

**LAND AT THE BUNGALOW,
FORGE LANE,
KESWICK,
CUMBRIA**



**RAPID DESK-BASED ASSESSMENT
AND ARCHAEOLOGICAL
EVALUATION REPORT**

CP 10801

04/02/2014



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 Edwin Thompson to undertake a programme of archaeological evaluation on land at The Bungalow, Forge Lane, Keswick, Cumbria (NGR NY 28185 24034; Figures 1 and 2), to inform of the archaeological potential of the site, in advance of planning permission being granted for the demolition of the existing dwelling and construction of a new one. Of particular significance is the known site of the Elizabethan 'Mines Royal Smelting and Refining Plant' (HER 1109). Later industrial activity is also known from the near vicinity, including the site of a fulling mill (HER 30626), a bobbin mill (HER 30627) and Brigham Forge (HER 11543).

Prior to the commencement of groundworks, a rapid desk-based assessment was undertaken in order to place this area of Forge Lane, Keswick in its historical and archaeological context. This assessment highlighted the potential for surviving sub-surface traces of the Elizabethan Mines Royal Smelting and Refining Plant (HER 1109) being encountered within the proposed development site. An early 19th century map of Cumberland (Greenwood 1823; Figure 5) may indicate surviving traces of the boundary of these works within the proposed development area, but the exact location of these extensive works is unknown. This area of Keswick also formed an industrial hub during the 19th century. Traces of post medieval industrial activity may have survived sub-surface.

The field evaluation was undertaken on a single day on 30th January 2014. The nature of the site on a steep north-west facing slope, and the necessity to undertake the evaluation while The Bungalow was still standing, meant that the trench was located to the west of the extant building, on the flatter ground, and measured 10m by 1.2m.

No archaeological remains were encountered during the field evaluation.

ACKNOWLEDGEMENTS

Wardell Armstrong Archaeology would like to thank Christopher Reeve of Edwin Thompson for commissioning the project, and for all assistance throughout the work. Wardell Armstrong Archaeology would also like to thank Holly Beavitt-Pike and John Hodgson, of the Lake District National Park Authority for advice relating to the work, and John Wilson of Wilson's Plant and Haulage Ltd for his work on site.

The rapid desk-based assessment was undertaken by Cat Peters. The field evaluation was undertaken by Cat Peters and Sue Thompson. The report was written by Cat Peters & Sue Thompson and the figures were produced by Adrian Bailey. The project was managed by Frank Giecco, Technical Director, Wardell Armstrong Archaeology, who also edited the report.

1 INTRODUCTION

- 1.1 Wardell Armstrong Archaeology were commissioned by Edwin Thompson to undertake an archaeological field evaluation on land at The Bungalow, Forge Lane, Keswick, Cumbria (NGR NY 28185 24034; Figures 1 and 2), prior to the granting of planning permission for development of the site. The site lies close to the known site of the 16th century Mines Royal Smelting and Refining Plant (HER 1109) which is thought to have continued in use until the mid 17th century. Since then, this area of the River Greta was a hub for industrial activity, and within the vicinity of the proposed development site are a number of known sites.
- 1.2 Prior to the commencement of the groundworks, a rapid desk-based assessment was undertaken in order to set the site of this part of Forge Lane, Keswick into its historical and archaeological context. This assessment primarily involved the consultation of the Lake District National Park Authority 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 Edwin Thompson for an archaeological evaluation of the proposed development site (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), and generally accepted best practice.

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 site at Forge Lane, Keswick, and its immediate environs. The assessment primarily involved the consultation of the Lake District National Park Authority 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 assessed for any additional information on the landscape around Forge Lane.

2.2.3 The rapid desk-based assessment was undertaken following *Standards and Guidance for Historic Environment Desk-Based Assessment* (IfA 2012).

2.3 THE FIELD EVALUATION

2.3.1 The evaluation consisted of the excavation of one 10m by 1.2m trench covering 5% of the proposed 200m square metre development area. The purpose of the evaluation was to calibrate the results of the desk based study, in particular the presence or absence of remains associated with any medieval occupation that could be situated within the development site. All work was conducted according to the recommendations of the Institute for Archaeologists (2008).

2.3.2 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.
- 2.3.3 Turf and topsoil was removed by mechanical excavator under close archaeological supervision. The trial trenches were subsequently cleaned by hand and all features were investigated and recording according to the Wardell Armstrong Archaeology standard procedure as set out in the Excavation Manual (Giecco 2012).
- 2.3.4 All finds encountered were retained, including those from excavated topsoil, and were cleaned and packaged according to standard guidelines.
- 2.3.5 All deposits encountered were deemed unsuitable for environmental sampling, and therefore no samples were retained.
- 2.3.6 The evaluation trenches were scheduled to be backfilled at the discretion of John Hodgson, of the Lake District National Park Authority, following excavation and recording.
- 2.3.7 The fieldwork programme was followed by an assessment of the data as set out in the Management of Archaeological Projects (2nd Edition, 1991).

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 the Carlisle 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, FLK-A, CP 10801**.
- 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: Land at The Bungalow, Forge Lane, Keswick OASIS identification number is wardella2-170304.

3 BACKGROUND

3.1 SITE LOCATION

- 3.1.1 The development area lies at the north-eastern extent of Forge Lane, located within the eastern part of the settlement of Keswick. Keswick is a tourist town, which lies on the A66 between Penrith and Cockermouth (Figure 1).
- 3.1.2 Presently, the development area comprises the disused dwelling house known as 'The Bungalow', on the southern bank of the river Greta in the valley beneath a disused railway embankment, and the A66 flyover (Figure 2). To the immediate north and east are surviving traces of the mill race, which are mentioned by the Historic Environment Record as being related to the site of the Mines Royal Smelting and Refining Plant (HER 1109). To the south and west, is agricultural land, presently used for sheep pasture. The land to the south is on a steep slope.

3.2 GEOLOGICAL CONTEXT

- 3.2.1 To the north and west of Keswick, the rock formations are formed from the Borrowdale Volcanic Group- which varies from dark lavas to light-green slaty rocks, the products of violent volcanic eruptions that occurred around 450-460 million years ago. A third type of rock is found outcropping near Keswick, batholiths, a granitic rock which underlies the rock formations of the Fells but occasionally outcrops at the surface. One of these outcrops near Threlkeld, to the east of Keswick, and another at Castlehead, just south of Keswick.
- 3.2.2 The landform of the site and its wider landscape setting have resulted from the successive glaciations which eroded and shaped the surrounded fells and valleys and excavated the lake basins of Derwentwater and Bassenthwaite Lake to the north. When the ice finally melted around 10,000 years ago, thick deposits of boulder clay and sand were deposited.

3.3 HISTORICAL CONTEXT

- 3.3.1 *Introduction:* this historical background is compiled mostly from records held in the Lake District National Park Authority Historic Environment Record (HER), summarised in Table 1 below, and from readily-available published and unpublished sources, including historical mapping.
- 3.3.2 *Prehistoric (up to c.72AD):* two findspots are known from within 0.5km of the proposed development site. One, a perforated stone adze was found in the river Greta by the Forge in Keswick prior to 1935 (HER 1120), and the other, a crude stone implement found at Brigham, Keswick in 1936 (HER 19303). Both are

- housed at the Keswick Museum (KESMG 1243 and KESMG 1261). These are of little significance to the proposed development.
- 3.3.3 *Romano-British (c.72-410AD)*: there is no known evidence for Romano-British activity in close proximity to the proposed development. The name Derwent is derived from the Celtic name 'derva' meaning 'oak', suggesting early utilisation/occupation of the area.
- 3.3.4 *Early Medieval (c.410-1066AD)*: Scandinavian placenames are also abundant in the Keswick area, with over forty used within 6 miles of Keswick. Keswick is thought to mean 'cheese farm' from a combination of two Anglian elements, 'cese' and 'wic' (Bott 1994). This implies settlement in the area at this time.
- 3.3.5 *Medieval (c.1066-1540AD)*: a sizable settlement was certainly in existence by the early 12th century. In 1208, Alice de Rumelli sold a large part of Borrowdale to the Cistercian monks of Furness Abbey, who had grown rich on the wool trade. The land included "Derwent Island, Watendlath and the mill of Crosthwaite on 'the land of Kesewic'" (*ibid*). Keswick is likely to have served as a hub for smaller communities at this time. In 1276 the Lord of the Manor of Derwentwater was granted a charter to hold a Saturday market and an annual five day fair. Medieval burgage plots which would have fronted onto Market Square are still visible today, and formed the main hub of the town well into the 18th century (e.g. Clarke's Survey of the Lakes, 1787). By the 1530s, Leland described Keswick as "a lytle poore market town" (Bott 1994).
- 3.3.6 *Post-Medieval (c.1540 onwards)*: it is the mining of the Elizabethan era that had the earliest impact on the proposed development site. Although there are some references to copper mining under the reign of Edward IV (e.g. Denton 1688, 136) and Henry VIII (Bridge 1994, 108), it is generally accepted that copper mining in Cumbria did not start in any significant way until the arrival of German mining experts. In 1561, "the government negotiated with German experts about mining for copper in Cumbria. The negotiations collapsed, but in 1564 Daniel Hochstetter, a partner in the firm of Haug and Langnauer, which worked Tyrolese mines, was given a patent with the Englishman Thurland to discover copper... in 1568 the patentee was incorporated as the Mines Royal, with monopoly rights of mining copper" (Pallister 1983; HER 1109). The smelting house was being built in 1566 (Donald 1989, 230). By July 1568, the smelting house and coal house, as well as the dam, sluices and flood gates, had been extended and strengthened (Donald 1989, 154).
- 3.3.7 Although there are "meticulously kept records... [e.g. Collingwood 1912] the fact that they were only intended to record income and expenditure [means that] many questions regarding the extent of the mining operations at the time and the location of some of the smaller workings remain unanswered" (Bridge 1994, 108). This is also true of the extent of structural features relating to the

smelting facility at Brigham: “the site of the smelting house was on the River Greta and most probably at Brigham Forge. This location is still further confirmed by the hole cut through the rock to allow for passage of the leat from the weir to the water wheels” (Donald 1989, 233). In 1580, an inventory made by Richard Ledes includes a 3-storey melting/roasting house with offices, and to the west and adjacent, a “hammer smithy for copper” containing two forges a vessel dressers workhouse, “a store-house joining to the west end of the said workhouse, wherein is kept divers tools pertaining to the melting house and furnaces”, a carpenter’s workhouse with tools, a melting house with a store chamber at the west end, and adjoining assay house and chamber (*ibid*, 233-237). At the east end of the melting house by the waterside was a “stamping house for stieff”, a “stove or bathing house “between the great copper smithy and blacksmithy, a “blacksmithy by the melting house” with a kitchen, a water race serving all the wheels which belong to all offices at the melting house, and an “old dwelling house being 22 yards long and 6 yards broad” at the “south-west side of the melting house” (*ibid*, 237-8). The 1580 inventory also refers to “new buildings” adjoining the west end of the old house, which seem to include a dwelling and a parlour with “a chimney and 4 glass windows” and a small hen house (*ibid*, 239).

- 3.3.8 In 1592, a hammer smithy was erected a quarter of a mile away because of the limited water supply in dry summers, “this may have been at Briery, the next suitable site upstream” (Donald 1989, 233). The company “rented land from ‘Miladi Catherina Radclieff’ at one shilling a year and built on a lavish scale (Bott 1994, 19). “In its heyday, the concentration of workshops and assay chambers, smelting houses and smithies, accommodation and bath-house for the workforce, was said to be the biggest in England and possibly in Europe” (*ibid*, 19). Philemon Holland’s translation of William Camden’s *Britannia* of the 17th century refers to miners “who have their smelting house at Derwentside which, with his forcible stream and their ingenious inventions, serveth them in notable stead for easy bellows, hammer works, forge works and sawing of boards, not without admiration to those that behold it” (Donald 1989, 239). “Sir Daniel Fleming, writing in 1671, compared Brigham Forge at that date with its former glory. Keswick, he wrote, was ‘wel knowne many years ago by reason of ye mines of copper... and much inhabited by mineral men who had their smelting houses near Greata Syde... And tho’ these smelting houses within memory were so numerous as they looked like a little Townw yet now there is not one house standing’” (Bott 1994, 21).
- 3.3.9 When referring to the 16th century site of the Mines Royal smelting and refining plant’s upstanding remains, Marshall and Davies-Shiel state that “only a mill race, cut through rock, remains on the north-east side” (Marshall and Davies-Shiel 1969, 247). Hyde and Pevsner state that both the weir in the river, and the

“rock cut leat forcing its way through the 15-yd (14 metre) tunnel known as the ‘hammer hole’ to feed the hammers and bellows” (Hyde and Pevsner 2010, 450) date from the 16th century smelting site. The Cumbrian copper mines, “although less profitable than initially hoped, and never producing enough to meet home demand in full, still played a part in reducing dependence on imports of a kind liable to be cut off in time of war” (Pallister 1983).

- 3.3.10 Unfortunately, early maps of the area are not detailed enough to give any insight as to the exact location of the Elizabethan smelting works. Speed’s map of Cumberland of 1610, is annotated with “*The mynes Royall*” by Keswick (Figure 3). Similarly, Morden’s map of Cumberland of 1695 is annotated with “the Mines Royal” but with no detail as to whereabouts the buildings were (Figure 4); although if Antiquarian authors are correct the site may have been demolished by then. They could even be more indicative of the island in Derwentwater where many of the German miners seem to have resided.
- 3.3.11 The Greta supplied a natural and cheap source of power which was harnessed during the later post-medieval period by a string of some twenty mills on its banks (Bott 1994, 29). They stretched from the Briery bobbin works (now a holiday village) to Greta Bridge pencil mill, with a concentration at Brigham Forge and on the river opposite what is now Fitz park (*ibid*). As well as the area being referred to as Brigham Forge, some sources also referred to it as ‘smelteries’. Hutchinson refers to “a cotton mill... lately erected on the river Greta” (Hutchinson 1797, 153). The HER lists a number of such mills within 0.5km of the proposed development site including the aforementioned Brigham Forge and Copper Smelting Works (HER 1109), Briery Weaving Mill (HER 4188), a Woollen Mill (HER 11535), a Bobbin Mill which is still in existence (HER 11542), Brigham Forge, still in existence and depicted on Greenwood’s map of 1823 (HER 11543; Figure 5) and a Water Corn Mill and Powerhouse, the Powerhouse seems to have utilised and adapted earlier water mill features relating to the Water Corn Mill (HER 30625).
- 3.3.12 The earliest map consulted during this desk-based research to show any detail of this part of Keswick is Greenwood’s Map of Cumberland of 1823 (Figure 5). This clearly shows the forge to the west of the proposed development site, which is likely to have been built near the site of the Elizabethan Copper Works (HER 1109). This forge is logged in the HER as no. 11543, Brigham Forge. Brigham Forge is also marked on the First Edition Ordnance Survey Map of 1869 (Figure 6), with some surviving structures still in existence. Marshall and Davies refer to this site as “an important nineteenth century water-power centre, with a woollen mill [presumably HER 11535], a brewery, a bobbin mill (closed 1953) [presumably HER 11542] and another woollen mill at Briery upstream [presumably HER 4188]. Some buildings remain” (Marshall and Davies 1969, 247). The brewery does not appear to be included as a separate

building in the HER records. Additionally, records held by the Cumbria Archive Service reference 'terms for the sale of forge and grinding mill at Keswick', suggesting a grinding mill was also in existence by July 1842 (DB1/90). The sites of an Edge Tool Mill and Fulling Mill (HER 30626) and a Bobbin Mill, Dye Mill and Pencil Mill (HER 30627) are listed in the HER, and located within or close to the proposed development site, based on Davies Shiel's annotated map of 1990. Unfortunately, this was not available for viewing, and it is not clear where his information came from. Bott refers to Banks and Co setting up a pencil industry business at Forge Mill in 1832, which was taken over in 1906 by Henry Birkbeck, which was hit by a disastrous fire in 1940 (Bott 1994). This is likely to have been located in the 19th mill complex itself, however, shown as 'Brigham Forge' on 19th century Ordnance Survey Mapping (Figures 6 and 7) to the south-west of the proposed development site. A woollen mill and bobbin mill is depicted to the north-east, at the Briery site, on First Edition Ordnance Survey mapping, which may instead explain these sites (HER 30626 and HER 30627). Nothing is shown within the proposed development area at this time (see 3.3.13).

3.3.13 Greenwood's map seems to show a roughly rectangular enclosure, with a possible leat collecting water from the fells to the south (Figure 5), extending into the eastern part of the proposed development site. It is not clear whether this is some kind of field boundary, or whether it relates to an industrial area, hence the leat. Perhaps it is the surviving outline of the Elizabethan Copper Works (HER 1109). If so, this is of potential significance to the proposed development, and traces may survive sub-surface and be encountered during the evaluation. By 1869, and the publication of the First Edition Ordnance Survey map (Figure 6), this seems to have disappeared, although there is a wooded enclosed area encompassing the proposed development area. The mill race is clearly shown to the immediate north, which still survives. Brigham Forge, including a woollen mill is depicted to the south-west. By 1899, the wooded enclosed area has been reduced in size, and the proposed development site has some kind of boundary within its western half (Figure 7). It is unclear what this boundary relates to, but could relate to the Power House (HER 30625) which also relates to the utilisation of the leat for "an exceptionally early attempt to generate electricity for public lighting [in] 1890" (Hyde and Pevsner 2010, 450). The line of the Cockermouth, Keswick and Penrith Railway (HER 11531) is also depicted to the south of the development area (Figure 7). There is little change to the area by the publication of the Third Edition Ordnance Survey map in 1924 (Figure 8), although some changes have occurred to buildings to the west, relating to Brigham Forge.

3.3.14 Keswick Urban District Council building control plans have reference to an application for a bungalow at The Forge, Forge Lane, Keswick, for Mr Wildman

(Cumbria Archive Service SVDK/3/PLANS/B/41) dating to 1930, with 'alterations to bungalow at The Forge, Forge Lane, Keswick' for R. Wildman in 1950 (Cumbria Archive Service SVDK/3/PLANS/KANC/209). Certainly, by 1976, and the publication of the Ordnance Survey map of that date, a building has been constructed in the proposed development site, sharing a similar footprint to the extant bungalow (Figure 9). The flyover relating to the A66 is not shown on this map.

Table 1: Summary of HER sites referred to in the text above:

HER No.	Site Name	Site Type	Period	NGR (NY)
1109	Mines Royal Smelting and Refining Plant	Copper Works (site of)	Post Medieval, Elizabethan	32810 52400
1120	Adze Find, The Forge, Keswick	Findspot	Uncertain	32810 52390
4188	Briery Weaving Mill	Woollen Mill (site of)	Post Medieval	32850 52410
11531	Cockermouth, Keswick and Penrith Railway	Railway (site of)	Post Medieval	32500 52422
11535	Keswick Woollen Mill	Mill (site of)	Uncertain	32800 52393
11542	Keswick Bobbin Mill	Bobbin Mill (extant building)	Uncertain	32860 52420
11543	Brigham Forge	Forge (extant building)	Uncertain	32860 52420
19303	Stone Adze Find, Brigham, Keswick	Findspot	Prehistoric	32806 52395
30625	Water Corn Mill, Power House	Power Station, Water Mill (sites of); Tail Race, Head Race (extant structures)	Uncertain; Post Medieval	32810 52395
30626	Mill, Brigham Forge, Keswick	Fulling Mill (site of)	Uncertain	32819 52303
30627	Mill, Brigham Forge, Keswick	Bobbin Mill (site of)	Uncertain	32821 52303

4 ARCHAEOLOGICAL EVALUATION

4.1 INTRODUCTION

- 4.1.1 The evaluation was undertaken on a single day on 30th January 2014.
- 4.1.2 A single evaluation trench was excavated to the west of the standing bungalow, within the footprint of the proposed new building. The trench was excavated using a toothless ditching bucket under close archaeological supervision, and subsequently cleaned by hand (Figure 10).

4.2 RESULTS

- 4.2.1 The trench was located to the west of the standing bungalow, to lie within the footprint of the new building. The trench measured 10m x 1.2m and was excavated to a maximum depth of 1.25m. A uniform deposit of topsoil (100), 0.33m in depth, was removed to expose a silty clay subsoil (101), 0.40m deep. The natural (102) was encountered directly below the subsoil and consisted of sands and gravels, with occasional rounded river cobbles in the lower sand deposits (Plate 1).



Plate 1: Trench overview. Looking north-west.

- 4.2.2 No archaeological remains or deposits were encountered during the excavation of the evaluation trench.

4.3 ARCHAEOLOGICAL FINDS AND ENVIRONMENTAL SAMPLING

- 4.3.1 Occasional fragments of clay pipe and post medieval 19th and 20th century pottery were recovered from the topsoil. The only item of note was a moulded clay pipe bowl decorated with a face. As these finds came from the topsoil they were deemed to be of limited archaeological interest and therefore not retained.
- 4.3.2 No environmental samples were taken.

5 CONCLUSIONS AND RECOMMENDATIONS

5.1 CONCLUSIONS

- 5.1.1 Wardell Armstrong Archaeology were commissioned by Edwin Thompson to undertake an archaeological field evaluation on land at The Bungalow, Forge Lane, Keswick, Cumbria (NGR NY 28185 24034; Figures 1 and 2), prior to the granting of planning permission for development of the site. The site lies close to the known site of the 16th century Royal Mines Royal Smelting and Refining Plant (HER 1109) which is thought to have continued in use until the mid 17th century. Since then, this area of the River Greta was a hub for industrial activity, and within the vicinity of the proposed development site are a number of known sites.
- 5.1.2 The rapid desk based assessment has highlighted the potential for surviving sub-surface traces of the Elizabethan Mines Royal Smelting and Refining Plant (HER 1109) to be encountered within the proposed development site. An early 19th century map of Cumberland (Greenwood 1823; Figure 5) may indicate surviving traces of the boundary of these works within the proposed development area itself. The exact location of these extensive works is unknown. This area of Keswick also formed an industrial hub during the 19th century. Traces of post medieval industrial activity may have survived sub-surface.
- 5.1.3 The evaluation trench did not reveal the presence of any archaeological remains. Due to the topography it seems likely that the smelting plant was located further west, towards Brigham Forge.

5.2 RECOMMENDATIONS

- 5.2.1 As the purpose of this archaeological field evaluation was to establish the nature and extent of below ground remains associated with the Elizabethan Mines Royal Smelting and Refining Plant (HER 1109) as specified by John Hodgson, of the Lake District National Park Authority, no further work is deemed necessary associated with the present study. However, given the significance of previous archaeological potential within the immediate vicinity of the study area, it is recommended that any future invasive work be subject to a similar programme of archaeological investigation.

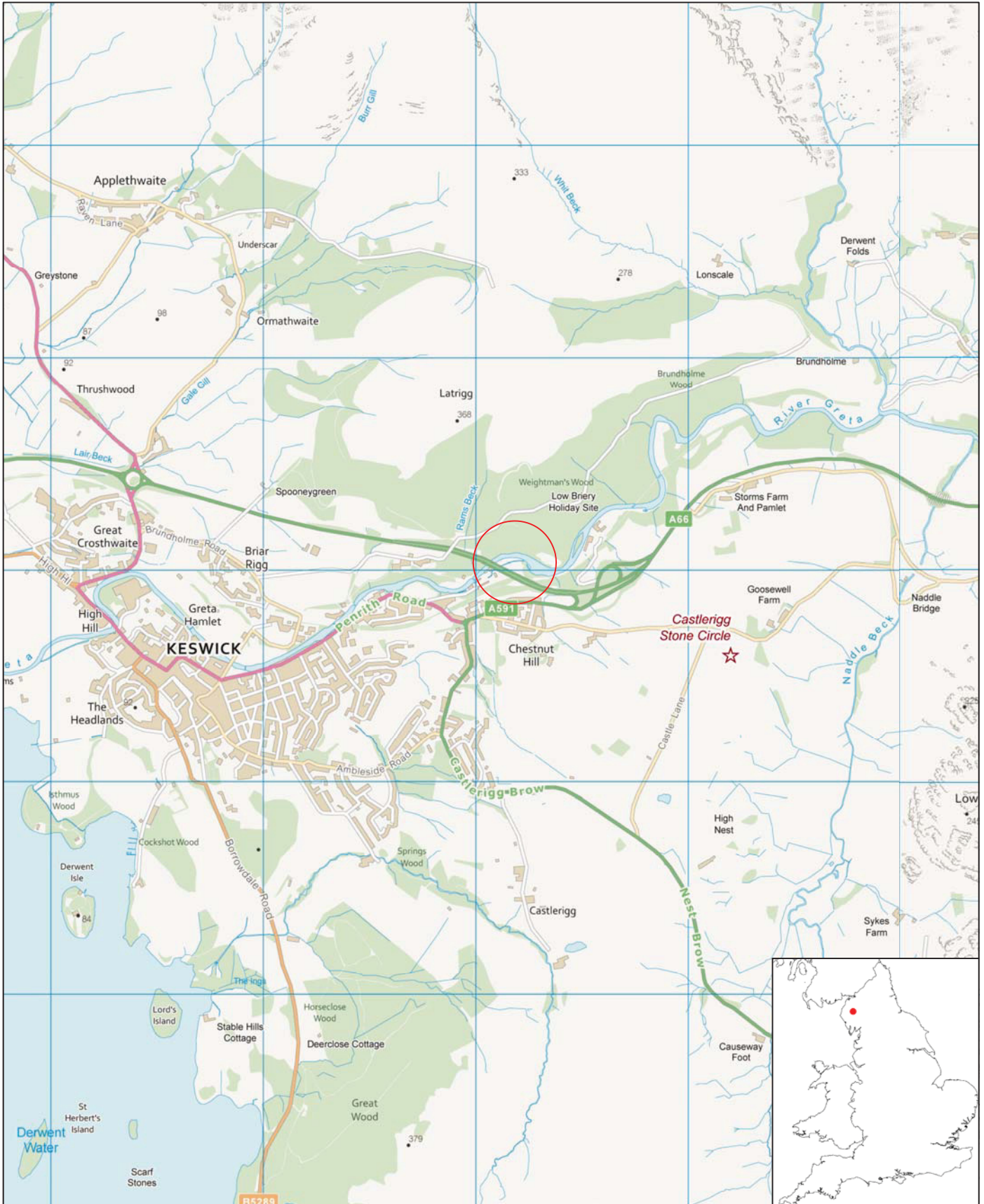
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APPENDIX 1: CONTEXT TABLE

Context Number	Context Type	Description
100	Deposit	Topsoil – dark sandy silt
101	Deposit	Subsoil – orange silty sand
102	Deposit	Natural – sands and gravels

APPENDIX 2: FIGURES






 <p>Wardell Armstrong Archaeology 2014</p>	<p>PROJECT: Land at The Bungalow, Forge Lane, Keswick, Cumbria</p> <p>SCALE: 1:25,000 at A4</p> <p>REPORT No: CP10801</p> <p>CLIENT: Edwin Thompson</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.

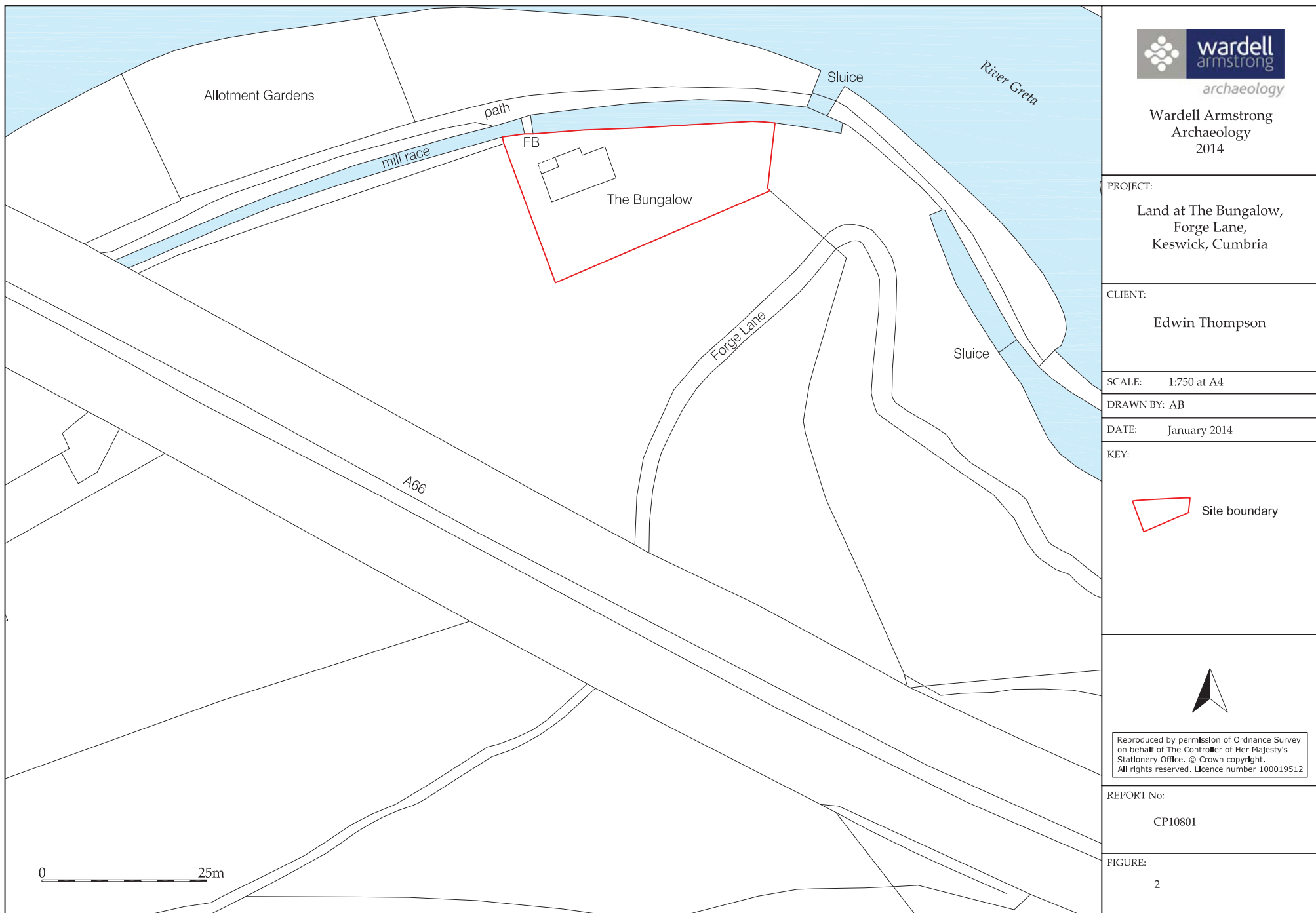


Figure 2: Detailed site location.

PROJECT:

Land at The Bungalow,
Forge Lane,
Keswick, Cumbria

CLIENT:

Edwin Thompson

SCALE: Not to scale

DRAWN BY: AB

DATE: January 2014

KEY:

 Site location



REPORT No:

CP10801

FIGURE:

3

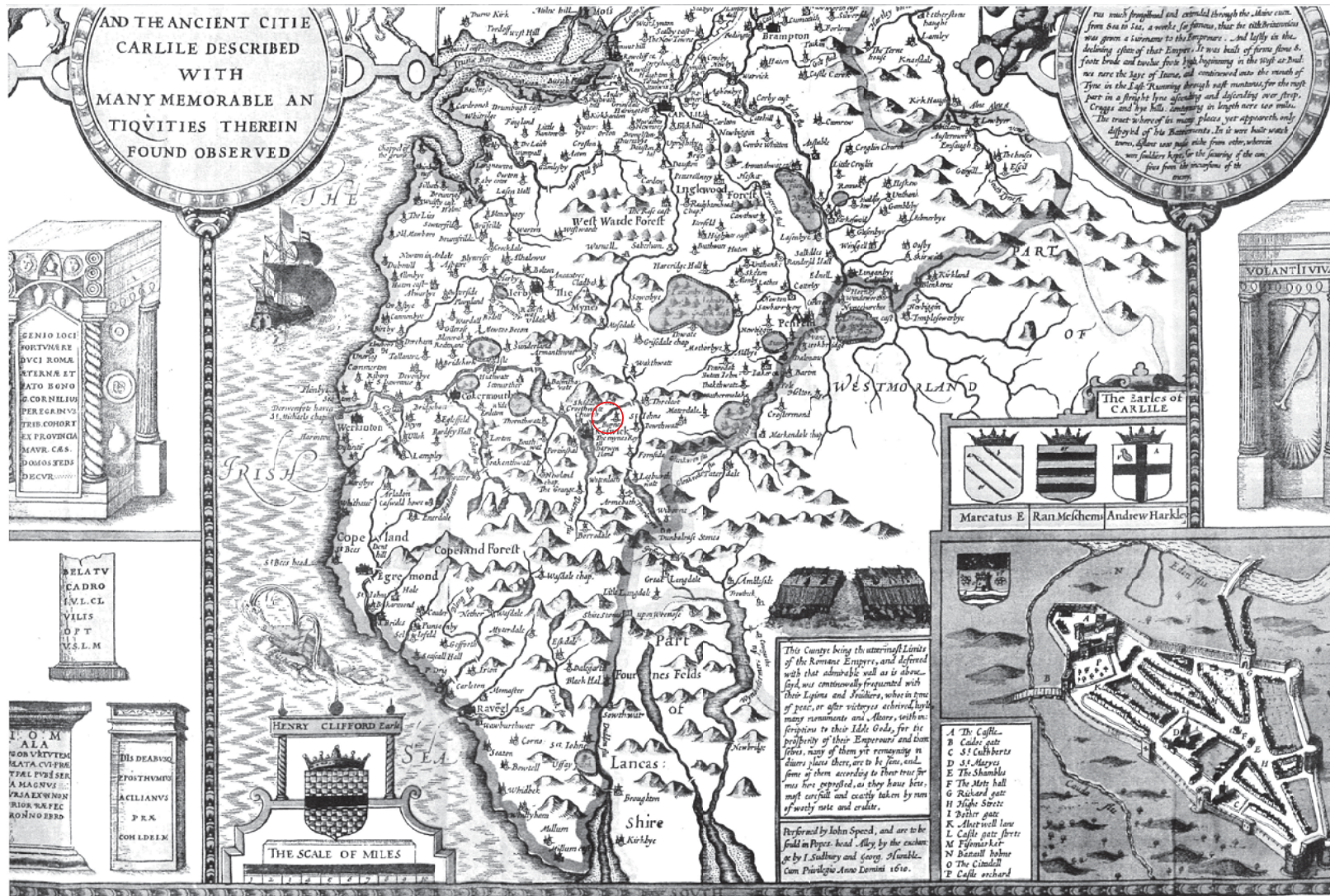


Figure 3: Speed's Map of Cumberland, 1610.

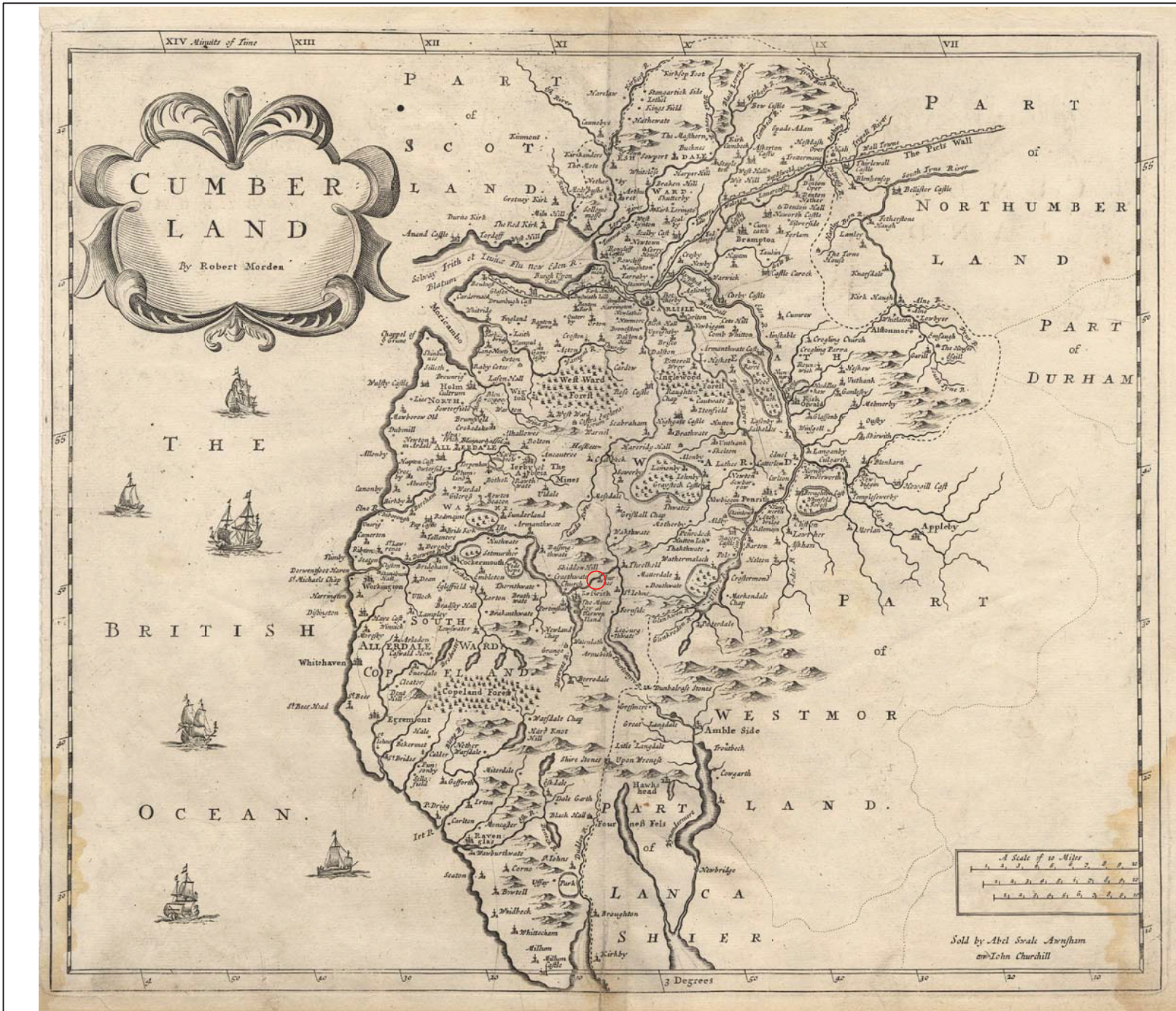


Figure 4: Morden's Map of Cumberland, 1695.


PROJECT:
Land at The Bungalow,
Forge Lane,
Keswick, Cumbria

CLIENT:
Edwin Thompson

SCALE: Not to scale

DRAWN BY: AB

DATE: January 2014

KEY:
 Site location



REPORT No:
CP10801

FIGURE:
4

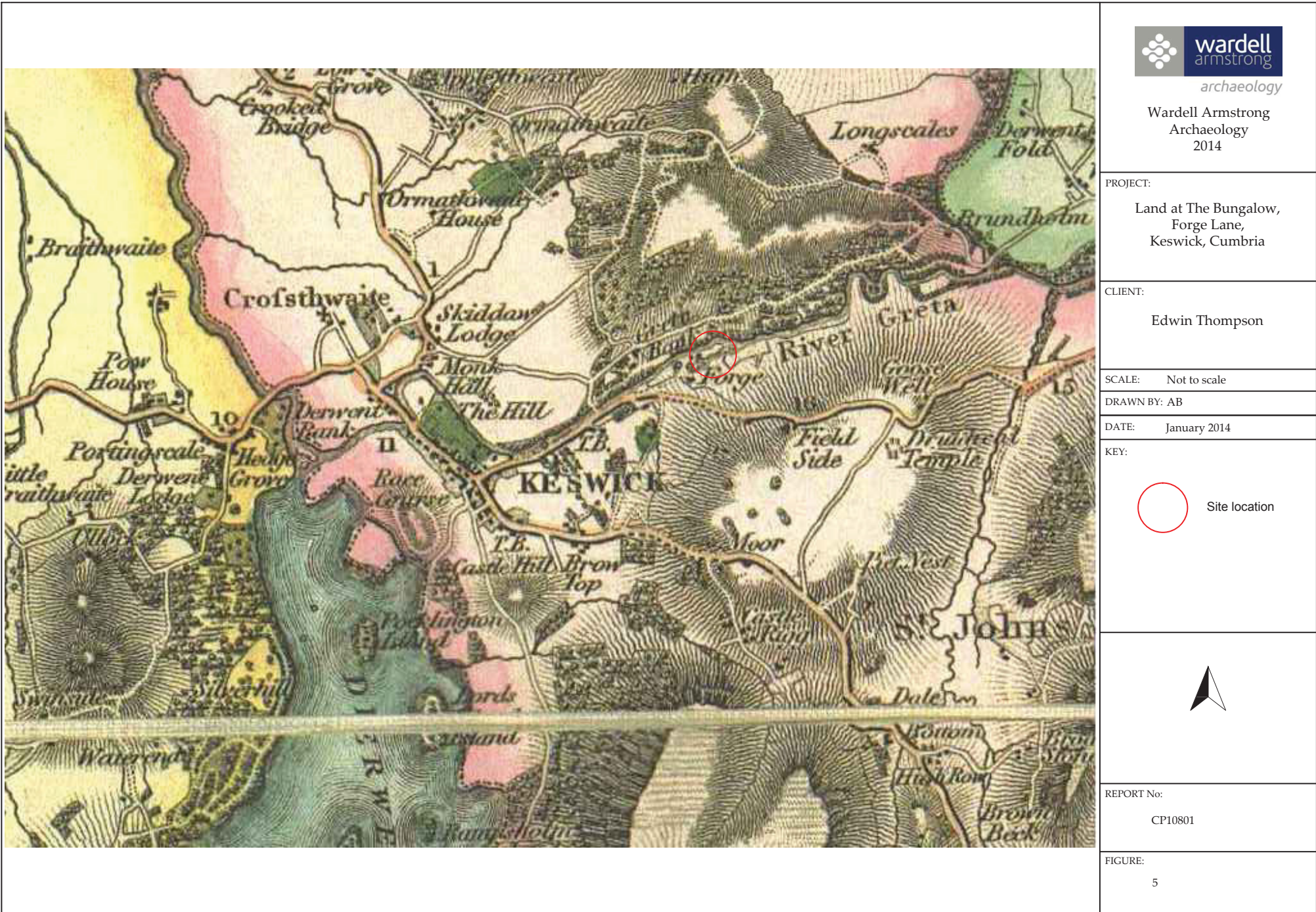
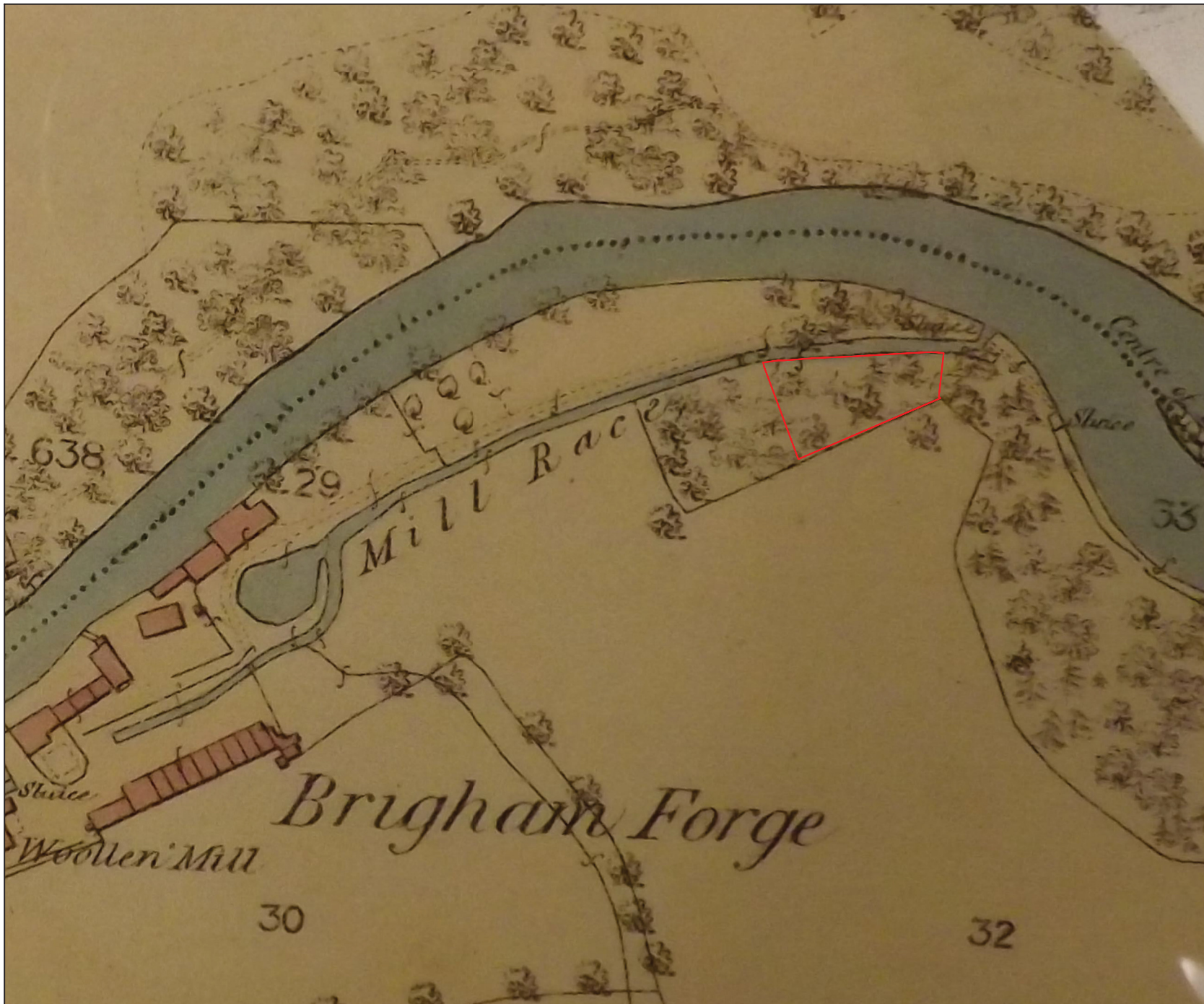


Figure 5: Extract from Greenwood's Map of Cumberland, 1823.



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PROJECT:
Land at The Bungalow,
Forge Lane,
Keswick, Cumbria

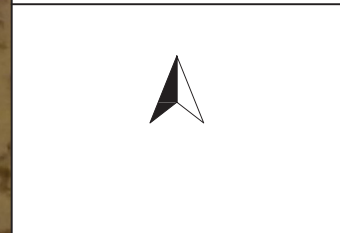
CLIENT:
Edwin Thompson

SCALE: 1:1,250 at A4

DRAWN BY: AB

DATE: January 2014

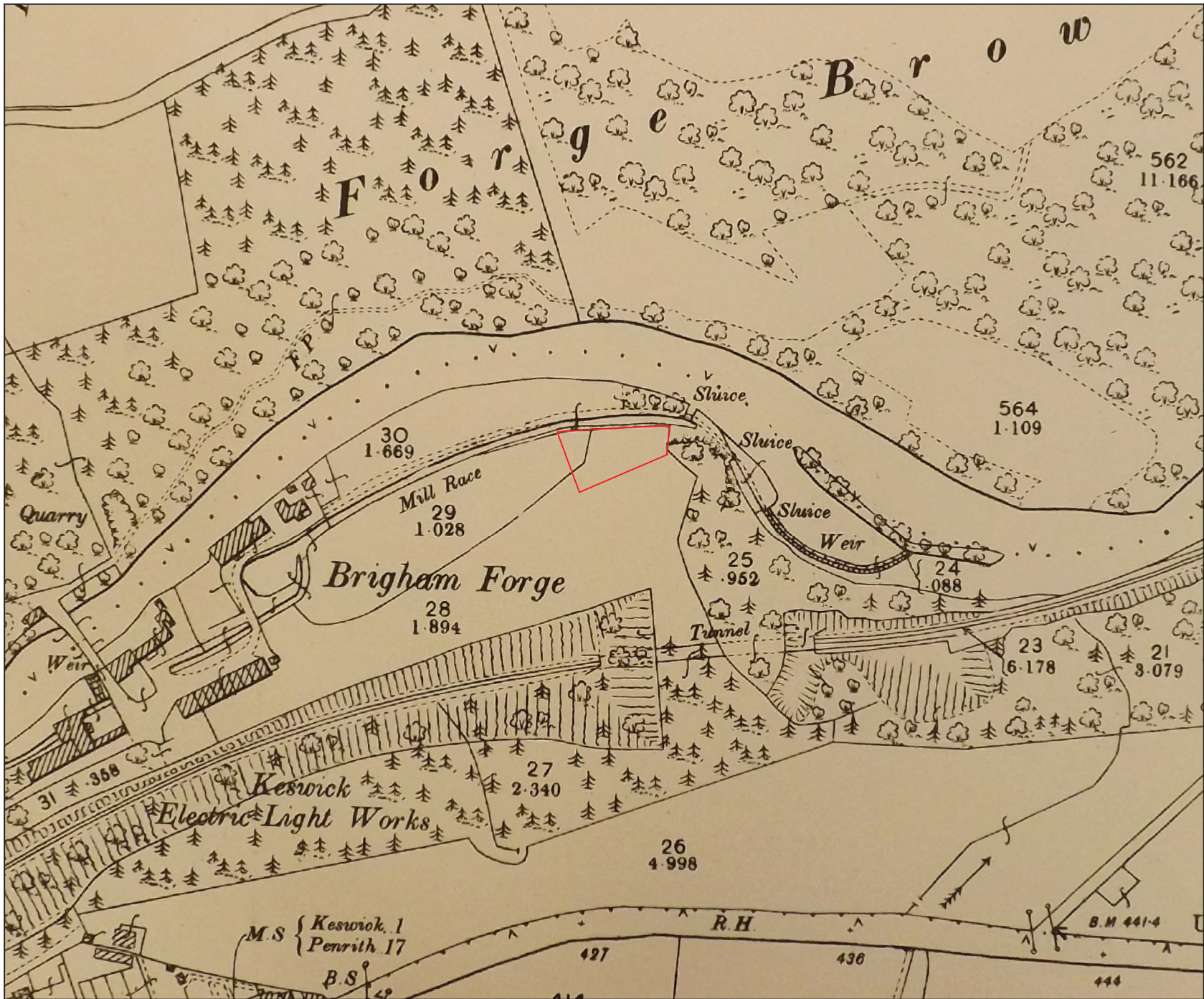
KEY:
 Site boundary



REPORT No:
CP10801

FIGURE:
6

Figure 6: First Edition Ordnance Survey Map, 1869.




PROJECT:
 Land at The Bungalow,
 Forge Lane,
 Keswick, Cumbria

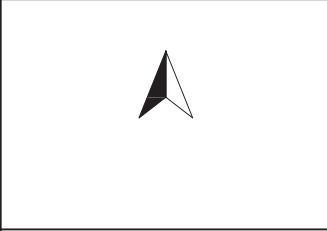
CLIENT:
 Edwin Thompson

SCALE: 1:2,000 at A4

DRAWN BY: AB

DATE: January 2014

KEY:
 Site boundary



REPORT No:
 CP10801

FIGURE:
 7

Figure 7: Second Edition Ordnance Survey Map, 1899.



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PROJECT:
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Forge Lane,
Keswick, Cumbria

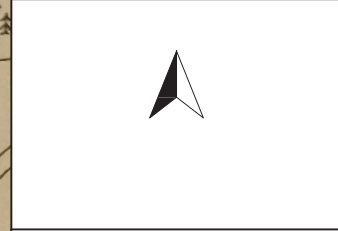
CLIENT:
Edwin Thompson

SCALE: 1:2,000 at A4

DRAWN BY: AB

DATE: January 2014

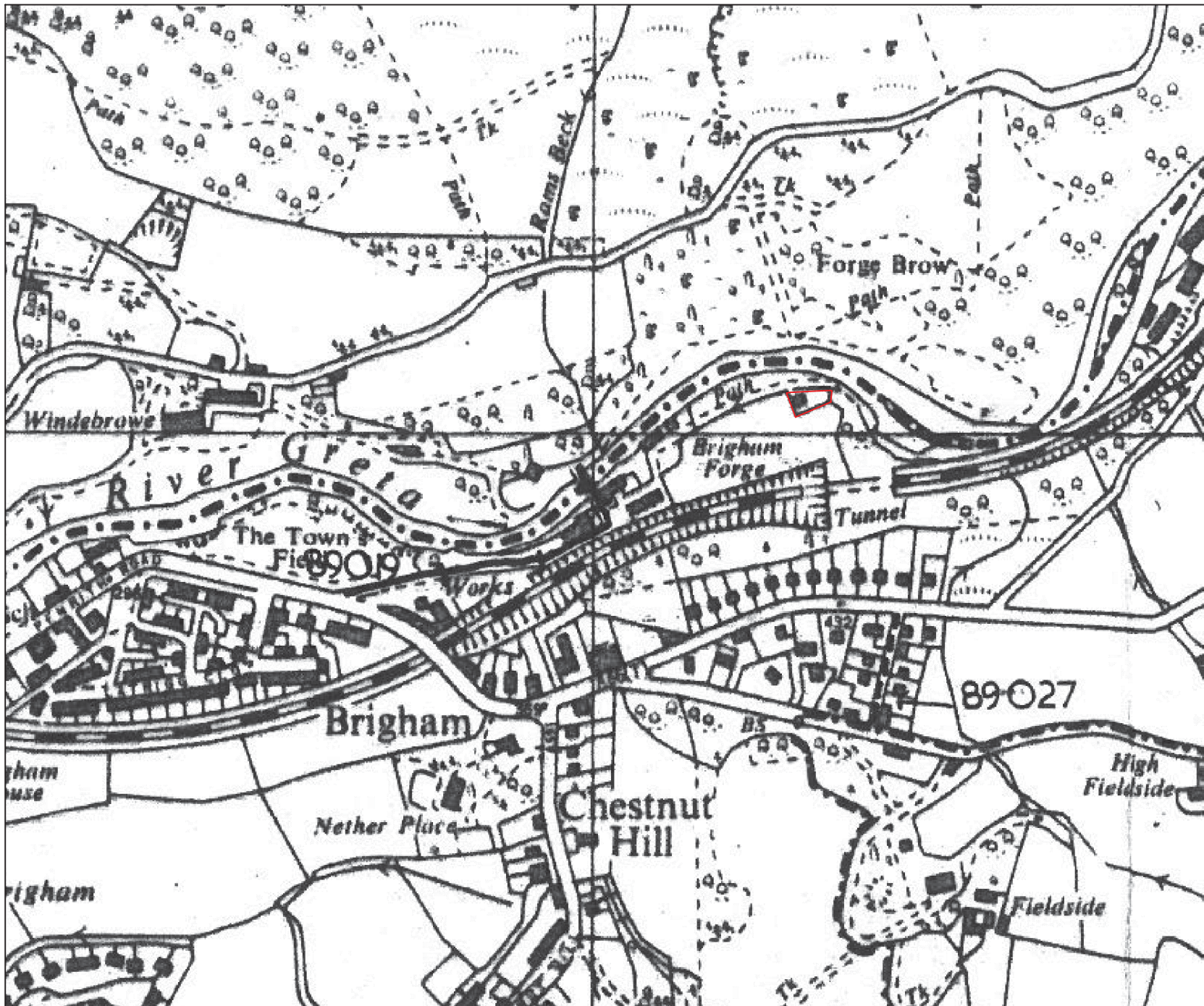
KEY:
 Site boundary



REPORT No:
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FIGURE:
8

Figure 8: Third Edition Ordnance Survey Map, 1924.



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PROJECT:
Land at The Bungalow,
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CLIENT:
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SCALE: 1:5,000 at A4

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DATE: January 2014

KEY:
 Site boundary



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FIGURE:
9

Figure 9: Ordnance Survey Map, 1976.

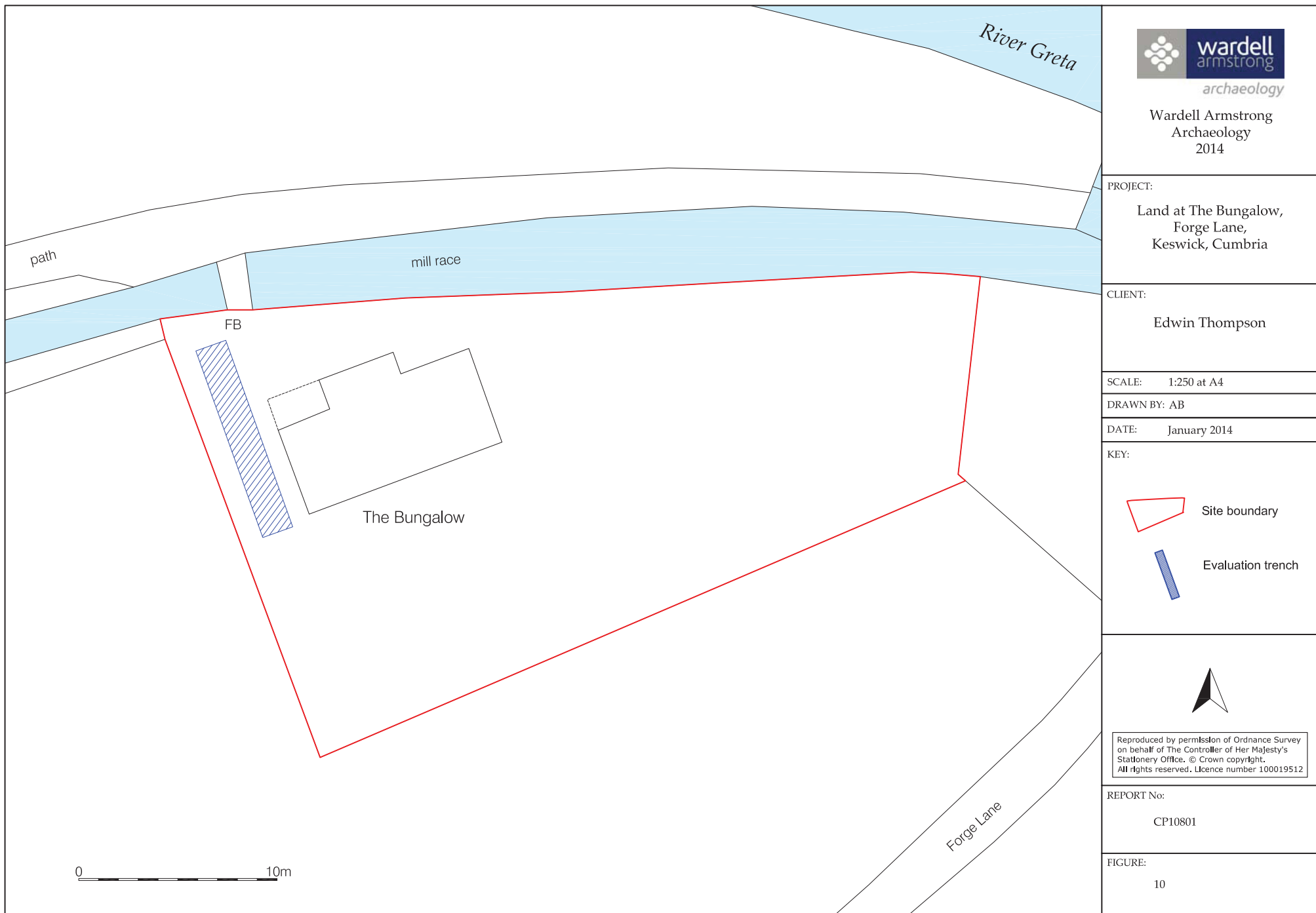


Figure 10: Evaluation trench location plan.