



WILTON SERVICE RESERVOIR, EGREMONT, CUMBRIA

**Desk-Based
Assessment,
Walkover Survey,
and Evaluation**



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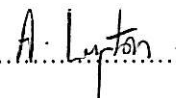
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SUMMARY

Following proposals by United Utilities for the construction of a new service reservoir adjacent to Wilton Service Reservoir, Egremont, Cumbria (NY 0440 1125), archaeological recommendations were made by the Cumbria County Council Historic Environment Service (CCCHES). These recommendations comprised a desk-based assessment, walkover survey, and a programme of evaluation trenching. Oxford Archaeology North was subsequently commissioned by United Utilities to undertake the work. The proposed development footprint covers a 10,000m² area, of which 540m² was examined by evaluation trenching.

The desk-based assessment, walkover survey, and evaluation were undertaken in April 2007. The locale surrounding the proposed development area was shown by the desk-based assessment, to have evidence of prehistoric activity, particularly during the late Neolithic and Bronze Ages, including a former stone circle (Site 5) and a Bronze Age arrowhead find (Site 4). Six sites of archaeological interest were identified within the study area, all of which were listed in the Cumbria County Historic Environment Record. The walkover survey did not identify any features of archaeological significance. A number of features related to drainage clearance and the remainder were the results of erosion.

The archaeological evaluation trenching found no evidence at the site of prior human activity other than agricultural practices, and the construction of the earlier reservoir at the southern end of the site. The only artefactual finds from the site comprised post-medieval pottery sherds that came from the topsoil and were representative of past manuring practices.

ACKNOWLEDGEMENTS

Oxford Archaeology North (OA North) would like to thank United Utilities for commissioning the project. Thanks are also due to the staff at the Cumbria Historic Environment Record (CHER) and the Cumbria Record Office in Whitehaven (CRO(W)). Thanks are also due to the Geography Department of the University of Lancaster for use of laboratory facilities.

Alastair Vannan compiled the desk-based assessment and Christina Robinson undertook the walkover survey. Alastair Vannan, Steve Clarke, and Kathryn Levey undertook the evaluation. Sandra Bonsall carried out the pollen preparations. Mark Tidmarsh produced the drawings and Alison Plummer managed the project and edited the report.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF PROJECT

1.1.1 United Utilities has proposed the construction of a new service reservoir adjacent to Wilton Service Reservoir, Egremont, Cumbria (NY 0440 1125). Following recommendations made by the Cumbria County Council Historic Environment Service (CCCHES), and their subsequent acceptance of a project design (*Appendix 2*), Oxford Archaeology North (OA North) were commissioned by United Utilities to undertake the desk-based assessment, walkover survey, and a programme of evaluation trenching. The proposed development footprint covers a 10,000m² area, of which 540m² was examined by evaluation trenching. This report sets out the results of the desk-based assessment, walkover survey, and evaluation.

1.2 SITE LOCATION AND TOPOGRAPHY

1.2.1 The site lies at the eastern side of Wilton, around 3km to the east of Egremont, in western Cumbria (NY 0440 1125; Fig 1). The site is in the eastern area of the West Cumbria Coastal Plain, which is a pastoral landscape that fringes the upland fells to the east (Countryside Commission 1998, 25). The site is located on a west-facing slope at an elevation of around 170m (AOD).

1.2.2 The underlying geology comprises Ordovician Llanvirn and Arenig sediments (British Geological Survey 1979) which are overlain by a drift geology of Wick 1-type typical brown earths (Soil Survey of England and Wales 1983).

2. METHODOLOGY

2.1 DESK-BASED ASSESSMENT

- 2.1.1 Several sources of information were consulted, in accordance with the project design. The study area extended 0.5km from the proposed development area and a gazetteer of HER sites was compiled (*Appendix 1*; Fig 2). A general historical and archaeological background of the area was compiled and map regression analysis was undertaken. Several sources of information were consulted as part of the assessment, primarily HER data, maps, and secondary sources. Archive sources that were consulted include:
- 2.1.2 ***Cumbria Historic Environment Record***: the Cumbria Historic Environment Record (HER) held in Kendal was consulted to establish the extent and character of the sites of archaeological interest already known within the study area. The HER is a database of all known sites of archaeological interest within Cumbria, and is maintained by the County Council.
- 2.1.3 ***Cumbria County Record Office (Whitehaven) (CRO(W))***: the County Record Office in Whitehaven was visited to consult primary records relating to the study area. Tithe maps and Ordnance Survey maps were the main sources consulted. Secondary sources were also investigated.
- 2.1.4 ***Oxford Archaeology North***: OA North has an extensive library of secondary sources relevant to the study area, as well as numerous unpublished client reports on work carried out under its former title of Lancaster University Archaeological Unit (LUAU). These were also consulted where necessary.

2.2 WALKOVER SURVEY

- 2.2.1 Following the rapid desk-based assessment a level I-type survey was undertaken to relate the existing landscape to research findings. Archaeological features identified within the landscape were recorded using the relevant OA North *pro forma*, and the features located using differential GPS survey, which can achieve an accuracy of +/- 5m with respect to the OS national grid.

2.3 EVALUATION

- 2.3.1 Following the desk-based assessment and site visit, the positioning of the evaluation trenches was informed by the location of possible earthworks and the natural topography of the area, while also fulfilling the necessary requirement for comprehensive sampling of the whole proposed development area. The trenches were excavated, under the supervision of an OA North archaeologist, by a 8.5 ton 360° mechanical excavator fitted with a 1.8m wide toothless ditching bucket. The trenches were reduced to the depth of the first deposits of archaeological interest or natural geological derivation, unless this was precluded by the maximum safe working depth of 1.2m. The bases and

sides of the trenches were hand-cleaned with hoes and trowels and any features of potential archaeological interest were investigated using mattocks and trowels. Following excavation, the spoil was stored at a safe distance before being used to backfill the trenches.

- 2.3.2 All aspects of the work were executed in accordance with current English Heritage guidelines (English Heritage 1991, 2002). This consisted of descriptions and preliminary classifications of each revealed feature or deposit on *pro-forma* sheets, a plan of the location of each trench, and plans and sections of each trench drawn at appropriate scales. A photographic record was maintained using black and white print and colour slide formats.
- 2.3.3 All finds were bagged and recorded by context number and have been processed and stored according to standard practice, following the guidelines set out by the Institute of Field Archaeologists.

2.4 PALAEOENVIRONMENTAL INVESTIGATIONS

- 2.4.1 Two monoliths from a palaeochannel observed in evaluation Trench 6 were submitted for palynological assessment.
- 2.4.2 ***Quantification and sediment description:*** the monoliths were cleaned, described and subsampled. The sediment types, including Munsell colours, and their depths are shown in Tables 1 and 2.

Depths	Description
0.15-0.56m	Silty clay 7.5YR 4/3 brown
0.56-0.65m	Organic clay 10YR3/2 very dark greyish brown

Table 1: Sediment stratigraphy, monolith 1

Depths	Description
0.16-0.37m	Clayey silt 10YR 4/1 dark grey with orange staining
0.37-0.58cm	Silty clay 10YR 3/3 dark brown
0.58-0.66	Organic clay 10YR 2/2 very dark brown

Table 2: Sediment stratigraphy, monolith 4

2.4.3 **Laboratory methods:** four subsamples of 1cm³ (from 48cm and 60cm in monolith 1 and 45cm and 62cm in monolith 4) were prepared for pollen analysis using a standard chemical procedure (method B of Berglund & Ralska – Jasiewiczowa, (1986), using HCl, NaOH, sieving, HF, and Erdtman's acetolysis, to remove carbonates, humic acids, particles > 170 microns, silicates, and cellulose, respectively. The samples were then stained with safranin, dehydrated in tertiary butyl alcohol, and the residues mounted in 2000 cs silicone oil. Slides were examined at a magnification of 400x (1000x for critical examination) by ten equally-spaced traverses across at least two slides to reduce the possible effects of differential dispersal on the slide (Brooks & Thomas, 1967). Two *Lycopodium* tablets (Stockmarr 1972) were added to a known volume (10ml) of sediment at the beginning of the preparation so that pollen concentrations could be calculated. Pollen was identified using the key of Moore *et al* (1991) and a modern pollen reference collection. Indeterminable grains were also recorded as an indication of the state of the pollen preservation. Nomenclature follows Stace (1997) and Bennett *et al* (1994). Pollen percentages are calculated as percentage of total land pollen and pteridophyte spores. Other taxa (aquatics, *Sphagnum*, indeterminate grains and microscopic charcoal) are presented as percentages of the sum plus group.

2.5 ARCHIVE

2.5.1 A full professional archive has been compiled in accordance with the project design (*Appendix 2*), and in accordance with current IFA and English Heritage guidelines (English Heritage 1991). Arrangements for the deposition of the paper and digital archive will be made with the Cumbria County Record Office on completion of the project. A copy of the report will be deposited with the Cumbria County Historic Environment Record (CCCHER).

3. ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

3.1 INTRODUCTION

3.1.1 In addition to a detailed investigation of the closely defined study area, it is also necessary to present a general archaeological and historical background of the wider locale. This will allow the site to be considered within the context of the differing systems of land use, ideology, and resource exploitation that helped to define the broader human landscapes in this area over time.

3.2 THE PREHISTORIC PERIOD

3.2.1 *The Mesolithic Period (c 8000–4000 cal BC)*: evidence for hunter-gatherer sites of the late-Mesolithic period is well represented in the wider area with numerous sites known along the coastal area between Haverigg and St Bees (Cherry and Cherry 2002, 2–3). These sites mainly consist of find spots of worked stone, with Irish Sea beach pebble flint, and small quantities of volcanic tuff pebbles, being utilised as raw materials (*ibid*). The Mesolithic sites in this area tend to be associated with contemporary coastal and estuarine areas, suggesting that they were sited in order to exploit food and raw material resources (Hodgkinson *et al* 2000, 69). Late Mesolithic sites from the eastern Cumbrian uplands (Cherry and Cherry 2002, 4–5) demonstrate, however, that activity was not restricted to the coastline.

3.2.2 *The Neolithic and Bronze Age periods (c 4000–700 cal BC)*: there appears to have been a great deal of continuity between the late-Mesolithic and early-Neolithic periods in this area of western Cumbria, with typically Mesolithic tool types possibly continuing in use until the end of the fourth millennium BC (Cherry and Cherry 2002, 2–3). However, as demonstrated by pollen evidence from western Cumbria, the early Neolithic period was a time of great cultural change, with the adoption of agriculture on a large-scale leading to extensive woodland clearance (Hodgkinson *et al* 2000, 68). The Neolithic period also saw the introduction of monumental funerary and ritual architecture with some of the earliest stone circles in Britain being constructed in Cumbria (Burl 2000, 109). Several stone circles are known from in this area including those at Blakely Raise and Studfold, which may be early Bronze Age in date (*ibid*), as well as monuments that have now been destroyed at Egremont le Wheles, Lamplugh, and Wilton (Site 1) (Waterhouse 1985, 34).

3.2.3 Ehenside Tarn has proved to be one of the most abundant sites of Neolithic material in lowland Cumbria (Hodgkinson *et al* 2000, 71), revealing wooden artefacts, pottery, flint and stone implements, animal bones, and the remains of vegetation (*ibid*). A wide spread of dates suggests activity in the Tarn locale from the late Mesolithic to the Bronze Age, including the possible production of polished stone axes, suggested by the presence of *polissoirs* in association with finished axes and rough-outs (*op cit*, 73).

- 3.2.4 Upland marginal settlement in western Cumbria during the Bronze Age is suggested by burial and clearance cairns (Hodgkinson *et al* 2000, 76), and finds of stone tools from this period, including barbed and tanged arrowheads and axe hammers, are also known from the West Cumbrian Coastal Plain, although these tend to cluster south of the study area around the Beckermeth and Seascale areas (*op cit*, 76–7). One was, however, found within the study area at High House (Site 4)
- 3.2.5 Within the study area lies the former site of a stone circle that has now been destroyed (Site 5), although it is unclear whether this monument was of Neolithic or Bronze Age origin. This stone circle does not appear to have been described by antiquarians or archaeologists prior to destruction, but was noted on an estate map of 1777 by a member of the Haile and Wilton Local Heritage Group (2004, 62–3), although it was not shown on any subsequent maps. The Blakely Raise stone circle (Burl 2000, 41) and a nearby group of standing stones (Ordnance Survey 2001) are within 3km of the study area and lie to the north-east. Other sites in the immediate locale of the study area, suggestive of early prehistoric origins, are a tumulus *c* 2km to the south-east of the site and an area called ‘long barrow’ which is around 1.5km to the north-north-west of the site.
- 3.2.6 ***The Iron Age (c 700 cal BC – AD 43)***: palaeoecological data from Ehenside Tarn have been tentatively suggested to be indicative of continuous agriculture during the Iron Age and Romano-British period. Both the uplands and lowlands of Cumbria have produced evidence of enclosures that may date to the Iron Age, however, a lack of identifiable material culture has made assigning these sites firmly to the Iron Age difficult (Hodgson and Brennand 2006, 52). Possible Iron Age evidence was recovered from Eskmeals, south of the study area, consisting of a pair of blue beads, and a possible Iron Age body was recovered from Seascale Moss in the early nineteenth century (Hodgkinson *et al* 2000, 77). Intensive aerial survey has revealed extensive settlement remains across the Solway plain, north of the study area (Bewley 1994) and large field systems and agriculturally improved areas have been identified in the uplands of the Lake District (Quartermaine and Leech forthcoming).

3.3 THE HISTORIC PERIOD

- 3.3.1 ***The Romano-British Period (c AD 43 – AD 409)***: the forts at Ravenglass, to the south, and at Moresby, to the north, are the closest Cumbrian forts to the study area (Shotter 1993, 44). Although there are no Roman roads recorded running between these two forts, a road ran southwards from Papcastle to the River Ehen near Egremont (*ibid*) and may have continued as far as Ravenglass (Margary 1973, 395–6). The discovery of the Braystones coin hoard, found near to the River Ehen, and downstream from this stretch of road, and finds of Romano-British pottery from Eskmeals (Bellhouse 1989, 61–3), demonstrate a degree of activity in this area during the Romano-British period. A settlement featuring hut circles, 5km to the north-west of the site at Kinniside Common, has been suggested to be Romano-British in origin (Haile and Wilton Local Heritage Group 2004, 46).

- 3.3.2 **The early medieval period (c AD 49 – AD 1066):** due to a lack of archaeological evidence from this period it is necessary to rely heavily upon fragmentary historical documents and place-name evidence (Rollinson 1996, 33). Cumbria was probably part of the British kingdom of Rheged, which was eclipsed by the more powerful northern kingdom of Strathclyde (*ibid*, 34). In the seventh century, Strathclyde was subsequently subsumed within the Anglo-Saxon Kingdom of Northumbria (*ibid*) and, from the late eighth century, the decline of Northumbria left a power vacuum in the north-west that was further destabilised by pressure from Scandinavian and Hiberno-Norse groups (Newman 2006, 91–3). The Viking and Anglo-Saxon influence in the north-west is obvious from place-name evidence, however, it should be remembered that linguistic continuity, including otherwise incongruous colloquialisms, might be responsible for the introduction of certain place-names in much later periods than the initial arrival of immigrant groups (*op cit*, 95). Place-names ending in *by*, such as Moresby, may suggest a Norse stem, and the element *kirk*, found in ‘Kirkland’, suggests an Old English root (*ibid*). The word *scales* is a Scandinavian element denoting shielings (*ibid*) and occurs in ‘Seascales’, which lies to the south of the study area. In the immediate locale of the site, Brackenthwaite contains the Norse element ‘*thwaite*’ denoting a clearing, while Haile is an Anglo-Saxon term for a nook or corner (Haile and Wilton Local Heritage Group 2004, 64).
- 3.3.3 Environmental evidence from Ehenside Tarn shows that there were intense episodes of clearance following the Romano-British period (Hodgkinson *et al* 2000, 78). Sculpture, in the form of stone crosses and hogback tombs, also attests to activity in this area predating the Norman conquest. Most of the Cumbrian examples, including the cross and hogback tombs from Gosforth to the south of the study area, represent Scandinavian craftsmanship (Newman 2006, 102–3) as did the cross from St Bees (Hodgkinson *et al* 2000, 78). A cross was also south of the study area at Haile (Middlemass 2007).
- 3.3.4 **Medieval:** although much of England became part of the Kingdom of William I in 1066, Cumberland did not come under Norman rule until 1092 (Newman 2006, 93). Cumbria had been directly affected by the growing unity of a Scottish kingdom (*op cit*, 93) and cross-border conflict had made the north of England relatively unstable with constant rebellions against the new rulership (Rollinson 1996, 43-4), indeed, Egremont Castle, in the locale of the study area, may have been built by William Fitzduncan at a time when he was supporting the Scottish David I in the capture of Cumberland and Westmorland (Turnbull and Walsh 1994, 79). It was not until 1157 that the northern part of Cumbria became part of the English realm, following expansion by Henry II (Newman 2006, 93). The early twelfth century saw the foundation of the priory of St Bees (Wilson 1905, 179). This was a particularly wealthy monastic house (*ibid*, 180), including an iron mine in its holdings (Rollinson 1996, 113), and was founded in an area with a strong ecclesiastic tradition, as attested by the St Bees cross and the St Begas Holy Well. Further conflict characterised the following centuries with several rebellions and feuds in Cumbria, as well as raids from Scotland, such as the serious attacks led by Robert the Bruce in the first half of the fourteenth century (Rollinson 1996, 50), which included the 1315 assault on Egremont Castle (Turnbull and Walsh

1994, 79), which lies to the west of the study area. Outbreaks of the plague also devastated vast areas during this period (Rollinson 1996, 50).

- 3.3.5 One of the medieval buildings in the wider locale, such as St Bees Abbey or Egremont Castle, may have been the original setting for a stone head that was reused in the building of a house called ‘Yewcroft’ in Wilton (Site 3). Although described as ‘Celtic style’ in the HER description, the head appears to have originally been a corbel of 12th- or 13th-century date and does not appear to be Iron Age in origin (Haile and Wilton Local Heritage Group 2004, 60).
- 3.3.6 From the fifteenth century, truces brought about relative stability in the area (*op cit*, 55), although the Dissolution of the Monasteries caused serious social and economic damage to the north of England (*op cit*, 57). Although there was agricultural development in the region at this time, the wealth of Cumberland began to develop through the growth of industry (*op cit*, 60).
- 3.3.7 **Post-medieval:** the Lowther family had an enormous influence on the development of Cumberland during the seventeenth century, particularly in the Whitehaven area (Collier 1991, 26-7). The fishing harbour at Whitehaven was established by Sir Christopher Lowther as a trade port, initially for the export of salt to Ireland (*ibid*, 26) and later for coal (*ibid*). Coal bound for Ireland was the main regional export to Ireland, however, the main import was Virginian tobacco and this meant that it was difficult to find return cargoes (*ibid*). Sir John, the son of Sir Christopher Lowther, therefore attempted to stimulate the linen, wool, and tannery industries in order to produce more exportable goods for the American market (*op cit*, 27).
- 3.3.8 The West Cumbrian coal industry continued to expand during the eighteenth century, with the Lowther family controlling around 90% of the coal in the area (*op cit*, 36). Mousegill Quarry (Site 1), to the east of the study area, attests to the quarrying of limestone in the area prior to 1860, as does the depiction of a limekiln, in the same area, on the Ordnance Survey map of 1860, and the name ‘Limekiln Lane’. The quarry had fallen out of use by the time of the Ordnance Survey map of 1925.
- 3.3.9 Industry continued to be the dominating social and economic factor of the wider area during the nineteenth century. The massive expansion in mining led to new transport routes being created, in particular the railways. The Whitehaven and Furness Junction Railway, was completed in 1850 (Furness Railway Trust 2003) and most of the main lines had been established by the mid-nineteenth century, principally for the transport of coal and iron. St Bees sandstone had been exploited by cliff-side quarries since the medieval period (British Stone 2000). During the eighteenth and nineteenth centuries, sandstone quarrying was an important industry in the area around St Bees, supplying stone to the expanding towns. Despite this growth in industry, it is clear that the area around Wilton remained largely agricultural. In the late nineteenth century a rifle range existed just to the east of the proposed development area, as depicted on the Ordnance Survey map of 1899, however, it is not clear whether this was a private or military installation, and, if it was a

military site, whether training areas extended into the current development area.

3.4 MAP REGRESSION ANALYSIS

3.4.1 Several historic cartographic sources were consulted in order to trace the physical development of the study area:

Greenwood and Greenwood, 1822, Map of Cumberland

Ordnance Survey 1860, 25" : 1 mile

Ordnance Survey 1899, 25" : 1 mile

Ordnance Survey 1925, 25" : 1 mile

3.4.2 The first map to show the study area in any sufficient detail was Greenwood and Greenwood's map of 1822 (Fig 3). This showed little more than the topography of the site, with the current north-north-east to south-south-west farm road shown bounding the western extent of the development area. A stream, shown to the north of the proposed development area, probably corresponds to a current stream that lies just beyond the northern site boundary. Wilton was shown as a sparsely populated area.

3.4.3 The Ordnance Survey first edition map of 1860 (Fig 4) depicted the north-western and southern parts of the study area as agricultural field systems, with the dispersed properties of Wilton scattered sparsely along roads that have retained the same layout to the present day. A school was depicted close to the current service reservoir. Mousegill Quarry (Site 1) was shown on this map, as was a limekiln at the southern end of the quarry site and this site was also alluded to in the name 'Limekiln Lane'. The north-eastern part of the study area was depicted as fell-land.

3.4.4 Very few changes were evident on the second edition Ordnance Survey map of 1899 (Fig 5). Dispersed agricultural farmsteads once more characterised the locale and the division between field systems and fell-land was depicted as it had been shown on the first edition map. The school was not shown on this map, and the most striking modification was the addition of a rifle range, targets, and flagstaff to the east of the study area; however these features lay beyond the proposed development area. A second limekiln was depicted at Mousegill Quarry (Site 1) and the earlier limekiln was annotated 'Old Limekiln'.

3.4.5 The Ordnance Survey map of 1925 (Fig 6) depicted the current service reservoir for the first time and a partial field division was depicted running south-south-west to north-north-east to the north east of the study area. The only features associated with the rifle range that were shown on this map were the targets. Mousegill Quarry (Site 1) was depicted as disused.

4. WALKOVER SURVEY

4.1 INTRODUCTION

- 4.1.1 The walkover survey aimed to determine both the survival of above ground remains of sites recorded during the desk-based assessment and also identify previously unrecorded sites along the proposed pipeline route.
- 4.1.2 The field that will contain the site of the new reservoir was walked in a systematic way and the ground conditions were moderate, in the main part, for identifying sites through walkover. The vast majority of site was under a covering of medium length grass and a rush-related grass (Plate 1).

4.2 RESULTS

- 4.2.1 A series of earthworks of varying size and shape was identified within the field. Four of the earthworks were aligned along the western side of the field and are thought to be an accumulation of upcast from the clearance of the drainage ditch on the opposite side of the hedge. The remainder of the features appeared to be natural and related to water run-off along the slope of the field.

5. EVALUATION RESULTS

5.1 EVALUATION TRENCHING

5.1.1 In accordance with the methodology set out in *Section 2* of this report, and in compliance with the project design (*Appendix 2*), 540m² was examined by evaluation trenching (Fig 3). This equated to an overall length of 300m of trenching with a width of 1.8m, which was divided into eight evaluation trenches. No features of archaeological interest were observed in Trenches 1, 3 to 5, 7 and 8. Trenches 2 and 6 are discussed in detail and an overview of the results from each trench is shown in Table 3 below:

Trench Number	Length (m)	Orientation	Features of Archaeological Interest
1	50	East/west	None observed
2	50	North/south	Linear feature 206 Pit 207 Pit 204 Two ceramic-piped land drains
3	30	North-north-west/south-south-east	None observed. Three post-medieval land drains were present
4	30	East/west	None observed
5	30	North/south	None observed. Three land post-medieval drains were present
6	30	East/west	Seven land drains. Palaeochannel
7	50	North-east/south-west	None observed. Six land post-medieval drains and one soak-away pit were present
8	30	North-east/south-west	None observed. Three post-medieval land drains were present

Table 3: Overview of the evaluation trenches

5.1.2 **Trench 2:** the linear feature (**206**) and two pits (**204** and **207**) found within Trench 2 were shallow and slight features. None of the features provided artefactual finds or any material that could have been used for the purposes of dating. The features were all situated at the base of the slope of the field. This area had clearly been waterlogged, as attested by the presence of coarse wetland grasses and land drains, as well as a profusion of drains within Trench 6, located just to the west. It is possible that the linear feature may have been the result of efforts to create a drainage channel in this area. The ambiguous

and slight nature of the pits prevented any definite conclusions relating to their function.

- 5.1.3 **Trench 6:** this trench formed an oblique intervention across a palaeochannel (**606**) that ran east/west across the northern end of the site and which was still visible, at the eastern end, as a slight linear depression running down the hill slope. The subsequent silting of this channel had created a shallow depression which was subject to water-logging at the western end, where the land levelled out from the slope to the east and water was able to pool. This had clearly been an issue that affected the productivity of this agricultural land and seven separate land drains had been installed in this area. The bottom of the palaeochannel had become water-logged to the extent that peat (**602**) had begun to accumulate. The peat was overlain by a dense deposit of fine silt (**604**) (Plate 2). Monolithic samples were taken of the palaeochannel deposits (Samples 1–4) in order to facilitate palaeoenvironmental analysis of the locale (Section 5.3).

5.2 FINDS

- 5.2.1 A very small assemblage of finds was recovered from the site comprising post-medieval pottery sherds and ceramic pipe derived from land drains. All of the pottery sherds were retrieved from the topsoil, rather than any closely stratified deposits, and are likely to have migrated into the area as a result of post-medieval manuring practices.

5.3 PALAEOENVIRONMENTAL INVESTIGATIONS

- 5.3.1 **Results:** pollen was preserved in high concentrations in all the samples assessed (pollen data are presented in Table 4 below). Preservation was generally fair, and the low percentages of indeterminate grains would not preclude further investigation. Corrosion and crumpling were the most common barriers to identification of the indeterminate grains.
- 5.3.2 **Monolith 1:** undifferentiated monolete Pteropsida (fern) spores are the dominant taxon in both samples, forming over 80% of the sum at 0.6m and over 50% at 0.48m. Tree pollen percentages rise from *c* 9.8% to 45.7%. The main tree pollen taxa are *Corylus* (hazel) and *Betula* (birch), with *Alnus glutinosa* (alder) and *Pinus sylvestica* (Scots pine) secondary and *Quercus* (oak), *Salix* (willow) and *Ulmus* (elm) pollen poorly represented. Herb pollen is poorly represented, declining from 6.7% to 3.7%. The diversity of the herb suite is low. Microscopic charcoal values expand from 24% sum plus charcoal at 0.6m to 31.5% at 0.48m.
- 5.3.3 **Monolith 4:** this is similar to Monolith 1, undifferentiated fern spores dominate the monolith 4 spectra, forming 66.1% of the sum at 0.6m and 43% at 0.45m. The tree pollen taxa are identical to those in Monolith 1, with a similar expansion in percentage frequency seen. Alder is the exception in that it is less well represented in the upper spectrum (4.4%) than the lower (8.3%). In parallel to Monolith 1, the overall representation of herb pollen declines

between 0.6m (15.4%) and 0.45m (5.7%), whilst that of microscopic charcoal increases from 30.5% to 79.1%.

Monolith		<1>		<4>	
Sample depth cm		48	60	45	62
Tree and shrub pollen %		45.7	9.8	51.3	18.5
Herb pollen %		3.7	6.7	5.7	15.4
Pteridophyte spores %		50.5	83.5	43	66.1
TLP and spores		376	389	316	637
Total fossil concentration (grains/cm³)		517571	850445	510628	1691053
Trees and shrubs					
<i>Alnus glutinosa</i>	Alder	7.2	2.3	4.4	8.3
<i>Betula</i>	Birch	12.8	3.3	17.7	5
<i>Corylus avellana</i> -type	Hazel	14.1	1.8	23.1	1.7
<i>Pinus sylvestica</i>	Scots pine	7.7	1.5	2.8	1.1
<i>Quercus</i>	Oak	0.5		0.6	
Rosaceae	Rose family				0.6
<i>Salix</i>	Willow	2.1	0.3	2.2	1.6
<i>Ulmus</i>	Elm	0.8		0.3	
<i>Calluna vulgaris</i>	Ling	0.5	0.3		
<i>Erica undiff</i>	Heather undifferentiated		0.3		0.2
Herbs					
Poaceae	Grass family	0.3	2.3	0.6	5.2
Cyperaceae	Sedge family	2.9	3.6	4.4	5
Caryophyllaceae	Pink family				0.2
<i>Chrysosplenium</i>	Golden-saxifrage		0.8		2.4
<i>Convolvulus arvensis</i>	Field bindweed			0.3	
<i>Solidago virgaurea</i> -type	Michaelmas daisy type	0.3			
Lactuceae	Dandelion family	0.3			0.2
<i>Plantago lanceolata</i>	Ribwort plantain				0.5
Rubiaceae	Bedstraw family			0.3	
<i>Solanum dulcamara</i>	Bittersweet				2
Pteridophytes					
<i>Athyrium filix-femina</i>	Lady-fern	1.1			
<i>Diphasiastrum</i>	Alpine clubmosses	0.3			
<i>Polypodium vulgare</i> -type	Common polypody type	0.3			0.9
<i>Thelypteris</i>	Marsh fern			0.3	
Pteropsida (monolete) indet	Undifferentiated ferns	48.9	83.5	42.7	65.1
Sphagnum	Sphagnum	2.6	2.3	8.1	22.9
Aquatics					
<i>Typha angustifolia</i>	Bulrushes		1		
Indeterminate		11.1	3.5	6	2.6
Microscopic charcoal		31.5	24	79.1	30.5

Table 4: Wilton Services Reservoir pollen assessment table. The numbers in the table are the percentages of total land pollen and spores except for *Sphagnum*, obligate aquatics, indeterminate grains and microscopic charcoal where they are presented as percentages of the sum plus group.

6. DISCUSSION

6.1 DESK-BASED ASSESSMENT

6.1.1 The desk-based assessment identified six sites of archaeological interest within the study area, all of which were listed in the Cumbria County Historic Environment Record (*Appendix 1*). The locale surrounding the proposed development area was shown to have been an area of prehistoric activity, particularly during the late Neolithic and Bronze Ages. This was suggested by the find of a Bronze Age arrowhead (Site 4) and the former presence of a stone circle (Site 5) within the study area. A series of cropmarks of unknown date (Site 6) also lay to the north-west of the development area. Activity in the post-medieval period appears to have been mainly confined to agriculture in this essentially rural area.

6.2 WALKOVER SURVEY

6.2.1 The walkover survey identified nine earthworks within the proposed development area, all of which appeared to relate to the construction and maintenance of agricultural drainage channels, or natural gullies and depressions that had been formed by water-based erosion.

6.3 EVALUATION TRENCHING

6.3.1 Although the study area lay close to areas of potential archaeological interest (*Section 6.1*) little evidence of human activity was found during the evaluation. The linear feature (206) and two pits (204 and 207) found within Trench 2 were of unknown date and function. The area was clearly prone to water-logging as illustrated by the number of land drains encountered, these being evidence for post-medieval attempts to improve the drainage of this agricultural land.

6.4 PALAEOENVIRONMENTAL INVESTIGATIONS

6.4.1 **Discussion:** as the pollen source area of channel or floodplain deposits is estimated to be largely restricted to floodplain vegetation (Moore *et al* 1991, 25), only a very localised palaeoenvironmental reconstruction is possible from this assessment. A striking feature of both profiles is the dominance of undifferentiated fern spores, for example monolete Pteropsida. This could be a taphonomic indication of post-depositional destruction of pollen grains. High concentrations of monolete spores and certain other taxa have been interpreted as indicating the preferential preservation of resistant types in the sedimentary environment (see Bunting & Tipping 2000). The low percentages of indeterminate pollen grains and the generally good state of preservation, suggest that it is a real rather than apparent reflection of original pollen and spore influx. Furthermore, preservation is generally better and percentages of indeterminate grains are lower in the lowermost spectra from

organic clays, where fern spores are better represented. Interpretation of the lowermost spectra suggests that channel-sides and immediate floodplain were inhabited by damp-loving ferns, with shade provided by floodplain trees, principally birch and alder. Hazel, willow, elm and herbaceous taxa were present initially in such low frequencies that they probably represent open woodland on the fringes of the floodplain.

- 6.4.2 Over the length of time that elapsed between the lowermost and uppermost spectra, the expansion of dryland trees and decline in fern spore representation suggest a drying of the floodplain sediments as the channel became infilled with silty clay deposits. Since the relative proportions of tree taxa within the group (trees and shrubs) were more or less the same as those in the lowermost spectra, it is envisaged that the woodland merely expanded within the floodplain, and that the areas inhabited by damp-loving ferns and the areas of open ground were reduced accordingly. Pine pollen reaches 7.7% of the sum in the upper spectrum of Monolith 1. This may derive from a local source or from further away, as pine pollen is produced prolifically and being airborne can travel considerable distances prior to incorporation in the sedimentary record. Various percentage representation values are used as cut-off indications of local presence of pine trees, rather than merely wind-blown regional influx, such as 5% TLP (Fossitt 1994) and 20% TLP (Bennett 1984). Therefore, the pine pollen in the present investigation probably reflects the presence of pine trees outside of the floodplain and immediate slopes.
- 6.4.3 There is no indication of agriculture in the vicinity, as there are no cereal-type pollen grains and very little grass pollen recorded. However the limited pollen source area must be borne in mind and it is entirely possible that such anthropogenic activity was taking place away from the floodplain on drier ground. Furthermore, cereal crops tend to self-pollinate, and therefore produce low quantities of pollen, which does not tend to travel short distances from the plant. Cereal pollen grains are therefore unlikely to be represented in sediments a significant distance away from the cultivation site. The increase in microscopic charcoal particles in the upper spectra may represent intentional burning of the floodplain vegetation as a land management technique.
- 6.4.4 There are no absolute dates available and as pollen sequences cannot be used as a dating method, the age of the profile is unknown. The near-absence of elm pollen from the spectra indicate that accumulation began after the *c* 5800 cal. BP elm decline. A general synthesis of pollen diagrams from lowland and intermediate Cumbrian and Lake District sites suggests that, following Neolithic clearance for agriculture at or just after the elm decline, phases of clearance and regeneration occurred on a cyclical basis from the early Bronze Age until the Romano-British period (Burnmoor Tarn, see Pearsall & Pennington 1973, 231-233; Pennington 1997, 48). The final clearance of oak woodlands from low and middle altitudes occurred in the second and third centuries AD (Pearsall & Pennington 1973, 234). Elm is extremely rare and lime and ash are absent from the palaeochannel at Wilton Services Reservoir, which probably reflects their general absence from intermediate altitudes. Therefore, the palaeochannel infill could have accumulated at any time between the Early Bronze Age and the Romano-British period. The absence of

major changes in taxa present in the pollen assemblages might suggest that infilling occurred over a relatively short span of time.

6.4.5 **Recommendations:** although the pollen was well-preserved in high concentrations, and therefore by nature suitable for further investigation, a full palynological analysis of the palaeochannel deposits is not recommended. The reasons are as follows: firstly, that there is no definitive indication of human activity in the profile, and secondly, that the pollen source areas for each monolith are judged to have been extremely restricted, thus wider landscape changes are highly unlikely to have been reflected. Furthermore, there is little internal differentiation in the pollen assemblages from the different depths of the monoliths, and also between the monoliths; the landscape reconstruction is in agreement with published pollen profiles and consequently, it is concluded that there are no particular features within this palaeochannel worthy of further investigation.

6.5 CONCLUSION

6.5.1 This area produced no evidence of human activity beyond the post-medieval use of the field for agricultural purposes. The depressions and plateaus that were evident, on surface inspection of the area, were shown to be the result of natural water-based erosion and sculpture of the area.

7. BIBLIOGRAPHY

7.1 PRIMARY AND CARTOGRAPHIC SOURCES

British Geological Survey, 1979 *Geological survey ten mile map*, north sheet, 1:625000

Greenwood, C, and Greenwood, O, 1822 *Map of the county of Cumberland*

Ordnance Survey, 1860 *Cumberland Sheet 73*, 1st edn, 25" : 1 Mile

Ordnance Survey, 1899 *Cumberland Sheet 73*, 2nd edn, 25" : 1 Mile

Ordnance Survey, 1925 *Cumberland Sheet 73*, 3rd edn, 25" : 1 Mile

Ordnance Survey, 2000 *Cockermouth and Egremont*, Explorer Sheet 303, 1:25,000

Ordnance Survey, 2001 *The English Lakes, north-western area, Sheet OLA*, 1:25,000

Soil Survey of England and Wales, 1983 *Soils of Northern England*, 1:250000

7.2 SECONDARY SOURCES

Bellhouse, RL, 1989 *Roman sites on the Cumberland coast: a new schedule of coastal sites*, Cumberland Westmorland Antiq Archaeol Soc, Res Ser, **3**

Bennett, KD, 1984 The post-glacial history of *Pinus sylvestris* in the British Isles, *Quaternary Science Reviews* **3**, 133-155.

Bennett, K, Whittington, G & Edwards, KJ, 1994 Recent plant nomenclature changes and pollen morphology in the British Isles, *Quaternary Newsletter* **73**, 1-6.

Berglund, BE, & Ralska-Jasiewiczowa, M, 1986 Pollen analysis and pollen diagrams. In Berglund, BE (ed) *Handbook of Holocene Palaeoecology and Palaeohydrology*, Wiley, Chichester, pp 455-484.

Bewley, RH, 1994 *Prehistoric and Romano-British settlement in the Solway Plain Cumbria*, Oxbow Monograph, **36**, Oxford

British Stone, 2000 *Technical data sheet: red St Bees sandstone, Birkhams Quarry, St Bees, Cumbria*, internet publ

Brooks, D & Thomas, KW, 1967 The distribution of pollen grains on microscope slides. The non randomness of the distribution, *Pollen et Spores* **9**, 621-629.

- Bunting, MJ & Tipping, R, 2000 Sorting dross from data: possible indicators of post-depositional assemblage biasing in archaeological palynology in Bailey, G, Charles, R & Winder, N, (eds) *Human Ecodynamics*, 63-69, Oxford
- Burl, A, 2000 *The stone circles of Britain, Ireland and Brittany*, London
- Countryside Commission, 1998 *Countryside character, Volume 2: North West*, Cheltenham
- Cherry, J, and Cherry, PJ, 2002 Coastline and upland in Cumbrian prehistory: a retrospective, *Trans Cumberland Westmorland Antiq Arch Soc*, 3rd ser, **2**, 1-19
- Collier, S, 1991 *Whitehaven 1660-1800. A new town of the late seventeenth century: a study of its buildings and urban development*, London
- Edmonds, M, 1995 *Stone tools and society, working stone in Neolithic and Bronze Age Britain*, London
- English Heritage, 1991, *The management of archaeological projects*, 2nd edn, London
- English Heritage, 2002 *Environmental archaeology, a guide to the theory and practice of methods from sampling and recovery to post excavation*, London
- Fossitt, JA, 1994 Late-glacial and Holocene vegetation history of western Donegal, Ireland. *Biology and Environment* 94B, 1-31.
- Furness Railway Trust, The, 2003 *The Furness Railway Company*, <http://www.furnessrailwaytrust.org.uk/frco.htm>
- Haile and Wilton Local Heritage Group, 2004 *Now and then in Haile and Wilton*, Egremont
- Hodgkinson, D, Huckerby, E, Middleton, R, and Wells, CE, 2000 *North West Wetlands Survey 6: The lowland wetlands of Cumbria*, Lancaster
- Hodgson, J, and Brennan, M, 2006 The prehistoric period resource assessment, in M Brennan (ed) *The archaeology of north west England, an archaeological research framework for north west England: volume 1, resource assessment*, 23-58
- Middlemass, T, 2007 Corpus of Anglo-Saxon stone sculpture: photographs, <http://www.dur.ac.uk/corpus/CorpusWebImages/Volume2Images>, accessed 16th may 2007
- Margary, ID, 1973 *Roman Roads in Britain*, London
- Moore, PD, Webb, JA & Collinson, ME, 1991 *Pollen analysis*, Oxford.

- Newman, RM, 2006 The early medieval period resource assessment, in M Brenand (ed) *The archaeology of north west England, an archaeological research framework for north west England: volume 1, resource assessment*,
- Parker Pearson, M, 1993 *Bronze Age Britain*, London
- Pearsall, WH, & Pennington, W, 1973 *The Lake District: A Landscape History*, London
- Pennington, W, 1997 Vegetational History in Halliday, G(ed) *A Flora of Cumbria*, 42-50, Lancaster
- Quartermaine, J and Leech, R, forthcoming *The later prehistory of the Lake District, the results of recent surveys*
- Rollinson, W, 1996 *A History of Cumberland and Westmorland*, 2nd edn, Chichester
- Shotter, DCA, 1993 *Romans and Britons in North-West England*, Lancaster
- Stace, C, 1997 *New Flora of the British Isles*, Cambridge
- Stockmarr, J, 1972, Tablets with spores used in absolute pollen analysis, *Pollen et Spores* 13, 615-621.
- Tipping, RM, 1994 Williamson's Moss: Palynological evidence for the Mesolithic-Neolithic transition in Boardman, J & Walden, J (eds) *The Quaternary of Cumbria: Field Guide*, 104-127, Oxford
- Turnbull, P, and Walsh, D, 1994 Recent work at Egremont Castle, *Trans Cumberland Westmorland Antiq Archaeol Soc*, n ser, **94**, 77-89
- Waterhouse, J, 1985 *The stone circles of Cumbria*, Chichester
- Wilson, J (ed), 1905 *The Victoria History of the County of Cumberland*, **2**, London
- Wood, O, 1988 *West Cumberland Coal, 1600-1982/3*, Cumberland Westmorland Extra Ser, **24**, Kendal

8. ILLUSTRATIONS

8.1 LIST OF FIGURES

Figure 1: Site location

Figure 2: Gazetteer sites plan

Figure 3: Greenwood's map of 1822

Figure 4: Ordnance Survey First Edition map of 1860

Figure 5: Ordnance Survey map of 1925

Figure 6: Location of evaluation trenches

8.2 LIST OF PLATES

Plate 1: General view of the site looking north

Plate 2: General view of the site looking west

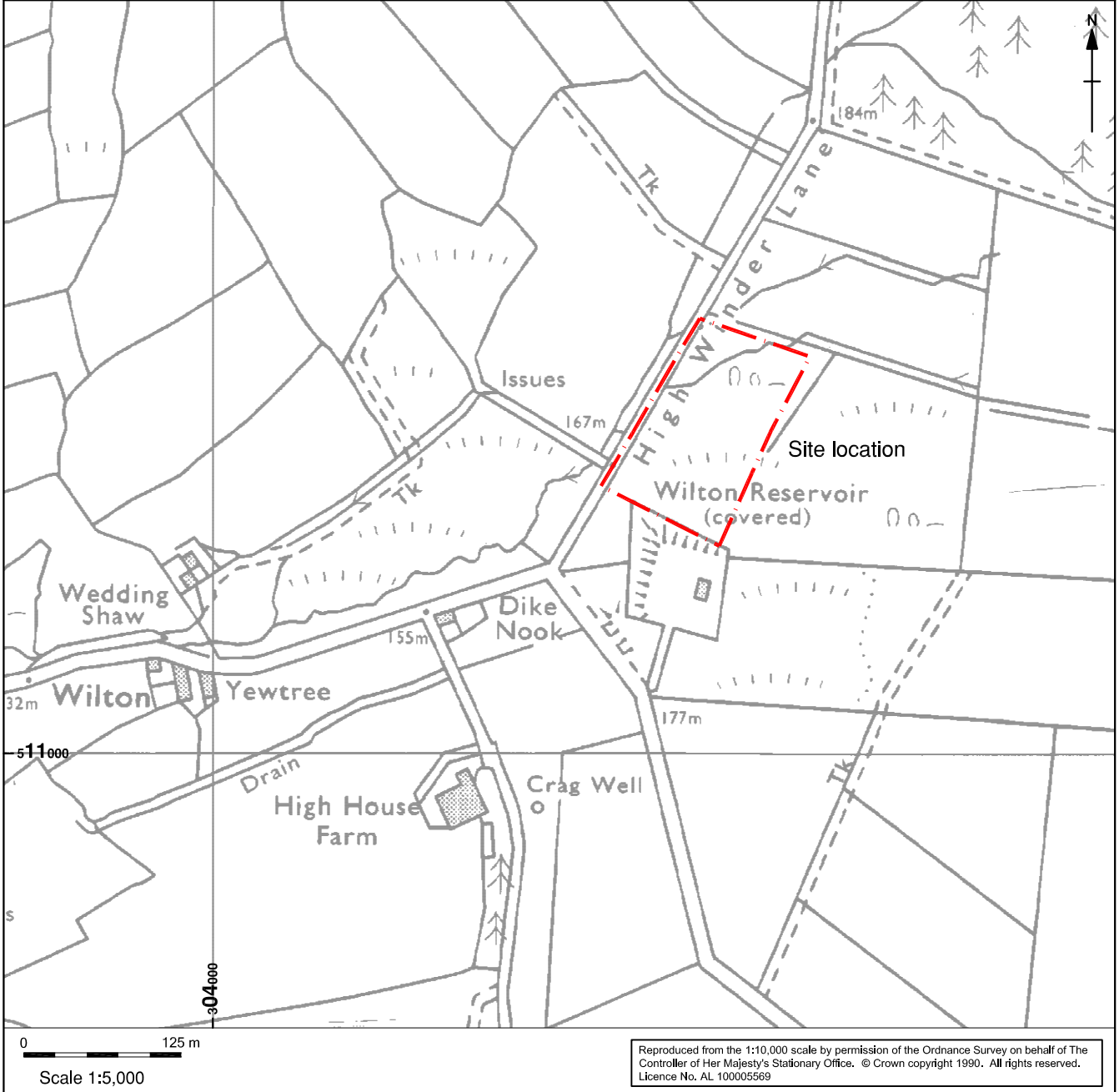


Figure 1: Site Location

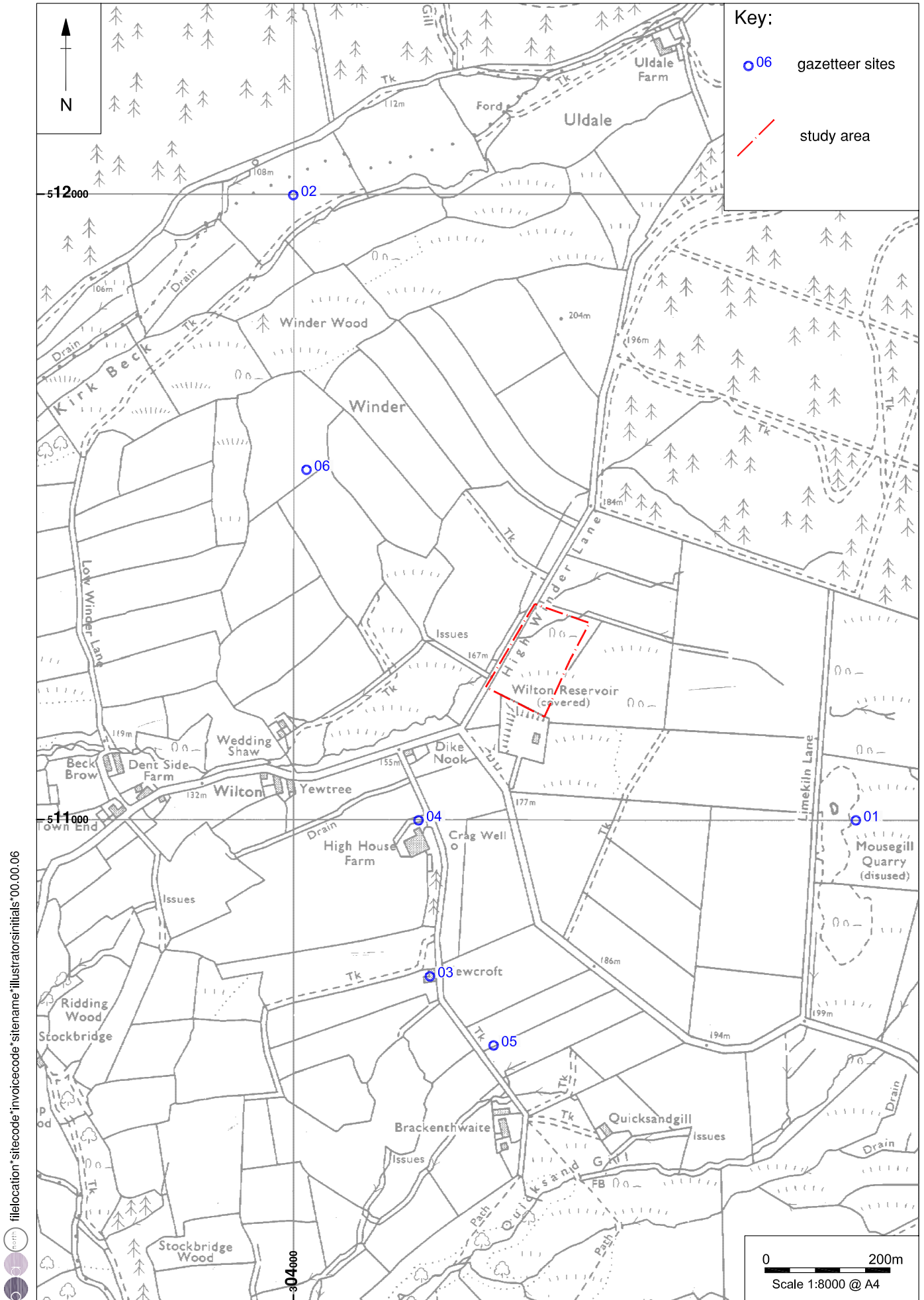


Figure 2: Gazetteer sites plan



Figure 3: Greenwood's map of 1822

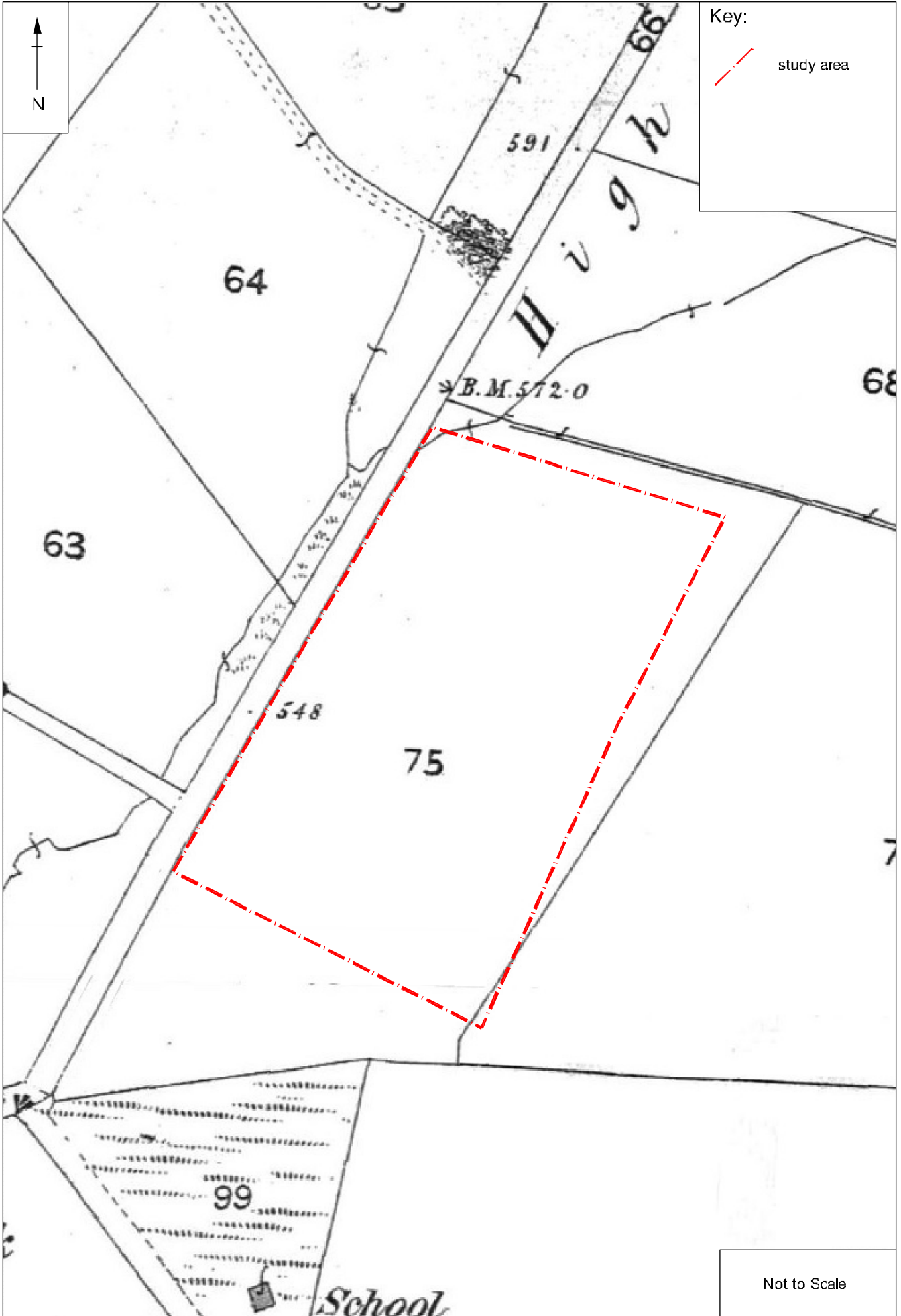
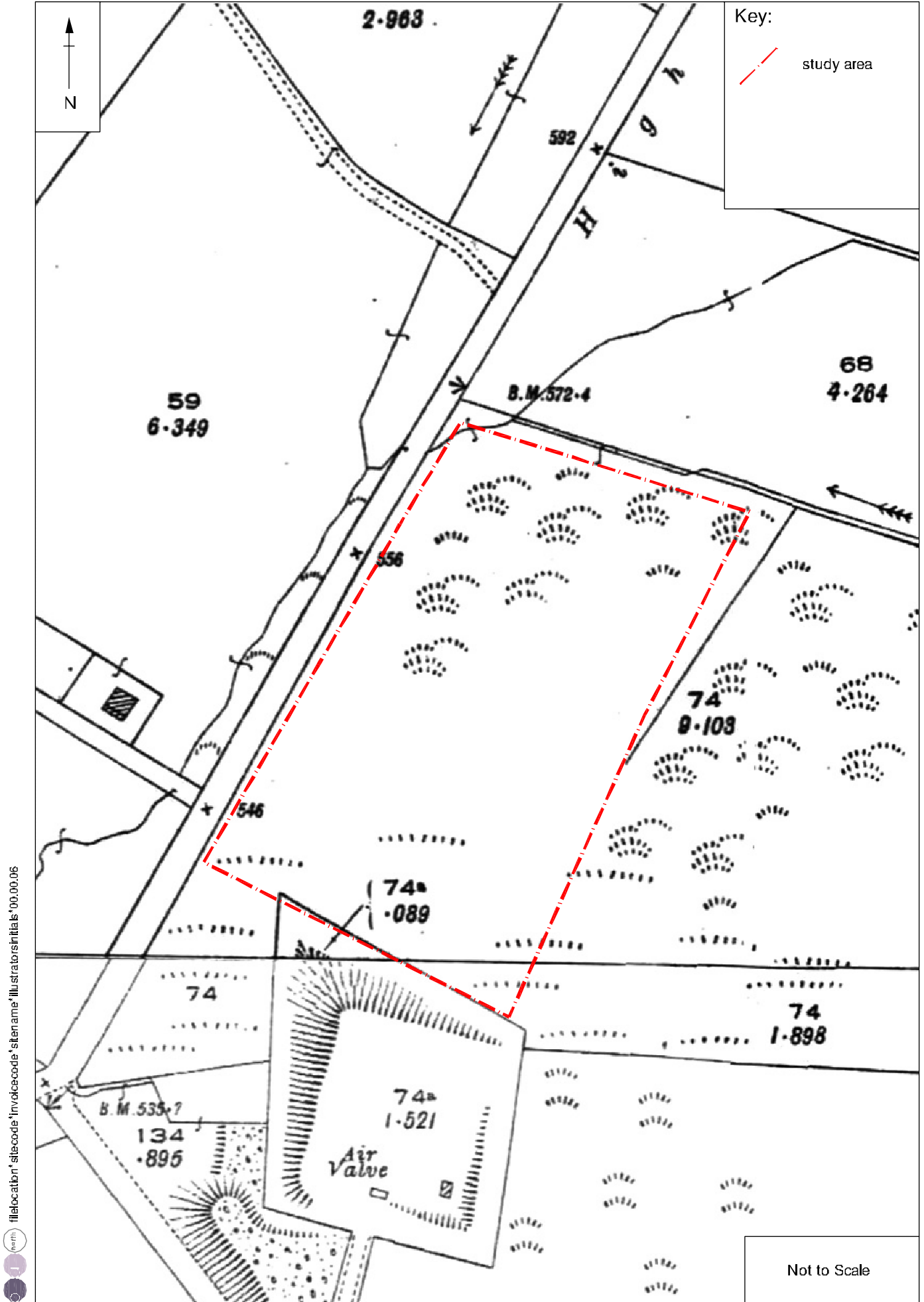


Figure 4: Ordnance Survey First Edition map of 1860



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Figure 5: Ordnance Survey map of 1925

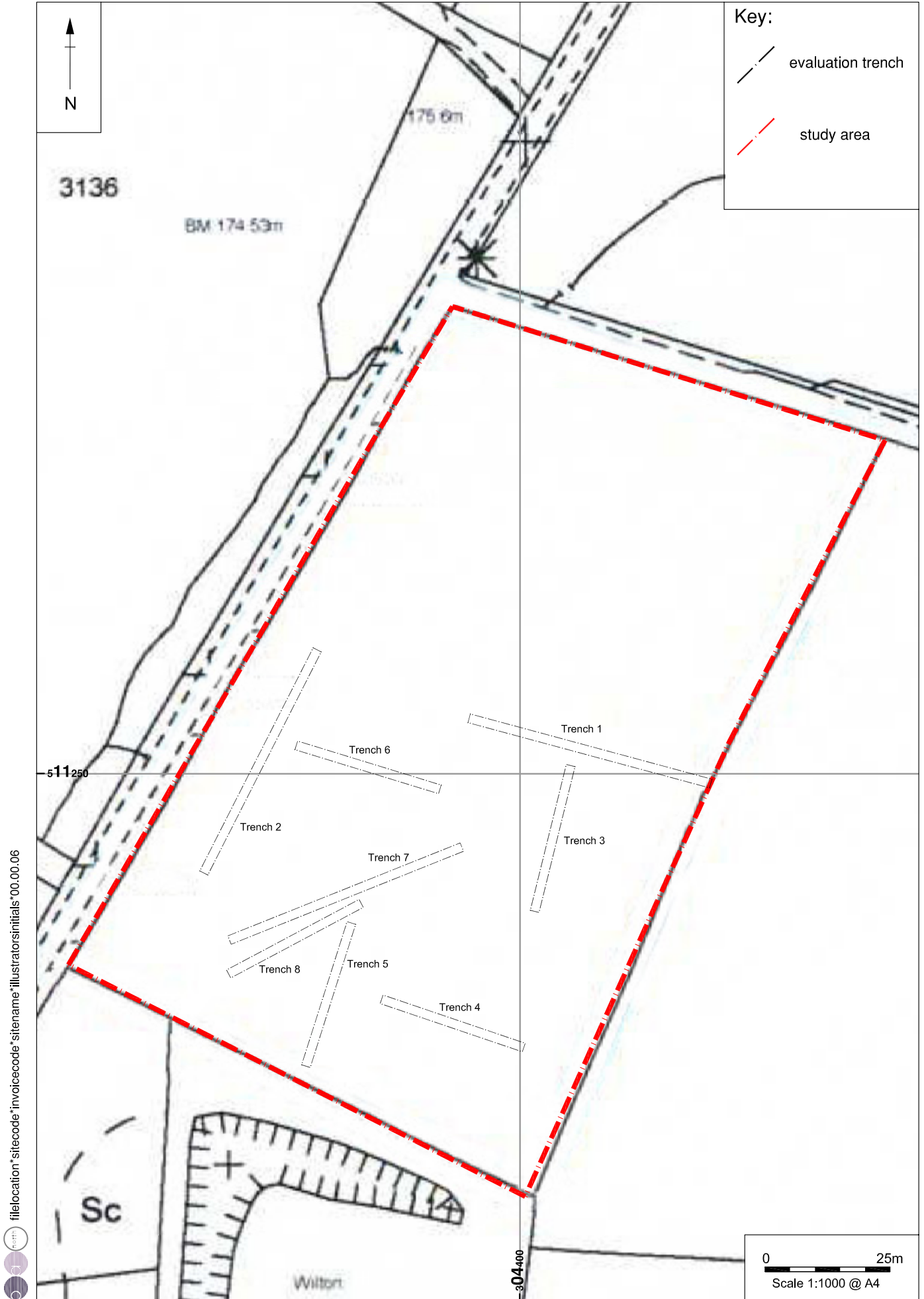


Figure 6: Location of evaluation trenches



Plate 1: General view of the site looking north



Plate 2: General view of the site looking west

APPENDIX 1: GAZETEER OF SITES

Site Name Mousegill Quarry

Site number 01

NGR NY 04900 11000

SMR no 12325

Site Type Quarry

Period Post medieval - AD 1540 to AD 1900

Source First edition OS map 73

Description

Mousegill Quarry was used as a Limestone quarry in the 1860's. Now disused.

Assessment

The site lies outside the development area and will not be affected by the works.

Site Name Harness Mount Find, Uldale

Site number 02

NGR NY 04000 12000

SMR no 19537

Site Type Findspot

Period Post medieval/Modern AD 1540 to 20th century

Source (1) Richardson, C., CW99., Pt.II., No.195, p32

Description

This harness mount was reported to Keswick Museum in September 1993 as having been found at Uldale, "many years ago". These decorative mounts were manufactured in a wide range of metals and designs. The finest quality horse brasses were often produced to the owner's individual design, while those in soft metals like lead and pewter were turned-out in their hundreds for the "cheaper end of the market". The Uldale mount probably dates from the 19th or early 20th century A.D. It is oval in shape, with relief decoration covering the central boss and the flange. The reverse is concave with a projecting rectangular-shaped iron attachment loop. The boss displays an open flower head design and is surrounded by an undecorated raised band which in turn is surrounded by a single line of leaf-and-pellet. The flange surface carries twelve small bosses with a linking festoon ornament incorporating a punched dot design. Dimensions: 60 x 55 mm; Max. Depth (including boss 10 mm; attachment loop projection 13 mm, length 27 mm. Reported by Hazel Davison, Curator, Keswick Museum and Art Gallery (1).

Assessment

The find spot lies outside the development area and will not be affected by the works.

Site Name Celtic Style Stone Head, Yewcroft, Haile

Site number 03

NGR NY 04220 10750

SMR no 40269

Site Type Carved Stone

Period Unknown

Source (1) information, photos: Clive Bowd, Sept 2003

Description

This stone head is located set high up in the exterior wall of the west gable of the house now known as 'Yewcroft', Wilton near Egremont. O/S Explorer 303. 043-106. The present buildings appears to be of 18th century date, whilst documentary evidence points to the site being occupied a century before. This building was formerly the byre attached to the barn, which has undergone conversion into living accommodation. The present owners Mr and Mrs Johnson understand that the head has been in its present location for at least 70 years. The head made from the local red St. Bees sandstone would appear to a corbel which has been reused in its present location for some decorative purpose and most likely has come from a church in the vicinity; Calder Abbey, St. Bees Priory, Egremont Castle or even a predecessor of Haile parish church are all candidates. The stone measures 30cms high x 15cms wide at its maximum, the lead being 22cms long from top to bottom. Features include mask like lentoid eyes, full pouting lips, a wedge shaped nose (the tip being broken off), and a jutting chin. No ears or hair are visible, but with the lichen that covers the head there is a possibility that representation of the above is

hidden. A separate piece of stone directly above the head forms a sort of topknot measuring 15cms wide x 6cms deep. This appears to have been part of the piece that has split away some time in the past (the edges are weathered) but been kept together when set into the wall, lime mortar having been used. This topknot exhibits an open fronted mortise, presumably for locating a corresponding dovetail type tenon of a timber roofing beam, or perhaps a stone rib. The occurrence of the mortise would indicate this piece might have been the impost and springer for an arch, not a simple corbel as in a corbel table or beam support. Two further features of note are the slight circular indent just below the middle of the upper lip, and the portrayal of pupils. The whole protrudes a maximum of 13cms from the face of the wall at the top tapering down to around 4cms at the base. Recorded 4th Sept. 2003 (Clive Bowd).

Assessment

The find spot lies outside the development area and will not be affected by the works.

Site Name Arrowhead Find, High House, Wilton, Haile

Site number 04

NGR NY 04200 110000

SMR no40366

Site Type Findspot

Period Prehistoric: Bronze Age

Source Pers comm: Mrs E Dixon, High House, Wilton

Description

Barbed and tanged flint arrowhead found c1910 in a field at High House, Wilton, by a member of the Suddart family. Location now unknown.

Assessment

The find spot lies outside the development area and will not be affected by the works.

Site Name Druids Temple, Yewcroft, Wilton, Haile

Site number 05

NGR NY 04320 10640

SMR no40367

Site Type Stone Circle

Period Prehistoric

Source (1) Pers comm: C Bowd, 12 Jan 2004

Description

Possible prehistoric stone circle shown on an estate map of c1777. The map shows a stone circle labelled 'Druids Temple', comprising of nine stones, seven of which are in one field, whilst the other two lie just to the south through a hedge in another field. The feature is not shown on the 1814 Enclosures Award map or 1st edition Ordnance Survey map of 1867. The site is currently being investigated by a member of The Haile Local History Group as part of a parish survey (pers comm C Bowd, 2004).

Assessment

The site lies outside the development area and will not be affected by the works.

Site Name Winder Unclassified Earthworks and Cropmarks, Haile

Site number 06

NGR NY 04020 11560

SMR no40375

Site Type Enclosure

Period Unknown

Source Aerial photographs: Cumbria County Council: CCC 2817, 10; CCC 2817, 11; CCC 2817 12

Description

Site gives the appearance of being two enclosures with further earthworks within these. In addition the aerial photographs indicate cropmarks in the immediate vicinity of the site itself.

Assessment

The site lies outside the development area and will not be affected by the works.

APPENDIX 2: PROJECT DESIGN

APPENDIX 3: CONTEXT LIST

Context number	Trench number	Description
101	1	Topsoil: mid greyish-brown silty-clay with inclusions of angular stones
102	1	Subsoil: mid grey sandy-clay with inclusions of angular stones
103	1	Natural: orangey-yellow clay with inclusions of angular stones
200	2	Topsoil: mid greyish-brown silty-clay with inclusions of angular stones
201	2	Natural: mottled reddish-orange and grey clay
202	2	Pit fill: dark greyish-brown silty-clay. Fill of 207
203	2	Pit fill: dark greyish-brown sandyclay. Fill of 203
204	2	Pit: cut of a shallow, sub-ovoid pit with a flat-bottomed V-cut profile. Filled by 203
205	2	Ditch fill: orangey-red clay, Fill of 206
206	2	Ditch: cut of a shallow linear with a U-cut profile. Filled by 205
207	2	Pit: cut of a shallow sub-ovoid pit flat-bottomed V-cut profile. Filled by 202
300	3	Topsoil: mid greyish-brown silty-clay with inclusions of angular stones
301	3	Subsoil: mid grey sandy-clay with inclusions of angular stones
301	3	Natural: orangey-yellow clay with inclusions of angular stones
400	4	Topsoil: mid greyish-brown silty-clay with inclusions of angular stones
401	4	Subsoil: mid/dark greyish-brown silty-clay with inclusions of angular stones
402	4	Natural: orange and grey clay with inclusions of angular stones
500	5	Topsoil: mid greyish-brown silty-clay with inclusions of angular stones

501	5	Subsoil: mid greyish-brown sandy-clay with inclusions of angular stones
502	5	Natural: bands of orange and grey clay with inclusions of angular stones
600	6	Topsoil: mid greyish-brown silty-clay with inclusions of angular stones.
601	6	Subsoil: mid grey silty-clay with inclusions of angular stones
602	6	Natural: blackish-brown peat layer
603	6	Natural: mottled blue, grey, and orange clay with inclusions of angular stones
604	6	Palaeochannel fill: mid-grey silty-clay filling 606
605	6	Palaeochannel fill: blackish-brown peat layer filling 606
606	6	Palaeochannel: cut of east/west aligned channel. Filled by 604 and 605 .
800	8	Topsoil: mid greyish-brown silty-clay with inclusions of angular stones.
801	8	Topsoil: light/mid greyish-brown silty-clay with inclusions of angular stones
802	8	Natural: light orangey grey clay with inclusions of angular stones
700	7	Topsoil: mid greyish-brown silty clay with inclusions of angular stones
701	7	Natural: light brownish-grey silty-clay colluvium
702	7	Natural: blackish-brown peat layer
703	7	Natural: yellowish-grey clay with inclusions of angular stones
704	7	Pit: cut of probable soak-away drainage pit. Filled by 705
705	7	Pit fill: deposit of stones filling pit 704