

**LAND AT
WINDSOR WAY,
CARLISLE,
CUMBRIA**

**ARCHAEOLOGICAL
EVALUATION REPORT
CP. No: 10793/13
20/01/2014**



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 Rachael Coar of Persimmon Homes Lancashire, to undertake an archaeological field evaluation on land at Windsor Way, Carlisle, Cumbria (centred on NY 4006 5865), in advance of a planning application for a new residential development. A recent geophysical survey and rapid desk-based assessment was undertaken by Wardell Armstrong Archaeology in order to assess the archaeological potential of the area. However, whilst this work did not reveal any features of archaeological significance, previous archaeological work undertaken to the south of the site has revealed evidence for archaeological remains in the form of slots, stakeholes and shallow ditches, characteristic of late prehistoric or Romano-British settlement. Evidence for a former farmstead known as Sowerby Hall was also revealed, although this previous work failed to find evidence for the Roman road which is believed to have formed the western boundary of the present site. As a result of these previous findings, Cumbria County Council's Historic Environment Service requested a further programme of archaeological investigation in order to better inform on the archaeological potential of the proposed development site.

The archaeological evaluation was undertaken over three days between the 17th December and the 19th December 2013. The evaluation involved the excavation of 14 trenches, eleven of which were clustered towards the southwest corner of the investigation area, close to the area of known archaeological activity to the south, with a further three trenches spaced evenly across the eastern end of the site. No trenching was undertaken within the northwest corner or the centre of the site, due to the presence of a major gas main running through these areas. All trenches measured 30m in length by 1.8m in width and were excavated to a maximum depth of 0.55m, revealing the natural substrate below topsoil. All trenches were devoid of any remains of archaeological significance, the only features revealed being several land drains and a former north to south aligned field boundary at the western extent of the site, which contained several sherds of late 19th/20th century pottery.

The lack of any archaeologically significant remains within the investigation area, specifically within the southwest corner of the site, strongly suggests that the previous work undertaken to the south of the site revealed the northern extent of archaeological activity, and that these remains do not continue further north as previously suggested.

ACKNOWLEDGEMENTS

Wardell Armstrong Archaeology would like to thank Rachael Coar of Persimmon Homes Lancashire for commissioning the project. Thanks are also due to Jeremy Parsons of Cumbria County Council's Historic Environment Service and to Metcalf Plant Hire.

The work was undertaken by Kevin Horsely, Kevin Mounsey, Scott Vance and Ben Moore, under the supervision of David Jackson. The report was written by David Jackson and the drawings were produced by Adrian Bailey. The project was managed by Frank Giocco, Technical Director for Wardell Armstrong Archaeology.

1 INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

- 1.1.1 In December 2013, Wardell Armstrong Archaeology were invited by Rachael Coar of Persimmon Homes Lancashire, to undertake an archaeological field evaluation on land at Windsor Way, Carlisle, Cumbria (centred on NY 4006 5865; Figure 1), in advance of a planning application for a new residential development. Previous work has highlighted the potential survival of archaeological remains within the area, of possible prehistoric or Romano-British date. As a result of these previous findings, Cumbria County Council's Historic Environment Service (CCCHES) requested a further programme of archaeological investigation in order to better inform on the archaeological potential of the proposed development site. This is in line with government advice as set out in Section 12 of the National Planning Policy Framework (NPPF 2012).
- 1.1.2 The archaeological evaluation was undertaken following approved standards and guidance (IfA 2008), and was consistent with the specification provided by Wardell Armstrong Archaeology (Giecco 2013) and generally accepted best practice.
- 1.1.3 This report outlines the evaluation works 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 Rachael Coar of Persimmon Homes Lancashire, for an archaeological evaluation of the study area. Following acceptance of the project design by Jeremy Parsons of Cumbria County Council's Historic Environment Service (CCCHES), Wardell Armstrong Archaeology was commissioned by the client to undertake the work. 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), and generally accepted best practice.

2.2 THE FIELD EVALUATION

2.2.1 The evaluation consisted of the excavation of 14 trenches, each measuring 30m in length and 1.8m in width. The purpose of the evaluation was to establish the nature and extent of below ground archaeological remains within the vicinity. All work was conducted according to the recommendations of the Institute for Archaeologists (2008).

2.2.2 In summary, the main objectives of the field evaluation were:

- to establish the presence/absence, nature, extent and state of preservation of archaeological remains and to record these where they were observed;
- to establish the character of those features in terms of cuts, soil matrices and interfaces;
- to recover artefactual material, especially that useful for dating purposes;
- to recover palaeoenvironmental material where it survives in order to understand site and landscape formation processes.

2.2.3 Turf and topsoil was removed by mechanical excavator under close archaeological supervision. The trial trenches were subsequently cleaned by hand and were investigated and recording according to the Wardell Armstrong Archaeology standard procedure as set out in the Excavation Manual (Giecco 2012).

2.2.4 The fieldwork programme was followed by an assessment of the data as set out in the Management of Archaeological Projects (2nd Edition, 1991).

2.3 THE ARCHIVE

- 2.3.1 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 the Carlisle Records Office, with copies of the report sent to the Cumbria Historic Environment Record at Kendal, available upon request. The archive can be accessed under the unique project identifier **WAA13, WAY/A, CP 10793/13**.
- 2.3.2 Wardell Armstrong Archaeology and Cumbria County Council 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 LOCATION AND GEOLOGICAL CONTEXT

- 3.1.1 The evaluation area is located approximately 3km to the north of the centre of the city of Carlisle, and north of the residential area known as 'Knowefield'. The site is situated to the east of the main A7 trunk road which heads out of the city in a northerly direction towards Scotland (Figure 1). The field which forms the study area is bound to the south and west by the residential developments of Windsor Way and Newfield Park, and to the north and east by further enclosed fields (Figure 2).
- 3.1.2 The solid geology of the area comprises Mercia Mudstone, overlain by glacial till deposits. This sedimentary Bedrock was formed approximately 200 to 251 million years ago in the Triassic Period (BGS 2001). The overlying soils are seasonally waterlogged, reddish fine and coarse loamy soils, known as Clifton soils (SSEW 1980).

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. References to the County Historic Environment Record (HER) are included where known.
- 3.2.2 *Prehistoric:* the earliest recorded sites within the area possibly date to the Late Iron Age. In 1993, Carlisle Archaeological Unit undertook two phases of evaluation on fields under permanent pasture to the east of Beech Grove, Stanwix, in advance of residential development. The phase of work located on what is now Firlands, Cedar Grove and Maple Grove, found features which were interpreted as evidence of a possible Late Iron Age or Early Romano-British farmstead, overlying earlier ditches (indicating earlier activity) (HER No. 40442). To the south of this area, a second phase of work on land to the north of Tarraby Lane, now partly occupied by housing on Larch Drive, revealed further evidence for a possible Late Iron Age/1st century AD farmstead and associated field system (HER No. 40425).
- 3.2.3 Recent archaeological work undertaken immediately to the south of the investigation area by Carlisle Archaeological Unit in 1998 and 1999, did not reveal any evidence for prehistoric activity and it was noted that the wet, impermeable nature of the underlying glacial till may have meant that the land in this area was not suitable for occupation of arable farming in the prehistoric or Roman periods (Barkle 1998). Subsequent archaeological work

- did reveal some evidence for Roman activity however (Reeves 1999), as will be referred to below.
- 3.2.4 *Roman*: the most significant Roman remains within the vicinity are those of Hadrian's Wall to the south-east of the proposed development site, and its associated features such as the vallum and milecastles. Stretching over 70 miles from coast to coast, Hadrian's Wall was a continuous barrier of stone in the east and, initially, of turf in the west. At regularly-spaced intervals of about a mile along its length lay small walled fortlets known as milecastles. These were attached to the southern side of the Wall and most had a gateway through the Wall to the north (SM No. 28482). One such milefortlet has been identified at Tarraby, located to the south-east of the proposed development site (HER No. 498).
- 3.2.5 The course of a Roman road between Carlisle and Crawford in Scotland is believed to be located immediately to the west of the proposed development site, and possibly forms the western boundary of the investigation area (HER No. 186). However, archaeological work undertaken immediately to the west of the present study area failed to identify any features associated with this postulated route and it was suggested that the road lay further to the west under the existing housing estate (Barkle 1998, 12).
- 3.2.6 As noted in 3.2.2 above, recent archaeological work on land to the east of Beech Grove identified features interpreted as a possible Late Iron Age or early Romano-British farmstead (HER No's 40425 and 40442). Further information on these sites will be referred to in section 3.3 below.
- 3.2.7 The archaeological evaluation undertaken on land immediately to the south of the investigation area revealed a series of features of possible Roman date comprising a ditch aligned northwest to southeast, a series of stake holes, and a shallow and narrow linear feature packed with cobbles. Although little dateable material was recovered, the features were interpreted as representing the extreme edge of a settlement, possibly a Roman farmstead (HER No. 41876).
- 3.2.8 *Medieval*: there is no known evidence of medieval activity within the vicinity of the investigation site and it is probable that the area was utilised as cultivated land during this period. However, the settlements around the proposed development site, such as Stanwix, Tarraby and Houghton, are all referred to in medieval documents suggesting that there was some form of settlement in these locations during the medieval period (Wooler & Railton 2013).
- 3.2.9 *Post-medieval and Modern*: Although numerous developments appear to have occurred within the vicinity of the study area during the post-medieval and modern periods, including brick works, clay extraction works and

residential housing, the proposed development site appears to have continued in use as undeveloped fields, although several boundaries were removed from the site at various times (Wooler & Railton 2013). The Third Edition Ordnance Survey map of 1926 was the first map to annotate the western boundary of the proposed development site as a 'Roman Road', although pencil annotations on the First Edition had indicated the same (*ibid*). However, as already noted, the location of the Roman road has never been confirmed.

3.3 PREVIOUS WORK

- 3.3.1 *Beech Grove, Knowefield, Carlisle: Archaeological Evaluation Phase 1:* Carlisle Archaeological Unit (CAU) undertook an archaeological evaluation on land located immediately to the east of Beech Grove in advance of a residential development in 1993 (the site is now housing known as Firlands, Cedar Grove and the northern part of Larch Drive). The land had previously been under cultivation as a commercial nursery, operated by Little and Ballantyne from approximately 1850 to the 1930s, and it was noted that despite the presence of field drains, the boulder clays, which were on average c.300mm below the ground surface, lead to waterlogging (CAU 1993a).
- 3.3.2 The evaluation concentrated on two fields, which were under permanent pasture at the time of the archaeological work, which were bounded to the north by the Gosling Syke. The evaluation trenches revealed a cobbled surface and postholes, which were interpreted as representing a small complex of buildings located next to the Gosling Syke. In addition, ancient ditches were identified in both fields, along with a number of other linear features that were suggested to be either ancient drainage gullies or shallow ditches. There was, however, insufficient data to enable the archaeological features to be closely dated or assigned precise functions, although it was suggested that the features may have represented the remains of a late prehistoric or early Roman farmstead of the kind which has previously been excavated at the Cumberland Infirmary (CAU 1993a).
- 3.3.3 *Beech Grove, Knowefield, Carlisle: An Archaeological Evaluation Phase 2:* a second phase of archaeological work was undertaken by Carlisle Archaeological Unit in 1993 on land to the south of Phase 1, in a field bounded by Tarraby Lane to the south and by Beech Grove to the west (now part of Larch Drive, NY 4040 5754). The field examined contains a prominent knoll crossed by Hadrian's Wall on its southern side. The sides of the knoll, the summit of which lies at 33m OD, included slight scoops and terraces which were recognised as being of potential archaeological interest (CAU 1993b).

- 3.3.4 The work involved the excavation of 14 trenches, in which archaeological features were revealed in the form of ditches, two areas of cobbled surface, postholes and stakeholes. The ditches averaged 1.6m wide and varied in depth from 0.30 to over 0.6m. They appeared to represent ancient field boundaries, possibly associated with farmsteads, which included buildings and working areas that were suggested by the cobbled surfaces, postholes and stakeholes. One pair of ditches appeared to represent a double-ditched trackway. Some of the ditches were overlain by cobbled surfaces, showing that they had fallen out of use and had been replaced by other activity. This demonstrated that stratigraphy survived in places and the multi-phase nature of the site (CAU 1993b).
- 3.3.5 None of the archaeological features from this Phase 2 site could be dated in themselves, but it was noted that their characteristics were similar to others of known prehistoric and Romano-British date. The authors observed that as late pre-Roman Iron Age and Roman settlements excavated in northern England and southern Scotland rarely produce artefactual material, their absence at this site was not surprising. The report concluded that in view of the proximity of this site to Hadrian's Wall, and the large fort at Stanwix, it was tentatively suggested that the absence of pottery dating to the 2nd century AD could be significant. This absence, together with the occurrence of a fragment of prehistoric pottery, may have indicated a pre-Hadrianic date for the features revealed. At present there is little direct information on the impact that the construction of Hadrian's Wall had on the existing communities and on land use patterns at the time (CAU 1993b).
- 3.3.6 *Report on an Archaeological Evaluation on land adjacent to Windsor Way, Carlisle:* in 1998, Carlisle Archaeological Unit undertook an archaeological evaluation on land adjacent to Windsor Way in advance of a residential development (housing now known as Drumburgh Avenue, Wolsty Close and Pennington Drive located immediately south of the present study area). The site was identified as having some archaeological potential as it contained the first two areas of raised land immediately north of Hadrian's Wall and the Stanwix fort, in an area known to contain pre-Roman settlement remains (see above). The line of the Roman road extending north from Carlisle to the outpost forts of Netherby and Birrens supposedly formed the western boundary (Barkle 1998).
- 3.3.7 The report concluded that although the size of the area excavated was small, sufficient work had been undertaken to suggest that no significant archaeological features existed over much of the site. It was also noted that the very wet, impermeable nature of the underlying glacial till may also suggest that this area may not have been considered suitable for occupation of arable farming in the Roman or prehistoric periods. In Area 1 at the

northernmost and highest end of the field however, the concentration and nature of the features suggested evidence for ancient settlement. The features revealed included slots, stakeholes and shallow ditches, which were noted to be typical of late prehistoric and Roman rural settlement in northern Cumbria. No traces of the Roman road alleged to have formed the western boundary of the site were discovered (Barkle 1998).

- 3.3.8 *An Archaeological Excavation at Windsor Way, Carlisle, Draft Report:* following on from the evaluation, an excavation of the northern end of the field was undertaken by Carlisle Archaeological Unit in 1999. This report referred to the former presence of a farmstead known as Sowerby Hall in the north-west corner of the site; this property is shown on a Tithe Map of 1839 but had been demolished by the First Edition Ordnance Survey map of 1865 (Wooler & Railton 2013). A total of five trenches were excavated in this second phase of work; a number of features in Trenches 1 and 5 were thought to be Roman in date, although there was a relative absence of datable material and limited number of stratigraphic relationships which hindered the drawing of firm conclusions about early settlement on the site. The report concluded that the nature of the activity represented by the features was not clear, but may have related to the extreme edge of a settlement, possibly a Roman farmstead, whose main focus lay beyond the area of excavation. The site had also clearly been intensively utilised during the 18th and 19th centuries, with a number of features identified probably being associated with the demolished Sowerby Hall (Reeves 1999).
- 3.3.9 *Land at Windsor Way, Carlisle, Cumbria, Geophysical Survey Report:* during November 2013, Wardell Armstrong Archaeology undertook a geophysical survey and rapid desk-based assessment of the proposed development site. Although the desk-based assessment highlighted the survival of archaeological remains within the vicinity, the geophysical survey did not detect any features of archaeological significance (Wooler & Railton 2013).

4 ARCHAEOLOGICAL EVALUATION RESULTS

4.1 INTRODUCTION

4.1.1 The archaeological field evaluation was undertaken over three days, between the 17th December and the 19th December 2013. The evaluation involved the excavation of 14 trenches, eleven of which were clustered towards the southwest corner of the investigation area, close to an area of known archaeological activity to the south, with a further three trenches spaced evenly across the eastern end of the site (Figure 2). No trenching was undertaken within the northwest corner or the centre of the site, due to the presence of a major gas main running through these areas.

4.1.2 All trenches were excavated to the level of the natural substrate by a tracked mechanical excavator with a ditching bucket. The trenches were subsequently cleaned by hand and investigated and recorded fully.

4.2 RESULTS

4.2.1 *Trenches 1-3 & 5-11:* Trenches 1-3 and 5-11 were all located towards the southwest corner of the investigation area (Figure 2). All trenches measured 30m in length by 1.8m in width and were excavated to a maximum depth of 0.55m, revealing natural reddish orange/brown sandy clay (**101**), sealed below c.0.3m of mid-brown/grey clayey silt topsoil (**100**) (Plates 1-3).



Plate 1: Trench 3 looking west



Plate 2: Trench 9 looking northeast



Plate 3: Trench 10 looking northwest

- 4.2.2 Trenches 1-3 and 5-11 were all devoid of any significant finds, features or deposits, with land drains being observed within Trenches 2, 6, 9 and 11.
- 4.2.3 **Trench 4:** Trench 4 was located at the western extent of the site and was roughly aligned north to south, parallel with the western boundary of the investigation area (Figure 2). The trench measured 30m in length by 1.8m in width and was excavated to a maximum depth of 0.5m, revealing the natural substrate **(101)** below c.0.3m of topsoil **(100)**.
- 4.2.4 Within the western edge of Trench 4, a linear ditch was partially revealed which was aligned north to south, parallel with the existing western boundary of the site. The ditch **[102]** measured over 8m in length, over 0.45m in width and retained a maximum depth of 0.25m. The base of the concave ditch had been lined with several large stones before being backfilled with a single deposit of mid brown/grey clayey silt **(103)** (Plate 4), which contained three sherds of late 19th/20th century pottery. The ditch **[102]** had been partially truncated by a further north to south aligned linear feature, which was slightly offset to the original ditch. This later linear feature **[104]** measured over 8m in length, 0.3m in width and had a maximum depth of 0.12m. The concave linear feature **[104]** had been filled by a uniform deposit of mid-brown clayey silt **(105)** which was sealed by c.0.2m of topsoil **(100)**.



Plate 4: Slot through western section of Trench 4, exposing ditch [102]

- 4.2.5 Given the location and alignment of the original linear feature **[102]**, it is probable that it represents the remains of an earlier boundary ditch which probably went out of use some time during the late 19th or earlier 20th century. The movement and abandonment of several boundary ditches within the investigation area had already been identified during an earlier desk-based assessment, which is clearly shown on several earlier maps (Wooler & RAILTON 2013). It is unlikely that the later linear feature **[104]** was associated with an earlier boundary, as it was far too ephemeral to represent such a feature. It is more probable that this feature served as a drainage ditch for the management of flood water, as there are several such features of similar form and dimensions situated around the periphery of the site which still serve the same function today, including one immediately adjacent to the earlier linear feature **[104]**.
- 4.2.6 *Trenches 12-14:* Trenches 12-14 were distributed evenly along the eastern end of the investigation area (Figure 2). Each trench was aligned northwest to southeast and measured 30m in length by 1.8m in width. The trenches were excavated to a maximum depth of 0.55m, revealing natural reddish orange/brown sandy clay (**101**), sealed below c.0.3m of mid-brown/grey clayey silt topsoil (**100**) (Plate 5).
- 4.2.7 Trenches 12-14 were all devoid of any significant finds, features or deposits, with land drains being observed within all three trenches.



Plate 5: Southwest facing section of Trench 13

4.3 ARCHAEOLOGICAL FINDS

- 4.3.1 Three body sherds of manganese glazed coarse red earthenware were recovered from the fill **(103)** of a probable earlier boundary ditch **[102]**. The pottery dates to the later 19th/20th century.
- 4.3.2 All other finds revealed during the archaeological evaluation were classified as modern and discarded on site.

5 CONCLUSIONS

5.1 CONCLUSIONS

- 5.1.1 The archaeological evaluation involved the excavation of 14 trenches, eleven of which were clustered towards the southwest corner of the investigation area, close to the area of known archaeological activity to the south, with a further three trenches spaced evenly across the eastern end of the site. No trenching was undertaken within the northwest corner or the centre of the site, due to the presence of a major gas main running through these areas.
- 5.1.2 All trenches measured 30m in length by 1.8m in width and were excavated to a maximum depth of 0.55m, revealing the natural substrate below topsoil. All trenches were devoid of any remains of archaeological significance, the only features revealed being several land drains and a former north to south aligned field boundary at the western extent of the site, which contained several sherds of late 19th/20th century pottery.
- 5.1.3 The lack of any archaeologically significant remains within the investigation area, specifically within the southwest corner of the site, strongly suggests that the previous work undertaken to the south of the site revealed the northern extent of archaeological activity, and that these remains do not continue further north as previously suggested.

6 BIBLIOGRAPHY

6.1 SECONDARY SOURCES

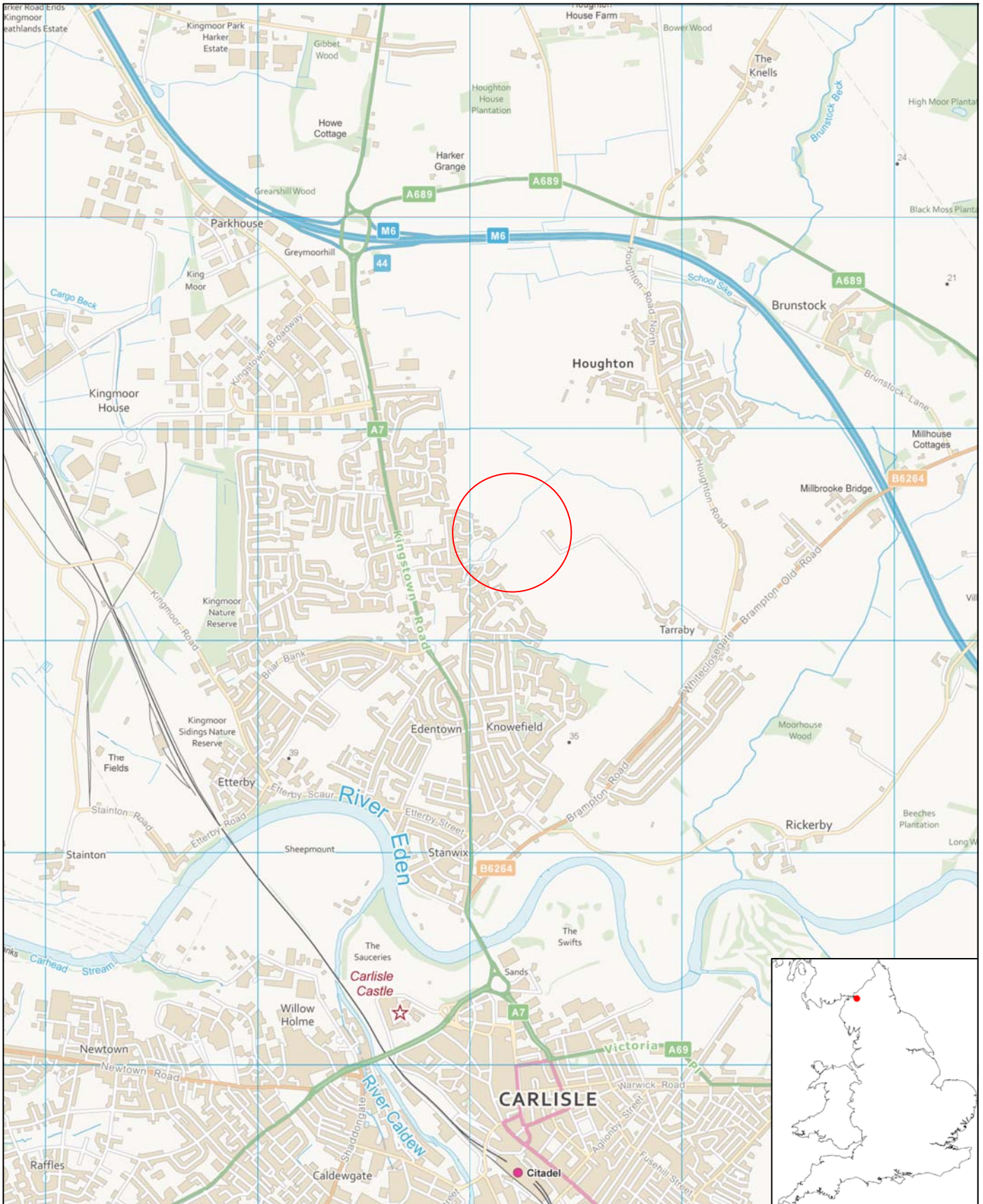
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APPENDIX 1: CONTEXT TABLE

Context Number	Context Type	Description
100	Deposit	Topsoil
101	Geological	Natural Substrate
102	Cut	Linear Boundary Ditch
103	Fill	Of [102]
104	Cut	Re-cut of Linear Boundary Ditch
105	Fill	Of [104]

Table 1: List of Contexts issued during the evaluation

APPENDIX 2: FIGURES






 <p>Wardell Armstrong Archaeology 2014</p>	<p>PROJECT: Land at Windsor Way, Carlisle, Cumbria</p> <p>SCALE: 1:25,000 at A4</p> <p>REPORT No: CP10793</p> <p>CLIENT: Persimmon Homes Lancashire</p> <p>DRAWN BY: AB</p> <p>DATE: January 2014</p> <p>FIGURE: 1</p>	<p>KEY:</p> <p> Site location</p>	 <p>Reproduced by permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office. © Crown copyright. All rights reserved. Licence number 100019512</p>
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Figure 1: Site location.

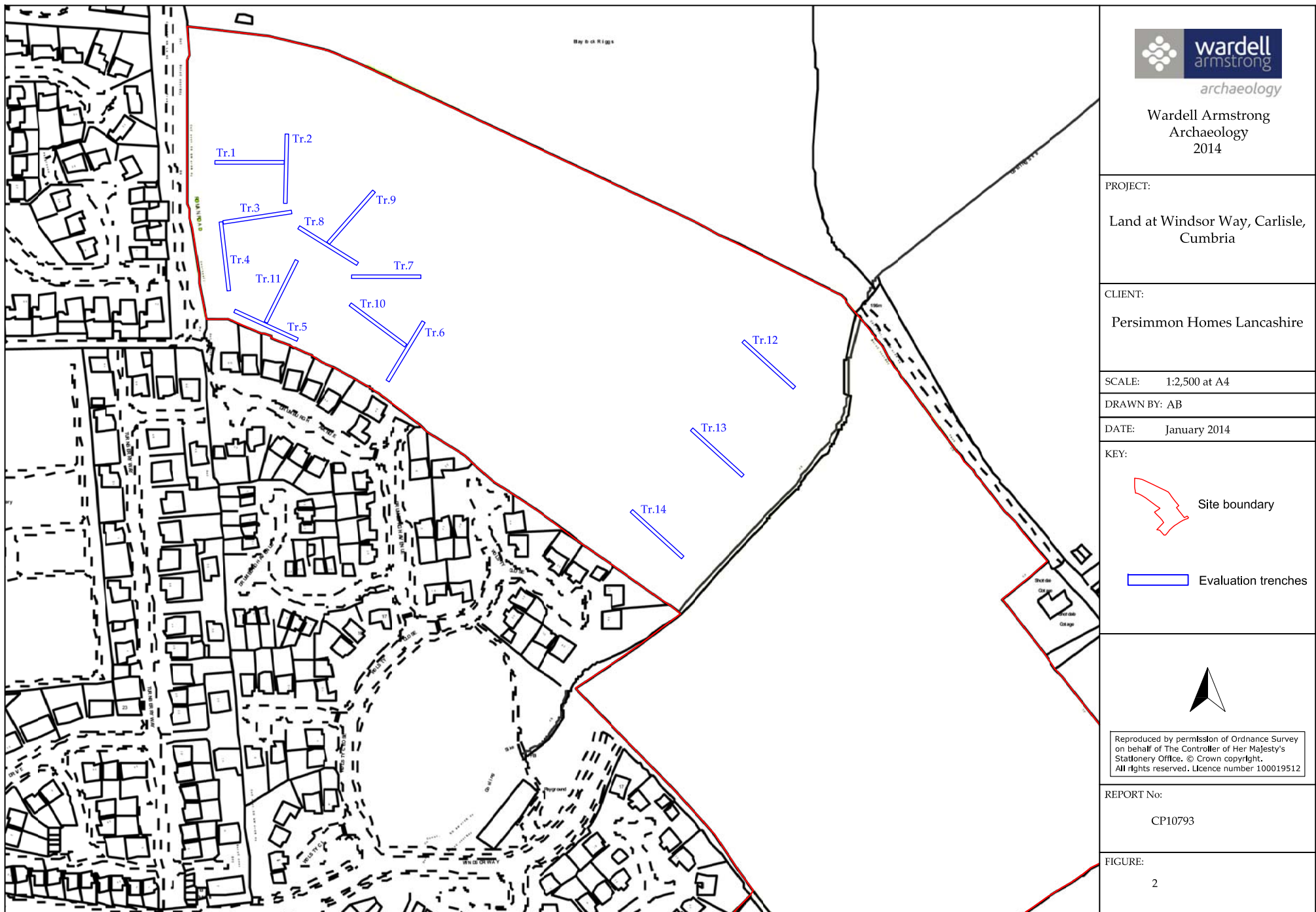


Figure 2: Location of evaluation trenches.