# KIRKBY THORE ROMAN FORT KIRKBY THORE, CUMBRIA



RAPID DESK-BASED ASSESSMENT AND
WATCHING BRIEF REPORT
CP 10834
12/06/2015

WARDELL ARMSTRONG ARCHAEOLOGY



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#### **Quality Assurance**

This report covers works as outlined in the brief for the above-named project as issued by the relevant authority, and as outlined in the agreed programme of works. Any deviation to the programme of works has been agreed by all parties. The works have been carried out according to the guidelines set out in the Institute for Archaeologists (IfA) Standards, Policy Statements and Codes of Conduct. The report has been prepared in keeping with the guidance set out by Wardell Armstrong Archaeology on the preparation of reports.

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#### **SUMMARY**

Wardell Armstrong Archaeology were commissioned by Electricity North West to undertake a Rapid Desk-based Assessment and archaeological watching brief on groundworks associated with the refurbishment of high voltage overhead apparatus on land at within the scheduled ancient monument area of Kirkby Thore Roman Fort and associated Vicus (centred on NGR NY 637 253; NHL 1012183); Figures 1 and 2. The refurbishment work within the area of the scheduled ancient monument related to 23 poles; of these eight required groundworks, and were therefore subject to the watching brief.

The Cumbria County Council Historic Environment Service granted planning consent for the development, on the condition that a Rapid Desk-Based Assessment be undertaken prior to groundworks, with an Archaeological Watching Brief on all groundworks. The work is required as the site is located within the *Brayoniacum* Roman Fort and associated *vicus*.

Prior to the commencement of groundworks, a rapid desk-based assessment was undertaken in order to place these areas of Kirkby Thore into their historical and archaeological context.

The watching brief was undertaken over three days on the 28<sup>th</sup> and 29<sup>th</sup> of October and 5<sup>th</sup> of November 2014. A total of 3 poles were worked on over the 3 days. No archaeological remains were noted across all excavations.

# **ACKNOWLEDGEMENTS**

Wardell Armstrong Archaeology would like to thank Electricity North West for commissioning the project, and for all assistance throughout the work. Wardell Armstrong Archaeology would also like to thank Jeremy Parsons, of Cumbria County Council Archaeology Service for advice relating to the work.

The rapid desk-based assessment was undertaken by Sue Thompson. The watching brief was undertaken by Kevin Mounsey and Ed Johnson. The report was written by Sue Thompson & Ed Johnson and the figures were produced by Adrian Bailey. The report was edited by Richard Newman; Project Manager, Wardell Armstrong Archaeology. The project was managed by Frank Giecco, Technical Director, Wardell Armstrong Archaeology.

## 1 INTRODUCTION

- 1.1 Wardell Armstrong Archaeology were commissioned by Electricity North West to undertake an archaeological watching brief on land at Kirkby Thore, Cumbria (centred on NGR NY 637 253; Figures 1 and 2), during the refurbishment of high voltage overhead apparatus. The affected areas lie within the scheduled monument areas of Kirkby Thore Roman Fort and Associated Vicus (listing reference 1012183). A total of 23 wooden electricity poles lie within the boundaries of the fort, of which eight will involve groundworks in the form of pole replacement. The groundworks have the potential to impact on sub-surface archaeological features relating to these Roman monuments.
- 1.2 Prior to the commencement of the groundworks, a rapid desk-based assessment was undertaken in order to set the site of these parts of Kirkby Thore into their historical and archaeological context. This assessment primarily involved the consultation of the Cumbria County Council Historic Environment Record (HER) database. Documentary and cartographic sources were also assessed in order to provide information on the historical developments of the area of the proposed construction.
- 1.3 All groundworks associated with this work were excavated under full archaeological supervision and all stages of the archaeological work were undertaken following approved statutory guidelines (IfA 2008, 2012), and were consistent with the specification provided and generally accepted best practice.
- 1.4 This report outlines all investigation undertaken on-site, the subsequent programme of post-fieldwork analysis, and the results of this scheme of archaeological works.

## 2 METHODOLOGY

#### 2.1 PROJECT DESIGN

2.1.1 A Project Design was submitted by Wardell Armstrong Archaeology in response to a request by Electricity North West for an archaeological watching brief on land to the south of Kirkby Thore (Giecco 2014). The project design was adhered to in full, and the work was consistent with the relevant standards and procedures of the Institute for Archaeologists (IfA).

#### 2.2 RAPID DESK-BASED ASSESSMENT

- 2.2.1 Prior to the commencement of groundworks, a rapid desk-based assessment was undertaken in order to provide historical information relating to the sites at Kirkby Thore, and their immediate environs. The assessment primarily involved the consultation of the Cumbria County Council Historic Environment Record (HER) database; a database of sites of historical and archaeological interest.
- 2.2.2 Following the consultation of the HER, historical mapping and documentary sources were assessment for any additional information on the landscape around Kirkby Thore.
- 2.2.3 The rapid desk-based assessment was undertaken following *Standard and Guidance* for Historic Environment Desk-Based Assessment (IfA 2012).

#### 2.3 THE WATCHING BRIEF

2.2.1 The Watching Brief was undertaken over the 28<sup>th</sup> and 29<sup>th</sup> of October 2014. It monitored all groundworks undertaken within the Scheduled Area. All work was conducted according to the recommendations of the Institute for Archaeologists (2008).

#### 2.4 THE ARCHIVE

- 2.4.1 A full professional archive has been compiled in accordance with the specification, and according to the Archaeological Archives Forum recommendations (Brown 2011). The archive will be deposited within Kendal Archive Centre, with copies of the report sent to the Lake District National Park Authority Historic Environment Record at Kendal, where viewing will be made available upon request. The archive can be accessed under the unique project identifier WAA14, KTC-A, CP 10834.
- 2.4.2 Wardell Armstrong Archaeology and the Lake District National Park Authority support the Online AccesS to the Index of Archaeological InvestigationS (OASIS) project. This project aims to provide an on-line index and access to the extensive and expanding body of grey literature, created as a result of developer-funded archaeological work. As a result, details of the results of this project will be made available by Wardell Armstrong Archaeology, as a part of this national project.

#### **3 BACKGROUND**

- 3.1.1 Kirkby Thore lies within the broad, river valley landscapes of the Eden Valley, to the north of the A66, and approximately 16 kilometres south-east of Penrith and eight kilometres north-west of Appleby-in-Westmorland, Cumbria. The Eden Valley lies between the North Pennines to the east and the Cumbrian High Fells and Orton Fells to the west (Countryside Commission 1998). The areas affected by the current refurbishment are located to the south-west part of the settlement (Kirkby Thore Roman Fort and Vicus).
- 3.1.2 The soils in the area are of the Clifton Association, which is characterised as a group of seasonally waterlogged soils developed in reddish fine loamy till and related glaciofluvial deposits and are stagnogley in character (Jarvis *et al* 1984).
- 3.1.3 The underlying geology is mainly comprised of Permian sandstone and some Carboniferous limestone with overlying Devensian glacial till (Countryside Commission 1998).

# 3.2 HISTORICAL CONTEXT

- 3.2.1 *Introduction:* this historical background is compiled mostly from secondary sources, and is intended only as a brief summary of historical developments specific to the study area.
- 3.2.2 **Place Name Evidence:** the name Kirkby Thore indicates a Scandinavian influence, probably by migration, and may signify the renaming of an already significant settlement (Gibbons 1989). It has also been suggested that Kirkby Thore was named after a temple was once dedicated to the Pagan god of thunder Thor, (Nicholson and Burn 1777, Parson and White 1829).
- 3.2.3 **Prehistoric (up to 43 AD):** Cumbria's Historic Environment Record database includes one listing for prehistoric activity in the vicinity of Kirkby Thore. This was a standing stone, documented as being broken by 1874. An urn was found at the foot of the standing stone (HER 1679). Neither the site nor the urn has been located since.
- 3.2.4 Roman (43 AD-400 AD): of most relevance to the groundworks relating to the refurbishment of high voltage overhead apparatus, are the Roman archaeological remains surviving at Kirkby Thore. The fort (listing reference 1012183), Bravoniacum, is recorded within the Antonine Itinerary as Brovonacis, where it is said to be located 14 Roman miles from Voreda, the Roman fort at Old Penrith, and 13 miles from Verteris, Brough Castle (McElligott 2011). The 4<sup>th</sup>-5<sup>th</sup> century Notitia Dignitatum and the Ravenna Cosmology give the name as Braboniacum (Birley 1934; Martin 2007). This fort is one of around 150 known forts in England, only 60 of which have produced evidence of civilian settlements, or vici.
- 3.2.5 Based on 13 Roman inscriptions, seven of which were altar stones and three tombstones, it is thought that the fort at Kirkby Thore housed the auxiliary cavalry or *Ala Quingeriaria*, a 500 strong unit (Martin 2007). An inscription from Africa on a funeral monument referred to a commander of a cavalry regiment serving at

- *Brauniacum*. An additional inscription, dedicated by Aurelius Marcus, also described a cavalry garrison, confirming that a cavalry was garrisoned at Kirkby Thore (Birley 1934, Jarrett 1960). The identification of a cavalry base is of particular significance, as these are rarer than other types of Roman fort.
- 3.2.6 Limited excavations at the fort at Kirkby Thore have demonstrated the extent of this site, and confirmed that sub surface archaeological deposits survive well and extensively. Antiquarian accounts also indicate a large vicus area and describe the high quality of the buildings, suggesting that this was a settlement of considerable importance. One of the fuller descriptions was recorded by Machell in the late 17<sup>th</sup> century (McElligot 2011). Machell noted that remains of the Roman fort could be seen between the Trout Beck on the south-east, on the south-west by Waterman Croft, Keld or Kelk-bottom on the north-west and the Church of Kirkby Thore on the north-east. He also noted that within, but not outside these areas, foundations of walls, both brick and stone, channels of stone and lead pipes, urns, alters and tiles were all visible. Unfortunately, the locations of Waterman Croft and Kelkbottom are not known, although the First Edition Ordnance Survey map shows the presently named Street House as 'Kelk House' and it is probable that Machell was referring to the area around this dwelling. There is also a reference to 'Kelkes' and to 'the land of Keldes' in the grants of land made to Holm Cultram in the late 12<sup>th</sup> century (Gibbons 1989). The vicus clearly extended to the west, south and east of the fort, along the main access routes into the fort, and surface traces were clearly still visible as late as the late 17<sup>th</sup> century. The descriptions indicate that that the fort was of some importance and well-built for longevity.
- 3.2.7 Numismatic evidence and some excavation suggests that occupation of the Roman fort began in the Flavian period with the construction of a turf and timber fort, which made way for a masonry fort, around AD 125. Occupation seems to have continued into the 4<sup>th</sup> century. The fact that the *vicus* clustered around the fort's main access routes is a theme common for forts associated with the northern frontier line. Unusually, the *vicus* appears to have been enclosed by earthwork defences, based on evidence encountered during excavations undertaken in the 1960s (Charlesworth 1964). The scheduled area of the fort and *vicus* is divided into three key areas, all three of which will be directly affected by groundworks associated with the refurbishment of high voltage overhead apparatus.
- 3.2.11 The present day A66 has existed as a road since at least since Roman times. This Roman road co-existed with a line of Roman forts, one of which was located at Kirkby Thore along with an associated *vicus*.
- 3.2.12 Within the 500 metre search radius around the proposed development site, eight sites/findspots are of Roman date. These include three roman coins found within the vicinity of the fort, a trumpet brooch found by a metal detector in a field near Kirkby Thore fort, an additional Roman coin found in the garden of Burwain Terrace, and three vessels.
- 3.2.13 *Medieval (400AD-1485):* during the reign of King Stephen (1135-1141) the manor of Kirkby Thore was held by the Whelp family. The descendants of Whelp eventually took the name de Kirkby Thore and held the manor until the reign of

- Henry VI, when it passed to the Wharton family (Parson and White 1829). Associated with Whelp family was Whelp Castle, described as a square enclosure and traditionally said to have been built from the remains of the Roman fort. In registers from Holm Cultram (1179) Whelp Castle is recorded as Castellum Whelp and as Wheallep-castle by Camden. By 1777 Nicholson and Burn reported that 'scarce remains' were to be seen, with the ruins of Whelp Castle said to have been used to construct Kirkby Thore Hall (Ragg 1917).
- 3.2.14 Not much is known about the origin and development of the medieval village. The most clearly recognizable medieval feature at Kirkby Thore is the Parish Church of St. Michael, a 12<sup>th</sup> century structure with 13<sup>th</sup>-14<sup>th</sup> century alterations as well as Kirkby Thore Hall, the core structure of which is a 14<sup>th</sup> century manor house (Gibbons 1989).
- 3.2.15 The village retains only vestigial evidence of croft boundaries. Excavations undertaken by Gibbons revealed that none of the excavated medieval features bore any relation to the present day plan of the village suggesting that there must have been a considerable evolution of land division (*ibid*).
- 3.2.16 **Post-medieval and Modern (1485 to present):** the existing bridge at Kirkby Thore was built in 1838 to replace an older stone bridge that was in danger of collapse. The demolition of the earlier bridge revealed a concentrated area of Roman finds that included copper alloy objects, coins, brooches, and small statuettes. It is unclear if the early bridge was completely destroyed in 1838 as well as how the new bridge was positioned. When the bridge was widened in the 1980s no trace of the earlier bridge was present (Gibbons 1989).

#### 3.3 MAP REGRESSION ANALYSIS

- 3.3.1 As part of the documentary research at Cumbria Record Offices in Kendal, a consultation of the historical maps for the Kirkby Thore area was undertaken. A cartographic date range of between 1770 and 1913 was obtained.
- 3.3.2 **Thomas Jeffreys' Historic Map of Westmorland 1770 (Figure 3):** The village of Kirkby Thore is clearly shown, however, no mention of roman remains is made. A square enclosure marked Gallatum is shown to the south east.
- 3.3.3 **Thomas Hodgson's Map of Westmorland 1828 (Figure 4):** This map shows the roads through Kirkby Thore in their present location. The location of 'Whelp Castle or Burwens a supposed Roman Station' is marked. The name Galgacum is also shown although it is not clear to what this relates.
- 3.3.4 *First Edition Ordnance Survey Map, 1861 (Figure 5):* at the time of the First Edition Ordnance Survey mapping the area within the site boundary was undeveloped. The site of the Roman fort was shown as *Burwens*. The site of Whelp Castle was also marked. To the west of the scheduled monument were open fields, and to the north was Cross Street.
- 3.3.5 **Second Edition Ordnance Survey Map, 1898 (Figure 6):** by the end of the 19<sup>th</sup> century this area of Kirkby Thore had retained much of the same shape as the earlier First Edition mapping. The Roman fort was still annotated as *Burwens* as

- well as the site of Whelp Castle. There were still undeveloped fields, but development was starting to occur in this area with the formation of new buildings and roads.
- 3.3.6 **Third Edition Ordnance Survey map, 1913 (Figure 7):** Burwens and the site of Whelp Castle were still annotated to the south of Kirkby Thore. What had previously been two separate, undeveloped fields on the First and Second Ordnance Survey maps was now one field that still remained undeveloped.

#### 3.4 Previous Work

- 3.4.1 In 1961 excavations were undertaken at two sites in the known area of the Roman fort. It was thought that excavations on the south side of the main street, near the junction of Main Street with Chapel Lane, would have found the eastern aspect of the fort as well as part of the defences on the northeast and southeast. All that was found of the defences was a ditch section with two pieces of late 2<sup>nd</sup> century pottery. Excavations have suggested that this was not the first fort on this site as a turf rampart and ditch were revealed within the area of the stone fort. These finds were similar to the defences of the Flavian temporary camp at Oakwood. Pottery found on the site from earlier levels were dated within the period of 80-120 AD and did not suggest a brief occupation. Pottery from the overlying areas suggests that the early fort ended around *c.* 120-125 AD, although Charlesworth stated that this was tentative (Charlesworth 1964).
- 3.4.2 On the south side of Piper Lane, a single trench revealed the foundation of a substantial wall that was thought by Charlesworth to have surrounded the civil settlement (*ibid*). Charlesworth's hypothesis that a defensive wall surrounded the civil settlement at Kirkby Thore had been questioned by Gibbons who thought that it was possibly the rear boundary wall of a medieval toft (Gibbons 1989).
- 3.4.3 In 1965 excavations by Charlesworth on the south side of Piper Lane, near the junction of the A66 revealed no traces of disturbance in Roman or later times. The absence of finds suggested that the *vicus* did not extend so far north and west as this (Charlesworth 1965).
- 3.4.4 In 1983 excavations were undertaken in a field to the north of the northern angle of the fort immediately west of the Prospect Terrace present day site boundary, centred at NGR NY 6378 2574. Trench 1 was positioned in the upper field and revealed a linear depression interpreted to be a hollow trackway with an uneven drainage channel aligned along the centre. This contained both Roman and medieval pottery with post-medieval material in the upper fill. A trench in the lower field revealed a deep bank of medieval ploughsoil that had been denuded from the upper field and put against a field wall of which the footing survived. The wall consisted of cobbles in a matrix of ploughsoil. In front of and parallel to the wall was a ditch, the upper fills of which contained pottery dated to the later medieval period. The ditch was thought to have functioned as a drainage channel. From the outer edge of the ditch was a cobbled surface. The wall, ditch and cobbled surface were thought to be contemporary. Trench 3/6 revealed Samian ware dated to the first half of the 2<sup>nd</sup> century. A medieval field wall that had been

robbed was also found. From the wall foundation a single sherd of Roman courseware was found. This excavation established that the area of the field was outside any foci of civilian occupation associated with the fort. This excavation revealed ditches, field boundaries, pits, possible structures and a probable well, of which only two ditches could be interpreted as part of the defences of the later stone fort. The probable well and pit demonstrate the presence of *vicus* activity on the northeast side of the fort. The main area of the field was interpreted as being used as both arable and pasture land (Gibbons 1989).

- 3.4.5 An archaeological evaluation was undertaken in 1999 on land adjacent to the A66 Trunk Road at Kirkby Thore, to the south of the proposed site boundary. Four of the trenches yielded archaeological deposits and finds including a possible Roman road surface and areas of cobbling interpreted as yards and wall foundations. Sherds of Roman, medieval and post-medieval pottery was also revealed within the area (Giecco 1999, Giecco 2000).
- 3.4.6 In 1999 Lancaster University Archaeological Unit (LUAU) undertook a desk-based assessment and inspection of the Kirkby Thore Road Improvement scheme. It was determined that the scheme would have a slight adverse impact on archaeological remains and recommended recording of these remains prior to road improvement works (LUAU 1999).
- 3.4.7 LUAU conducted an archaeological watching brief in 2000 as part of the road improvements on the A66 at Kirkby Thore, to the south of the proposed site boundary. No archaeological features or artifacts were recovered at this time (LUAU 2000).
- 3.4.8 In 2001 the aforementioned archaeology unit undertook an archaeological assessment of proposed sewerage works, to the south of Kirkby Thore. It was deemed that medieval and post-medieval activity may be recovered in the area; however, archaeological remains most likely to be uncovered were considered to be those of the Roman civilian extramural settlement (LUAU 2001a).
- 3.4.9 In 2001 Oxford Archaeology North undertook an archaeological watching brief during the laying of two new waste water pipes within the immediate vicinity of *Bravoniacum* Roman fort and its associated extramural settlement. The pipelines were excavated in fields to the southeast of the village leading to the Trout Beck. Close to the Trout Beck a series of fluvial deposits were found associated with previous courses of the river. On higher ground, within Trench 1, little Roman archaeology or features were found. A fence alignment was revealed that had been replaced by a shallow ditch in which a 4<sup>th</sup> century potsherd was found. The lack of building evidence, a single potsherd, and in general a small amount of finds would suggest that this was an area used for agricultural purposes rather than the extramural settlement associated with the Roman fort. A post-medieval mill race associated with a corn and saw mill was located across Trenches 1 and 2 as well as
- 3.4.10 An archaeological evaluation was conducted in 2000 by Carlisle Archaeology Ltd immediately north of the northern angle of the Roman fort, in what was known as Field 8866. Roman pottery and features were mostly concentrated in the western part of the field on higher ground. Ploughsoil in two of the trenches was medieval

- in date. Apart from the ploughsoil, medieval and post-medieval remains were concentrated in the eastern part of the field on lower ground. In one trench a large postpit indicated the presence of a substantial structure thought to be medieval in date that post-dated a shallow gully that was interpreted as a Roman field boundary. The best preserved features were thought to be Roman in date and were associated with the extramural *vicus* and included buildings, yards, ancillary working areas and field boundaries (Graham 2000).
- 3.4.11 An archaeological excavation undertaken by LUAU the same year followed the aforementioned evaluation conducted in Field 8866. Evidence for the Roman period consisted of a stratigraphic sequence through several phases of Roman occupation. The earliest dated to the 1<sup>st</sup> century with the majority of finds dating to the 2<sup>nd</sup> through 3<sup>rd</sup> centuries as well as a hint of occupation during the 4<sup>th</sup> century. The medieval period was characterised by shallow linear features and postholes thought to pertain to agricultural activity. A finely metalled cobbled surface and other features represented land boundaries (LUAU 2001b).
- 3.4.12 In 2003 a geophysical survey was undertaken at Kirkby Thore Roman Fort. The electrical resistance survey located the perimeter of the fort and provided an indication of the interior layout. Evidence for buildings within the fort was poor, possibly due to plough damage and stone robbing. The presence of a town to the northwest of the fort was investigated but not substantiated (Railton 2003).
- 3.4.13 In August 2006, an archaeological watching brief was undertaken by Tynescapes Archaeology during the construction of a new path north-east of the A66, directly south of the Roman Fort. No features or finds of an archaeological nature were encountered during this watching brief (Liddell 2006).
- 3.4.14 In 2009, North Pennines Archaeology Ltd undertook a rapid desk-based assessment and subsequent evaluation of the development area. The research showed that a long antiquarian history of Kirkby Thore extends back to the 16<sup>th</sup> century during which time it was recognized that a Roman fort with an extensive civil settlement was in existence. The visible remains of the Bravoniacum Roman fort are few and the extent of the fort and surrounding vicus remains a subject of much debate. Excavation evidence from 1983 revealed, in the field directly west of the proposed development site, and to the north of the Roman fort, ditches, field boundaries, pits, possible structures and a probable well. Two of the ditches were interpreted as being part of the defences of the later stone fort. The probable well and pit demonstrated the presence of some settlement activity on the northeastern side of the fort. The main area of this field was interpreted as being used as both arable and pasture land. Due to the proximity of the proposed development site with the Roman fort as well as previous archaeological excavations it was thought that evidence of medieval and post-medieval activity may be encountered as well as remains related to Bravoniacum Roman fort. The Archaeological Evaluation involved the excavation of six trenches, totalling 2% of the development area. Archaeological remains were identified in all trenches in the form of a series of ditches, foundations and cobbled surfaces. These appear to relate to the nearby Roman Fort and associated vicus (Strickland 2009).

- 3.4.15 In 2011 North Pennines Archaeology undertook an archaeological excavation and watching brief on land adjacent to Prospect Terrace, Kirkby Thore, which revealed numerous archaeological features and deposits of a Romano-British date. Most notable of these archaeological features/deposits were beam slots and cobble surfaces relating to timber buildings and a possible inhumation. A large sub rounded feature of possible industrial function was also recorded during the evaluation (McElligott 2011).
- 3.4.16 During April 2013, Wardell Armstrong Archaeology supervised the geophysical surveys of land at Kirkby Thore Roman Fort, Kirkby Thore, near Penrith, Cumbria, at the request of North Pennines AONB Partnership, as part of the Altogether Archaeology Project (Project Theme 2) to investigate the Roman Road between Kirkby Thore and Carvoran forts. (Mounsey 2013) The geomagnetic survey located earth filled ditches relating to a hitherto unknown civilian settlement, with a street running through it immediately north-west of the fort. In addition to this the survey managed to detect some other earth filled linear features between the fort and the north-west civilian settlement, one of which may represent the curved corner of another camp, fort or annex. Within the fort area strong positive magnetic anomalies indicated areas of buildings robbed of stone whereas weaker magnetic areas were indicative of streets between the buildings. The outline of the headquarters building was recognised as a series of strong positive magnetic anomalies set in a rectangular group. The north-west defensive wall was not clear on the geomagnetic survey, was the existence of any defensive ditch.

# 4 ARCHAEOLOGICAL WATCHING BRIEF

#### 4.1 Introduction

4.1.1 The watching brief was undertaken over the 28<sup>th</sup> and the 29<sup>th</sup> of October 2014 and monitored all groundworks associated with the replacement and renewal of 3 poles within Kirkby Thore. All excavations were made using a 6tonne tracked excavator using a toothless bucket.

#### 4.2 Results

4.2.1 **Pole 1 (ID 66013L008130808, Figure 2):** The pole was removed from the existing foundation hole before a wider foundation was excavated measuring 0.5m wide and 1m long. The limit of the excavations at 1.8m, revealed an orange brown sandy clay (101) under a brown silty topsoil (100) measuring 0.5m and the backfill from the previous pole cut (102)/[103]. No archaeological remains were noted.



Plate 1: Original foundation for pole 1

- 4.2.2 **Pole 2** (ID66013L006130613, Figure 2): The pole was removed from the existing foundation hole and re-augured before the replacement pole was sited in the same foundations. Deep stratigraphy could not be observed however 0.7m of brown silt topsoil (100) was observed overlaying an orange brown sandy clay (101). No archaeological remains were noted.
- 4.2.3 **Pole 3 (ID66013L006130615, Figure 2):** The pole was removed from the existing foundation hole and re-augured before the replacement pole was sited in the same foundations. Deep stratigraphy could not be observed however 0.7m of brown silt topsoil (**100**) was observed overlaying an orange brown sandy clay (**101**). No archaeological remains were noted.



Plate 2: Original Foundation hole for pole 3



Plate 3: Foundation for pole 3 after re excavation.

# 4.3 ARCHAEOLOGICAL FINDS AND ENVIRONMENTAL SAMPLING

4.3.1 No archaeological finds of note were recovered, and no environmental samples were retained during the groundworks.

# **5 CONCLUSION**

#### 5.1 CONCLUSIONS

- 5.1.1 Wardell Armstrong Archaeology were commissioned by Electricity North West to undertake a Rapid Desk Based Assessment and Watching Brief on land within and around Kirkby Thore, Cumbria prior to refurbishment of High and Low Voltage Overhead Apparatus within the Kirkby Thore Roman Fort and associated Vicus, (NGR NY 637 253; listing reference 1012183. Figures 1 and 2).
- 5.1.2 The rapid desk based assessment has highlighted the potential for surviving subsurface traces of the Roman Fort and associated Vicus (HER 1012183) to be encountered within the proposed development site.
- 5.1.3 During the watching brief three poles were monitored to establish the nature and extent of any archaeological remains. Although the poles were located close to the location of existing roman archaeological remains within Kirkby Thore the watching brief revealed no archaeological features, artefacts or deposits.

#### **6 BIBLIOGRAPHY**

#### 6.1 PRIMARY SOURCES

Kirkby Thore Enclosure Map, 1820 Located at Kendal Record Office (KRO) Reference Number: WQR/I 52.

First Edition Ordnance Survey Map 1861

Second Edition Ordnance Survey Map 1898

Third Edition Ordnance survey map 1913

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## 6.3 WEBSITES

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# APPENDIX 1: CONTEXT TABLE

Context Number	Context Type	Description
100	Deposit	Topsoil
101	Deposit	Subsoil
102	Deposit	Backfill of previous Pole
103	Cut	Cut of previous Pole

# **APPENDIX 2: FIGURES**

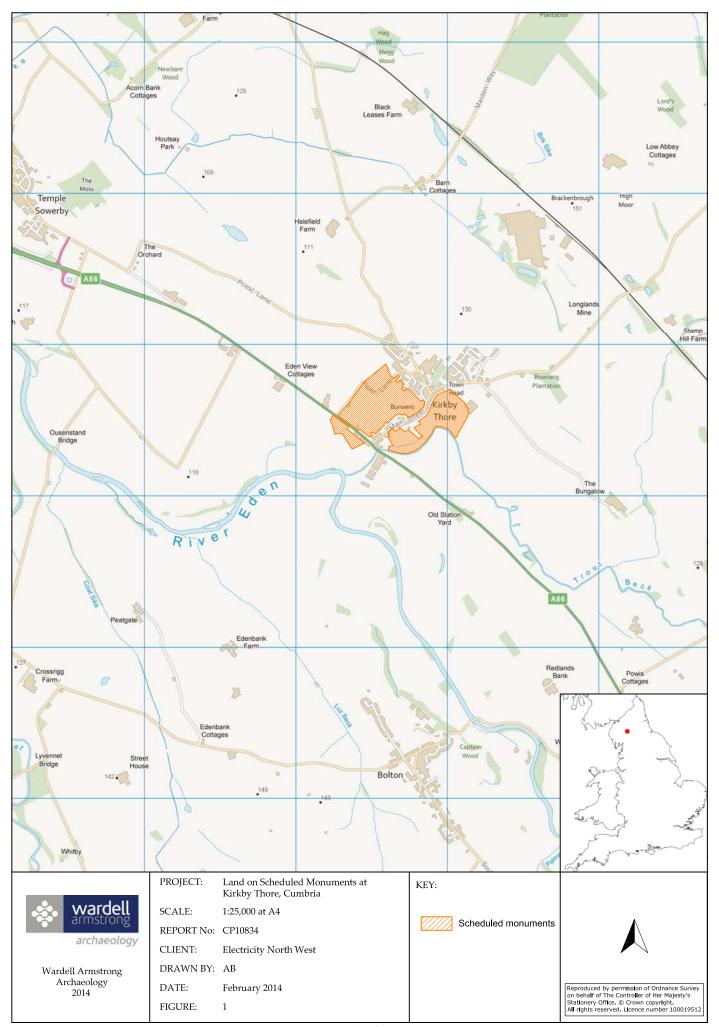


Figure 1: Site location.

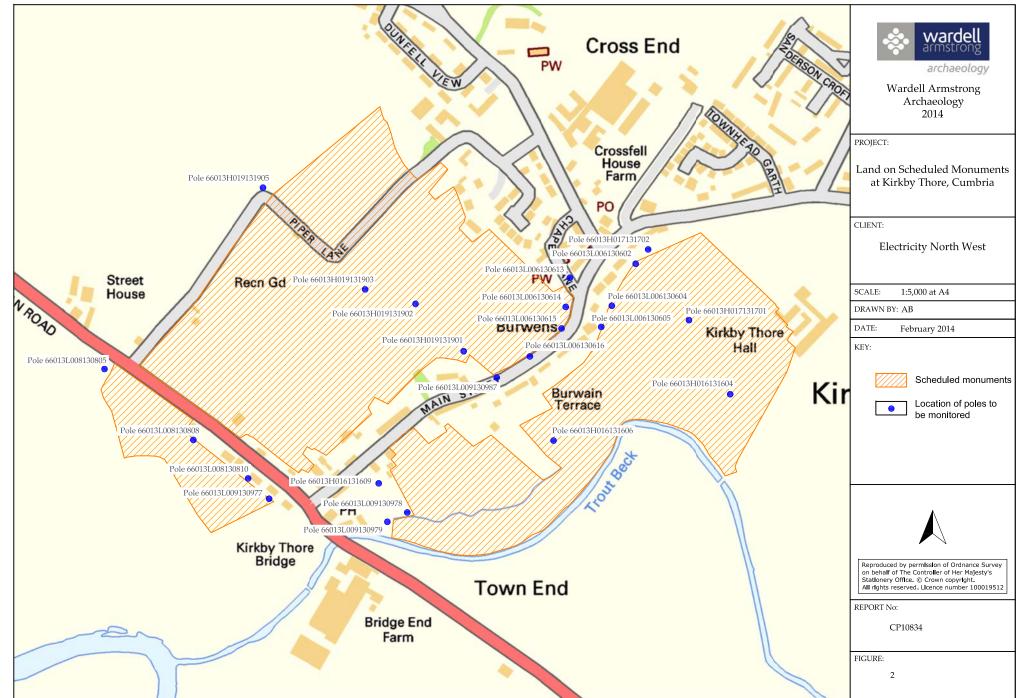


Figure 2: Detailed site location.

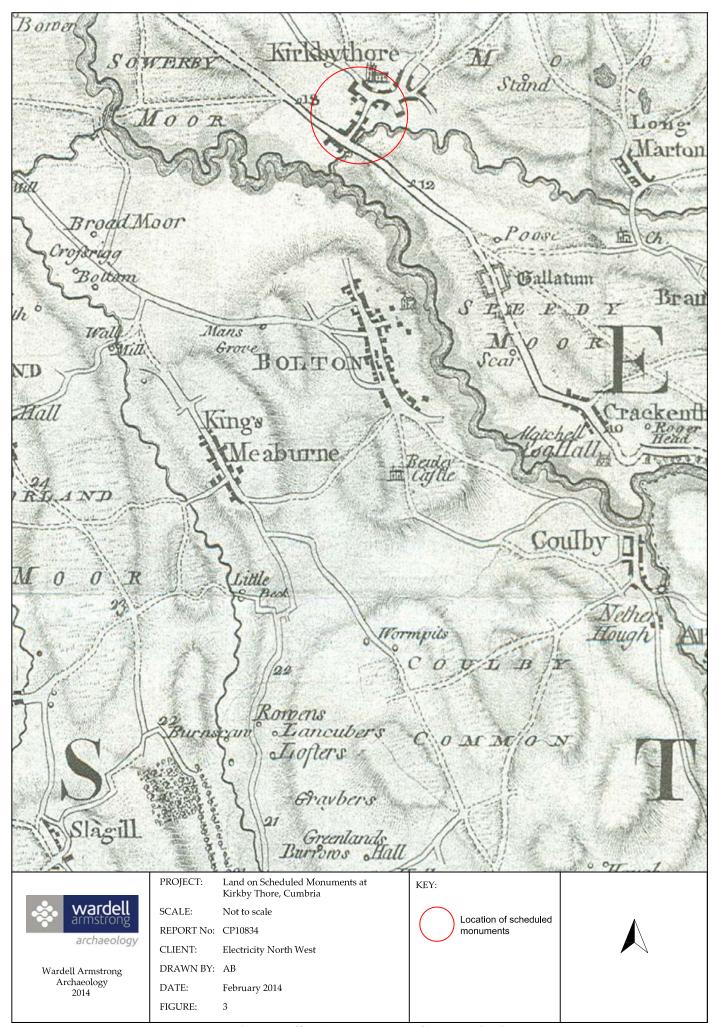


Figure 3: Thomas Jeffreys' Historic Map of Westmorland, 1770.

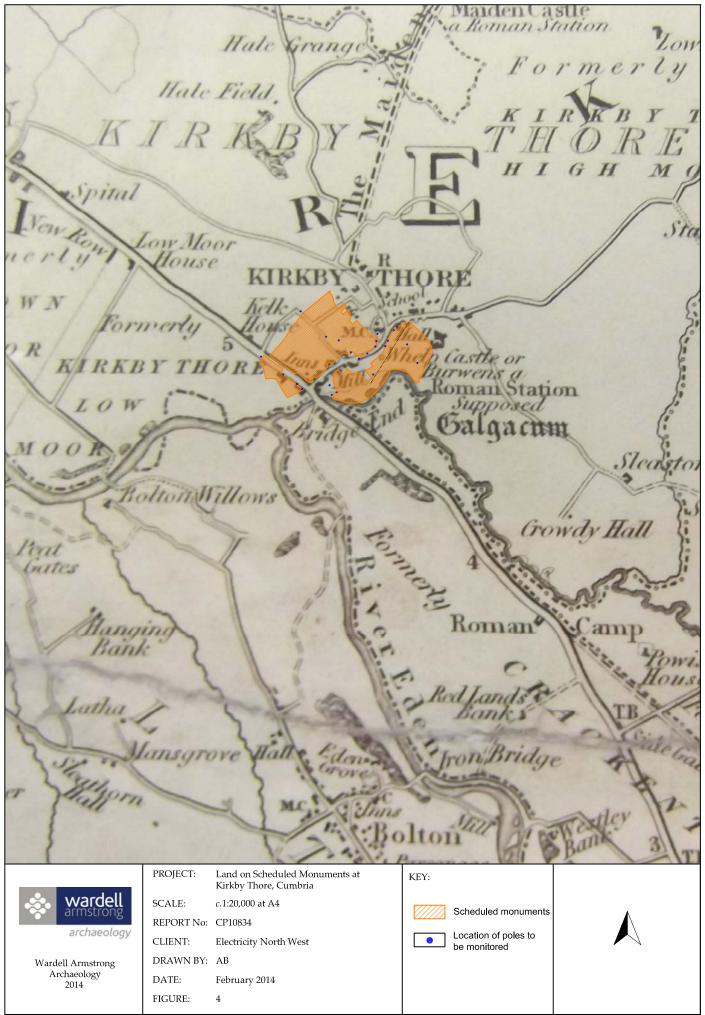


Figure 4: Thomas Hodgson's Map of Westmorland, 1828.

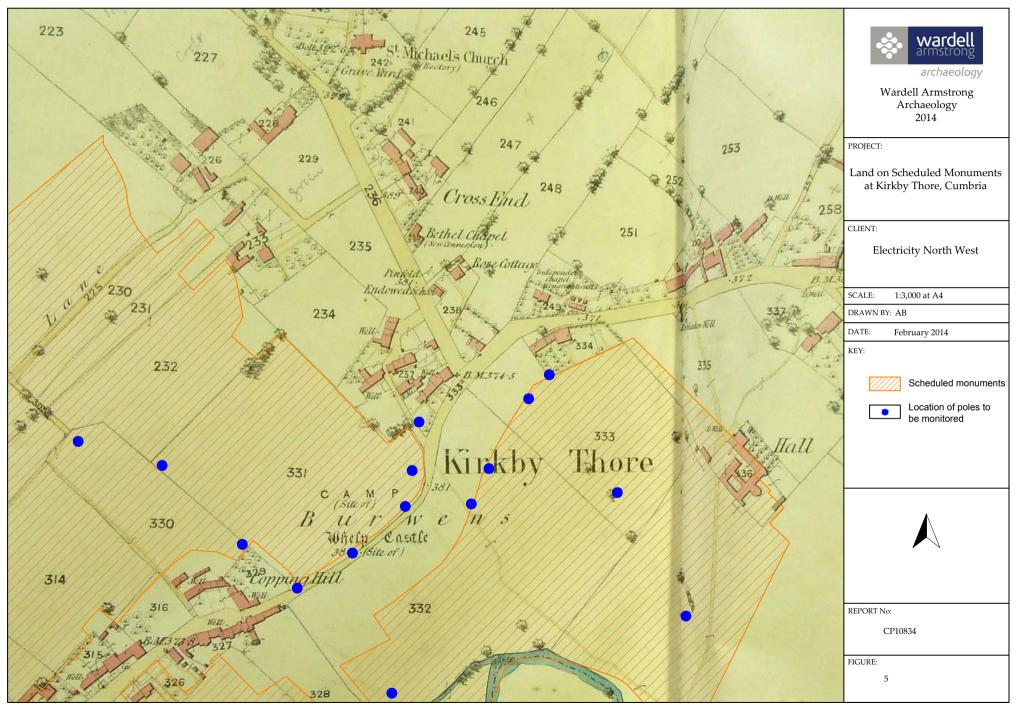


Figure 5: First Edition Ordnance Survey Map, 1861.

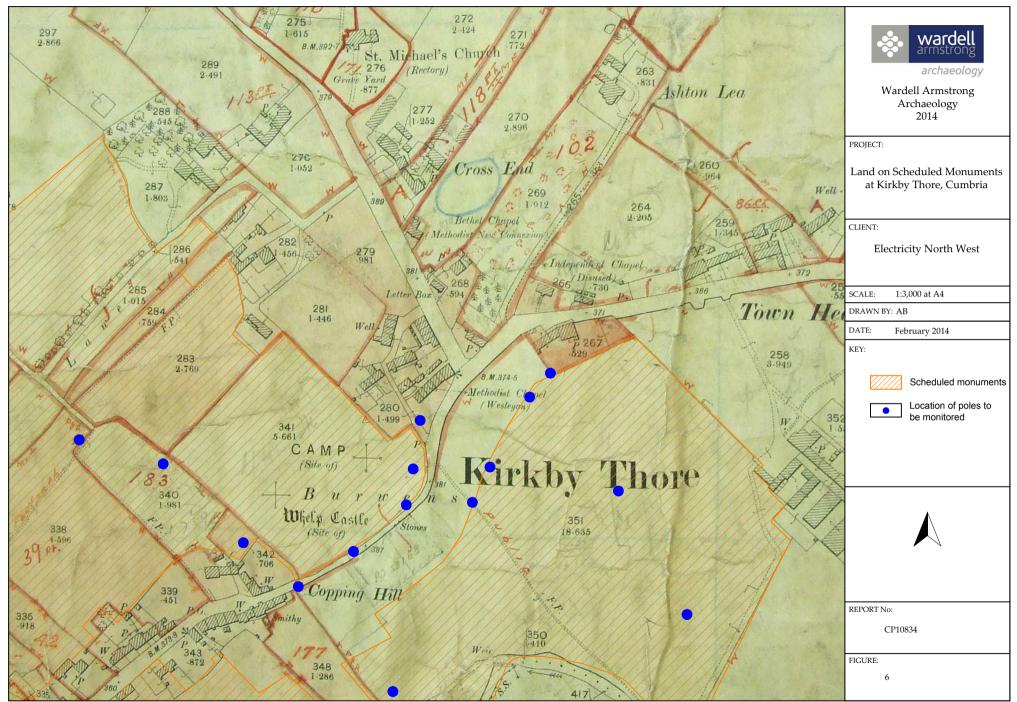


Figure 6: Second Edition Ordnance Survey Map, 1898.

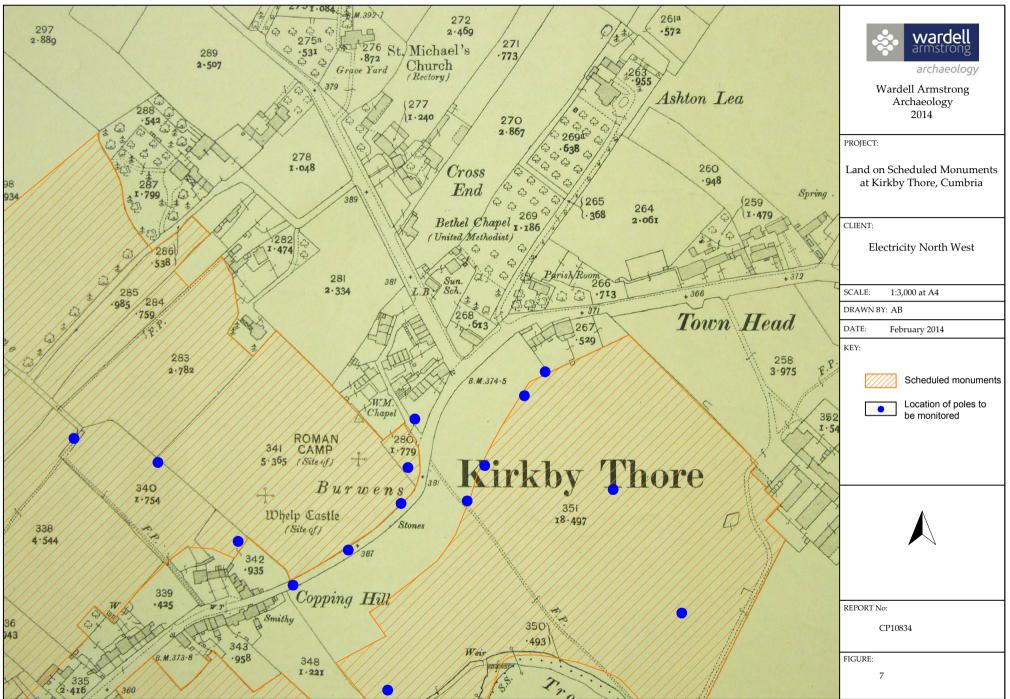


Figure 7: Third Edition Ordnance Survey Map, 1913.