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EIA AND HERITAGE CONSULTANCY



CPLC ASSOCIATES LTD

**FORMER THOMAS GRAHAM AND SONS SITE
SHADDONGATE
CARLISLE**

ARCHAEOLOGICAL EVALUATION REPORT

January 2016





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CPLC ASSOCIATES LTD

The former Thomas Graham and Sons site, Carlisle, Cumbria

Archaeological Evaluation

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SUMMARY

Wardell Armstrong Archaeology (WAA) was commissioned by CPLC Associates Ltd., to undertake an archaeological evaluation by trial trenching at the former Thomas Graham and Sons site, Shaddongate, Carlisle (NGR: NY 39444 55761). The evaluation was required as a condition of planning consent (ref 15/0070). The evaluation was undertaken in accordance with a written scheme of investigation (WSI) produced in response to advice given by Jeremy Parsons of Cumbria County Council Historic Environment Services (CCCHES).

Five trenches were opened across the site to investigate the buildings which stood previously. A number of possible walls were highlighted in the heritage impact assessment, including two walls belonging to a former pub that occupied the north eastern corner of the development site. However, the evaluation showed that these walls had been completely demolished, with no standing brickwork left. Trench 4 contained the only archaeological features, four walls, two of which were red brick and two sandstone that may relate to a stable or shed that was seen on a 1911 sales particular map. A number of post-medieval finds were recovered from all but one trench, indicating a high concentration of activity on the site, which was to be expected.

ACKNOWLEDGEMENTS

Wardell Armstrong Archaeology (WAA) thanks the client Darren Walden of CPLC Associates Ltd. for commissioning the project, and for all their assistance throughout the work. Also, WAA thank Jeremy Parsons at CCCHES for their assistance.

Wardell Armstrong Archaeology also thank Alan Tuer Ltd. plant Hire Company, for their help during this project.

The evaluation was supervised by Ruby Neale who also wrote the report. Finds assessment was by Sue Thompson and the figures were produced by Adrian Bailey and Helen Phillips. The project was managed by Frank Giecco, Technical Director who also edited the report. The report was approved by Richard Newman, Post-Excavation Manager.

1. INTRODUCTION

1.1 Project Circumstances and Planning Background

1.1.1 In January 2016, Wardell Armstrong Archaeology (WAA) undertook an archaeological evaluation at the former Thomas Graham and Sons site, Shaddongate, Carlisle, Cumbria (NGR: NY 39444 55761). It was commissioned by CPLC Associates Ltd, on behalf of Farm Foods, who intend to construct a new supermarket, for which a planning consent has been granted by Carlisle City Council (planning reference: 15/0070).

1.1.2 The grant of planning permission by Carlisle City Council, dated day August 2015 stated that *'no development shall commence within the site until the applicant has secured the implantation of a programme of archaeological work in accordance with a written scheme of investigation which has been submitted by the applicant by the Local Planning Authority.'*

1.1.3 This planning condition was in line with advice provided to Carlisle City Council by Jeremy Parsons of CCCHES in a letter dated 11th February 2015 (ref no. CH/DC/15/0070).

1.1.4 The proposed development is thought to contain the remains of a number of buildings of various dates, the heritage significance of which may be affected by the application.

1.2 Project Documentation

1.2.1 The project conforms to a brief which was prepared in consultation with the archaeological planning advisor Jeremy Parsons at CCCHES. A WSI (WAA 2015) was then produced to provide a specific methodology based on the brief for a programme of archaeological trial trench evaluation. This was approved by the archaeological planning advisor prior to the fieldwork taking place. This is in line with government advice as set out in Section 12 of the National Planning Policy Framework (NPPF 2012).

1.2.2 This report outlines the work undertaken on site, the subsequent programme of post-fieldwork analysis, and the results of this scheme of archaeological evaluation.

2. METHODOLOGY

2.1 Standards and guidance

2.1.1 The archaeological evaluation was undertaken following the Chartered Institute for Archaeologists *Standard and Guidance for archaeological field evaluation* (2014a), and in accordance with the WAA fieldwork manual (2012).

2.1.2 The fieldwork programme was followed by an assessment of the data as set out in the *Standard and Guidance for archaeological field evaluation* (CifA 2014a) and the *Standard and Guidance for the collection, documentation, conservation and research of archaeological materials* (CifA 2014b).

2.2 Documentary Research

2.2.1 A Heritage Impact Assessment was prepared by WAA (2015), which set out the archaeological and historical background of the site, and provided an assessment of the significance of all known and potential heritage assets up to 250m from the area of investigation.

2.3 The Field Evaluation

2.3.1 The evaluation comprised the excavation of five trenches measuring between 5m and 15m in length by 1.8m in width across the proposed development area that measured 0.26ha (Figure 2). The trenches were placed to target previously standing buildings as illustrated by a number of historic maps. The general aims of these investigations 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 assess the impact of the application on the archaeological site;
- 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.

2.3.2 Deposits considered not to be significant were removed by a JCB with a toothless ditching bucket, under close archaeological supervision. The trial trenches were subsequently cleaned by hand. All possible features were inspected and selected deposits were excavated by hand to retrieve artefactual material and environmental

samples. Once completed all features were recorded according to the WAA standard procedure as set out in the Excavation Manual (WAA 2012).

2.3.3 All finds encountered were retained on site and returned to the WAA Carlisle office where they were identified, quantified and dated to period. A *terminus post quem* was then produced for each stratified context under the supervision of the WAA Finds Officer, and the dates were used to help determine the broad date phases for the site. On completion of this project, the finds were cleaned and packaged according to standard guidelines (Ibid). Please note, the following categories of material will be discarded after a period of six months following the submission of this report, unless there is a specific request to retain them (and subject to the collection policy of the relevant depository):

- unstratified material;
- modern pottery;
- material that has been assessed as having no obvious grounds for retention.

2.3.4 On completion the evaluation trenches were backfilled, replacing the excavated material.

2.3.5 A full professional archive has been compiled in accordance with the project specification, and the Archaeological Archives Forum recommendations (Brown 2011). The archive will be deposited with Tullie House Museum, with copies of the report sent to the Cumbria HER, available upon request. The archive can be accessed under the unique project identifier WAA-16, CP11552/16, FTG-A.

2.5.2 Wardell Armstrong Archaeology supports 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 WAA as a part of this national project. The OASIS reference for the project is: wardela2-236846.

3. BACKGROUND

3.1 Location and Geological Context

3.1.1 The site is located at NY 39444 55761. The site's environs comprise an urban development site. The site is bounded to the west and south by houses whilst the north is limited by Broadguards and the east by Shaddongate itself, a historic route leading from Carlisle to Dalston. The study area lies to the west of the city centre of Carlisle, within the suburb of Caldewgate, to the west of the river Caldew. The area of investigation lies at a height of c13.97m aOD (above Ordnance Datum) with the ground sloping down gently to the east.

3.1.2 The site is approximately 0.26ha in size and is roughly square. The warehouse which formerly occupied the site was demolished in late 2015 and the site remains empty.

3.1.3 The underlying solid geology within the area of investigation is mapped as sandstone of the Sherwood Sandstone Group deposited during the Triassic and Permian periods approximately 229-271 million years ago, mainly deposited by rivers in the area. This is overlain by superficial deposits of diamicton of the Gretna Till Formation deposited around 2 million years ago during the Quaternary period (BGS 2015). The natural substrate observed during the current phase of works comprised clay and gravels which is consistent with the mapped geologies above.

3.2 Historical and Archaeological Background

3.2.1 A heritage impact assessment was produced to summarise the known historical and archaeological background of the site and the surrounding landscape to a distance of 250m (WAA 2015). It is not intended to repeat that information here and what follows is a brief overview, for further details please refer to the original document.

3.2.2 This report identified that there were no designated heritage assets within the site boundary, however there are a further 35 within the wider search area of 250m.

3.2.3 No heritage assets designated as scheduled ancient monuments are recorded within the immediate vicinity of the site.

3.2.4 No non-designated heritage assets are recorded within the immediate vicinity of the site. The desk-based assessment concluded that there was a reasonable likelihood

that archaeological remains of no earlier than 17th century may be present within the proposed development site.

- 3.2.5 The only other archaeological work to have been undertaken within the development area was a buildings recording of the boundary walls (WAA 2015).
- 3.2.6 **Prehistoric:** there is no known evidence for prehistoric activity within the study area.
- 3.2.7 **Roman:** evidence for Roman activity comes from the known Roman origins of the city of Carlisle and from two phases of Roman activity encountered during excavations at John Street (Giecco 2006). A ditch, and two pits to the west of it, contained small quantities of mid to late 2nd century pottery. These features were sealed by a soil layer which also contained 2nd century pottery.
- 3.2.8 **Medieval:** Evidence for medieval industrial activity in the area has been recovered from archaeological work undertaken at John Street in the form of extensive pitting in a layer of redeposited natural gravel, sealing earlier 2nd century activity (Giecco 2008). The pits produced large quantities of 12th or early 13th century pottery and small amounts of organic-rich deposits. The site had been intensively used in the 14th century for bronze working, evidenced by large timber workshops and five furnaces, representing three phases. The earliest building produced small quantities of 13th or 14th century greywares and a silver groat of Edward III (1327-77).
- 3.2.9 There is documentary evidence from the 14th century Chronicle of Lanercost, regarding the 1315 siege of Carlisle, when the Scots “*erected an engine for casting stones near the church of the Holy Trinity, where their king had placed himself, and continually threw great sties towards the Caldew gate, and at the wall*” (Perriam 1979, quoted in Noakes and Strickland 2008). This documentary evidence, along with the discovery of 40 skeletons in May 1959 during sewage works in Caldewgate beneath a road surface of possible 12th century date, suggests a medieval church once stood in the vicinity.
- 3.2.10 **Post-medieval:** a flood in 1484 seems to have led to an initial abandonment of the area of Caldewgate (Giecco 2011). Significant reoccupation does not seem to have occurred until the 17th century, when Caldewgate consisted of a small suburb immediately outside the city wall (R Newman 2011). The maps of 1716 and 1746 indicate that part of Shaddongate was already developed by the early 18th century, the development site however remained an open space. By 1794 both sides of the

road in the vicinity of the proposed development site were developed and the earlier gap had been filled.

- 3.2.11 Industrial sites, utilising the Little Caldew mill race also sprang up during the 18th century, including the New Brewery, established to the north-east of the proposed development site in 1778, and the Shaddongate works, originally a mill dating to the late 18th century. Most likely in correlation with these earlier industries were several buildings, possible workers dwellings, depicted in the vicinity of the proposed development site on a map of Carlisle, which illustrates a long row of buildings on the east side of Shaddongate heading to Junction Street. Hutchinson's Plan of 1794 additionally shows building on the west side of Shaddongate, including within the proposed development site.
- 3.2.12 Cole and Roper's plan of c.1805 also shows buildings on either side of Shaddongate and is the earliest to depict back plot running back from Shaddongate, westwards. The road called Broadguards, to the immediate north of the proposed development site, appears to have originated as back plot development at this time.
- 3.2.13 Plans dating between 1794 and 1821 show that the proposed development area was substantially deploined during the period. A plan of proposed improvements of 1809 shows the origins of Duke Street, originally Milburn Street, which lies just to the south of the proposed development area. The proposed development area appears to be a yard with buildings c 1805 which seems to be partially reflected in the character of the area mapped in 1865, when the southern part was known as Thompson's Court with a row of back-to-back buildings on the south side. These buildings may well be loomshops with accommodation above as in Broadguards. They were not in existence in 1794 but appear to be by 1805 and were definitely present by 1821.
- 3.2.14 By 1841, the pattern of building in the vicinity of the proposed development site remains very similar to that shown on Wood's plan of 1821. This shows narrow buildings fronting Shaddongate with yards behind. No plot numbers are given for the sites within the proposed development site though, so ownership and land usage cannot be identified. Between 1841, and the publication of the Board of Health's map of Carlisle in 1853, some additional development seems to have occurred within the southern plot, where a covered passage or ginnel seems to have been inserted to allow access to a court containing a small square outbuilding, and to the south of that,

a linear row of buildings has been inserted running across the southern boundary to the western boundary.

- 3.2.15 This same plan of the proposed development site, including the ownership of land at this time, is shown in a *'Plan of Shaddongate and Church Streets'* of c.1860 (CAC(C) CA/E/1/462). The southern part of the proposed development site was owned by *'William Armstrong'*. A *'John Armstrong'* is listed as a *'grocer and flour dealer'* on *'Shaddongate'* in Jollie's 1811 guide and directory (Jollie 1811). The central part of the proposed development in c.1860 was owned by *'John Wilkin, John Street'*. In a trade directory of 1847 a *'John Wilkin'* is noted as a wine and spirit merchant at 32 John St. in Caldewgate. The northern part of the proposed development site is owned by a *'Thomas McCutcheon, Church Street'* in c.1860.
- 3.2.17 The changes occurring between 1841 and 1853 are a likely result of developments in the wider area. The population of the Caldewgate Township nearly doubled between 1821 and 1851 (Harris 1967). This growth was stimulated by the opening of the Carlisle canal in 1823 and the construction in 1820 of new bridges across the Caldew and Little Caldew or Mill Dam (*ibid*), and by the construction of a railway link between the canal basin and the London Street station in 1837 (C Newman 2011). Further, communal developments in the study area can be seen in the form of religious institutions such as several churches and schools. A bakery, a social club and the Maltsters Arms public house, also date to this early-mid 19th century period of expansion. The tram depot also dates to this period, closing in 1900, as does the site of a fire station, erected in 1884.
- 3.2.18 The mid-19th century also had a large impact on the layout of the proposed development site. Between c. 1853 and 1865, the back-plots in the northern of the three main plots had been built upon. Fronting this northernmost plot are the same two buildings shown on the earlier plan, but annotated with *'Lister's Arms Inn'* on the Ordnance Survey plan. A Thomas Lister McCutcheon may have owned this plot in c.1860. It seems to no longer have been a pub by 1899. At least ten new buildings have been built behind along the southernmost boundary of this plot, and several on the northernmost boundary adjoining Broadguards. The central plot remains much the same in 1865 as it was in c. 1860, though three small square outbuildings are shown at the western boundary of the plot. In the southern of the three main plots, the court first illustrated on the 1853 plan is marked as *'Thompsons Court'*, and the buildings formerly shown across the southern boundary, are further detailed, as small individual

buildings, perhaps dwellings for factory hands or weavers. The outbuildings shown in the north-west corner of Thompsons Court may be privies. Five small newer buildings are also shown to the north east of the easternmost small individual buildings along the southern boundary on the 1865 Ordnance Survey map. No changes occurred in the proposed development site between 1865 and 1874.

- 3.2.19 The Second Edition Ordnance Survey plan of 1899 shows some changes, which occurred after 1874. The northern plot has undergone the most substantial changes. The former inn, shown as the *'Lister's Arms Inn'* on the 1865 plan is no longer annotated as an inn, though the building immediately adjacent, to the north, at the corner of Broadguards and Shaddongate, is marked as *'Lorne Arms Inn'* on the 1899 plan. This building, though shown on earlier mapping, was not previously marked as a public house. It could be that the pub dates to 1804/5 when some of the houses on Broadguards were constructed, though *"as the pub fronted Shaddongates it is likely to be somewhat earlier"* (Davidson 2004).
- 3.2.20 In 1911, some parts of the proposed development site were advertised for sale. At that time the property was brick built with slated roofs and *"in a fair state of repair"* (*ibid*). It was suggested that *"it is most suitable for a Dairy Business, but would answer equally as well for a Carting Contractor, Furniture Remover, or continued as at present used for the business of a Hay and Straw Dealer"* (*ibid*).
- 3.2.21 The plan associated with the above description, indicates that the plot for sale was the site of the former Lister's Arms Inn. The character of the buildings described as belonging to the inn, suggests that they originated as farmhouses. This indicates that the buildings shown facing Shaddongate in the late 18th century were primarily agricultural and that the development of the back plots first hinted at in 1805, involved the industrialisation and urbanisation of farm yards.
- 3.2.22 The Third Edition Ordnance Survey map of 1925 shows the same basic layout of the proposed development site as earlier mapping, with the buildings along the street frontage staying the same. The Lorne Arms Inn, which is no longer marked, has been removed. It had apparently closed c.1919 (Davidson 2014, 14). The central plot had had some outbuildings constructed to the rear, some spanning the entire western boundary, and some along the northern boundary of the plot. These were not shown on the Second Edition Ordnance Survey map of 1899. The southern plot seemed to have sold off the long row of buildings shown on earlier mapping, as a boundary wall separates these from the former *'Thompson's Court'*. The small row of outbuildings

shown on the 1899 map spreading westwards from the rear of the building, are also no longer depicted, with a larger north-east south-west orientated building taking their place.

3.2.23 Between 1940 and 1967 further changes occurred within the proposed development site. Many of the outbuildings behind the former Lorne Arms Inn and former Lister's Arms Inn had been removed, particularly along the northern boundary with Broadgates, and the western ones on the southern boundary of the northern plot. This northern plot is also annotated with '*Builder's Yard*' on the 1967 plan. In addition, the former outbuildings depicted at the western boundary of the central plot were removed between 1940 and 1967, as well as the linear building on the northern boundary of the central plot. Some additional detached linear buildings had been built in this backplot. In the southern plot, the southernmost building fronting Shaddongate had been demolished by 1967, as had the linear row of small buildings formerly shown along the southern boundary, and the small square outbuilding in the north-western corner (possible privies).

4. ARCHAEOLOGICAL EVALUATION RESULTS

4.1 Introduction

4.1.1 The evaluation was undertaken between the 4th and 6th January 2016, with 5 trenches excavated across the proposed development site (Figure 2). The trenches were placed to target a number of buildings recorded on historic maps. Two of the trenches were specifically placed to investigate a former pub in the north eastern corner of the site. Trench 4, located in the north west of the site, was repositioned as, when the mechanical excavation began in the original area, the saturated gravel collapsed the sides of the trench, causing a sinkhole effect. It was decided to rotate the trench roughly 90° clockwise.

4.2 Results

4.2.1 **Trench 1** (Plate 1) was situated perpendicular to the south eastern boundary of the site, next to the road. It was positioned to investigate a number of walls seen on previous maps.

4.2.2 The trench was aligned north west to south east and was 1.8m wide by 15m long. The natural substrate (106) was seen at a maximum depth of 1.3m below current ground level (12.26m aOD). It consisted of a loose orange brown sandy gravel overlain by a layer of loose sandy silt with frequent pebbles and bricks (105). Above this was a second demolition layer, (104), a loose grey sandy gravel layer with slightly more frequent fragments of brick than (105). This was sealed by a mid-brown sandy gravel layer with frequent brick inclusions (103), likely another demolition layer. The largest and most concentrated layer of demolition (102) overlain this and was a loose grey sandy silt with high concentrations of brick, slate and other building material. Layer (101) sealed this and was of a similar make up to (103) but a much thinner deposit. The entire trench was overlain by a light brown sandy silt (100) which was directly under the tarmac. There was no evidence of any standing walls within this trench, nor any other archaeological features. A large modern concrete covered water pipe was exposed running north to south across the trench.

4.2.3 **Trench 2** (Plate 2; Figure 3) was located in the north eastern corner of the site, running parallel to the road. The trench was one of two situated to investigate the former pub which stood in this corner of the site.

4.2.4 The trench was aligned north east to south west and was 10m in length by 1.8m in width. The natural substrate (204) was noted at a maximum depth of 1.8m below

current ground level (11.73m aOD). This was sealed by (203), a dark grey silty layer with very frequent bricks, gravel and pebbles, which clearly represented a substantial demolition layer. Deposit (202), which sealed (203), was similarly full of demolition waste but the soil matrix was a mid-brown sandy consistency with equal amounts of brick, gravel and cobbles as (203). The layer sealing this (201) consisted mainly of loose red bricks, likely the final demolition layer. The final deposit below the tarmac (205) consisted of a loose light brown sandy gravel, possibly a levelling layer for the tarmac. Despite the large quantity of building materials seen in this trench, there was no evidence of any remaining walls, meaning that the demolition of previous buildings in the corner of the development site was complete.

- 4.2.5 **Trench 3** (Plate 3; Figure 4) was located just to the north west of trench 2 and was the second trench located in the north east corner of the development site in order to investigate a pub that is recorded on numerous historic maps.
- 4.2.6 The trench was aligned north west to south east and was 10m in length by 1.8m in width. The natural substrate (303) was a loose orange brown sandy gravel and was seen at a maximum depth of 1.4m below current ground level or (12.09m aOD). A modern water pipe (304) was encountered above this and was similar to the concrete and brick pipe seen in trench 1 and was running on the same alignment. The cut for this pipe, [307], was visible in the section, and was seen cutting through (302), a grey brown silty sand, which was in turn, sealed by a large demolition layer (301). The trench was sealed by a deposit of pinkish silt and cobbles (300) which was directly below the tarmac (306). Much like trench 2, there was no evidence for any remaining walls of the pub which was situated on the corner. No archaeological features were encountered in this trench.
- 4.2.7 **Trench 4** (Plate 4; Figure 5) was located towards the north western corner of the development site and was originally placed to investigate a wall seen on historic maps. However, when the mechanical excavation of the trench began, the saturated gravel collapsed, meaning it was impossible to open the trench. This was likely caused by the recent flooding of the area, and so the decision was made to move the trench. Trench 4, therefore, was located slightly to the south of the original plan, and rotated roughly 90° clockwise.
- 4.2.8 The trench was aligned north west to south east and was 10m in length by 1.8m in width. The natural substrate (413) was an orange brown clay with gravel inclusions and was seen at a maximum depth of 1.14m below current ground level or 12.50m

aOD. Trench 4 contained a number of post-medieval walls. Wall {410} was aligned north west to south east and ran along the north eastern edge of the trench (Figure 6). It was a redbrick wall with black, gritty, friable mortar. {407} appeared to be a conjoining wall, meeting {410} at 90° towards the south western end of the trench, and was exactly the same red brick makeup. Wall {409} was also perpendicular to {410} but was made of a single layer of large sandstone blocks, and was located near the north western end (Figure 9). It is possible that this is the base of an earlier wall which was truncated by {410}. {408} was a small square of sandstone blocks to the south west of {407}, similar in makeup to {409} but not linear (Figure 7). Again, it is possible that this is the remains of an earlier wall which was almost completely destroyed when {407} was built. These walls represent the only archaeological features found on site. Within the walls, a large deposit of dark grey silt (404) was sampled. A number of post-medieval sherds of pottery were found within. A very similar deposit (412) was found to the south east of {407} and {408}, which contained post-medieval finds and a small amount of bone, and again to the north west of {409}, which was designated (404). As the walls completely separated the silt, it was decided that different context numbers would be necessary. Wall {409} was sealed by a thin layer of bricks and mortar rubble (405), with (403) being a similar mortar layer sealing {407} and {408}. None of the walls observed had obvious cuts in the sections. Overlaying this was a dark grey brown sandy gravel with moderate brick inclusions (402). Sealing this was (401), a pinkish brown sandy gravel with moderate levels of pebble inclusions, which in turn was sealed by (400) a light brown sandy gravel.

4.2.9 **Trench** (Plate 5) was located close to the south western boundary of the development site and was placed to investigate a possible sterile area of the site.

4.2.10 The trench was aligned north east to south west and measured 5m in length by 1.8m in width. The natural substrate consisted of a loose mid-brown silty gravel with occasional pebbles, seen at a maximum depth of 0.9m or 13.03m aOD. This was sealed by the only deposit in this trench, (500), which was a loose grey brown sandy silt with frequent gravel and moderate building material inclusions. No archaeological features were encountered in this trench.

4.3 **Archaeological Finds and Environmental Sampling**

4.3.1 A mixture of post-medieval and modern artefacts were recovered throughout the site. The earliest material recovered consisted of a few sherds of medieval pot. However, these sherds were recovered from contexts which also contained later material, so it

is likely that these are residual fragments, mixed during the many phases of demolition and construction on the site. A single sample of soil was collected from context (404), but after initial inspection, it was decided not to process this sample because material of modern date was found within this context.

5. FINDS

5.1 Introduction

5.1.1 A total of 144 artefacts, weighing 3854g, were recovered during an archaeological evaluation on land at the former Thomas Graham site, Shaddongate, Carlisle; of these, 67 artefacts weighing 457g, came from stratified deposits.

5.1.2 All finds were dealt with according to the recommendations made by Watkinson & Neal (1998) and to the Chartered Institute for Archaeologists (CIfA) *Standard & Guidance for the collection, documentation, conservation and research of archaeological materials* (2014b). All artefacts have been boxed according to material type and conforming to the deposition guidelines recommended by Brown (2011), EAC (2014) and Tullie House, Carlisle.

5.1.3 The material archive has been assessed for its local, regional and national potential and further work has been recommended on the potential for the material archive to contribute to the relevant research frameworks.

5.1.4 The finds assessment was compiled by Sue Thompson. Quantification of finds by context is provided in Table 1.

Context	Trench	Material	Qty	Wgt (g)	Date	Comments
U/S	1	Cu Alloy	2	30	PM/ Modern	
U/S	1	Iron	2	10	PM/ Modern	Nails
U/S	1	Lead	2	62	PM/ Modern	Lead figure
U/S	1	Pot	1	179	Med	Base sherd
U/S	2	Cu Alloy	1	18	Modern	
U/S	2	Iron	10	311	PM	Corroded
U/S	2	Lead	1	295	?	
U/S	2	Pot	3	70	PM	1 sherd from Wetheriggs Pottery?
U/S	2	Pot	5	233	Med	Overfired. Glazed
U/S	2	Slag	4	511		
404	4	Bone	1	2	?	
404	4	Clay Pipe	4	8	PM	Stem fragments. 1 glazed
404	4	Glass	2	9	PM	Window Glass
404	4	Pot	21	133	PM	
404	4	Pot	4	14	Med	Body Sherds
404	4	Stone	2	75	PM	Slate roof tile fragments
407	4	Clay Pipe	2	5	PM	Stem fragments. 1 glazed
412	4	Bone	4	20	?	1 worked fragment?

412	4	Clay Pipe	2	1	PM	Stem fragments, glazed
412	4	Glass	2	5	PM	Window Glass
412	4	Pot	16	51	PM	
412	4	Pot	6	77	Med	2 handle sherds
412	4	Stone	1	57	PM	Slate roof tile
U/S	4	Clay Pipe	4	7	PM	Stem fragments
U/S	4	Cu Alloy	4	23	PM/ Modern	1 buckle, 1 thimble
U/S	4	Iron	24	1158	?	Highly corroded
U/S	4	Lead	1	15	?	Waste
U/S	4	Pot	6	67	PM	1 sherd spongeware
U/S	4	Pot	5	25	Med	2 rim sherds Red Gritty ware 1 glazed Partially Reduced Greyware
U/S		CBM	3	10,500	PM	3 Bricks
Total			142	13,971		

Table 1: Quantification of Bulk Finds by Context

5.2 Post-Medieval Ceramics

- 5.2.1 A total of 46 sherds of post-medieval pottery, weighing 321g, were recovered from four deposits, of which 2 are stratified (Table 1). The sherds are in good condition and display little evidence of abrasion.
- 5.2.2 Fabric types include Refined White Earthenware, Buckley-type coarse red earthenware, Transfer Print and Stoneware. Vessel types include plates, teacups, large bowls and storage jars.
- 5.2.3 Of note was the recovery of a blue glazed body sherd of a large jar or jug which may be from the Wetheriggs Pottery near Penrith, and is likely to date to the mid-20th Century (Blenkinship 1998).
- 5.2.4 A broad date of 19th to 20th century has been attributed to this assemblage, although the majority of the pottery likely dates to the 19th century.
- 5.2.5 No further analysis is necessary on this assemblage

5.3 Medieval Ceramics

- 5.3.1 Twenty one sherds of medieval pottery, weighing 528g, were recovered during the evaluation (Table 1). The sherds are in moderate to good condition.
- 5.3.2 Fabric types range include Red and Buff Gritty ware and Partially Reduced Grey ware, with the majority of sherds comprising Late Medieval Reduced Grey ware. The Partially Reduced Grey ware includes two handle fragments (412); one rod

handle and one strap. The Late Medieval Grey ware sherds include the base of a jar or jug, and five sherds of a large jug from Trench 2 which is heavily overfired. The medieval ceramics show very little post depositional wear, and are likely to be locally produced.

5.3.3 The Gritty wares and Partially Reduced fabrics date from between the 12th – 14th centuries, while the Late Medieval Grey ware in Carlisle has a broad date range of 14th – 17th centuries (Brooks 2000).

5.3.4 While the presence of medieval pottery is significant, all sherds were recovered from mixed deposits containing post medieval and modern finds, and is therefore of limited archaeological value. No further analysis is necessary on this assemblage.

5.4 Clay Tobacco Pipe

5.4.1 Twelve fragments of clay tobacco pipe, weighing 21g, were recovered from Trench 4 (Table 1). Three of the fragments are glazed. The fragments are in moderate condition.

5.4.2 The artefacts comprise undecorated stem fragments. It is possible to obtain rough dates for clay tobacco pipes using Binford’s Pipestem Chronology (Table 2; Kipfer 2008, 8). Measurements taken of the internal stem diameters of fragments recovered from deposits (404), (407) and (412) are around 2mm, giving a rough date of 1720 to 1750 AD.

Stem-Hole Ø (in/XX)	Conversion (mm) 1 inch = 25.4mm 1/64 (inch) = 0.4mm	Dates
9/64	9 x 0.4mm = 3.6	1590 – 1620
8/64	8 x 0.4mm = 3.2	1620 – 1650
7/64	7 x 0.4mm = 2.8	1650 – 1680
6/64	6 x 0.4mm = 2.4	1680 – 1720
5/64	5 x 0.4mm = 2	1720 – 1750
4/64	4 x 0.4mm = 1.6	1750 - 1800

Table 2: Binford’s Pipestem Chronology (Kipfer 2008, 8)

5.4.3 No further analysis is warranted on this assemblage.

5.5 Glass

5.5.1 Four shards of glass, weighing 14g, were recovered from two deposits in Trench 4 (Table 1). The shards are in good condition.

5.5.2 The fragments are clear window glass and are likely of 19th – 20th century date.

5.5.3 No further analysis is warranted.

5.6 Stone

5.6.1 Three fragments of slate roof tile were recovered from two deposits in Trench 4 (Table 1). One of the fragments, a green-gray slate has the remnants of the hole for a nail measuring 5mm, and may be local. The two remaining fragments are a dark gray and may be Welsh slate.

5.6.2 No further analysis is necessary.

5.7 Metal Artefacts

5.7.1 A total of 48 metal artefacts, weighing 1993g, were recovered from unstratified deposits. The majority of the metal artefacts were recovered with the use of a metal detector.

5.7.2 A total of 36 iron artefacts were recovered, all from unstratified deposits, weighing 1479g (Table 1). The assemblage consisted of nails, both machine and hand-made, a fragment of chain and flat bars. It is possible that some of the iron artefacts could date to Roman or medieval periods, however, most of the items are heavily corroded, and it is not therefore possible to specify dates, although it is likely that the majority is of 19th/ 20th century date.

5.7.3 Four lead items weighing 372g were collected from unstratified deposits. One on these artefacts from Trench 1 was a small figure of a WW1 soldier wearing a gas mask. Several toy companies manufactured these figures during the first half of the 20th Century, Britains being one of the most well-known.

5.7.4 A total of 7 Copper Alloy artefacts, weighing 71g, were recovered from unstratified deposits, including a buckle and a machine made thimble, both likely to date to the 19th century (Shopland 2005).

5.7.5 No further analysis is necessary on the metal assemblage.

5.8 CBM

5.8.1 Three bricks were collected as representative samples of the buildings on site. All were unstratified (Table 1). One of the bricks, measuring 23.5x11x8cm was frogged, and stamped with a makers mark of KINGMOOR. The Kingmoor brick and tileworks operated from 1896 - 1960's (carlislehistory.co.uk), although the right to dig clay for brickmaking had existed from at least 1860, when it was advertised in the Carlisle Journal (solwaypast.co.uk).

5.8.2 Another of the bricks is handmade, measuring 24x11x7cm, with no frog and is likely to date to the 18th or 19th century (solwaypast.co.uk). The remaining brick measures 21x10x6cm is a composite concrete block and likely 20th century.

5.8.3 No further work is necessary.

5.9 Slag material (Don O'Meara)

5.9.1 A small quantity of slag material was recovered from the site. This material was quite dense, but non-magnetic. Based on personal observations from near Harrington on the West Cumbrian coast this appears to be amorphous later post-medieval/modern slag material. No further work is recommended at this time.

5.10 Statement of Potential

5.10.1 This small assemblage spans the period from the 12th/ 13th to 20th centuries, with the majority of the finds dating to the 19th/20th century. It is of interest that there is a significant presence of medieval pottery indicating medieval activity on or very near the site, however, while the some of these remains are from stratified deposits, these also contained frequent post medieval artefacts. The assemblage is therefore, of local archaeological significance.

5.10.2 The medieval finds were retained with the archive, which will eventually be deposited at Tullie House Museum, Carlisle.

6. ENVIRONMENTAL ANALYSES

- 6.1 The only sample collected on site was two ten litre buckets full of context **(404)**. This was sampled because of the proximity of the soil to the walls discovered in trench 4. However, after an initial inspection, it was decided that this would not need to be further analysed because of the modern finds also seen within this context. A small quantity of bone was also recovered from context **(412)**. This consisted of a distal sheep humerus, a cattle tooth fragments and other unidentified fragments. As this material is likely to be modern in origin no further work is recommended at this time due to the small nature of the assemblage.

7. CONCLUSIONS

7.1 Interpretation

7.1.1 Archaeological remains were found in one trench, trench 4. The remains were extended across the entire trench and consisted of three walls with a small section of a possible fourth wall. The data recovered indicated past activity on the site dating to the post-medieval and modern periods, with a small amount of medieval pottery recovered. This activity was represented by the three walls in trench 4, as well as a number of artefacts recovered from four of the trenches, mostly dating from the post-medieval period. It is likely that the recorded data for the post-medieval period relates to the suburban settlement with associated domestic, agricultural, commercial and possible domestic industrial activity, documentarily recorded as present in the vicinity. Much of this development was round courtyards to the rear of properties flanking the street known as Shaddongate. The red brick walls that were uncovered in trench 4 may relate to courtyard buildings seen on a 1911 sales particular map, either the stables or the shed to the east of them (Figure 6).

7.1.2 The survival of the archaeological features and material was mediocre. Survival had been influenced by later phases of development, especially the demolition of all the previous buildings on the site. A large amount of demolition waste was seen on site and post-medieval artefactual material was recovered from most trenches.

7.2 Significance

7.2.1 The complete demolition of the majority of the walls which once stood on the development site, including those of a pub in the north east corner of the site, reduces the possible archaeological significance of the site. The recovery of some sherds of medieval pot indicates that there was earlier activity on the site, but this has likely been destroyed by later developments. Although of no immediate significance for the current development proposals, the medieval pottery is of potential significance for understanding and dating the development of Carlisle's suburbs as the earliest documentary evidence for settlement at Shaddongate is early 18th century. The medieval pottery assemblage recovered may suggest that Shaddongate, like nearby Caldewgate, originated as a settlement in the medieval period. The main area of surviving archaeological potential is the western area of the development site, where the remains of standing walls were uncovered. As these walls are all of late 19th/early 20th century date the archaeological significance of these remains is low.

8. BIBLIOGRAPHY

Professional Guidance

Brown, DH (2011), *Archaeological Archives: A Guide to Best Practice in Creation, Compilation, Transfer and Curation*, Archaeological Archives Forum

CIfA 2014a, *Standard and Guidance for Archaeological Evaluations*, Chartered Institute of Field Archaeologists: Reading

CIfA 2014b, *Standards and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials*. Reading: Institute for Archaeologists

English Heritage 2007, *Understanding the Archaeology of Landscapes: A Guide to good recording practice*, English Heritage: Swindon

English Heritage 1991 *Management of Archaeological Projects (MAP2)*, London: English Heritage

Europae Archaeologia Consilium (EAC) 2014, *A Standard and Guide to Best Practice for Archaeological Archiving in Europe*, EAC Guidelines 1: Belgium

NPPF 2012, *National Planning Policy Framework: Archaeology and Planning*. Department for Communities and Local Government

Published Books

Blenkinship, B. 1998, *Wetheriggs Pottery: A History and Collectors Guide* Spenser Publications

Brooks, C.M. 2000 'The Medieval Pottery' in *The Southern Lanes, Carlisle: Fascicule 3*, Oxford Archaeology North

Davidson, S. 2004, *Carlisle Breweries and Public Houses, 1894-1916*, P3 Publications: Carlisle.

Giecco, F. 2011, 'Life in Medieval Carlisle', in, M. Brennand and K.J. Stringer (eds), *The Making of Carlisle from Romans to Railways*, Cumberland and Westmorland Antiquarian and Archaeological Society extra series no XXXV and English Heritage, pages 121-136, Titus Wilson and Sons: Kendal

Kipfer, BA 2008, *The Archaeologist's Fieldwork Companion*, Oxford: Blackwell Publishing

Newman, C. 2011, 'The Industrial and Manufacturing City', in M. Brennand and K.J. Stringer (eds), *The Making of Carlisle from Romans to Railways*, Cumberland and Westmorland Antiquarian and Archaeological Society extra series no XXXV and English Heritage, pages 153-172, Titus Wilson and Sons: Kendal

Newman, R. 2011, *'The Origins of the Modern City'*, in, M. Brennan and K.J. Stringer (eds), *The Making of Carlisle from Romans to Railways*, Cumberland and Westmorland Antiquarian and Archaeological Society extra series no XXXV and English Heritage, pages 137-152, Titus Wilson and Sons: Kendal

Shopland, N. 2005, *Archaeological Finds: A Guide to Identification*. Tempus

Watkinson, DE & Neal, V 1998, *First Aid for Finds*, RESCUE: The British Archaeological Trust (London)

Articles

Harris, A. 1967, *'Denton Holme, Carlisle, Part II'*, in Transactions of the Cumberland and Westmoreland Antiquarian and Archaeological Society 67, p206-227

Grey Literature

Giecco, F. 2006, *'Report on an Archaeological Excavation at The Maltster's Arms, 17 John Street, Carlisle'* Unpublished Report, North Pennines Archaeology

Giecco, F. and Wooler, F. 2008, *'Archaeological Desk Based Assessment and Field Evaluation on Land Adjacent to Low Meadow, Belle Vue, Carlisle'*, unpublished report, North Pennines Archaeology

Noakes, H. and Strickland, J. 2008, *'Archaeological Desk Based Assessment and Field Evaluation at John Street, Carlisle, Cumbria'*, unpublished report, North Pennines Archaeology

WAA 2015, *Excavation Manual*. Unpublished internal document, Wardell Armstrong Archaeology

WAA 2015, *Proposed Farmfoods Store at the Thomas Graham and Sons site, Shaddongate, Carlisle: Written scheme of investigation*. Unpublished Report, Wardell Armstrong Archaeology

WAA 2015, *Former Thomas Graham and Sons, Shaddongate, Carlisle: Heritage Impact Assessment*. Unpublished Report, Wardell Armstrong Archaeology

WAA 2015, *Former Thomas Graham and Sons, Shaddongate, Carlisle: Measured Photographic Survey*. Unpublished Report, Wardell Armstrong Archaeology

Websites

BGS 2015, *Geology of Britain Viewer*,

<http://mapapps.bgs.ac.uk/geologyofbritain/home.html>, British Geological Survey, accessed

7th January 2016

PDFs and Ebooks

Jollie, F. 1811, *Jollie's Cumberland Guide and Directory*, F. Jollie and Sons: Carlisle (available online at

https://books.google.co.uk/books?id=YM0HAAAAQAAJ&pg=PR9&lpg=PR9&dq=William+Armstrong+shaddongate&source=bl&ots=ProxLu2TRu&sig=Nt-LjwSjv06X3VBsCdVKIRo2_gY&hl=en&sa=X&ved=0CDUQ6AEwA2oVChMlt7XZs7DdxwIVy7sUCh31BQVU#v=onepage&q=William%20Armstrong%20shaddongate&f=false)

www.carlislehistory.co.uk Accessed 11/01/2016

www.solwaypast.co.uk Accessed 11/01/2016

APPENDIX 1: TRENCH DESCRIPTIONS

Trench 1

Length: 15m Width: 1.8m Orientation: NW – SE
 Average Depth: 0.95m Maximum Depth: 1.3m

Context Number	Context Type	Description	Height/Depth	Discussion
100	'Topsoil'	Light orange brown sandy gravel below tarmac	0.10m	Relatively thin layer directly below the tarmac, possibly a levelling layer.
101	Deposit	Grey brown silt with high frequency of pebbles and gravel	0.05m	Initial layer of demolition waste, frequent brick seen throughout
102	Deposit	Moderately firm grey brown silty layer with frequent bricks	0.15m	More demolition waste, differs from (101) by a lack of pebbles/gravel.
103	Deposit	Similar to (101); loose grey brown silt with frequent pebbles and gravel	0.45m	Another layer of demolition waste. Likely the same material as (101) but was mixed with (102) during the demolition
104	Deposit	Light grey brown silty sand with frequent pebbles and fragments of brick	0.10m	Pebbles less frequent than (101) and (103). Still demolition waste.
105	Deposit	Mid-brown silty sand with occasional brick fragments	0.30m	Likely a layer with the natural and the demolition waste mixing together in wet conditions.
106	Natural	Loose orange brown sandy gravel with occasional larger pebbles	N/A	Natural substrate

Trench 2

Length: 10m Width: 1.8m Orientation: NE – SW
 Average Depth: 1.6m Maximum Depth: 1.8m

Context Number	Context Type	Description	Height/Depth	Discussion
200	'Topsoil'	Light orange brown sandy gravel below tarmac	0.20m	Layer directly below the tarmac, possibly a levelling layer.
201	Deposit	Grey brown silt with high frequency bricks	0.10m	Initial layer of demolition waste, possibly the remains of the last pub on the site
202	Deposit	Loose dark grey brown silt with a high frequency of	0.62m	The main layer of demolition waste

		brick and other demolition rubble		
203	Deposit	Similar to (202); loose grey brown silt with moderate amounts of brick	0.45m	Another layer of demolition waste. A slight dip in the section of this layer may indicate where the pub wall once stood
204	Natural	Compact orange brown clay with a large area of dark grey brown peaty material	N/A	Change in the natural observed may be because of the presence of a palaeochannel
205	Deposit	Tarmac	0.09m	

Trench 3

Length: 10m Width: 1.8m Orientation: NW – SE
 Average Depth: 1.1m Maximum Depth: 1.4m

Context Number	Context Type	Description	Height/Depth	Discussion
300	'Topsoil'	Loose, light orange brown sandy gravel below tarmac	0.27m	Layer directly below the tarmac, possibly a levelling layer.
301	Deposit	Grey brown silt with high frequency of pebbles and brick	0.73m	Initial layer of demolition waste, frequent brick seen throughout
302	Deposit	Loose light brown sandy layer with frequent cobbles and bricks	0.70m	More demolition waste seen more towards the NW of the trench
303	Natural	Loose orange brown sandy gravel	N/A	
304	Structure	Concrete covered pipe with red brick base	0.35m	Modern water pipe
305	Deposit	Light grey brown silt with moderate amounts of cobbles	0.42m	Layer overlying the modern pipe, likely backfill from when the pipe was built
306	Deposit	Tarmac	0.10m	
307	Cut	Trench for concrete sewer pipe 304	0.92m	
308	Deposit	Layer of brick rubble and mortar	0.06m	Demolition deposit

Trench 4

Length: 10m Width: 1.8m Orientation: NW – SE
 Average Depth: 1.0m Maximum Depth: 1.15m

Context Number	Context Type	Description	Height/Depth	Discussion
400	'Topsoil'	Loose light brown sandy gravel with occasional larger pebbles	0.12m	Very mixed layer, likely a layer of disturbance from the demolition of the warehouse.
401	Deposit	Pinkish brown moderately firm sandy gravel with occasional pebbles	0.16m	Modern layer, possibly a layer to level the land for the warehouse.
402	Deposit	Moderately firm dark grey sandy gravel with frequent bricks and other demolition waste	0.23m	Demolition waste.
403	Deposit	Moderately firm dark grey sand with possible ash and pieces of limestone mortar	0.13m	Thin layer of soil mixed with mortar. Covers wall {407} so may be the remains of the mortar in this wall
404	Deposit	Compact, dark brown clay silt with occasional pebbles.	0.42m	Layer within the three walls of {407}, {410} and {409}. Contained a number of pot sherds
405	Deposit	Compact layer of brick and mortar rubble with a soil matrix of grey silt	0.10m	Layer of demolition overlying wall {409}
406	Deposit	Compact orange clay	0.35m	Small concentration of clay seen on either side of wall {409}, possibly the backfill of the wall cut
407	Structure	Red brick wall with black, friable mortar near the SE end of the trench running SW-NE	0.4m	Post-medieval or modern wall, directly related to wall {410}. Truncates wall {408}
408	Structure	Small area of sandstone blocks one layer deep next to {407}	0.12m	Post-medieval wall base, truncated by later wall {407}
409	Structure	Sandstone wall running SW-NE towards the NW of the trench. White limestone mortar, single layer thick	0.36m	Likely a post-medieval wall base, similar in makeup to {408}. May have been truncated by {410}
410	Structure	Red brick wall with black friable mortar running NW-SE along the NE edge of the trench	0.52m	Post-medieval or modern wall, forms a corner with {407}.
411	Deposit	Compact, dark brown clay silt, similar to (404)	0.1m	Thin deposit under wall {407}
412	Deposit	Compact, dark brown clay silt, similar to (404)	0.32m	Similar deposit to (404) but on the SE of wall {407}
413	Natural	Moderately firm orange brown clay with gravel inclusions	N/A	

414	Deposit	Loose reddish brown gravel layer	1.00m	Modern gravel layer concentrated in the NW of the trench
416	Deposit	Moderately firm greyish sand	0.04m	Very thin layer of sand close to wall {409}

Trench 5

Length: 5m Width: 1.8m Orientation: NE – SW
 Average Depth: 1.0m Maximum Depth: 1.15m

Context Number	Context Type	Description	Height/Depth	Discussion
500	'Topsoil'	Loose grey brown sandy gravel with frequent cobbles and bricks	0.90m	Only layer in this trench
501	Natural	Loose brown silty gravel	N/A	

APPENDIX 2: PLATES

Plate 1; Trench 1 facing south east



Plate 2; Trench 2 facing north east



Plate 3; Trench 3 facing north west



Plate 4; Trench 4 facing north west



Plate 5; Trench 5 facing south west

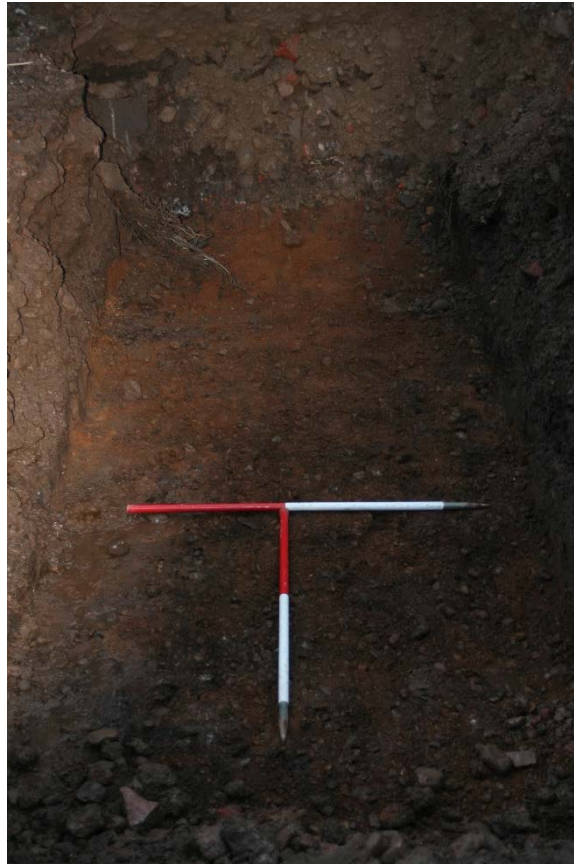


Plate 6; Trench 4, north facing, showing walls {407}, {409} and {410}



Plate 7; Trench 4, north east facing, walls {407} and {408} from above



Plate 8; Trench 4 NW elevation of wall {407}



Plate 9; Trench 4, south east elevation of wall {409}




Plate 10; Trench 4, north east facing, detail of wall {410}



Plate 11; Trench 4, south east elevation of walls {407} and {408}



APPENDIX 3: FIGURES

Wardell Armstrong
Archaeology
2016

PROJECT: The Former 'Thomas Graham and Sons',
Shaddongate, Carlisle, Cumbria

SCALE: 1:25,000 at A4

REPORT No: CP11552


CLIENT: Construction Property and Land Consultancy

DRAWN BY: AB


DATE: January 2016

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KEY:

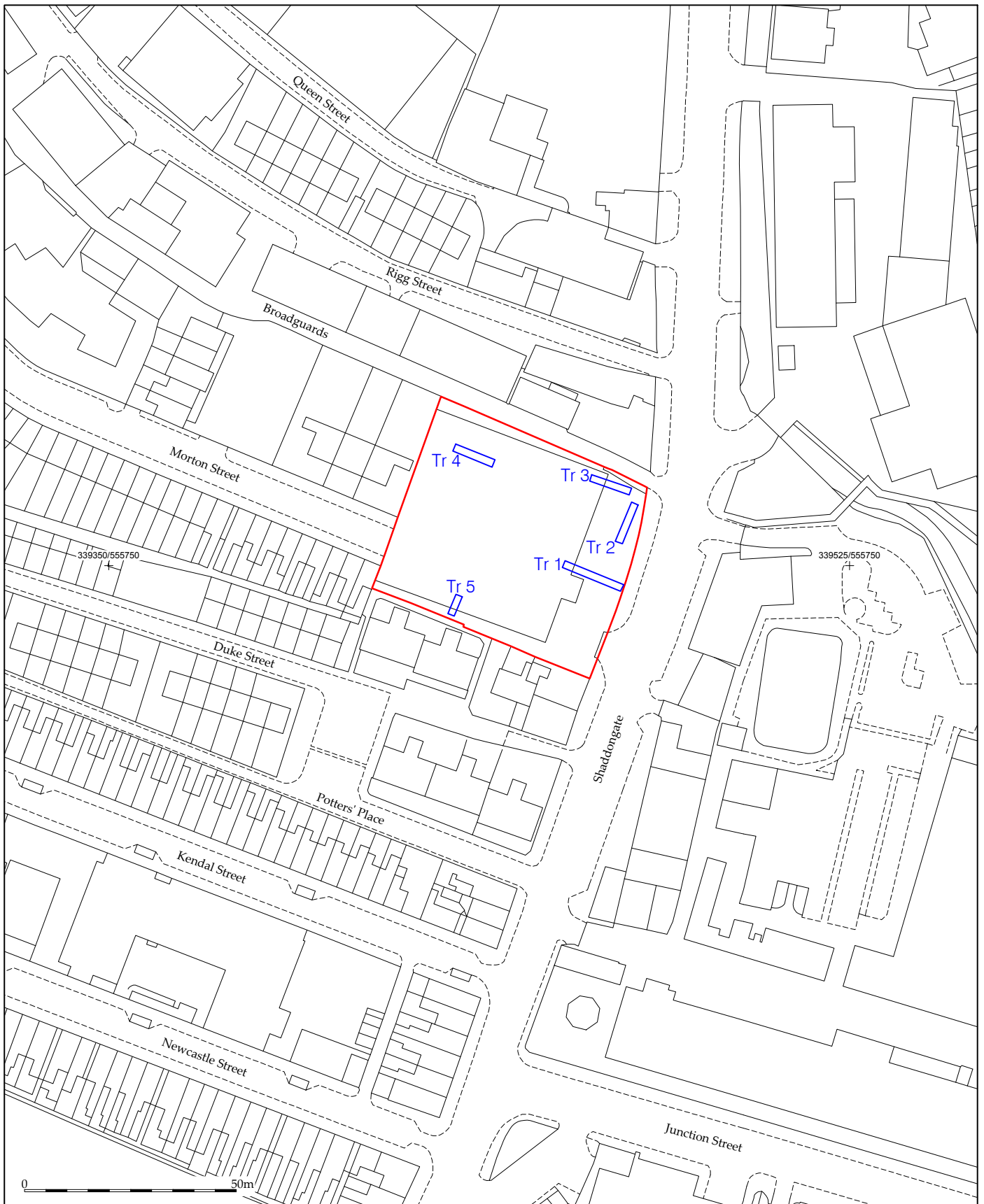


Site location



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Figure 1: Site location.



0 50m



Wardell Armstrong
Archaeology
2016

PROJECT: The Former 'Thomas Graham and Sons',
Shaddongate, Carlisle, Cumbria
SCALE: 1:1,250 at A4
REPORT No: CP11552
CLIENT: Construction Property and Land Consultancy
DRAWN BY: AB/HP
DATE: January 2016
FIGURE: 2

KEY:

-  Site location
-  Site location



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Figure 2: Detailed site location.

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Shaddongate, Carlisle,
Cumbria

CLIENT:





CPLC Associates Ltd

SCALE: Plan 1:50/Section 1:40 at A3

DRAWN BY: HP

DATE: January 2016

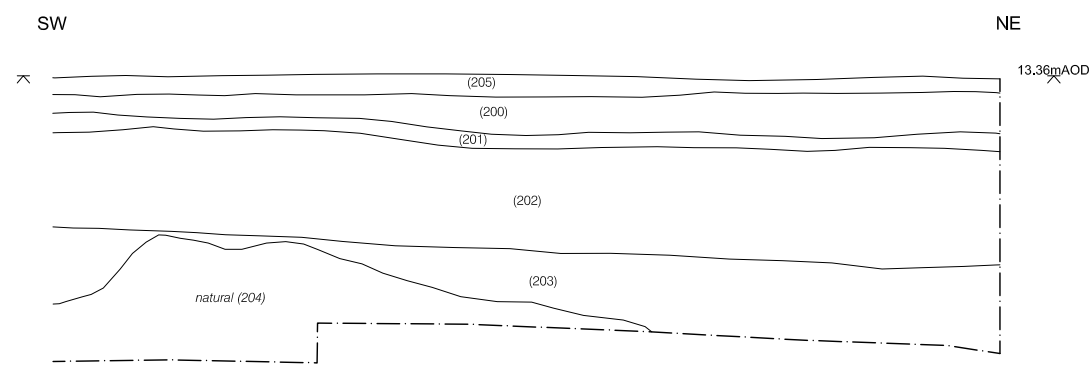
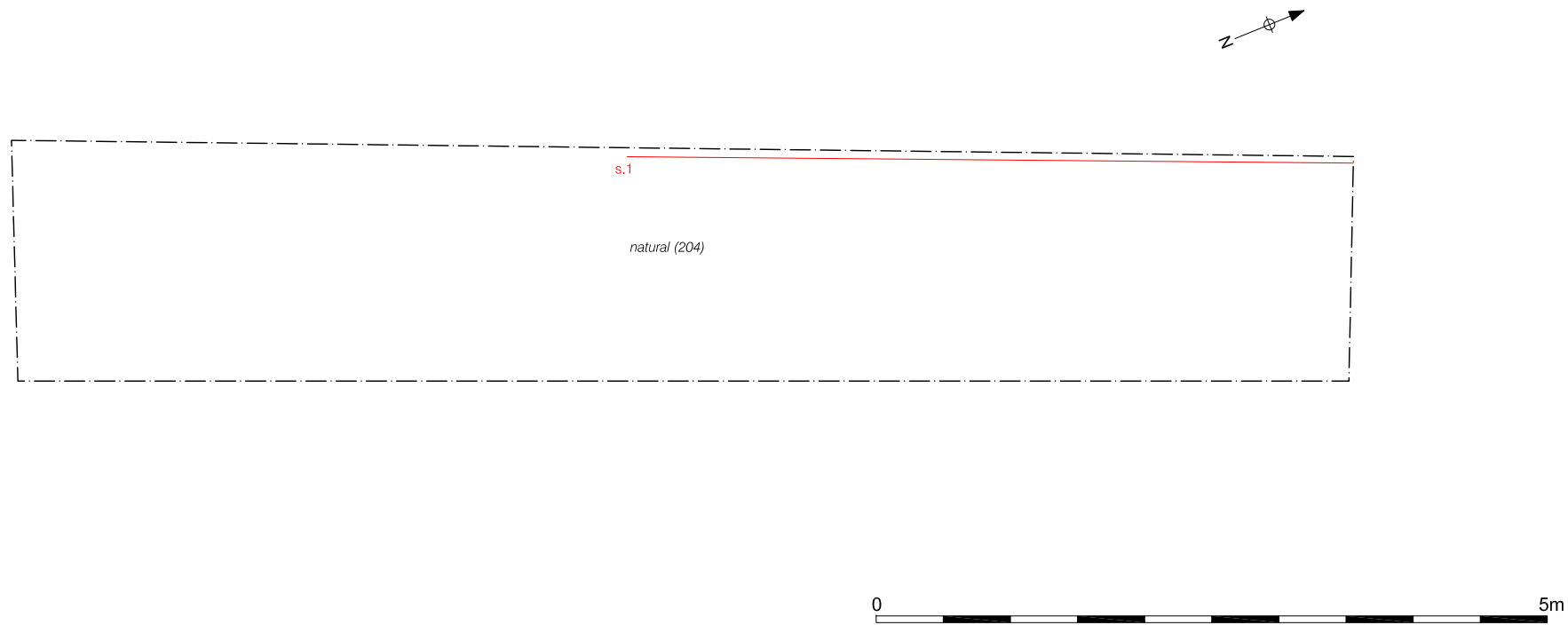
KEY:

	Context number
	Height mAOD
	Section location
	Limit of excavation

REPORT No:
CP11552

FIGURE:
3

Trench 2. Plan.



Section 1. South-east facing section across Trench 2.



Figure 3: Trench 2; plan and section.

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The Former 'Thomas Graham
and Sons',
Shaddongate, Carlisle,
Cumbria





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CPLC Associates Ltd

SCALE: Plan 1:50/Section 1:40 at A3

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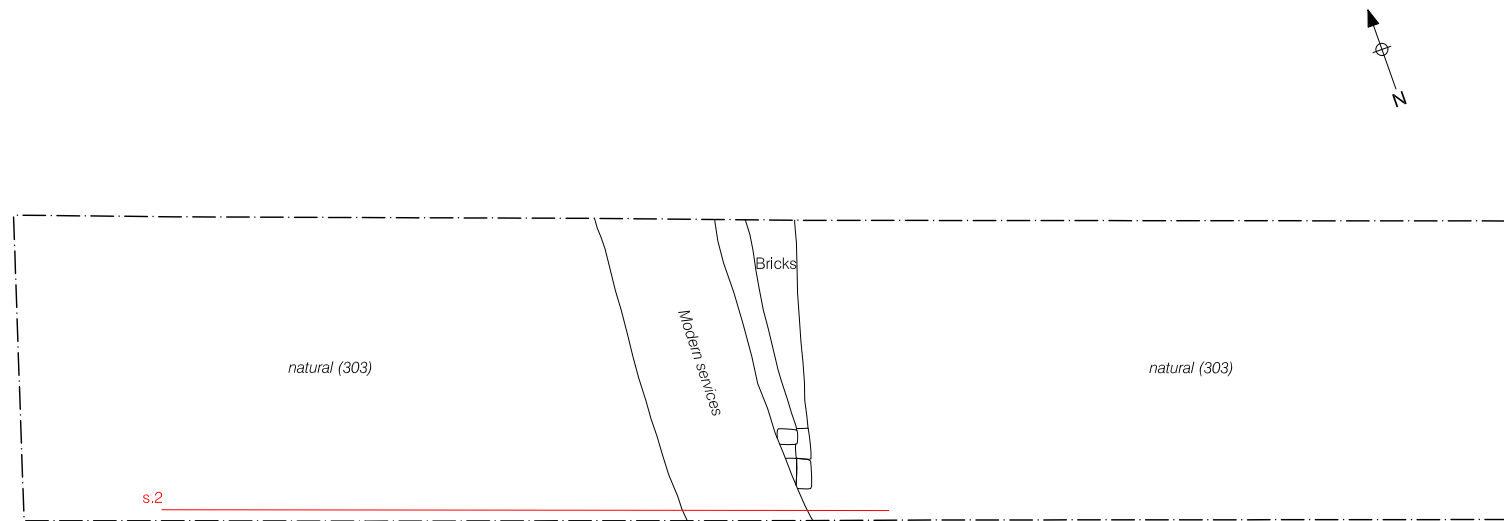
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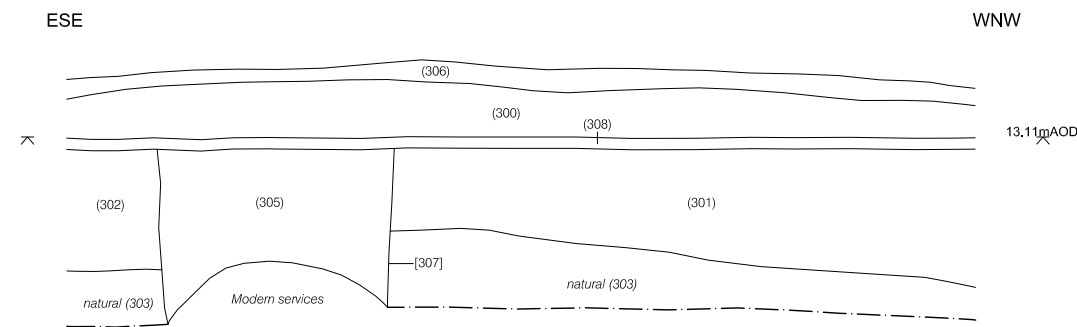
	Context number
	Height mAOD
	Section location
	Limit of excavation

REPORT No:
CP11552

FIGURE:
4



Trench 3. Plan.



Section 2. NNE facing section across Trench 3.



Figure 4: Trench 3; plan and section.

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Shaddongate, Carlisle,
Cumbria




CLIENT:
CPLC Associates Ltd

SCALE: Plan 1:50/Section 1:40 at A3

DRAWN BY: HP

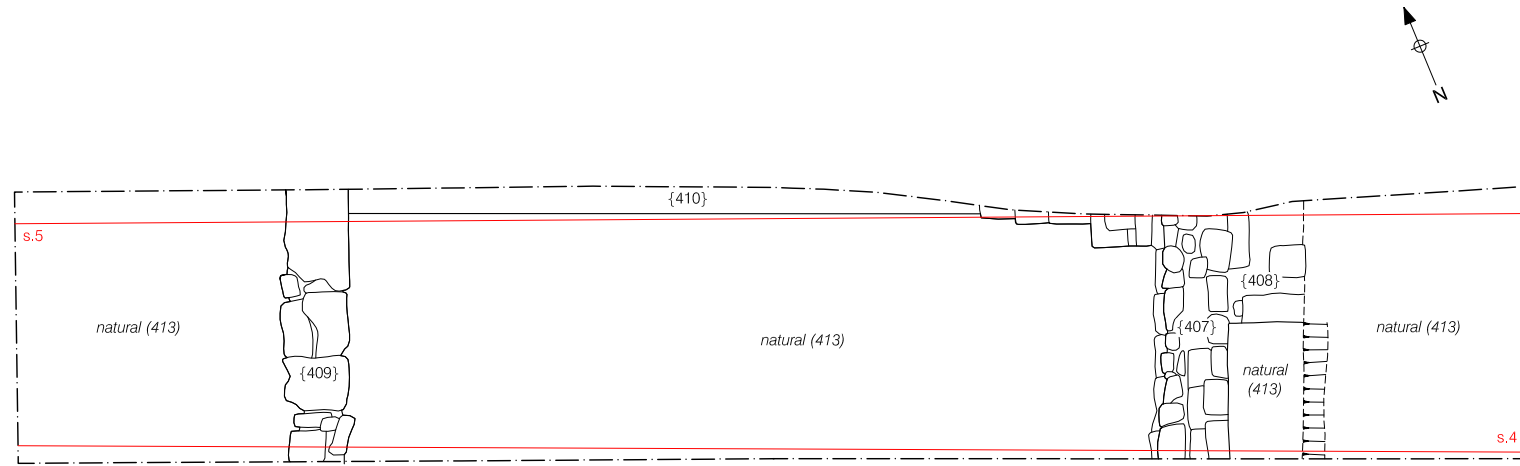
DATE: January 2016

KEY:

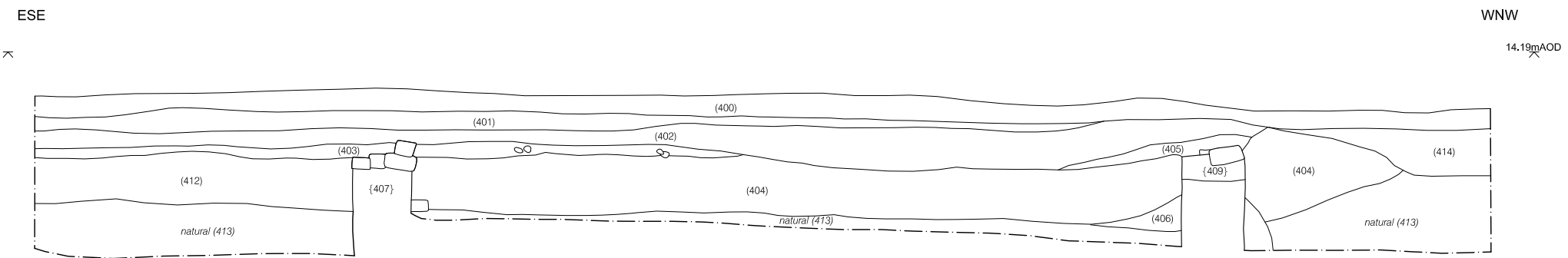
(101)	Context number
	Height mAOD
	Section location
	Limit of excavation

REPORT No:
CP11552

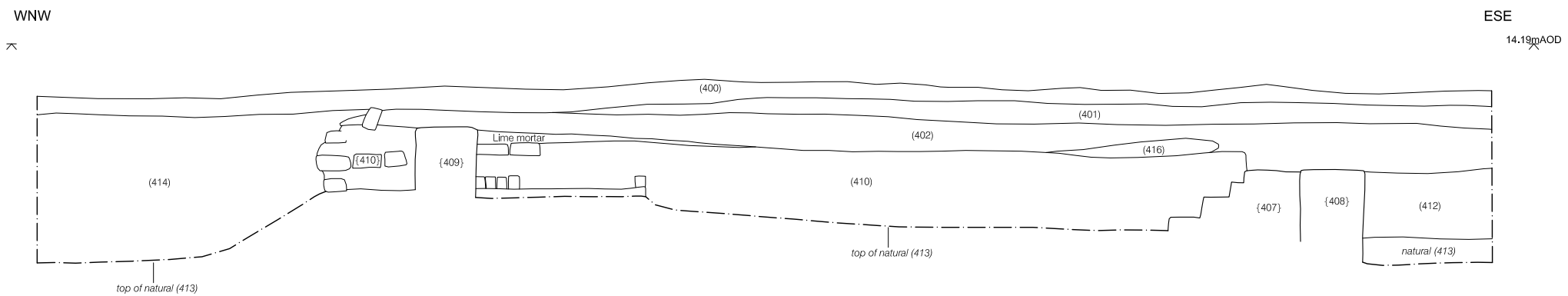
FIGURE:
5



Trench 4. Plan.



Section 4. NNE facing section across Trench 4.



Section 5. SSW facing section across Trench 4.



Figure 5: Trench 4; plan and sections.

PROJECT:

The Former 'Thomas Graham
and Sons', Shaddongate,
Carlisle, Cumbria

CLIENT:

CPL Associates Ltd

SCALE: 1:500 at A4

DRAWN BY: AB

DATE: January 2016

KEY:

 Site location



REPORT No:

CP11552

FIGURE:

6

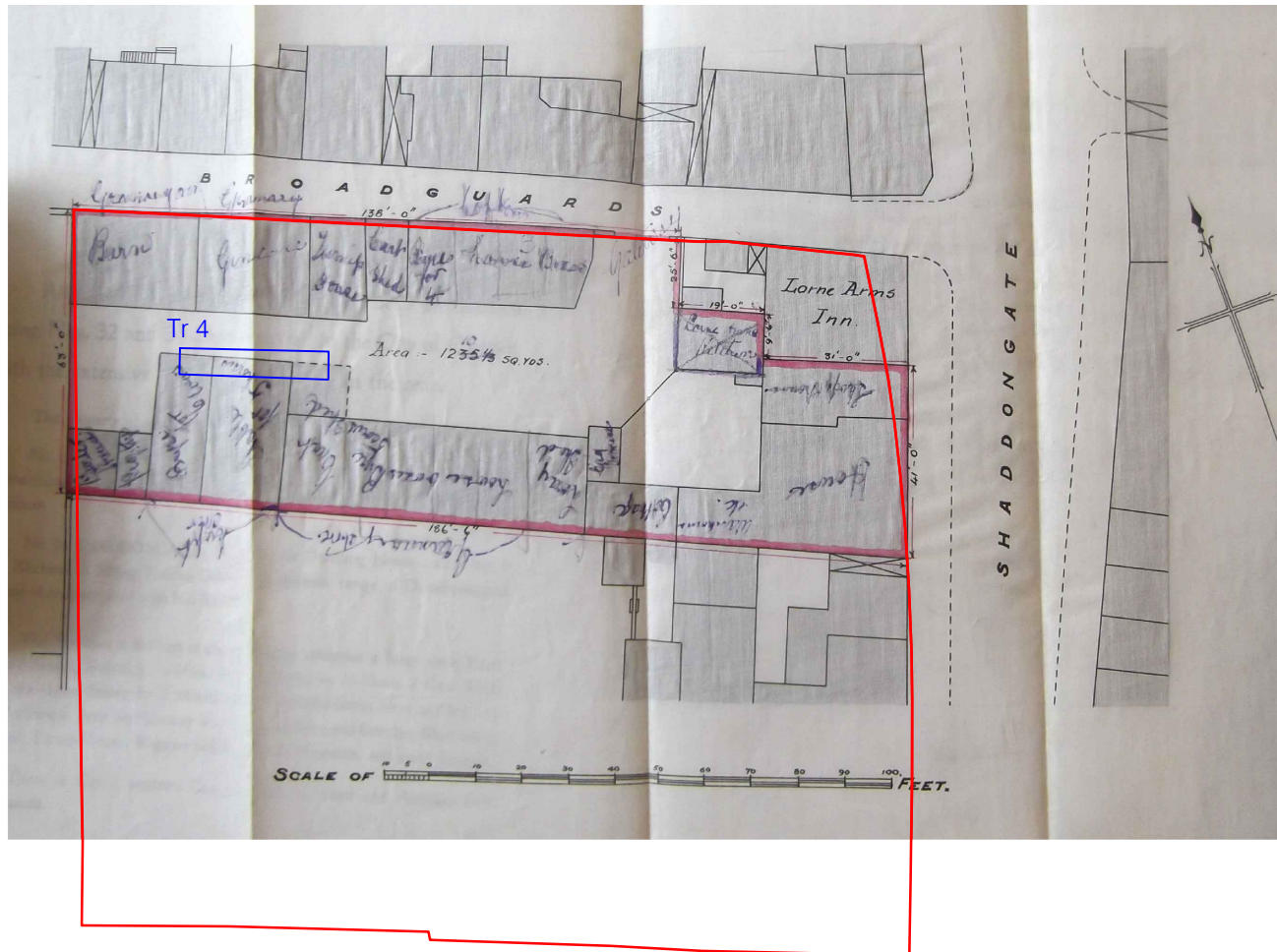


Figure 6: Sales Particulars, Nos. 32 and 34 Shaddongate, 1911.

STOKE-ON-TRENT
Sir Henry Doulton House
Forge Lane
Etruria
Stoke-on-Trent
ST1 5BD
Tel: +44 (0)845 111 7777

CARDIFF
22 Windsor Place
Cardiff
CF10 3BY
Tel: +44 (0)29 2072 9191

EDINBURGH
Suite 2/3, Great Michael House
14 Links Place
Edinburgh
EH6 7EZ
Tel: +44 (0)131 555 3311

GREATER MANCHESTER
2 The Avenue
Leigh
Greater Manchester
WN7 1ES
Tel: +44 (0)1942 260101

LONDON
Third Floor
46 Chancery Lane
London
WC2A 1JE
Tel: +44 (0)20 7242 3243

NEWCASTLE UPON TYNE
City Quadrant
11 Waterloo Square
Newcastle upon Tyne
NE1 4DP
Tel: +44 (0)191 232 0943

PENRYN
Tremough Innovation Centre
Tremough Campus
Penryn
Cornwall
TR10 9TA
Tel: +44 (0)1872 560738

SHEFFIELD
Unit 5
Newton Business Centre
Newton Chambers Road
Thorncliffe Park
Chapelton
Sheffield
S35 2PH
Tel: +44 (0)114 245 6244

TRURO
Wheal Jane
Baldhu
Truro
Cornwall
TR3 6EH
Tel: +44 (0)1872 560738

WEST BROMWICH
Thynne Court
Thynne Street
West Bromwich
West Midlands
B70 6PH
Tel: +44 (0)121 580 0909

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29/6 Satpaev Avenue
Rakhat Palace Hotel
Office Tower, 7th Floor
Almaty
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Kazakhstan
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Wardell Armstrong Archaeology:

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Carlisle
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