

**AN ARCHAEOLOGICAL WATCHING BRIEF ON
THE BURNSTONES-SLAGGYFORD-AYLE OHL REFURBISHMENT,
NEAR KIRKHAUGH, NORTHUMBERLAND**

***PHASE 1: UNDERBANK AND KIRKSIDE WOOD,
BETWEEN KIRKHAUGH AND AYLE***

**An Archaeological Watching Brief on the Burnstones-Slaggyford-Ayle OHL
Refurbishment, near Kirkhaugh, Northumberland**

Phase 1: Underbank and Kirkside Wood, between Kirkhaugh and Ayle

Central National Grid Reference: NY 6987/4930 – 7074/4929

Site Codes: SLA 07 & SLA 09

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1. NON-TECHNICAL SUMMARY

- 1.1 A programme of archaeological investigation is being undertaken in association with the refurbishment of an overhead electricity supply between Burnstones and Ayle, via Slaggyford, near Kirkhaugh in Northumberland. The first phase of the investigation was undertaken along the southern portion of the supply line, between Kirkhaugh and Ayle, specifically in two areas: firstly where the route crosses the River South Tyne at Underbank (NY 6987 4930); secondly where the route runs eastwards, to the north of Kirkside Wood (NY 7074 4929).
- 1.2 The archaeological investigation was commissioned by Northern Electric Distribution Limited and undertaken by Pre-Construct Archaeology Limited intermittently between December 2007 and April 2009. The work was requested by the Northumberland County Council Conservation Team in order to ensure that any archaeological remains exposed during the work were recorded prior to their destruction.
- 1.3 Various archaeological sites and monuments lie along the route of the overhead line between Burnstones and Ayle. Therefore it was considered that intrusive groundworks in the refurbishment scheme had potential to destroy important archaeological remains. The two archaeologically sensitive areas in the southern portion of the route lie in the vicinity of Underbank Farm, on the River South Tyne. The remains of a Roman bridge abutment survive at this location, which is overlooked from the west by the Roman fort of Whitley Castle. On the eastern valley side, north of Kirkside Wood, are known Bronze Age funerary remains.
- 1.4 Groundworks for a series of foundation pits for new poles (or their supports) to carry the overhead line between Underbank and land north of Kirkside Wood were subject to archaeological monitoring. Various deposits were recorded, mostly comprising glacial and alluvial material, with topsoil forming the existing ground surface. No remains of archaeological significance were recorded.

2. INTRODUCTION

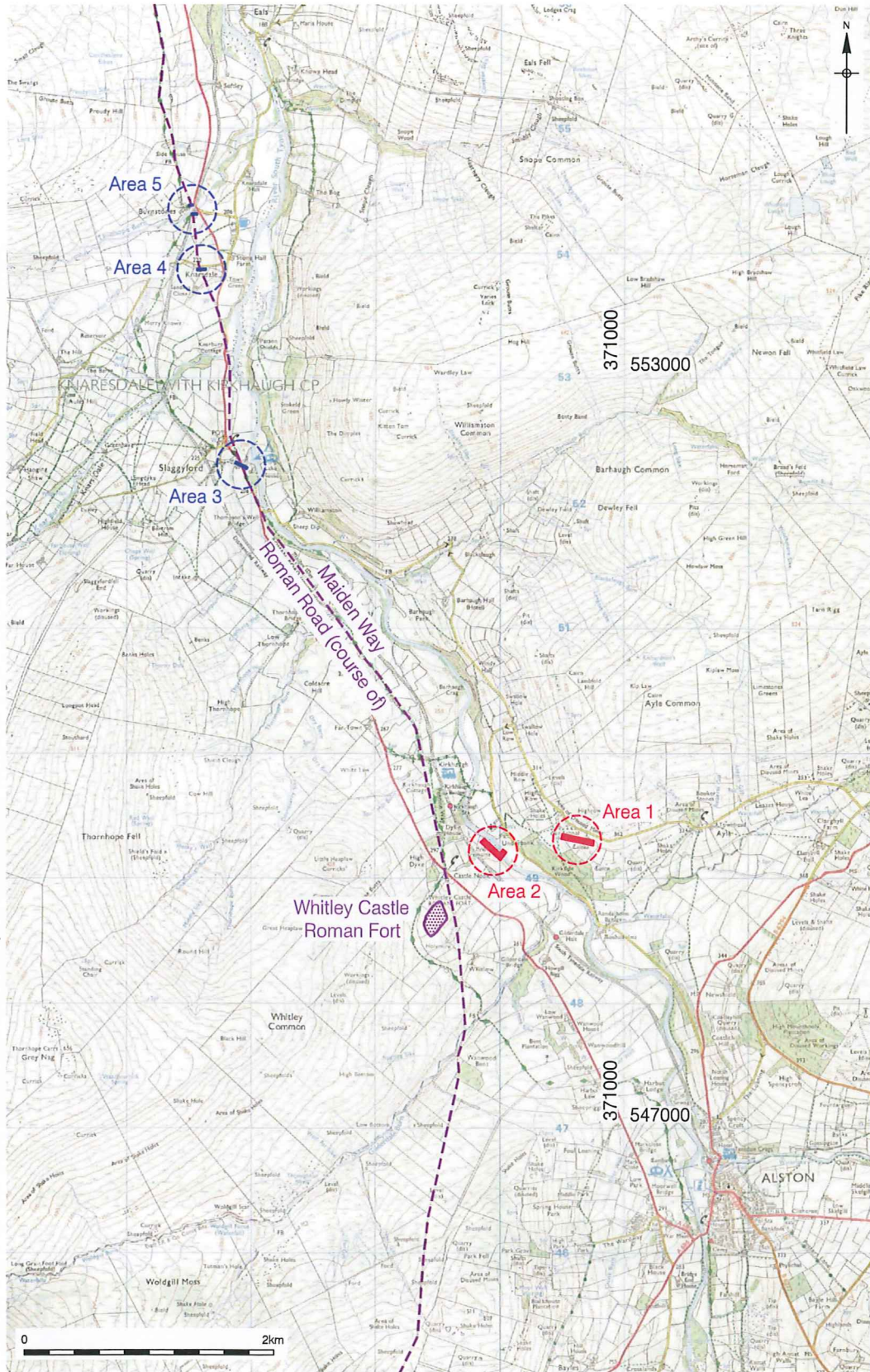
2.1 General Background

- 2.1.1 This report describes the results of the first phase (Phase 1) of a programme of archaeological monitoring and recording (watching brief) undertaken in association with the refurbishment of the electricity supply on an overhead line (OHL) between Burnstones and Ayle, via Slaggyford, near Kirkhaugh in Northumberland (Figure 1).
- 2.1.2 Five specific sections of the overall c. 8km OHL route were identified as being of archaeological interest. Three of these (Areas 3, 4 and 5) lie within the northern portion at Burnstones, Knarsdale, and Slaggyford, where the route follows the line of the Maiden Way Roman road (Figure 1). However Phase 1 of the watching brief, as described herein, was concerned with two sections (Areas 1 and 2) within the southern portion of the OHL route, between Kirkhaugh and Ayle (Figures 1 and 2). Here the route passes close to the Roman fort of Whitley Castle and the site of Roman bridge abutment, while further east, it crosses land known for Bronze Age funerary remains.
- 2.1.3 The watching brief was commissioned by Northern Electric Distribution Limited (NEDL) and undertaken by Pre-Construct Archaeology Limited (PCA), intermittently between December 2007 and April 2009. The work was undertaken at the request of the Northumberland County Council Conservation Team (NCCCT) and according to a Project Design, compiled by PCA in advance of the work.¹ In places, the OHL refurbishment scheme was considered to have potential to disturb archaeological remains dating from prehistory and the Roman period in particular.
- 2.1.4 At the time of writing, the Site Archive is housed at the Northern Office of PCA, at Unit N19a, Turdsale Business Park, Durham. The completed Site Archive, comprising written, drawn, and photographic records will be ultimately deposited at the Great North museum, under the site codes SLA 07 and SLA 09. The Online Access to the Index of Archaeological Investigations (OASIS) reference number is: preconst1-73080.

2.2 Site Location and Description

- 2.2.1 The OHL refurbishment scheme is located to the south of Haltwhistle, in the North Pennines, the westernmost part of Northumberland. Approximately 8km in length, the OHL route runs from Burnstones, at National Grid Reference NY 675 544, in a general south-easterly direction towards Alston (in Cumbria), passing through Knarsdale, Slaggyford and Kirkhaugh, beyond which it turns to the east, crossing the River South Tyne at Underbank, and runs onto Ayle, at NY 718 494 (Figure 1).
- 2.2.2 Phase 1 of the watching brief was conducted towards the south-eastern end of the OHL route. Between NY 6987 4930 and NY 7074 4929, two sections of the route had been identified as being of specific archaeological interest. The first area (Area 1), c. 250m in length, lies to the east of the South Tyne where the route runs along the valley side north of Kirkside Wood, on its eastwards course to Ayle (Figure 2).

¹ PCA 2007. Included as an appendix to this report.



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 Monitored Areas

 Proposed Areas

 Roman Road (course of)

Figure 1
Site Location
1:50,000 at A4

- 2.2.3 The second area (Area 2), also c. 250m in length, is located above the west bank of the River South Tyne, opposite Underbank Farm (Figure 2). This portion lies below the route of the South Tynedale Railway as it runs roughly north-westwards along an elevated alluvial river terrace. In turn, the railway line is skirted to the west by the A689, which runs along slightly higher ground below Whitley Common and Great Heaplaw.
- 2.2.4 The land on which Phase 1 of the watching brief was undertaken was mostly open pasture fields on the floor and sides of the valley of the South Tyne (Figure 3). The valley sides have some areas of managed woodland, such as the aforementioned Kirkside Wood, this stretching along the eastern valley side below Ayle Common.

2.3 Geology, Topography and Geoarchaeology

- 2.3.1 The River South Tyne is the dominant geological and topographical feature in the area of the Burnstones-Ayle OHL refurbishment. The South Tyne and its upland tributaries drain substantial areas of Carboniferous limestone and the Northern Pennine Orefield, once the most productive lead and zinc mining area in Britain.² In the upper reaches, around Alston, the Middle Limestone Group forms the solid geology, while beyond Burnstones, at the northern end of the OHL route, the solid geology is Millstone Grit/Upper Limestone.³
- 2.3.2 Throughout the Tyne Basin, thick glacial, periglacial and glaciofluvial deposits mantle hill slopes and infill valley floors with present river channels inset within these Pleistocene deposits, Holocene alluvium or bedrock.⁴
- 2.3.3 Watching brief Area 1 lies on the eastern valley side, between c. 310m OD and 340m OD, north of Kirkside Wood. Watching brief Area 2 lies at c. 240m OD, on the western valley floor of the South Tyne, in the vicinity of its confluence with the Lort Burn.
- 2.3.4 In terms of Holocene river environments and valley floor development, Thinford Burn, near Burnstones at the northern end of the overall OHL route, may be considered the type site for the upper and middle reaches of the South Tyne.⁵ Its deeply entrenched valley floor is entirely characteristic of this and neighbouring valleys, as is its wandering boulder and cobble bed channel with narrow floodplain, lying below a well-developed sequence of alluvial terraces. In terms of archaeological potential, slow rates of Holocene fine-grained overbank alluviation recorded at Thinford Burn up to the late Roman period suggest great potential for the burial of intact multi-period archaeological landscapes beneath Roman and later peat developments in the upper reaches of the South Tyne. Valley floor incision occurred from the late Roman period onwards, with such river erosion likely triggered, at least in part, by early historic clearance of river catchment woodland. A long period of entrenchment and lateral reworking of channels in the upper reaches of the South Tyne between the late Roman period and modern era has been punctuated by episodic alluviation. The late 18th and 19th centuries was notable for frequent large scale flood events resulting in marked down cutting of river channels, these likely resulting in truncation of archaeological landscapes and reworking and burial of artefacts.

² Macklin *et al* 1992, 125.

³ *ibid.*, Figure 12.1(a), 124.

⁴ Passmore and Macklin 1997, 12.

⁵ *ibid.*, 16-19.

2.4 Planning Background

- 2.4.1 In 2006, NEDL, a subsidiary of CE Electric UK Limited, submitted a planning application to, what was then, Tynedale District Council proposing refurbishment of the OHL electricity supply between Burnstones and Ayle, via Slaggyford, near Kirkhaugh.
- 2.4.2 NCCCT, in its archaeological development control role, considered that the majority of the OHL route had little or no archaeological potential. However, NCCCT identified five sections of the route - shown on a plan supplied to NEDL - with greater archaeological sensitivity. Three of these sections, at Burnstones (Area 5), Knarsdale (Area 4) and Slaggyford (Area 3), lie within the northern portion of the OHL route, where it coincides with the line of the Maiden Way Roman road (Figure 1). The remaining two sections (Areas 1 and 2) lie within the southern portion of the OHL route, between Kirkhaugh and Ayle, where there is particular potential for Roman period and prehistoric remains (Figures 1 and 2).
- 2.4.3 NCCCT took the view that, in all five areas, groundworks associated with the OHL refurbishment had the potential to disturb important archaeological remains. Therefore, NCCCT requested that a programme of archaeological watching brief to be undertaken in association with intrusive groundworks in these areas.
- 2.4.4 Upon appointment to undertake the archaeological investigation, PCA compiled the aforementioned Project Design, incorporating the required 'written scheme of investigation' (WSI). The Project Design covered all intrusive groundworks associated with the OHL refurbishment. It set out the background to and the aims of the project and described the methodologies to be employed during both the fieldwork and 'post-excavation' phases of the work.

2.5 Archaeological and Historical Background

Northumberland Historic Environment Record (HER) numbers have been taken from 'Keys to the Past', the online HER for County Durham and Northumberland. Scheduled Ancient Monument (SAM) numbers have been taken from 'MAGIC' a web-based interactive map service that collates environmental information from across government. Information regarding the history of the South Tynedale Railway has been taken from the website of the South Tynedale Railway.

- 2.5.1 In broad terms, the area through which the c. 8km long OHL route passes, between Burnstones in the north and Ayle in the south-east, has rich archaeological heritage ranging from prehistoric times through to the post-medieval and industrial eras.
- 2.5.2 Prehistoric activity in the general area is well attested. Of note are two Bronze Age barrows and a cairn (HER 6300) lying to the north of Kirkside Wood, in the immediate vicinity of Area 1 of the OHL route (Figure 2). The barrows at Kirkside Wood were excavated in 1935; one contained a burial with a ceramic vessel, gold earring and some flint tools and the other contained a cremation burial in a ceramic vessel. There are other traces of prehistoric activity in the vicinity of the barrows at Kirkside Wood, such as the remains of the possible Holymire stone circle (HER 13679), c. 0.5km to the south at Gilderdale Burn.

- 2.5.3 In all five archaeologically sensitive sections of the OHL route, the predominant known archaeological sites derive from the Roman period. On the valley side less than 1km to the west of the point at which the OHL route crosses the South Tyne at Underbank is the site Whitley Castle Roman fort (*Epiacum*) (HER 5934) (Figure 1). The site of this partly excavated lozenge shaped fort is scheduled (SAM ND12). Overlooked by the fort and close to the Lort Burn, in the immediate vicinity of Area 2 of the OHL route, are the remains of a Roman bridge abutment (HER 5936) at Underbank Farm (Figures 2, 3 and 4). This is also a scheduled monument (SAM ND127). The bridge is thought to have lain on the line of Roman road between Corbridge and *Epiacum*.
- 2.5.4 Running along the valley side immediately to the east of *Epiacum* was the Maiden Way Roman road (HER 5968) (Figure 2). This linked the Brough/Penrith road at Kirkby Thore, near Appleby, to *Carvoran* fort on Hadrian's Wall. Parts of this road are scheduled. The three northernmost areas (Areas 3, 4 and 5) of archaeological interest on the overall OHL route lie on, or span, the presumed line of the Maiden Way.
- 2.5.5 Close to Underbank Farm in the immediate vicinity of Areas 1 and 2 of the OHL route is the Church of the Holy Paraclete (HER 5937) (Figure 2). Although the existing structure dates from the second half of the 19th century, it is known to have replaced a 13th century church at the same location and a window from the original church was incorporated into the Victorian building. Indeed, this area was a focus for medieval settlement and there is a deserted medieval village (DMV) site (HER 5939) at Kirkhaugh, to the west of the river.
- 2.5.6 From the early post-medieval period onwards, the Borders region became renowned for the presence of bastles, stone-built two-storey farmhouses that could shelter both humans and livestock. The area round Kirkhaugh has many examples, the nearest to the OHL route being at Underbank Farm, where a range of farm buildings north of the farmhouse includes a series of bastles (HER 6304). The dwellings were converted to barns in the 19th century and are now Listed Buildings. Other examples in the immediate vicinity of the OHL route are at Dyke House Farm (HER 5948) and Holymire (HER 5940), both overlooking the route from the west, and High Row (HER 6302), to the north. The last named was built in the early 17th century, with a similar structure added at its south end in the 18th century.
- 2.5.7 During the 19th century, the area around Alston – sited in the Northern Pennine Orefield, as previously described - became an important lead mining district. Two rival pioneering railway companies – the Newcastle and Carlisle Railway Company and the Wear Valley Railway Company, a subsidiary of the Stockton and Darlington Railway - soon turned their attention to the mineral wealth of the South Tyne valley. Both companies proposed routes from Nenthead to Lambley on similar, but not identical, alignments that would have passed above Alston on high ground to the east. Both companies submitted plans to Parliament in 1845, but almost immediately the Wear Valley Company decided not to proceed, due to the prevailing economic climate. Despite a major Parliamentary battle, the Newcastle and Carlisle Railway Act, authorising construction of their line, received Royal Assent in 1846. There then followed a period of inactivity, whilst various proposals were made to modify the route.

- 2.5.8 Finally, in 1849, Parliament approved a modified line that abandoned a steeply-graded section to Nenthead. This enabled the last 1½ miles to be constructed on a much improved alignment, terminating at Alston. Construction proceeded fairly rapidly and the first 4¼ miles from Haltwhistle to Shafthill (later known as Coanwood) were opened for goods in March, and for passengers in July, 1851. The southern section of 9 miles to Alston from Lambley Colliery was brought into use for goods and mineral traffic in January 1852, and the whole branch was opened to all traffic on in November that same year. No less than nine viaducts were constructed to carry the rails over the River South Tyne and its tributaries – such as Lort Burn close to Underbank Farm (Figure 2).
- 2.5.9 For most of its life of 124 years, traffic on the Alston branch was handled by a single locomotive. Although Alston handled 15,000 tons of freight in 1953, the closure of the last colliery at Lambley in 1958 heralded the beginning of the end. Freight services were withdrawn from Lambley and Slaggyford in 1960, and from Alston in 1965. The end of passenger trains between Haltwhistle and Alston came in 1976, when the opening of a new road enabled a replacement bus service to operate. The South Tynedale Railway Preservation Society formed in 1973. Although unable to save the original standard gauge line, it succeeded in constructing and opening a narrow gauge line along part of the old trackbed, allowing passenger trains to operate along the line from 1983.

2.6 Aims and Objectives

- 2.6.1 In broad terms, the archaeological investigation aimed to record the character of archaeological remains exposed as a result of intrusive groundworks associated with the OHL refurbishment. In advance of the work, it was thought that such remains could encompass buried structures, deposits and features along with associated artefactual and ecofactual evidence.
- 2.6.2 The five sections of the OHL route identified as being of particular archaeological interest have been previously described. This report covers work in the two southernmost sections, Areas 1 and 2, located between Kirkhaugh and Ayle. A subsequent report will cover work in the three northernmost sections, Areas 3-5.
- 2.6.3 The project had the potential to make a contribution to archaeological knowledge of the area.

3. ARCHAEOLOGICAL METHODOLOGY

3.1 Fieldwork

- 3.1.1 Phase 1 of the watching brief, on groundworks in Areas 1 and 2 of the OHL route, was undertaken by PCA intermittently between December 2007 and April 2009. Work in Area 1 took place on the 13th and the 17th December 2007, while work in Area 2 took place on 23rd-25th April 2009.
- 3.1.2 Fieldwork was undertaken in accordance with the relevant standard and guidance document of the Institute for Archaeologists (IfA)⁶ and the Project Design compiled by PCA in advance of the work.
- 3.1.3 Groundworks in Areas 1 and 2 were undertaken by personnel from NEDL and/or their appointed sub-contractor. Foundation pits for new poles to carry the OHL and pits to house stays to support new poles were mechanically excavated under archaeological supervision. A total of 11 foundation pits were monitored.
- 3.1.4 None of the poles in Area 1 (Poles 9-12) were replaced. However, excavation of foundation pits to house two supporting stays for Pole 9 were archaeologically monitored. In addition, the excavation of foundation pits for replacements poles for Poles 3 and 6, these lying between Areas 1 and 2 Area 1, were also monitored.
- 3.1.5 In Area 2, the excavation of foundation pits for Poles 2, 53, 54, 55 and 55c, were archaeologically monitored (e.g. Figure 5). In addition, the excavation of foundation pits (55a and 55b) to house supporting stays for Pole 55c were monitored.
- 3.1.6 Exposures in all foundation pits were recorded by the attendant PCA archaeologist (e.g. Figures 6, 7 and 8).

3.2 Post-excavation

- 3.2.1 The stratigraphic data for Phase 1 of the project is represented by the written, drawn and photographic records. Post-excavation work involved checking and collating site records. A written summary of the archaeological sequence was then compiled, as described below.
- 3.2.2 No artefactual or organic material was recovered and no bulk samples for palaeoenvironmental remains were collected during Phase 1 of the project.
- 3.2.3 The complete Site Archive, in this case comprising written, drawn and photographic records (including all material generated electronically during post-excavation), will be packaged for long term curation. No material was recovered that required specialist stabilisation or an assessment of potential for conservation research. The depositional requirements of the receiving body, in this case the Great North Museum, will be met in full.

⁶ IfA 2001.

4. THE ARCHAEOLOGICAL SEQUENCE

During the investigation, separate stratigraphic entities were assigned unique and individual 'context' numbers, which are indicated in the following text as, for example [123]. The archaeological sequence in each foundation pit is described separately. Interpretation has been added where possible.

4.1 Area 1 and Vicinity (North of Kirkside Wood and at Underbank)

4.1.1 Within Area 1 no poles were replaced and only one pole (Pole 9) had two supporting stays added. Excavation of the foundation pits for these were monitored, along with excavation of the foundation pits for replacements of Poles 3 and 6, both lying west of Area 1, close to Underbank Farm (Figure 2).

Foundation Pit for Replacement Pole 3

4.1.2 This pit was located south of Underbank Farm on the valley floor, at c. 240m OD, and only c. 50m from the east bank of the river. It measured c. 2.0m in length by c. 1.0m wide and was c. 2.0m deep. The earliest deposit, seen from c. 1.0m below existing ground level, was layer [301], comprising gravel in a matrix of mid greyish brown silty sand, with cobbles and boulders, these up to 800mm across. The layer was machine-excavated to a depth of c. 2.0m below existing ground level. It represents former channel bed material, which now underlies the floodplain of the existing river channel.

4.1.3 Overlying the former river bed material was a layer, [300], of mid greyish brown silty sand, with lenses of fine sand throughout, this being the existing 'topsoil', up to c. 1.0m thick, on the floodplain, where ground level lies at c. 240m OD.

Foundation Pit for Replacement Pole 6

4.1.4 This pit was located on higher ground, at c. 285m OD, east of Underbank Farm. The pit measured c. 2.0m in length by c. 1.0m wide and was c. 2.50m deep. The earliest deposit seen was a layer, [602], of firm grey silty clay, at least 0.50m thick. The composition and sterile nature of this material suggest that it was of probable glacial origin, underlying the valley side. It was overlain by a layer, [601], of firm mid yellow sandy silt with occasional fine stones throughout, this c. 1.20m thick. This material is likely to be of alluvial origin, now occupying one of a series of well-developed alluvial terraces above the valley floor.

4.1.5 The uppermost deposit at this location, layer [600], comprised firm mid yellowish brown clayey silt with occasional medium and large stones throughout. Up to 0.80m thick, this is of likely alluvial origin.

Foundation Pits for Stays 9a and 9b for Pole 9

4.1.6 Two foundation pits, Pits 9a and 9b, were excavated to house supporting stays for Pole 9 at the western end of Area 1, c. 50m to the south of the Old School House and at an elevation of c. 330m OD. Both pits were c. 2.0m long by c. 1.0m wide and c. 1.60m deep and were sited on the east side of Pole 9.

- 4.1.7 Pit 9a revealed fractured limestone, [102], within a matrix of firm mid reddish brown sandy clay, at c. 1.30m below ground level and at least 0.30m thick. This material is of likely glacial origin. It was overlain by a layer, [101], comprising firm mottled mid greyish brown and mid orange clay with occasional fine and medium stones, up to c. 1.0m thick. Again this material is of likely glacial origin. The uppermost deposit seen in Pit 9a was layer [100], comprising firm mid greyish brown clayey sandy silt, up to c. 0.30m thick. This was the 'topsoil' at this point on the valley side.
- 4.1.8 Pit 9b exposed a similar sequence of deposits, with the addition of a layer, [203], of firm light grey sandy clay, this exposed below the fractured limestone, layer [202], and again of likely glacial origin. The main deposit exposed in this pit was layer [201], up to c. 1.0m thick, with an overlying 'topsoil', layer [200], these corresponding to the previously described layers, [101] and [100], in Pit 9a, respectively.

4.2 Area 2 (West of the South Tyne at Underbank)

Foundation Pits for Replacement Poles 53 and 54

- 4.2.1 Area 2 was a section of the OHL route running along the valley floor in the vicinity of the Lort Burn and opposite Underbank Farm. Pits 53 and 54 were the north-westernmost pits to be monitored in Area 2, both sited within c. 100m of the scheduled site of the Roman bridge abutment, on level ground at c. 240m OD (Figure 2)
- 4.2.2 Pit 53, sited close to the confluence of the Lort Burn and the South Tyne, measured c. 2.30m by c. 1.50m and was excavated to a maximum depth of c. 2.30m. To the south-east was Pit 54 sited on boggy ground directly above but within c. 50m of the site of the Roman bridge abutment. It measured c. 1.80m by c. 1.40m and was excavated to a maximum depth of c. 2.20m. Pits 53 and 54 contained an essentially identical sequence of deposits, with the same context numbers being used (Figures 6 and 7). In each case, the lowermost deposit, [702], comprised gravel and cobbles in a sandy matrix. This material likely represents a former channel bed. It was exposed at depths of c. 1.10m and c. 2.0m in Pits 53 and 54, respectively. An overlying alluvial accumulation, [701], comprised soft mid greyish brown silt with frequent gravel; this was c. 0.90m thick in Pit 53 and c. 1.40m thick in Pit 54. 'Topsoil' was c. 0.20m thick in Pit 53 and c. 0.60m thick in Pit 54, where it was described as an organic black clayey silt.

Foundation Pits for Replacement Pole 55, New Pole 55c and its Stays 55a and 55b

- 4.2.3 Pole 55 was located to the south-east of Pole 54 at the junction of the valley floor OHL route and the section which extends to the north-east over the South Tyne (Figure 2). This pole was sited on steeply-sloping ground above the valley floor, at c. 243m OD (Figure 5). The foundation pit measured c. 2.50m in length by c. 1.50m wide and was excavated to a maximum depth of c. 2.0m.
- 4.2.4 In Pit 55, the lowermost deposit, [902], comprising compact mid bluish grey clay, was exposed at a depth of c. 1.0m below ground level. This likely glacial material was covered by a layer, [901], of a mid brown sandy silty clay with moderate cobbles. This deposit, c. 0.80m thick, was of likely alluvial origin. 'Topsoil', [900], up to c. 0.20m thick, comprised soft mid to dark brown sandy silty clay with occasional cobbles.

4.2.5 On the valley floor just a few metres from Pole 55, a new pole was erected, this numbered Pole 55c. Taking a supply from Pole 55, this formed the south-westernmost component of the OHL route crossing the South Tyne. On its south-western side, two foundation pits, Pits 55a and 55b, were excavated on the sloping ground to house supporting stays for Pole 55c.

4.2.6 Pit 55c, measured c. 2.20m long by c. 1.50m wide and was c. 2.0m deep (Figure 8). The lowermost deposit, [802], was compact mid bluish grey clay with moderate cobbles, this likely glacial material exposed at depth of c. 2.0m below ground level. It was covered by a substantial deposit, [801], of soft mid brown silty sandy clay, with occasional large boulders. Up to c. 1.50m thick this material is of likely alluvial origin. 'Topsoil', [800], consisted of soft mid brown sandy silty clay, up to c. 0.50m thick. The foundation pits for the two stays, Pits 55a and 55b, each measured c. 1.5m by c. 0.50m and were up to c. 2.0m deep. Both exposed an identical sequence of deposits to that seen in Pit 55c.

Foundation Pit for Replacement Pole 2

4.2.7 To the north-east of Pit 55c, Pit 2 was excavated for the easternmost pole of those monitored in Area 2, this continuing the section of the OHL route which carries the supply across the South Tyne. Pole 2 was sited just above the existing river channel, at c. 240m OD, c. 100m to the south-east of the scheduled site of the Roman bridge abutment. Its foundation pit measured c. 2.20m in length by c. 1.30m wide and was excavated to a maximum depth of c. 2.40m. At a depth of c. 0.80m below ground level, a compact deposit, [702], was exposed, comprising river gravel and rounded cobbles in a mid brown sandy matrix. Again this material represents a former channel bed. It was overlain by a layer, [701], of soft mid greyish brown silt with frequent gravel, up to c. 0.40m thick and of likely alluvial origin. 'Topsoil', [700], comprised soft mid brown sandy silty clay, up to c. 0.40m thick.



Figure 3: South end of Area 2, Roman bridge abutment in rearground, looking north.



Figure 4: Roman bridge abutment, south side, looking north-west (*scale 2m*).



Figure 5: South end of Area 2, working shot at Pole 55, looking west (scale 2m).



Figure 6: Pit for Pole 53, looking north-west (scale 2m).



Figure 7: Pit for Pole 54, looking north-west (scale 2m).



Figure 8: Pit for Pole 55c, looking south-west (scale 2m).

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

- 5.1.1 No features, deposits or structures of archaeological significance were recorded during the watching brief on the two sections of the OHL refurbishment near Underbank Farm, Kirkhaugh. No artefactual material was recovered or noted within any of the deposits exposed.
- 5.1.2 Former river bed and fine grained alluvial material was encountered in the lower lying foundation pits, as might be expect on the floodplain and lower alluvial terraces of the valley of the South Tyne. In general, foundation pits sited on higher ground recorded clay as the lowermost deposit, this likely representing the glacially derived material that is known to underlie valley sides at such locations in the North Pennines. Again, sterile fine grained alluvial material was recorded. Sterile 'topsoil' formed the existing overburden in all foundation pits.

5.2 Recommendations

- 5.2.1 No further work is recommended on the data recovered from the investigation associated with the two sections of the Burnstones-Ayle OHL refurbishment near Underbank Farm, near Kirkhaugh.

6. REFERENCES

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Online Sources

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www.magic.gov.uk/ - a web-based interactive map service that brings together environmental information from across government.

7. ACKNOWLEDGEMENTS AND CREDITS

Acknowledgements

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PCA Credits

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APPENDIX
PROJECT DESIGN

PROJECT DESIGN FOR AN ARCHAEOLOGICAL INVESTIGATION ON THE SLAGGYFORD TO AYLE OHL REFURBISHMENT, NEAR KIRKHAUGH, NORTHUMBERLAND

*Prepared on behalf of NEDL by Pre-Construct Archaeology Limited
August 2006 (and updated December 2007)*

PCA Reference: PCA/KHG/WSI DOC 1(rev1)

NEDL Reference: MJ/9814546

NCCCT Reference: TBC

1. INTRODUCTION

- 1.1 There is to be refurbishment of overhead electricity lines (OHL) between Slaggyford and Ayle, near Kirkhaugh in Northumberland. The Northumberland County Council Conservation Team (NCCCT) has requested that an archaeologist monitors groundworks in certain parts of the OHL route and any archaeological remains of significance exposed are recorded prior to their destruction.
- 1.2 In this instance, there are five specific areas of archaeological interest: two between Kirkhaugh and Ayle adjacent to the River South Tyne in the southern portion of the route and three between Slaggyford and Burnstones, where the northern portion of the route runs close to the line of the Maiden Way Roman road.
- 1.3 Northern Electric Distribution Limited (NEDL) or their appointed contractor will undertake the relevant groundworks, which will include erecting new poles to carry the overhead electricity supply, dismantling old poles and associated groundworks.
- 1.4 Archaeological input is to be provided by Pre-Construct Archaeology Limited (PCA), who have compiled and updated this Project Design, which incorporates a 'written scheme of investigation' for the archaeological project.

2. SITE LOCATION

- 2.1 The northern end of the OHL route is at Burnstones, north of Slaggyford, (at NGR NY 675 544). From there it runs to the south-west, skirting the A689 as it ruins towards Alston in Cumbria. South of Kirkhaugh, the route turns to the east, crossing the River South Tyne, before running up to Ayle (at NGR NY 718 494).
- 2.2 Along the overall route there are five areas designated as being of specific archaeological interest, where groundworks are to be monitored, these areas comprising 'the site'. The first three lie within the northern half of the route: at Burnstones (NY 675 543), Knarsdale (NY 678 539) and Slaggyford (NY 679 523). In this portion, the OHL route skirts the A689, which closely follows the line of the Maiden Way Roman road. The remaining two areas lie in the southern half of the route, east of Kirkhaugh: the first is at Castle Nook (NY 699 492), between the South Tynedale Railway and the River South Tyne; the second lies to the east of the river (NY 707 492), north of Kirkside Wood as the route continues up to Ayle.

- 2.3 The valley of the River South Tyne is the dominant topographical feature in the area. Of the southernmost two areas of interest, the western area spans the Lort Burn close to its confluence with the river and lies on the valley floor at c. 240m OD, while the eastern area runs up the eastern valley side north of Kirkside Wood, lying between c. 310m OD and 340m OD.

3. PLANNING BACKGROUND

- 3.1 An application for planning permission to refurbish the electricity network between Slaggyford and Ayle, Northumberland has been made by NEDL. The majority of the OHL route runs through areas where the possibility of disturbance to archaeological remains by groundworks associated with the project is considered to be slight. However, five portions of the route – in the vicinity of Kirkhaugh - run through areas of perceived archaeological sensitivity. The areas considered to be archaeologically sensitive are shown on a plan supplied by NCCCT.
- 3.2 NCCCT took the view that the proposed works have the potential to disturb important archaeological remains and, therefore, it has recommended that a programme of archaeological monitoring and recording ('watching brief') should be undertaken in association with intrusive groundworks in the aforementioned five areas of the OHL route in the Kirkhaugh area.
- 3.3 This Project Design incorporates the required 'written scheme of investigation' for the archaeological watching brief. It covers all intrusive groundworks associated with the installation of the new electricity supply at the site. It sets out the background to and the aims of the archaeological project and describes the methodologies to be employed both during the fieldwork and 'post-excavation' phases of the project.

4. ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

- 4.1 Kirkhaugh lies on the western valley side of the River South Tyne, c. 3km north of Alston in the North Pennines. The river rises on Alston Moor south of Alston. The OHL route runs to the south from Burnstones along the western valley side, passing Kirkhaugh, then turns to the east, crossing the river, then passing Kirkside Wood, as the valley side rises to the east. In broad terms this area has rich archaeological heritage spanning the period from prehistoric times through to the post-medieval and industrial eras.
- 4.2 The predominant archaeological sites in the vicinity derive from the Roman period. On the valley side less than 1km to the west of the southern portion of the OHL route is the site of *Epiacum* or Whitley Castle Roman fort (County SMR 5945). This partly excavated lozenge shaped fort has Scheduled Ancient Monument (SAM) status. Overlooked by the fort and close to the Lort Burn, in the immediate vicinity of one of the areas of archaeological interest on the OHL route, are the remains of a Roman bridge abutment at Underbank Farm (SMR 5936). The bridge may have lain on the line of Roman road between Corbridge and *Epiacum* and its surviving abutment also has SAM status.

- 4.3 Running along the valley side immediately to the east of the fort was the Maiden Way Roman road (SMR 5968). This linked the Brough/Penrith road at Kirkby Thore, near Appleby, to *Carvoran* fort on Hadrian's Wall. Parts of this road also have SAM status. The three northernmost areas of archaeological interest on the OHL route lie on or span the presumed line of the Maiden Way.
- 4.4 Pre-Roman activity in the area is also well attested. Of particular note are two Bronze Age barrows and a cairn (SMR 6300) north of Kirkside Wood and in the immediate vicinity of the south-easternmost area of archaeological interest on the OHL route. The barrows at Kirkside Wood were excavated in 1935; one contained a burial with a ceramic vessel, gold earring and some flint tools and the other contained a cremation burial in a ceramic vessel. There are other traces of prehistoric activity in the vicinity, such as the remains of the possible Holymire stone circle (SMR 13679) by the Gilderdale Burn, c. 1km to the south.
- 4.5 Close to Underbank Farm in the immediate vicinity of the OHL route is the church of the Holy Paraclete (SMR 5937). Although the existing structure dates from the second half of the 19th century, it is known to have replaced a 13th century church at the same location and a window from the original church was incorporated into the Victorian building. Indeed, this area was a focus for medieval settlement and there is a DMV site (SMR 5939) at Kirkhaugh, to the west of the river.
- 4.6 From the early post-medieval period onwards the Borders region became renowned for the presence of bastles, stone-built two-storey farmhouses that could shelter both humans and livestock. The area round Kirkhaugh has many examples, the nearest to the OHL route being at Underbank Farm, where a range of farm buildings north of the farmhouse includes a series of bastles (SMR 6304). The dwellings were converted to barns in the 19th century and are Listed Buildings. Other examples in the immediate vicinity of the OHL route are at Dyke House Farm (SMR 5948) and Holymire (SMR 5940), both overlooking the route from the west, and High Row (SMR 6302), to the north. The last named was built in the early 17th century, with a similar structure added at its south end in the 18th century.

5. RECOMMENDED SCHEME OF WORKS

5.1 Aims and Objectives

- 5.1.1 In broad terms, the archaeological investigations will aim to record the character of archaeological remains exposed as a result of groundworks associated with refurbishment of the OHL. Such remains could encompass buried structures, deposits and features and any associated artefactual and ecofactual evidence. Five specific areas of archaeological interest are shown on the accompanying plan.

5.2 Fieldwork: General Standards

- 5.2.1 All archaeological work at the site will be carried out in compliance with the codes and practice of the Institute of Field Archaeologists (IFA) and should follow the IFA *'Standards and Guidance for Archaeological Watching Brief'* (2001).
- 5.2.2 All archaeological staff must be suitably qualified and experienced for their project roles.

- 5.2.3 All staff must be aware of the work required, as detailed in this Project Design, and must understand the project's aims and methodologies.

5.3 Archaeological Methodology

- 5.3.1 There will be archaeological monitoring of all intrusive groundworks associated with refurbishment of the OHL at the five designated areas of archaeological interest.
- 5.3.2 The foundation pits for new poles to carry the electricity supply will be excavated by hand and/or mechanically by personnel from NEDL or their appointed contractor. Modern surfaces, 'overburden', undifferentiated soil horizons and 'made ground' can be removed under archaeological supervision. Where at all possible, delays to the groundwork timetable should be avoided. Nevertheless, if archaeological remains of note are uncovered, the attendant archaeologist must be given the opportunity to investigate and record such remains before they are destroyed.
- 5.3.3 At all locations, excavation will cease when the first significant archaeological horizon or the maximum excavation depth for the groundworks is reached, whichever is soonest. If the removed material is entirely of low archaeological significance, the attendant archaeologist will make a brief record of the excavated 'trench'. Removal of archaeological layers of significance must only be undertaken by an archaeologist. Where this latter scenario unfolds, there will be a requirement for cleaning, examination and recording of the trench, both in plan and in section.
- 5.3.4 Archaeological excavation may require work by 'pick and shovel' or occasionally by further use of the machine. Such techniques shall only be employed for the removal of homogeneous and 'low grade' layers where it can reasonably be argued that more detailed attention would not produce information of value, and their removal provides a 'window' onto the underlying archaeological levels. They will not be employed on complex stratigraphy and the deposits to be removed will be fully recorded prior to excavation.
- 5.3.5 All archaeological features (layers, cuts, fills, structures) will be recorded using the 'single context recording' method on *pro forma* sheets. Plans and sections will be drawn at an appropriate scale. Photographs on both colour slide and black and white print will be taken as appropriate. The stratigraphy of the trench should be recorded even where no archaeological deposits have been identified. A 'Harris' matrix should be compiled where stratified deposits are encountered.
- 5.3.6 The height of all principal strata and features will be calculated in metres relative to Ordnance Datum and indicated on the appropriate plans and sections.
- 5.3.7 Features and structures worthy of preservation would not be unduly excavated. NCCCT will be informed immediately if archaeological remains of high significance are revealed.
- 5.3.8 In the event of the discovery of archaeological remains, which are considered to be of far greater number, extent or significance than could have been reasonably anticipated in advance of the work, investigations will cease and NCCCT will be notified immediately. An assessment of the importance of the remains will be made at an appropriate stage and a methodology for the recording or preservation *in situ* of the remains will be discussed and agreed by all parties.

5.4 Finds and Samples

- 5.4.1 During the works, a high priority would be given to dating any archaeological remains. Therefore, all relevant artefacts and finds would be retained. Consideration would also be given to the recovery of specialist samples for scientific analysis, particularly samples for cultural/environmental evidence, structural materials and absolute dating. Different sampling strategies may be employed according to established research targets and the perceived importance of the strata under investigation.
- 5.4.2 Deposits would be assessed for their potential for radiocarbon and archaeomagnetic dating and, if appropriate, samples would be recovered for these purposes. Specialist analysis of the recovered material would be a requirement.
- 5.4.3 Any *in situ* human remains should be removed in an archaeological manner, although this can only take place under appropriate regulations. Prior notice must be given to NCCCT. If human remains were only partially located within the excavated trench, then it would be enlarged accordingly, if practical, to allow the removal of complete burials. All burials that have to be removed from site during the course of the fieldwork would be adequately recorded first and then carefully removed for scientific study, and long-term storage with an appropriate museum, unless the burial licence specifies reburial or cremation. Human remains would be recorded by photography and the use of *pro forma* skeleton recording sheets.
- 5.4.4 All gold and silver would be removed to a safe place and reported to the local coroner according to the procedures relating to the 'Treasure Act 1997'. Where removal cannot be effected on the same working day as the discovery suitable security measures would be taken to protect the finds from theft.
- 5.4.5 The overall aim of the fieldwork with respect to archaeological science would be to determine the types of material preserved and in what quantity and condition, thus enabling the aims and objectives of the project as a whole to be addressed. The advice of Jacqui Huntley, English Heritage's Regional Advisor for Archaeological Science (RAAS) would be sought, as appropriate.
- 5.4.6 Sample size would take into account the frequency with which material is likely to occur. In general, however, samples would be of the order 20–30 litres although with the expectation that smaller quantities (c. 5 litres) would be initially processed and assessed as part of the post-excavation work. There may be a requirement for further processing and full analysis of the remaining material recovered from the site.

5.5 Treatment of Recovered Materials

- 5.5.1 Specialists would examine all levels of finds (e.g. organic, ceramic, metallic) that are recovered during the fieldwork. All finds would be treated in a proper manner and would be exposed, lifted, cleaned, conserved, marked, bagged and boxed in accordance with the guidelines set out in 'First Aid for Finds' (Watkinson and Neal, 1998, 3rd edition) and the United Kingdom Institute for Conservation (UKIC), Archaeology Section's 'Conservation Guidelines No.2. Packaging and storage of freshly excavated artefacts from archaeological sites' (1983).

- 5.5.2 Preliminary conservation and stabilisation of all objects would be undertaken as soon as possible during or upon completion of the fieldwork. Vulnerable materials that require specialist archaeological conservation would be transported to appropriate facilities without delay. There would be an assessment of long-term conservation and storage needs of all excavated material.
- 5.5.3 All metal objects would be X-rayed and then selected for conservation. All iron objects would be X-rayed, along with a selection of non-ferrous artefacts (including all coins) and a sample of any industrial debris relating to metallurgy.
- 5.5.4 Waterlogged organic materials would be dealt with following guidelines set out in the English Heritage documents, '*Guidelines for the care of waterlogged archaeological leather*' (1995) and '*Waterlogged wood. Guidelines on the recording, sampling, conservation and curation of waterlogged wood*' (1996).
- 5.5.5 All processing of artefacts and ecofacts would be undertaken away from the site. Assessment of artefactual and ecofactual material would be undertaken by suitably qualified personnel. For each category of artefact and ecofact an assessment report would be produced, that would include a basic quantification of the material, a statement of its potential for further analysis and recommendations for such work.
- 5.5.6 A programme of pottery dating and analysis would be undertaken by a nominated specialist(s), as necessary.

5.6 Project Archive

- 5.6.1 The data collected during monitoring of groundworks will be integrated into the existing project archive. The project archive has been prepared to the standard specified in Appendix 3 of '*Management of Archaeological Projects*' (English Heritage, 1991) and in accordance with the '*Guidelines for the Preparation of Excavation Archives for Long Term Storage*' (UKIC, 1990).
- 5.6.2 All artefacts and ecofacts recovered and retained from the site constitute part of the archive and these will be packed and stored in the appropriate materials and conditions.
- 5.6.3 The project archive will be deposited with the Museum of Antiquities, Department of Archaeology, Newcastle University. Copyright of the written archive will be vested in the Museum of Antiquities unless otherwise determined.
- 5.6.4 The archive will be presented to the archive officer or relevant curator within 6 months of the completion of fieldwork, unless alternative arrangements have been agreed in writing with NCCCT.
- 5.6.5 PCA will complete an Online Access to Index of Archaeological Investigations (OASIS) form for the project.

5.7 Reporting

- 5.7.1 The findings of the archaeological investigations will be summarised in a bound report, with each page and paragraph numbered.
- 5.7.2 The report will include the following information specific to the monitoring programme:
- a summary statement of the results of the investigations;
 - the aims and methods adopted in the course of the work;
 - NEDL, NCCCT and OASIS reference numbers;
 - illustrative material (cross-referenced within the text), including an overall site location plan and a plan showing the location of excavated trenches, both tied into the Ordnance Survey grid and at recognisable scales, plans and sections of archaeological deposits at recognisable scales, and photographs, as appropriate;
 - a section of text detailing the nature, extent, date, condition and significance of any archaeological remains.
- 5.7.3 The report will give in the 'Introduction' an 8 figure NGR for the site and will set out the dates when the fieldwork was undertaken and name the archaeological personnel involved.
- 5.7.4 Copies of the report will be sent to NEDL and NCCCT. NCCCT require two copies of the report, one bound and one unbound.

5.8 Access and Health & Safety

- 5.8.1 Reasonable access to the site will be granted to representatives of Northumberland County Council who wish to be satisfied, through site inspections, that the archaeological works are being conducted to proper professional standards and in accordance with the agreements made.
- 5.8.2 All relevant Health and Safety legislation, regulations and codes of practice must be respected. For Health and Safety purposes, PCA is a sub-contractor and will have no responsibilities as a Main Contractor.
- 5.8.3 PPE will be used by all archaeological personnel, as appropriate.

5.9 Further Information

- 5.9.1 Guidance on the archaeological action recommended and any further information can be obtained from:

Conservation Team
Environment Directorate
Northumberland County Council
County Hall
Morpeth
NE61 2EF

Tel: 01670 534 057

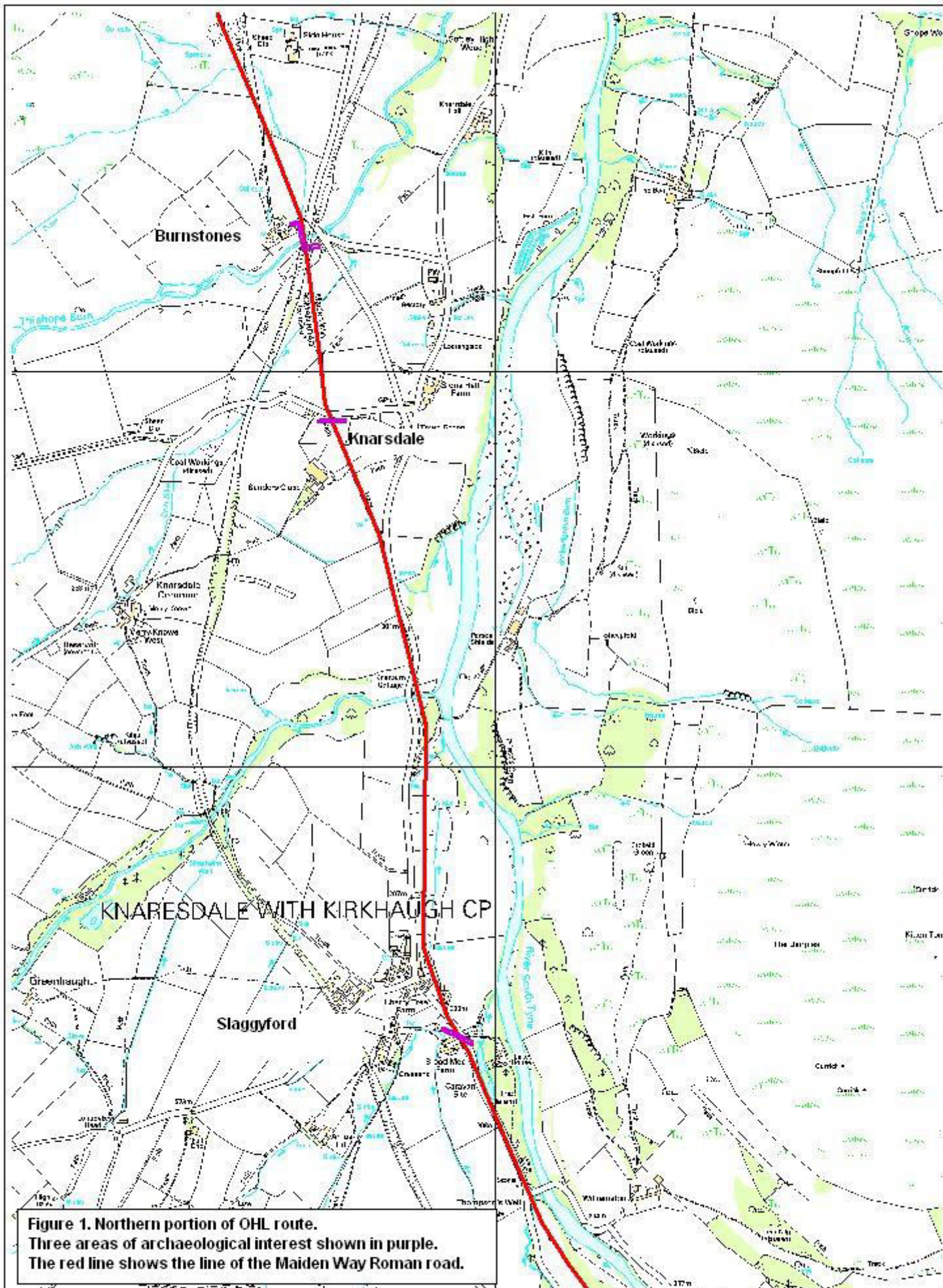


Figure 1. Northern portion of OHL route.
Three areas of archaeological interest shown in purple.
The red line shows the line of the Maiden Way Roman road.

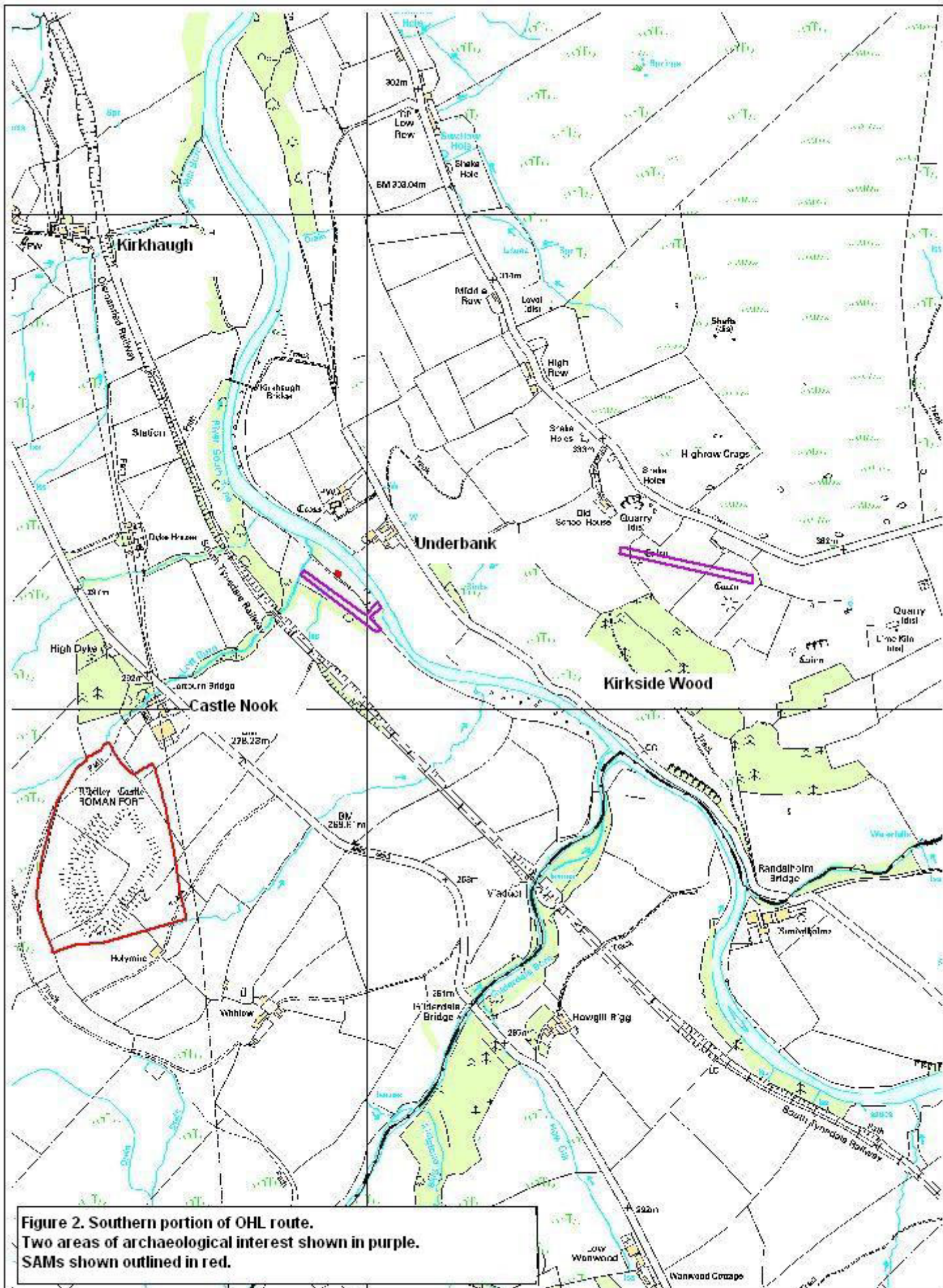


Figure 2. Southern portion of OHL route.
Two areas of archaeological interest shown in purple.
SAMs shown outlined in red.