	creamw	5	5		
4	late post med	1	1		pinkish buff gl
4	pipe bowl	0	0	18th/19th	decorated frag

Pottery

context	type	count	weight	dating	comment
4	pipe stem x 2	0	0	17th/18th?	
4	red	1	1	17th?	
4	red	4	7		fairly thin walled
4	tin-glazed	2	2	17th/18th	dark blue on pale blue
4	ungl red	1	2		
4	whiteware	15	18		
5	blackware	3	7		Thin walled reduced dark grey fabric with near black gl
5	brown gl st	1	4		
5	burnt	1	1		
5	cream dec	1	1		with grooves coloured brown
5	creamware	16	61	18th c.	1 moulded 1 plain plate rim.
5	local pm	3	44	17th/18th	mostly oxidised with greenish and light brown gl.
5	mottled gl red	1	7	17th/18th	rim
5	pipe bowl frag	0	0		masonic
5	pipe stem	0	0		
5	porcelain	3	2		fine rim with blue red and brown dec. Chinese export?
5	red	3	8		thin walled rim
5	red slipped	1	16		
5	tin-glazed	1	1	17th/18th	dark blue on pale blue
5	white salt gl st	5	20	18th	hollow vessel rim and plate rim, base
6	black gl red	1	5		shiney
6	blackware	1	1		reduced fabric as in 5
6	china	1	3		rim with applied sprig
6	creamw	7	6	18th	1 has blue painting
6	local red	1	7	17th/18th	
6	medieval	1	17	13th/14th	abraded base, grey core buff surfaaces
6	medieval oxidised	1	3	13th/14th	
6	pipe bowl frags x 2	0	0		1 is decorated
6	pipe stem x 4	0	0	17th/18th	2 x 17th/18th
6	porcelain	2	2		with blue dec
6	post med ew	2	1	17th/18th	poss. Staffs type
6	red	3	5		
6	red slipped	1	0		
6	tin-glazed	2	1	17th/18th	
6	ungl red	1	1		
6	white salt gl st	4	5	18th	base, rim

Pottery

context	type	count	weight	dating	comment
6	whiteware	4	10		
7	local red	2	23	17th/18th	
7	pipe stem	0	0	17th/18th	
7	white salt gl st	1	1	18th	

end of TP33

Test Pit 34: 131 sherds, 362 grams
There was no medieval pottery from this pit and, although there were a few indications of 18th century activity, the majority of the assemblage was later, or not closely dateable, i.e. whitewares, many with transfer printing, and the red earthenwares.

TP 34

context	type	count	weight	dating	comment
2	whiteware	14	19		very miscellaneous
2	ungl red	1	2		flake
2	red slipped	7	27		1 main bit - a rim
2	red	4	14		
2	pipe stem x 5	0	0	18th/19th	
2	mottled	1	9	?	a coarse white fabric with brown mottled on upper (glazed) surface.
2	brown gl stoneware	1	1		
2	black gl red	1	2		
3	whiteware dec	13	27		mostly transfer incl willow
3	whiteware	23	36		
3	white salt gl	1	2	18th	
3	stonew	2	6		
3	red slipped	12	28		some with brown mottling
3	red slip dec?	2	3	17th/18th	light red with gaps in glaze possibly flaked off slip trailing
3	red	8	25		base. 2 have very thick gl.
3	pipe stem x 7	0	0		
3	creamware	8	15	18th	
3	black gl red	3	19		
3	?	3	3		
4	whiteware	2	2		
4	white salt gl st	1	1	18th	
4	ungl red	1	6		
4	Staffs type	1	17	17th/18th	combed brown lines on white (yellow)

Pottery

context	type	count	weight	dating	comment
4	red slipped	1	3		
4	red slip dec	3	6		With slip lines
4	red	3	8		
4	pipe stem x 4	0	0		1 has a Darlington stamp but the other side is the pipe type (cutty) not the maker. Likely to be later 19th c.
4	pipe bowl frag x 1	0	0		
4	brown gl st	1	5		
4	black gl red	1	3		
5	red	1	2	17th	rim, has some sooting ext.
5	creamware	1	4	18th	
6	whiteware	2	2		
6	red slipped	2	19		rim, may be early
6	pipe bowl frag x 1	0	0		
6	black gl red	2	32		base.
7	whiteware	1	1		
7	ungl red	1	7		
7	red	1	3		
7	pipe bowl frag	0	0		v. small!
7	china	1	1		
7	brown gl st	1	2		

Test Pit 38: 48 sherds, 1024 grams
The weight of the pottery from this test pit is mostly accounted for by four joining fragments from the base of a large late medieval vessel in a reduced (grey) fabric. Three were from context (6) and one from (7). The size and condition of these sherds strongly suggests a primary deposit. There were two other fragments of late reduced ware from other contexts and another medieval sherd of a pink fabric, possibly earlier but the sherd was quite small. There was some 17th/18th century pottery present, although sherds were very small. However, there was also a fragment of clay pipe bowl and some clay pipe stems of this date.

TP 38

context	type	count	weight	dating	comment
1	pipe stem	0	0	18th ?	
1	china	1	1		
1	pipe bowl	0	0		very small frag
1	whiteware	6	3		
2	white salt gl stoneware	1	2	18th	

Pottery

context	type	count	weight	dating	comment
2	local post-med	2	7	17th/18th	rim
2	Staffs	1	1	17th/18th	yellow gl with very tip of dark brown combed dec.
2	black gl red	1	1		flake
2	red slipped	1	3		rim
2	whiteware	10	12		
3	pipe bowl	0	0	l.17th/e.18th	
3	late reduced ware	1	8	15th/16th	
3	creamw	1	2		
3	late pm	1	0		?yellow ware
3	red	1	0		
3	red slipped	2	7		1 main bit
3	whiteware	3	1		
4	pipe stem	0	0	18th?	
4	creamware	1	1	18th	
4	black gl red	1	37		from base
4	red	3	7		2 bits of small strap handle, rim with slip band
4	red slipped	2	49		2 rims
4	ungl red	2	4		
5	pipe stem x 2	0	0	17th/18th	
5	late reduced ware	1	5	15th/16th	
5	medieval pink	1	3	13th/e. 14th	
5	red	1	2		
6	late reduced ware	3	369	15th/16th	base, 2 other sherds (joining) have oxidised interior.
7	late reduced ware	1	499	15th/16th	base joins that in 6, large thick walled

Pottery

Test Pit 39: 166 sherds, 447 grams
There were five fragments of late medieval pottery from the lower contexts and four possibly earlier sherds from higher up. Fragments of early post-medieval wares (17th/18th century) were scattered throughout as well as sherds of creamware and tin-glazed earthenware suggesting there could have been more or less continuous activity in this area. The majority of the sherds are broadly 18th/19th century. The few fragments of clay pipe stem confirm an early post-medieval element.

TP 39

context	type	count	weight	dating	comment
1	china	1	2		transfer printed
1	whiteware	17	11	19th	
1	factory slip	3	5	19th	
1	red	2	2		?early
1	red slipped	1	4		
1	black gl red	1	4		
1	brown gl stoneware	1	2		rim
1	?	2	2	?	
1	pipe stem x 2			?18th c.	
2	medieval	2	4	13th/14th	fairly non-descript!
2	buff earthenware	1	5	17th/18th	base – brown internal gl.
2	tin-glazed?	1	1	17th/18th	very abraded
2	ungl red	1	7		
2	whiteware	13	12		
2	brown gl whiteware	1	5		
2	creamware	2	2	18th	
2	factory slip	1	2		
2	miscellaneous	2	2		
2	burnt	1	1		
2	pipe stem x 2			18th?	
2	pipe bowl frag				
3	black gl red	3	6		
3	red slipped	1	7	18th ?	splayed base with ext slip
3	whiteware	22	31		some transfer print
3	pink lustre	1	0	19th	
3	ungl red	2	6		
3	red	1	2		
3	Staffs?	1	4	e.18th c.	buff post-med earthenware
3	stoneware	1	5		grey
3	miscellaneous	4	6		

Pottery

context	type	count	weight	dating	comment
3	pipe stem x 1			17th/e.18th	
3	pipe stem x 1			18th/19th	
4	red slipped	1	10		
4	creamware	3	3	18th	
4	brown gl stoneware	1	4		
4	red	2	5		
4	whiteware	10	10		various
4	pipe mouthpiece x1			18th/19th	
5	red slipped	1	11		rim
5	medieval	2	10	13th	pale pink and orange/buff
5	tin-glazed	1	3	18th	light blue gl
5	Staffs?	1	2	18th	brown with yellow blob
5	whiteware	7	6		some transfer print
5	creamware	4	4	18th	
5	ungl red	2	3		
5	red	1	1		flake
5	buff earthenware	1	3	17th/18th	base – yellow internal gl.
6	china	1	6		Rim – undecorated
6	tin-glazed	1	1	17th/18th	blue decoration
6	creamware	1	2	18th	
6	Local red?	1	8	17th/18th	rim with green/brown gl
6	black gl red	1	14	?	base
6	whiteware	7	12		willow pattern rim
6	pearlware?	1	3		shell edge rim
6	yellow ware	1	10	19th	
6	red slipped	1	1		
6	pipe stem x 2			18th	
7	creamware	6	10	18th	moulded rim
7	red	5	35		1 has slip band
7	creamware?	1	2		with fine ribs and green gl ext
7	whiteware	5	4		
8	late medieval	1	50	14th/15th	Thick walled mid-grey, green gl, oxidised internally
8	ungl red	1	3		flake
8	?	1	1	19th?	pinkish earthenware, light brown gl
8	pipe stem x 3			17th/e.18th	
8	pipe stem x 3			18th/19th	
9	late medieval	3	64	14th/15th	as in layer above

Pottery

context	type	count	weight	dating	comment
9	Local red?	1	4	17th/18th	red fabric with greenish gl
9	pipe stem x 1			18th/19th	
10	late medieval?	1	2	15th/16th	

Test Pit 40: 116 sherds, 263 grams

There were two pieces of medieval pottery, one from [3] and one from [6] the lowest level reached. A few fragments, including two of Staffordshire type slipware, indicate some earlier post-medieval activity. Later material, however, much of it heavily fragmented, occurred throughout the levels excavated.

TP 40

context	type	Count	weight	dating	comment
1	black gl red	2	3		
1	china	1	1		
1	pipe stem x1	0	0		mouthpiece
1	post-med ew	4	3	18th/19th	misc chips of mainly brown gl white ew
1	red	3	9		
1	stoneware	1	5		utilitarian
1	whiteware	12	16		misc
2	china	1	3		
2	red slipped	1	5		
2	ref red	1	1		
2	ungl red	1	3		rim
2	whiteware	20	26		some tiny
3	brown gl whiteware	1	6		
3	china	4	15		2 biggest are same ves with transf print. Small bit of pink lustre and rim with gold band
3	local pm	1	3	17th/e.18th	
3	medieval gritty	1	3	13th	small flat frag sooted one side, red brown
3	pipe stem x1	0	0		with spur
3	porcelain?	1	4		bit of figurine
3	red slipped	1	2		
3	ungl red	1	3		
3	whiteware	25	35		misc incl blue and brown tp.
3	yellow	2	3		flakes
4	red	1	3		
4	red slipped	2	9		
4	whiteware	10	24		5 TP, 4 sponge, 1 burnt

Pottery

context	type	Count	weight	dating	comment
5	black gl red	5	28	18th	incl rim of bowl
5	brown gl whiteware	1	1		
5	pipe bowl frag	0	0	?	
5	pipe clay?	0	0		not sure what this is
5	pipe stem x1	0	0	17th/18th	
5	pm ew	1	3		burnt bit of base
5	Staffs slip	2	11	18th c.	pie crust rim. Feathered slip
5	whiteware	6	6		misc
6	black gl red	3	10		
6	medieval buff	1	19	12th/13th c.	typical Tees Valley 'bifid' rim, quite coarse

Test Pit 41 : 127 sherds, 53 grams
There was nothing identifiably earlier than the 19th century from this test pit.

TP 41

context	type	count	weight	dating	comment
1	red slipped	1	7		
1	ungl red	1	2		
2	red slipped	1	2		
2	late pm	1	1		sl yellow gl
2	pipe stem x2	0	0		
2	red slipped	1	8		rim
2	whiteware	22	33		several, incl rim from a tp dish/plate, also some sponged and some plain

Test Pit 42: 42 sherds, 137 grams

Although most of the pottery appeared to be 19th century or later there were indications of earlier activity in this test pit, including a small piece of Staffordshire type slipware and a clay pipe stem with large bore.

TP 42

context	type	count	weight	dating	comment
2	black gl red	1	3		
2	red	2	7		1 sherd has flaked but counted here as 1
2	red slipped	1	2		
2	ungl red	1	1		

Pottery

context	type	count	weight	dating	comment
2	whiteware	5	8		1 sherd has flaked but counted here as 1
3	black gl red	4	54		rim sherd has flaked but counted here as 1, also a base
3	brown gl whiteware	2	8		
3	pipe stem x6	0	0		at least one looks 17th/18th c.
3	red	6	13		incl small strap handle
3	red slipped	6	23		bowl rim
3	Staffs type	1	1	18th c.	
3	ungl red	1	1		
3	whiteware	11	13		
3	yellow	1	3		

Test Pit 43: 21 sherds, 35 grams
[Not sure about the status of these clay pipes which were uncontexted but in the TP 43 bag. They certainly indicate early post-medieval activity, though there is also the Tennant stem which is probably well into the second half of the 19th century].

There were two sherds of medieval pottery from context (3) which also produced some early post-medieval sherds and nothing necessarily later than the 18th century.

TP 43

context	type	count	weight	dating	comment
0	pipe bowl	0	0		almost complete - looks 17th c.
0	pipe bowl frag	0	0		with GB mark on base
0	pipe frag	0	0		with spur
0	pipe stem x1	0	0	19th	TENNANT/BERWICK
0	pipe stem x1	0	0		with spur
0	pipe stem x11	0	0	17th/18th	these fairly large bores
0	pipe stem x20	0	0		sl smaller bores
0	pipe stem x8	0	0		
1	pipe bowl fragx2	0	0		v small
1	pipe stem x1	0	0	19th	
1	red	1	0		small
1	red?	1	4		hard chip of ?base with some brown gl
1	white salt gl stoneware	1	0	18th	v small
1	whiteware	5	4		
2	brown gl stoneware	1	1		
2	whiteware	3	2		2 are burnt with dark gl
3	?	1	1		orange flake not lpm
3	local pm	2	10	17th/18th	1 green, 1 yellowish gl
3	medieval buff	1	7	13th/14th	

Pottery

context	type	count	weight	dating	comment
3	medieval buff?	1	2	13th/14th	rim, hard
3	pipe stem x7	0	0	17th/18th	
3	red?	1	2	18th?	not lpm
3	Staffs type	1	1	18th c.	feathered slip
3	white salt gl stoneware	2	1	18th	
4	pipe stem x1	0	0	17th?	worn

Pottery

Test Pit 44: 158 sherds, 419 grams

There were 20 sherds of medieval pottery from this test pit including some late medieval reduced ware, but also other 13th/14th c. material. There was also one so far unidentified sherd which may be earlier still. Contexts [6] to [8] produced only medieval [or earlier] pottery. Other contexts also contained early post-medieval material including fragments of clay pipe bowl and tin-glazed earthenware suggesting that some of the less diagnostic pottery (e.g. red wares) might also fit into the 17th/18th century date bracket rather than being broadly 19th century.

TP 44

context	type	Count	weight	dating	comment
1	black gl red	4	11		
1	creamware	1	2		
1	mottled ware	1	2		buff fabric with brown mottled gl
1	pipe bowl fragx2	0	0		small
1	pipe stem x1	0	0	17th	
1	whiteware	2	2		1 is simple rim with blue painted dec
2	?	3	2		small
2	black gl red	6	28	18th?	
2	burnt blackw	1	2		
2	med gritty	1	9	13th	pale fabric, simple rect/everted rim
2	med oxidised	1	2	13th/14th	
2	pipe bowl fragx2	0	0		1 v small, other looks early
2	pipe stem x7	0	0		
2	red	4	33		club base, others small
2	red slip dec	1	1	17th/18th	small hv
2	red slipped	2	14		
2	salt gl st	1	0		small grey frag
2	Staffs black gl	1	4	18th c?	pale orange buff, has a darker red slip and black gl
2	stoneware	1	5		pale brown ext, brown int
2	tin glazed	2	3	17th/18th c.	pale blue gl
2	whiteware	7	7		some maybe creamw
3	pipe stem xx2	0	0		1 is 17th other late
3	red	3	3		
3	tin glazed	1	0	17th/18th c.	v small
3	whiteware	4	3		1 sponge, 1 tp
4	?	5	2		
4	brown gl stoneware	2	2		
4	brown gl whiteware	3	5		1 is really black ?tea pots?
4	creamware	15	11	18th c.	flakey

Pottery

context	type	Count	weight	dating	comment
4	local pm	3	5	17th/18th c.	
4	med gritty	1	3	13th	pink/buff
4	pipe bowl fragx2	0	0		moulded dec
4	pipe stem x8	0	0		
4	post med?	2	5		2 softish orange
4	red	20	81		very misc, 1 has slip trail, 1 with int slip, 1 thick with slip line
4	red slipped	4	43		main bit is brown mottled base
4	reduced blackw	2	2	?	
4	rhen st?	1	9	?	brown sl speckled gl
4	tin glazed	1	1	17th/18th c.	
4	white salt gl stoneware	2	3	18th	bit uncertain about this!
4	whiteware	9	5		
4	yellow	3	6		blue and white bands
5	?	5	3		
5	black gl	1	2		more pale brown than red
5	brown gl stoneware	1	0		small!
5	brown gl whiteware	1	1		
5	late medieval reduced	4	47	14th/15th	bit of jug rim, all are worn
5	pipe bowl frag	0	0	e. 18th	actually 3 bits but are from 1 bowl
5	pipe bowl frag	0	0	e. 18th	has stars on spur
5	pipe stem x1	0	0		
5	red	4	7		misc
5	red slip dec	4	4	17th/18th c.	small hv or bowl with sl everted rim
5	red slipped	2	2		1 has sgraffito line, 1 brown mottling
5	tin glazed	1	5	17th/18th c.	pale blue gl
5	whiteware	1	1		may be creamw, has brown in impressed line and 'chain' dec
6	med orange	2	2	13th/14th	
6	medieval	2	5	13th/14th	grey-brown part ox with patch brownish gl
6	medieval buff	5	11	13th/14th	
7	med orange	4	9	13th/14th	joining, has some white inclusions
8	med gritty?	1	4	??	rim, thin dark grey with some brown surface oxidation, not sure what this is

end of **TP** 44

Pottery

Test Pit 45 : 125 sherds,141 grams
Three sherds of medieval pottery were recovered from this test pit. There were also a few fragments of early post-medieval date but the rest of the assemblage was broadly 19th century though highly fragmented.

TP 45

context	type	Count	weight	dating	comment
2	pipe stem x1	0	0		
2	red slipped	3	3		
2	whiteware	11	5		some tp
2	yellow	2	1		
3	?	2	5		
3	black gl red	3	3		
3	brown gl stoneware	1	0		
3	china	2	6		tp
3	creamware?	14	10		small flakes mostly
3	pipe bowl fragx4	0	0		
3	pipe stem x9	0	0		
3	red	3	4		misc
3	red slipped	3	9		rim
3	Staffs type	1	1	18th c.	small hv slip trail ext
3	stoneware	1	1		pale buff
3	whiteware	34	19		misc
3	yellow	6	5		
4	?	3	3		
4	black gl red	2	15		
4	local pm	1	6	17th/18th c.	
4	pipe bowl frag 2	0	0		
4	pipe stem x5	0	0		
4	red	2	3		
4	whiteware	21	17		
4	yellow	2	2		with white strips
5	?	1	1		worn red frag
5	china	1	2		
5	pipe bowl frag	0	0		
5	pipe stem x2	0	0		1 has spur and initials apparently JK
5	red?	1	1		has metallic gl as Cistercian, this ungl int
5	stoneware	1	2	18th?	thin base
5	whiteware	1	0		
6	late medieval reduced	1	7	14th/15th	buff surface, only patch gl
6	medieval buff	2	10	13th/14th	Everted jar rim and sherd prob sv
6	pipe bowl frag	0	0		
6	pipe stem x1	0	0		

Pottery

Test Pit 46 : 127 sherds, 414 grams
There was no medieval pottery from this test pit but, although sherds were small, there were clear indications of activity earlier than the 19th century, e.g. 18th century type stoneware, tin-glazed earthenware, Staffordshire type slipware. It is possible therefore that some of black-glazed redware which was a fairly large component of this group, is also in this date range.

TP 46

context	type	Count	weight	dating	comment
1	black gl red	1	4		
1	cbm	0	0		numerous flakes of red cbm - tile/brick
1	china	7	7		
1	stoneware	1	1		flake util
1	wall tile?	2	4		chips coarse fabric with blue-green painting
2	black gl red	4	19		
2	china	3	5		
2	pipe stem x2	0	0		
2	ref black	2	12		joining ring base
2	stoneware	3	31		misc util
2	stoneware coarse	5	38		
2	whiteware	5	12		misc
3	black gl red	5	28		
3	brown gl stoneware	1	31	?	
3	china	1	1		
3	pipe bowl frag	0	0		plain except for along mould line ?18th
3	pipe stem x4	0	0		small
3	red slipped	1	2		
3	whiteware	13	24		some tp some sponge and blue edge rim
3	yellow	12	16		with white and blue bands
4	black gl red	1	3		
4	creamware?	1	3		
4	stoneware?	1	1		
4	tin glazed	1	3	18th?	rim of hv, light blue with blue painting and red brown line
5	?	1	7		thick light red with some gl x1, flat ?pot
5	black gl red	18	52		
5	brown gl stoneware	1	2		
5	china	1	1		rim
5	Notts type stonew?	1	4	18th	mug handle
5	pipe stem x2	0	0	17th	
5	pipe stem x4	0	0		
5	red	3	5		
5	red slipped	1	3		

Pottery

context	type	Count	weight	dating	comment
5	whiteware	13	18		some could be creamw
5	yellow	2	4		joining flakes small handle
6	black gl red	4	25		base
6	local pm	2	5	17th/18th	
6	pipe stem x1	0	0	17th/18th	
6	pm reduced	1	23	?	base glx2
6	red slip dec	1	4	17th	light red with trace of slip trailing
6	red slipped	1	3		
6	whiteware	2	2		
7	black gl red	1	1		
7	pipe bowl fragx2	0	0	17th	
7	red slip dec	2	7	17th/18th	1 with trailed dec, 1 rim with band of slip
7	Staffs type	1	2	18th c.	rim
7	white salt gl stoneware	1	1	18th	

Test Pit 47 : 37 sherds, 109 grams

Apart from one small flake of possible creamware all the pottery from this test pit was probably medieval, though some was very worn. Most of the sherds were orange-buff or a mixture of pink and buff and are broadly of the Tees Valley type of 13th/14th century date.

TP 47

context	type	Count	weight	dating	comment
2	creamware?	1	1		flake
2	medieval buff	7	15	13th/14th	small and abraded
3	medieval	1	7	13th/14th	?rim, very worn with grey core
3	medieval orange	4	20	13th/14th	2 with brown-green gl ext
3	medieval pink/buff	12	28	13th/14th	prob TV type, 1 has blib and green gl (very small and worn)
3	medieval?	6	9	?	prob med pot but very worn
4	med misc	4	4	13th/14th	misc small
4	medieval orange-buff	1	18	13th	very worn, squarish rim, int bevel
5	med gritty	1	7	13th	bit of base thin blue grey core disappears further up, sooted ext. orange buff

Pottery

Test Pit 48: 13 sherds, 30 grams
Only three contexts were excavated in this test pit. Six, possibly seven, of the sherds of pottery were medieval. None of the other fragments were necessarily later than the 18th c.

TP 48

context	type	Count	weight	dating	comment
2	black gl red	1	1		
2	medieval buff	1	3	13th/14th	
2	ox med?	1	4	?	very worn
2	red	2	1		brown gl, thin
2	red slip dec	1	2	17th/18th	small hv
2	TVB	1	6	13th/14th	yellow gl with small bit of cu green
3	?	1	1		small flake could be early pm.
3	black gl red	1	0		small
3	late medieval reduced	1	4	14th/15th	
3	med oxidised	3	8	13th/14th	main sh is sooted base

Test Pit 49 : 160 sherds, 434 grams
Although the great majority of fragments were late post-medieval (i.e. broadly 19th c.) most of them were very small, whereas the medieval component (15 sherds) consisted of some quite substantial fragments. Only one was a rim but this was of the 'bifid' Tees Valley type. The group probably ranged in date from broadly 13th to 15th centuries. However, there were also several fragments of local early post-medieval wares and one or two sherds of 18th century types indicating a degree of continuity not so evident in other test pits.

TP 49

context	type	Count	weight	dating	comment
0	TV iron rich	1	13	13th/14th	flaked bifid rim, red brown
1	black gl red	2	2		
1	china	1	1		
1	creamware	3	3		
1	medieval	1	2	13th/14th	dk grey with white ext
1	medieval buff	1	1	13th/14th	thin
1	pearlw?	1	3		moulded flake of rim
1	pipe stem x2	0	0		
1	red	1	3	17th/18th	epm
1	red	2	4		misc ?date
1	red	2	4		rim
1	stoneware	1	3		util
1	whiteware	12	7		most with some dec, some v small
2	?	5	3		

Pottery

context	type	Count	weight	dating	comment
2	black gl red	2	7		
2	late medieval reduced	1	8	14th/15th	
2	local pm	2	10	17th/18th	1 is abraded base, both have greenish gl and orange fabric
2	red	9	9		2 have traces slip
2	scratch blue?	1	0	?18th	poss 18th c. stonew
2	stoneware	1	3		thick chip
2	whiteware	29	22		misc, incl some transf p and other dec
3	?	1	7	early pm?	pinkish fabric with white surfaces, splayed base
3	black gl red	2	12		incl small handle
3	local pm	3	10	17th/18th	pinkish buff with dull greenish brown gl
3	oxidised	2	4	?	not sure
3	pipe bowl frag	0	0		
3	pipe stem x2	0	0		1 has totally illegible mark
3	red	2	2		
3	red slipped	2	3		
3	white salt gl stoneware	1	6	18th	1 is tiny other is base with some scraffitto and colour
3	whiteware	14	25		re. wgt - 1 sh has concretion
4	black gl buff	1	0		tiny
4	black gl red?	1	1		burnt/reduced
4	brown gl stoneware	1	7		rim - 'modern'
4	late medieval reduced?	1	4	14th/15th	chip
4	late pm	2	3		misc
4	local pm	1	13	17th/18th	pale orange/buff
4	local pm?	4	9	17th/18th ?	light red with greenish gl
4	orange	1	2	17th/18th ?	
4	pipe bowl frag	0	0		small
4	pipe stem x1	0	0		
4	red	6	7		brown gl
4	red slipped	1	3		
4	Staffs type	1	2	18th c.	
4	stoneware	2	1	18th?	v small
4	ungl red hard	1	4		rim
4	whiteware	15	8		misc - some tp and sponge
4	yellow?	1	7		
5	black gl red	1	4		
5	Cistercian?	1	1		burnt
5	late medieval reduced	1	15	14th/15th	pale with black int surface
5	medieval reduced -	2	19	15th?	

Pottery

context	type	Count	weight	dating	comment
	coarse				
5	mottled ware?	1	0		small flake
5	whiteware	1	1		
6	?	1	0		
6	early pm?	1	8	17th/18th ?	oxidised, flat frag with green and brown gl 1 side
6	late medieval reduced	2	13	14th/15th	
7	late medieval reduced	2	76	14th/15th	
7	late medieval reduced?	1	45	14th/15th	worn, part oxidised from a base
7	medieval oxidised	2	4	13th/14th	1 ?TVB

end of TP 49

Test Pit 50: 9 sherds, 35 grams
Only three contexts were excavated in this test pit. Most of the sherds recovered were medieval although none were particularly diagnostic.

TP 50

context	type	Count	weight	dating	comment
1	late med?	1	3	15th ?	dull buff with greenish ext gl
2	medieval orange/buff	2	6	13th/14th	
2	medieval oxidised	1	15	13th/14th	base
3	black gl red	2	4		
3	medieval buff	1	5	13th/14th	
3	medieval orange	1	2	13th/14th	
3	ungl red	1	0		small chip

Test Pit 51: 82 sherds, 280 grams
Over half the fragments recovered were unglazed red earthenware, probably relatively recent flower pot. However, there were some indications of earlier activity, including a pipe stem from the lowest level reached with a large bore. Nothing was clearly identifiable as medieval.

TP 51

context	type	Count	weight	dating	comment
1	?	1	2		burnt
1	china	1	3		dark green ext surface
1	ungl red	39	159		prob flower pot
1	util late pm	3	14		1 is chip of mixing bowl with int white slip
1	whiteware	13	26		some blue dec ?thin sponge

Pottery

context	type	Count	weight	dating	comment
1	whiteware	1	2		transfer print
2	china	1	2		as in [1]
2	red slipped	1	5		
2	ungl red	4	8		
2	white salt gl stoneware	1	1	18th	
2	whiteware	4	3		
2	whiteware	1	2		rim transfer print
3	black gl red	1	8		everted bowl rim
3	china	1	29		prof of saucer/shallow dish
3	med/p med	1	3	13th/17th!	Pale orange fabric with some gl one side. Not sure
3	red slip dec	1	2	?17th	slip flaked off
3	util/yellow	1	2		late pm kitchen ware
3	white salt gl stoneware	1	1	18th	
3	whiteware	1	1		
4	china	1	2		rim as before
4	ungl red	1	1		
4	white salt gl stoneware	1	2	18th	prob all from TP are one ves (small hv).
4	yellow	1	1		
5	pipe stem x1	0	0	18th?	
6	ungl red	1	1		flake
7	pipe stem x1	0	0		large bore

Test Pit 52: 46 sherds, 123 grams
Only a few small fragments from this test pit were clearly late post-medieval (i.e. 19th century or later). The majority were medieval buff and pink fabrics or a mixture of the two. These are Tees Valley ware types. The lowest level reached (context [5]) produced only medieval pottery.There was one small sherd of Cistercian ware and a few fragments of other early post-medieval wares (see catalogue).

TP 52

context	type	Count	weight	dating	comment
1	pearlw	1	1		rim
1	whiteware	1	0		
2	medieval buff	2	3	13th/14th	
2	whiteware	1	0		small!
3	Cistercian	1	3	16th c.	Appl strips not rouletted

Pottery

context	type	Count	weight	dating	comment
3	local pm?	3	17	17th/18th	pink (oxidised) fabric with green, green-brown gl.
3	medieval pink	3	8	13th/14th	1 looks to have [worn] applied blob so poss TVB.
3	medieval?	4	2	?	small worn frags
3	red	1	3		light red, fairly hard, not sure what this is
4	medieval buff	4	17	13th/14th	
4	medieval oxidised	8	22	13th/14th	incl rim
4	medieval?	4	2	?	small worn scraps
4	post med	1	1	17th/18th	small chip of base but has yellow gl int and dark brown ext, poss Staffs type
5	gritty med	1	4	12th/13th	red brown gritty fabric
5	medieval buff	4	13	13th/14th	
5	medieval pink/buff	6	21	13th/14th	TV type
5	reduced green gl	1	6	13th/14th	Not late med type

Test Pit 53: 119 sherds, 517 grams
*N*one of the pottery from this test pit could be dated to earlier than the 19th century. The stoneware jar (in [1]) with Hartley's mark and the FMF symbol is early 20th century.

TP 53

context	type	Count	weight	dating	comment
1	china	1	1		with pink lustre band
1	china	1	2		ridged
1	misc lpm	1	1		chip buff fabric
1	stoneware	4	41	e. 20th c.	base with FMF and 'not genuine unless bearing the Hartley's label'.the F (retrograde)MF mark was registered in 1928!
1	ungl red	4	11		
1	whiteware	6	21		transfer print, looks like 1 ves.
1	whiteware	12	15		misc incl small teacup type handle frags
2	black gl red	2	30		
2	brown gl stoneware	3	17	19th	jar
2	china	3	10		
2	copper lustre	1	7		hard dull grey-red fabric
2	red	2	9		plain brown gl
2	red slipped	5	28		2 have brown mottling
2	ungl red	14	28		
2	whiteware	18	55		Many are flakes, 2 bits rod handle - one with gold line

Pottery

context	type	Count	weight	dating	comment
2	whiteware dec	4	14		2 transf, one sponge dec (rim)
2	yellow	1	3		
3	black gl red	1	15		int gl, some concretion
3	pipe stem x1	0	0		
3	red	2	2		flakes with int gl
3	red slipped	2	29		rim
3	whiteware	15	28		2 transf, 1 sponged, 1 painted
3	yellow	6	13		2 biggest bits have white and dark brown banding
4	black gl red	1	80		thick, black gl int
4	red slipped	2	28		
5	china	1	15		ring base
5	creamware	3	4		
5	whiteware	2	4		bit of base of slip banded (brown) hv, other is flake
6	stoneware	1	5		impossible to date
8	yellow	1	1		

end of TP 53

Test Pit 54: 28 sherds, 50 grams
All but three small fragments of the pottery from this test pit came from context [2]. There was some indication of earlier 17th/18th century activity but fragments were very small.

TP 54

context	type	Count	weight	dating	comment
1	pipe stem x1	1	0		missing!
2	black gl red	2	2		hard part reduced
2	brown gl stoneware	1	2	?	
2	creamware	2	2		
2	local pm	1	2	17th/18th	bit of sooting ext, greenish gl int
2	misc lpm	2	2		
2	pearlw?	3	13	18th/19th	part of rim flange
2	pipe stem x2	2	0	18th/19th	
2	red	2	3	?18th	
2	red slipped	1	8		
2	tin glazed	3	2	17th/18th c.	pale blue gl
2	white salt gl stoneware	1	0	18th	tiny sliver
2	whiteware	1	1		transfer print
2	whiteware	1	1		
2	whiteware dec	3	5		2 with blue bands, one with brown line (rim)
3	black gl buff	1	3		small handle frag
3	red	2	4		not sure about this

Pottery

Test Pit 55: 65 sherds, 283 grams
Nearly half the fragments from this test pit were unglazed red earthenware, probably flower pots. There was one small fragment of local early post-medieval type.

TP 55

context	type	Count	weight	dating	comment
1	black gl red	1	3		rim ?small jar
1	china	2	4		1 has sprig
1	local pm	1	2	17th/18th	
1	red	2	3		
1	red slipped	2	49		bowl rim
1	ungl red	3	5		?
1	whiteware	3	6		2 tp (1 is brown) and one painted (rim)
2	black gl red	1	3		?part of T pot knob.
2	china	2	1		
2	misc lpm	1	3		variant of yellow ware dark brown slip line, white and light brown bands
2	pearlw?	1	2		
2	pipe stem x1	0	0		
2	red	1	4		
2	ref black	1	1		lathe cut? Reduced fabric
2	ungl red	9	46		prob all flower pot
2	whiteware	9	13		misc - some tp, some paint
2	yellow	1	4		
3	pipe stem x1	0	0		
3	ungl red	19	124		
3	whiteware	5	7		2 largest are tp
3	yellow	1	3		

Test Pit 56: 44 sherds, 170 grams
Only a few small sherds from this test pit were clearly later than the 18th century. Twenty seven were medieval, including an abraded fragment of rod handle. One fragment from the lowest level reached may be prehistoric.

TP 56

context	type	Count	weight	dating	comment
2	black gl red	6	10		could be 18th century as there is little definitely later in this TP
2	med	1	3	13th/14th	orange/mid grey
2	med	2	5	13th	worn brownish
2	med gl	2	3	13th/14th	oxidised with yellow gl, buff with green gl

Pottery

context	type	Count	weight	dating	comment
2	medieval buff	2	3	13th/14th	
2	ox med	1	6	13th/14th	flat, from base
2	pipe stem x4	0	0		all small thin frags
2	red	4	7	17th/18th ?	
2	white salt gl stoneware	1	2	18th	hv
2	whiteware	4	3		
3	blackware	1	22	16th/17th ?	in fact dark purplish brown, hard fired reduced poss iron gl early pm
3	med hard	4	43	14th?	very hard mid/light greyish fabric
3	med misc	7	13	13th/14th	
3	medieval buff	1	6	13th/14th	
3	TVB type	5	22	13th/14th	bright pinkish orange, yellow gl over a thin white slip, bit of worn rod handle, paler pink with buff m
4	TVB type	2	3	13th/14th	
5	?	1	19		Possibly prehistoric

Test Pit 57: 47 sherds, 181 grams

Several sherds from this test pit were not clearly identifiable but the majority appeared to be medieval with a few fragments in the 'early post-medieval' date range (i.e. 17th/18th century). There was no clear indication of any more recent activity.

TP 57

context	type	Count	weight	dating	comment
2	?	5	2		Not sure what these small flakes are, some could even be tge.
2	brown gl red	5	7	17th/18th	rim of small hv
2	local pm?	1	1	17th/18th?	
2	med?	3	10	?	worn
2	pipe stem x2	0	0		
2	red slip tr	1	1	17th/18th	
2	red slipped	1	1		mottled
3	glazed gritty	2	5	13th	2 joining, pale orange margins with grey core, coarse black and white inclusions
3	late medieval reduced?	4	18	14th/15th	worn
3	med misc	8	18	13th/14th	
3	medieval buff	2	4	13th/14th	
3	orange gl	1	54	epm?	part of strap handle, orange green gl, int surface also gl. May be early post-med
3	oxidised?	1	4	?	

Pottery

context	type	Count	weight	dating	comment
3	stoneware?	3	26	14th/15th?	mid grey vitrified fabric, traces gl ?over-fired LRW
3	TV type?	7	21	13th/14th	buff/orange
4	glazed gritty	1	5	13th	Coarse gritted pink/orange and light grey with yellow gl
4	med misc	2	4	13th/14th	

Test Pit 58: 65 sherds, 321 grams

The pottery from TP58 was the least fragmented of all the 2015 test pits with an average sherd weight of nearly 5 grams. (For 14 of the 23 pits the average weight was 3gms or less and only three were more than 4 grams). There were 21 (possibly 24) medieval sherds which included a thumbed base and a small section of rim. One fragment was late reduced ware and others were of Tees Valley B type. Other fragments were less diagnostic although broadly 13th to 14th century in date. There were eight quite large sherds of two vessels of local post-medieval type, a few fragments of tin-glazed earthenware and a small sherd of Staffordshire type slipware. With these clear indications of 17th to 18th century activity it seems likely that the black glazed redware present is in this date range rather than later. There is in fact very little clear indication of 19th century and later activity.

TP 58

context	type	Count	weight	dating	comment
1	med	2	5	13th/14th	ox ext with grey core
1	red	1	1		small thin frag
2	black gl red	2	29		Flanged dish rim, burnt (glaze bubbled)
2	black gl red	7	14		incl small strap handle
2	burnt	5	15		2 are flat, 1 has moulded dec (?figurine) all show signs of burning
2	late pm	3	3		not sure what these are, 2 have stabbed dec
2	local pm	8	139	17th/18th c.	5 bits (joining) base and 3 bits upper body not sv
2	med?	3	5	?	misc, worn
2	pipe stem x6	0	0		1 has start of bowl
2	porcelain	1	1		blue painted
2	red	3	11		1 is base
2	Staffs type	1	2	18th c.	feathered slip ext
2	tin glazed	4	10	17th/18th c.	3 +flake are 1 ves dish with blue dec on pale blue gl
2	white salt gl stoneware	1	0	18th	small very thin frag
2	whiteware	3	2		dec, 1 moulded
3	black gl red	1	1		
3	late medieval reduced	1	11	14th/15th	

Pottery

context	type	Count	weight	dating	comment
3	local pm	1	8	17th/18th c.	
3	med misc	3	13	13th/14th	
3	medieval buff	5	14	13th/14th	1 is sooted, others have traces glaze
3	ox med	1	13	13th	base with thumbing, orange fabric sooted ext
3	pipe bowl frag	0	0		
3	TVB type	9	24	13th/14th	with pale buff ext surface, traces bright green gl though worn on 3 (2 jn). 1 other is small section rim

end of TP 58

Test Pit 59: 108 sherds, 321 grams

There were five fragments of late medieval reduced ware from this pit, one, possibly two, of local post-medieval type and a small fragment of a Staffordshire type early post-medieval ware. There were two groups of sherds of cream-coloured refined earthenwares. These may both be 18th century creamwares but in small fragments its identification can be problematic. If they are it is possible some of the red earthenwares (including black glazed) could also be 18th century and the quantity of 19th century material relatively small.

TP 59

context	type	Count	weight	dating	comment
1	red	1	6		
1	red slipped	2	7		
1	stoneware	1	31		jam jar base
1	ungl red	1	13		
1	whiteware	1	1		
1	yellow	1	2		
2	black gl red	5	9		sm bit of handle is reduced (grey) fabric)
2	china	2	3		
2	creamware?	16	17		small flakey bits
2	late medieval reduced	1	5	14th/15th	
2	local pm?	1	2	17th/18th?	bright green gl
2	pipe stem x1	0	0		
2	red slipped	5	32		rim
2	Staffs type	1	2	18th c.	brown outer yellow int
2	ungl red	1	2	?	?rim
2	whiteware	17	13		
2	yellow	3	3		white stripes
3	black gl red	6	13		
3	creamware	13	20	18th ?	incl some bits of plate rim
3	late medieval reduced	3	39	14th/15th	incl bit of strap handle
3	local pm	1	21	17th/18th	buff fabric, green gl, handle?

Pottery

context	type	Count	weight	dating	comment
3	red	6	14		
3	red slipped	4	36		
3	stone bead	0	0		
3	whiteware	8	11		misc
3	whiteware?	1	2		rough burnt
4	black gl red	1	2		
4	brown gl stoneware	1	5		chunky
4	late medieval reduced	1	1	14th/15th	
4	stoneware	1	4	?	ungl
4	ungl red	1	4		
4	whiteware	1	0		sm bit rim
4	yellow	1	1		brown band

Test Pit 60: 311 sherds, 645 grams

This test pit produced the largest assemblage of pottery both by count and weight. None of the pottery could be confidently dated to earlier than the 19th century although there was one piece of clay pipe stem with a large bore suggesting a 17th c. date. Nearly 60% of the sherds were refined whitewares, the majority with some type of decoration (e.g. transfer printing, sponging etc) although with such fragmented material small, apparently plain, sherds are highly likely to be from decorated vessels. TP 60 also produced the largest group of white china (as opposed to white-glazed whitewares).

TP 60

context	type	Count	weight	dating	comment
1	black gl red	2	4		
1	brown gl buff	1	1		sl speckled, thin walled
1	china	15	23		plain
1	misc lpm	2	3		pinky buff
1	mottled ware	2	21		1 v small, other ?T pot rim brown mottled
1	pipe bowl frag	0	0		tiny
1	pipe stem x2	0	0	17th	one is tiny section, other is large bore
1	red	1	1		
1	red slipped	7	14		
1	stoneware	3	11		misc late pm (brown gl and buff)
1	tile	0	0		2 frags white gl tile
1	ungl red	3	13		1 is base
1	whiteware	26	38		plain
1	whiteware	20	39		other dec, mainly sponged
1	whiteware dec	28	46		tp, some v small
1	yellow	9	13		base, some blue bands
2	?	1	1		?ungl porcelain has imp N

Pottery

context	type	Count	weight	dating	comment
2	black gl red	2	3		
2	burnt	2	6		
2	china	19	63		1 is thick chunk with? lug handle but looks like china as opp to ew
2	creamware?	1	1		
2	misc lpm	4	7		pinkish buff ext gl
2	mottled ware	3	7		
2	pipe bowl frag	0	0		
2	pipe stem x2	0	0		
2	red	1	2		bright orangey red rim ?ves type
2	red	1	0		tiny
2	red slipped	5	12		
2	stoneware	3	40		misc late
2	ungl red	6	12		
2	whiteware	26	35		plain
2	whiteware dec	27	46		tp
2	whiteware dec	24	22		sponge and painted, some sv as in [1]
2	yellow	13	25		
3	black gl buff	1	1		
3	china	5	8		incl bit of 'Chelsea sprig'
3	creamware	1	1		
3	red	1	0		tiny, trace of slip band
3	red slipped	5	62		rim and base (part reduced) others small
3	whiteware	10	10		plain
3	whiteware dec	15	27		
3	whiteware dec	6	8		mainly sponge
3	yellow	8	16		
4	whiteware	2	3		looks like rim of util jar

end of TP 60

Test Pit 61: 180 sherds, 333 grams

There were two fragments of medieval pottery from this pit, both were rims. One had the external flange typical of Tees Valley types the other was a simple thick walled everted rim. A number of sherds were of earlier post-medieval types including some of the red earthenwares and white salt-glazed stoneware. However, later whitewares occurred in all contexts except the lowest level reached ([6]). It is possible that this was an 18th century deposit. There was a clay pipe bowl fragment of 17th century type in context [4].

TP 61

context	type	Count	weight	dating	comment
0	pipe stem x1	0	0		

Pottery

context	type	Count	weight	dating	comment
0	red	1	1		
0	red slipped	1	12		rim
0	stoneware	1	9		brown gl ?bottle
0	whiteware	3	2		
1	black gl red	2	6		both flaked, 1 with very little surface
1	china	1	1		
1	medieval buff	1	4	13th	thin walled rim with ext 'flange' as TVA
1	pipe bowl fragx2	0	0		
1	whiteware	4	3		
2	blackware	1	3	16th/17th ?	hard reduced fabric
2	china	2	3		1 blue painted
2	pipe bowl frag	0	0		v small
2	pipe stem x5	0	0		
2	red	5	29		very misc, 1 refined
2	red slipped	2	4		rim
2	ungl red	1	2		
2	whiteware	15	13		various - most are flakes some dec, largest bit is sponge
2	yellow	3	3		
3	?whiteware	13	6		flakes - probably all whiteware
3	black gl buff	1	0		small rim - has red slip with black gl
3	early pm?	1	2	17th/18th	buff fabric with trace yellow gl 1 side and brown other
3	med?	1	6	?	orange with buff surface
3	misc lpm	4	4		i.e. not white gl
3	pipe bowl frag	0	0		
3	pipe stem x4	0	0		
3	red	2	2		
3	red slip tr	1	1	17th/18th	
3	red slipped	4	6		
3	stoneware	1	1		small brown gl buff
3	whiteware	12	11		various, most small and undiagnostic
4	?whiteware	10	6		flakes, prob all whiteware
4	black gl red	2	1		
4	china	1	0		
4	early pm white	2	4	17th	base (frags join) yellow gl
4	local pm	1	5	17th/18th	buff fabric green gl
4	misc lpm	3	6		
4	pipe bowl frag	0	0	17th	
4	pipe bowl fragx3	0	0		1 has moulded dec
4	pipe stem x8	0	0		1 looks early/large bore

Pottery

context	type	Count	weight	dating	comment
4	red	3	4		
4	red slipped	5	14		
4	stoneware	1	1		brown gl
4	ungl red	1	1		
4	whiteware	19	18		misc - incl some tp
5	black gl red	2	14		1 thick 1 thin
5	brown gl red	4	5		all thin
5	burnt ?china	4	7		ring base
5	china	1	1		
5	medieval buff	1	40	13th/14th	thick everted rim, doesn't look TV
5	pipe bowl frag	0	0		
5	pipe stem x1	0	0		
5	red slipped?	1	3		not sure if slip coat or slip trail as most gone
5	white salt gl stoneware	2	3	18th	frag of small lid
5	whiteware	17	18		misc, many small flakes, 1 tp rim and bit of lid with lines. Some could be cream??
6	?	2	1		
6	black gl red	2	8		incl bit of strap handle
6	brown gl buff	1	0		
6	pipe stem x2	0	0	17th	large bore
6	pipe stem x7	0	0		
6	red	3	12	17th/18th	
6	red slip dec	5	9	18th	rim jar slip band
6	red slip dec	1	0	17th/18th	not sv as other slip trail
6	white salt gl stoneware	3	18	18th	dish rim (may have been a bit of this above but too small to ID on its own)

Pottery

Test Pit 62: 12 sherds, 32 grams
Six of the sherds from this test pit were medieval. [Nothing much more to be said – see catalogue!]

TP 62

context	type	Count	weight	dating	comment
2	black gl red	1	1		
2	brown gl stoneware	1	1		
2	pipe stem x1	0	0		
2	red slipped	1	5		brown mottling, light red
2	whiteware	3	2		1 is tiny
3	ox med	1	1	13th/14th	TV type - ungl
4	med	1	13	13th/14th	buff outer, pale orange, prob Tees V. type
4	med oxidised	2	2	13th/14th	
4	medieval buff	2	7	13th/14th	1 with some gl

15. Appendix 4. The Grinton-Fremington Dykes

In the landscape surrounding the villages of Grinton and Fremington, there exists a series of earthworks known as the Grinton-Fremington dykes.

Various theories have been put forward as to whether they form part of a coherent system or were constructed at different dates.

The origins of these large ditch and bank earthworks are also the subject of debate, with views that they were the boundaries of an early medieval polity in Upper Swaledale and others believing that these cross-valley dykes date from the late Bronze Age or Early Iron Age.

A previous investigation, by SWAAG, of a stream erosion break through another section of one of the dykes provided radiocarbon dates that suggests a pre-Conquest date.

The subject of this investigation is a longstanding breach in the southern section of the westernmost dyke. Agricultural vehicle and animal movements through this gap, necessary because of the very narrow nature of sections of the walled road, had been identified as likely to poach and erode the area. This together with natural erosion could result in further loss of the embankment.

With the support of the Senior Historic Environment Officer at the Yorkshire Dales National Park Authority (YDNPA), a proposal was developed as part of the Heritage Lottery funded Swaledale Big Dig, which in addition to mitigation, might provide the opportunity, through cleaning and minor excavation, to retrieve dateable material, which could contribute to the understanding and interpretation of the earthwork. Application was made to Historic England for Scheduled Monument Consent (SMC), which was duly granted.

The proposed works involved cleaning back the eroded surface of the bank followed by the excavation of a small (0.5 m wide x 0.4 m deep) trench to try and reach the base of the construction, gain dateable material, possibly from a decayed turf layer, with any samples obtained being subjected to radiocarbon dating.

This work was carried out in September 2015 in accordance with the SMC and showed that the bank had been constructed using a revetted wall to the eastern face, adjacent to the ditch, a rubble bank to the west with the bank infill constructed from the material excavated from the resulting ditch.

Several charcoal samples were retrieved from the base of the bank and subjected to radiocarbon dating at the Scottish Universities Environmental Research Centre in Glasgow, which gave consistent middle Bronze Age dates (c3119 – 3770BP; c1169 – 1820 BC).

As current theories date the earthwork as Prehistoric or early Medieval we had to consider how these new charcoal dates might fit with these theories.

Burning in the middle Bronze Age resulting in charcoal that was then contemporaneously incorporated in the construction would confirm a prehistoric date for the earthwork.

However, material burnt in the Bronze Age could have remained in the locality before becoming incorporated in the bank during a later construction.

Although relatively consistent in their origin these samples could not be used to definitively date the structure.

One of the original conditions attached to the SMC limited the excavated trench to a depth of 40cms and it was clear from our work on site that at this depth we had not reached the base of the bank nor uncovered any of the original ground surface. Because of this observation and the relatively consistent radiocarbon dates, we sought an amendment to the SMC to allow us to investigate the second exposed bank on the opposite side of the breach with a view to reaching the base of the bank and recovering samples from secure contexts for dating.

The SMC was duly amended and we were granted permission to try and reach the natural layers in a second small trench.

This second phase was carried out in late March 2016 and once again we were able to confirm the presence of a significant revetted wall on the eastern face, which was measured at a height of c50cms and comprised of substantial stonework. The bank composition (from material dug from the ditch) was very similar to the make up seen on the earlier excavation but on this occasion the natural underlying layers were reached. Unfortunately we did not uncover any significant archaeological features that might have represented the original ground surface.

A layer overlying the natural was thought to be residual ground surface but because this was relatively thin it was felt the original surface might have been disturbed or removed during the construction of the bank. Nevertheless a sample of this layer and several charcoal samples recovered from a similar depth in the trench were subjected to radiocarbon dating.

Unfortunately the layer did not contain sufficient organic material to provide a radiocarbon date but charcoal samples were again dated to the Bronze Age with one sample having a later Iron Age date of 453 BC (2403 BP).

These works, carried out as part of the Swaledale Big Dig, whilst not providing definitive dating evidence do suggest that this part of the earthworks was built after c450 BC (*terminus post quem*) and required substantial effort in the construction of revetted walls and excavation for the creation of the ditch and bank.

This knowledge adds to our understanding of these structures and will no doubt contribute to future debate.

This summary represents the position at the end of April 2016, when the Swaledale Big Dig came to an end. A full archaeological report for this part of the project is in preparation and will be submitted to Historic England, form the basis of an OASIS submission into the HER and also be considered for publication elsewhere.

Rob Nicholson – April 2016