
NORTH PENNINES ARCHAEOLOGY LTD

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**REPORT ON AN
ARCHAEOLOGICAL FIELD
EVALUATION ON LAND
AT BENDALL'S
ENGINEERING
LONDON ROAD
CARLISLE
CUMBRIA**

**FOR
STAINSBY GRANGE
(CARLISLE) LTD**

NY 41323 54919

**PLANNING REFERENCE:
01/0201 & 04/0255**

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EXECUTIVE SUMMARY

In November 2004 North Pennines Archaeology Ltd undertook an archaeological field evaluation on land at Bendall's Engineering, London Road, Carlisle, Cumbria. The work followed a desk-based assessment into the archaeological potential of the site in advance of development (Planning Application Reference 01/0201 and 04/0255).

The work involved the excavation of a series of linear trial trenches in order to establish the presence or absence of archaeological remains within pre-defined areas of archaeological potential, highlighted by the desk-based assessment.

The development area falls within the Carlisle Archaeological Hazard Area, an area of high archaeological potential recorded on the County SMR. It is close to a Roman road and a number of significant archaeological remains have been found within this area. It is also part of the Medieval Socage lands of Carlisle, as it falls northwest of the River Petteril. Part of the late 18th century Mains Cotton Mill are also situated on the site, locally important within the context of Carlisle's cotton industry and the development of the town throughout the 19th century.

No archaeological structures or deposits earlier than the late 18th or 19th centuries could be observed within any of the evaluation trenches. It is therefore recommended that no further work take place within the area of the evaluation. It is likely that the site was situated within agricultural land which was developed in the late 18th and 19th centuries with the construction of the Mains Cotton Mill and subsequent Railway Goods Depot.

ACKNOWLEDGEMENTS

Thanks are due to the following people and institutions who gave help and assistance during the field evaluation: David Williams of Stainsby Grange Ltd, Norman Addison, MD Bendall's Engineering and Alan Ritchie of Bendall's Engineering. The evaluation was undertaken by Ken Denham, Joanne Beaty, Kevin Mounsey and David Reynolds, under the overall direction of Chris Jones BA, MA, AIFA, Project Archaeologist.

The report was written by Chris Jones and edited by Juliet Reeves BA. Overall responsibility for the project rested with Frank Giecco BA, Dip Arch, AIFA Principal Archaeologist.

1 INTRODUCTION

- 1.1 In November 2004 North Pennines Archaeology Ltd undertook an archaeological field evaluation on land at Bendall's Engineering, London Road, Carlisle, Cumbria. The work was requested in a brief prepared by Cumbria County Council Archaeology Service (Parsons 2004) in response to a planning application for a commercial development (Planning Application Ref. 1/04/0254 & 1/04/0255).
- 1.2 The scheme is located on the site of Bendall's Engineering, London Road, Carlisle (NY 41323 54919) and lies within Harraby Ward in Carlisle Parish. The study area comprises an area of land approximately 4ha (40000m²) in extent. The site also lies within the Carlisle Archaeological Hazard Area, an area of high archaeological potential recorded on the County Sites and Monuments Record (SMR). The area is shown in figure 1.
- 1.3 The purpose of the fieldwork was to evaluate the site in order to define the presence or absence of archaeological remains. The fieldwork was undertaken in a single phase of seven days duration. Archaeological deposits were excavated in plan and, where appropriate, in section, and were recorded in order to achieve an understanding of their nature, extent, depth and state of preservation. Any artefactual material was collected to facilitate the interpretation and date of the archaeological features and any paleo-environmental evidence appropriately sampled.

2 EXISTING CONDITIONS

2.1 Topography, Geology and Hydrology of the Study Area

- 2.1.1 The study area is situated on low-lying ground, which forms part of the Carlisle Plain approximately 30m AOD. It is located approximately 0.5km south of the Historic Centre of Carlisle within an area of mixed industrial and residential use, in the Harraby District.
- 2.1.2 The geology of the area consists of boulder clay interleaved with alluvial sand and gravels, which occurs along rivers and merges into marine alluvium near the upper limits of tidal waters. The boulder clay has been deposited by ice and is derived from bedrock traversed by glacial movement and is heterogeneous (SSEW 1984).
- 2.1.3 The principal river within the study area is the River Petteril, a tributary of the Eden, which borders the site to the south and east. The site is also crossed by a millrace, which has been diverted from the Petteril at Harraby Green, crosses the site and continues its course northwards beyond the study area. The River Petteril also forms the Parliamentary and Municipal Boundary and marked the extent of the medieval Sogage Manor of Carlisle.

2.2 The Archaeological Landscape

- 2.2.1 The scheme exists in an industrial urban landscape within the modern City of Carlisle. The development area is situated partly on the northeast slope of Gallows Hill, which is 43m AOD at its highest point, falling to a height of 23m AOD on the site of Bendall's Engineering Works.
- 2.2.2 Approximately 0.5km north of the study area lies the Historic City of Carlisle. The earliest documented settlement was the Roman town of *Luguvalium*, which extended from the site of the medieval castle, along West Walls and present day Lowther Street to the Victorian Citadel. Present day London Road (the A6) has been the principal road to London since Roman times, and it is along this road that the Roman cemetery extended. The precise extent of the Roman cemetery is not known, but Roman period burials have been found as far as Gallows Hill, on the opposite side of London Road from the development site.
- 2.2.3 Within the development site lay the late 18th century Mains Cotton Mill. This mill was one of the earliest factories in the region, with some of the buildings surviving as part of Bendall's Engineering. The development proposals would mean the demolition of the works including any surviving elements from the original factory.

3.3 Previous Work

- 3.3.1 The site has been the subject of a desk-based assessment (Jones 2004) which revealed the potential for surviving archaeological remains across part of the site. This resulted in the production of areas of archaeological potential across the site, which should be subject to field evaluation.
- 3.3.2 There have also been a number of assessments and interventions undertaken within the environs of the site.

3.4 19th Century Observations

- 3.4.1 In the later 19th century, a number of Roman burials were discovered on both sides of Botchergate, extending from Court Square to London Road and Gallows Hill. Over 40 burials were found at different times, including cremations and inhumations, together with miscellaneous discoveries of Roman pottery.
- 3.4.2 In 1895 an urn full of bones was found in Tait Street, and another is recorded opposite Tait Street (Charlesworth 1978, 125). At the Crown Inn, at the northern corner of Crown Street and Botchergate, Haverfield recorded the discovery of two small vessels, one containing a pipeclay figurine of Venus and burnt bone (*Ibid*, 126). As burials in Roman times were usually located outside the occupied areas, there is a clear case for regarding Botchergate as lying outside the core settlement of Carlisle.

3.5 Other Investigations

- 3.5.1 In 1985, a number of gas-pipe trenches below the western pavement of Botchergate were watched to determine whether archaeological remains could be identified. They revealed road metalling, thought at the time to belong to the Roman and medieval road, the projected line of which lies below Blackfriars Street and extends towards the Roman fort at Tullie House (CAU 1985).
- 3.5.2 In 1994 Carlisle Archaeological Unit undertook an evaluation in the Cecil Street car park, south of Tait Street, where remains of cremation burials were located, together with field boundaries defining fields that are probably Roman in date. Here the depth of archaeological deposits varied between approximately 0.6m and 1.45m below the modern ground surface (McCarthy and Flynn 1994).
- 3.5.3 During July and August 1997, Carlisle Archaeological Unit undertook a rescue excavation prior to the redevelopment of the former Co-Op building at 40-78 Botchergate, Carlisle, following on from a previous evaluation. As most of the frontage buildings were to be retained, the investigation focused on the area to the rear, adjacent to Collier Lane, which was to be cleared and built over. A complex sequence of Roman activity was revealed, including part of a substantial earthwork (Zant 1999; Zant and Giecco 1999)
- 3.5.4 In 1997 Lancaster University Archaeological Unit found traces of a small Roman settlement of uncertain function at St Nicholas Yard during an excavation. The work revealed two broad, shallow ditches, which appeared to be separated by a metallised surface. Traces of possible burials and other features were also located. The excavations also revealed putative medieval features including an oven and the remains of walls, possibly associated with the former 12th century leper hospital (Howard-Davis and Leah 1999).
- 3.5.5 A series of evaluations followed by large-scale excavations were carried out by Carlisle Archaeology during 1998 and 1999 between Tait Street and Mary Street on the eastern side of Botchergate. These revealed complex, deeply stratified Roman deposits including a sequence of buildings fronting Botchergate and a number of cremation burials (Zant and Giecco 1999; Giecco 2001a).
- 3.5.6 An evaluation was carried out in July 2000 by Carlisle Archaeology at King Street, revealing extensive archaeological deposits throughout the site, the vast majority of Roman date (Reeves 2000).
- 3.5.7 An excavation was undertaken on the north-eastern side of Botchergate by Lancaster University Archaeological Unit (LUAU, now Oxford Archaeology North). The work revealed extensive Roman and Medieval archaeological deposits which provided a complete stratigraphic sequence for the Roman and post-Roman periods. The features included two Roman cremations from the late 1st century AD, and a series of hearths from the early 2nd century AD, including a probable lead smelting furnace. These were overlain by later medieval deposits including evidence for structures along the street frontage (LUAU 2001).

- 3.5.8 In January-February 2003, North Pennines Heritage Trust undertook a field evaluation on the site of the corn mill, Harraby Green, Carlisle, which revealed the substantial below ground remains of the latest phase of the mill and also probable remains of medieval settlement, consisting of a clay and cobble foundation and a number of medieval pottery fragments in an area north of the post medieval and modern mill (Jones 2003).
- 3.5.9 In February 2004, North Pennines Archaeology Ltd undertook a field evaluation on land adjacent to St Nicholas Bridge, across the line of the Canal Branch of the London, Midland and Scottish Railway from London Road. The results of the evaluation included a series of stakeholes which were observed cut into the natural subsoil within trenches 1 and 2, one of which contained medieval pottery. A number of fragments of redeposited Roman and medieval pottery were found within a layer of buried ploughsoil. Deposits associated with the London and North Western Railway, which included a Wagon Repair and a Creosoting Shed, both of which survive on site, significantly truncated pre-1900 deposits (Jones 2004).

4 AIMS AND METHODOLOGY

4.1 The work undertaken consisted of a visual site inspection and field evaluation.

4.2 Visual Site Inspection

4.2.1 A visual site inspection was undertaken on the 16th September 2004 by Frank Giecco and Chris Jones. This was in order to note any surface features of potential archaeological interest and to identify any potential hazards to health and safety, such as the presence of live services or constraints to undertaking archaeological fieldwork, such as Tree Preservation orders and public footpaths.

4.3 Field Evaluation

4.3.1 The field evaluation consisted of the excavation of a series of linear trial trenches in order to produce a predictive model of surviving archaeological remains detailing zones of relevant importance against known development proposals.

4.3.2 In summary, the main objectives of the excavation were:

- to establish the presence/absence, nature, extent and state of preservation of archaeological remains and to record these were 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 paleoenvironmental material where it survives in order to understand site and landscape formation processes.

4.3.3 Each trench was mechanically excavated by a JCB 3CX excavator equipped with a toothless ditching bucket, under archaeological supervision, to the top of archaeological deposits, or the natural substrate, whichever was encountered first. Each trench was then manually cleaned and all features investigated and recorded according to the NPA standard procedure as set out in the company Excavation Manual.

4.3.4 Photography was undertaken using a Canon EOS 100 Single Lens Reflex (SLR) manual camera. A photographic record was made using 400 ISO colour print film.

4.3.5 All work was undertaken in accordance with the Institute of Field Archaeologists *Standards and Guidance for Archaeological Field Evaluations* (IFA 1994).

5 Historical Background

5.1 Place Name Evidence

- 5.1.1 The area was known as The Maines or Mains, which derives from the Medieval lordship or demesne lands (pronounced *domain*; Denis Perriam, pers comm.).

5.2 Prehistoric

- 5.2.1 There is extensive evidence for prehistoric activity within and around Carlisle, including the remains of ard marks from prehistoric ploughing at Blackfriars Street and Lowther Street. Neolithic and Bronze Age pottery was found at Scotby Road, including Grooved Ware and Beaker pottery, and a collared urn and burnt mound were excavated at Garlands Hospital (Perriam 1992, 3). Flints of Neolithic and Bronze Age date have also been found, and two socketed Late Bronze Age axes were found at Kings Meadow, Stanwix (SMR No. 525). It has been suggested that the promontory on which Carlisle Castle now stands has been a defended site since at least the Iron Age and possibly a pre-Roman *dun*.

5.3 Roman

- 5.3.1 By 73 AD the Romans had established a fort at the northern end of the present city centre, and this quickly expanded to become a substantial civilian settlement measuring over 40 acres in area. The withdrawal by the Romans from Scotland in the 80s, and later the building of Hadrian's Wall from AD 122, probably had a substantial impact on the settlement. By about AD 200 Carlisle, known as *Luguvalium*, seems to have been granted special status, and it continued to flourish, with a large number of houses, shops, administrative and other public buildings, until the end of the Roman occupation around AD 400.
- 5.3.2 Outside the core part of the Roman town of Carlisle, in the period between the Flavian period and the mid 2nd century, many forts were built, some of which were temporary camps, and others were more substantial. Some doubtless housed troops on active campaigns, whilst others probably provided accommodation for soldiers redeployed during the withdrawal from Scotland and in the context of an evolving frontier policy. In addition, there are many small farmsteads, whose economy would have been linked in some way to that of Carlisle and the needs of the military.
- 5.3.3 The corridor either side of London Road and Botchergate has long been known to contain Roman remains, with some 39 burials recovered during building works in the 19th century, and other remains recovered during systematic archaeological excavation during the 1990s (Carlisle Archaeology, Lancaster University Archaeological Unit). Little is known, however, regarding the extent of the Roman cemetery (and settlement) or the nature and extent of medieval settlement.

5.4 Medieval

- 5.3.1 Following the withdrawal of the Legions in the early part of the 5th century, Carlisle probably continued to be occupied, and it housed an important monastic community from the 7th century. The arrival of the Normans in 1092 heralded a period of major change, during which the city was enclosed by walls. Throughout the Middle Ages and up to the Jacobite rebellion in 1745, Carlisle was a major frontier city on the borders of England and Scotland.
- 5.3.2 From the Middle Ages until the late 18th century, Carlisle was more or less confined to the land within the city walls, apart from three ribbon-like suburbs outside the three city gates. From the end of the 18th century, with the rapid expansion of the town during the Industrial Revolution, the three suburbs grew very rapidly in size, with new housing, factories, roads, and industrial and commercial premises. These developments, together with the advent of the railways, expanded over what had previously been open countryside.
- 5.3.3 The development site lay outside the principal area of settlement during the medieval period, a territory that, outside the protection of the city walls, was subject to ravaging by frequent raids and invading retinues. It is likely the site consisted of agricultural land during the medieval period, and formed part of the medieval lordship or demesne of Carlisle.

5.5 Post Medieval

- 5.5.1 Following the union of the English and Scottish Crowns with the accession of James I to the English throne in 1603, a programme of pacification of the borderlands began. This saw a modernisation of tenureships of great benefit to northern landowners and a breakdown of the traditional forms of Border service (Spence 1984; 64). This process of modernisation led to the undertaking of two detailed surveys of the Socage or manorial lands of Carlisle, by Thomas Johnson in 1608 and Aaron Rathbone in 1611 (Ibid, 67). The site lay within an area of open land, known in 1611 as The Mains.
- 5.5.2 During the later 18th and the 19th centuries, the introduction of the factory system and increasingly complex technologies gave rise to a substantial population increase in urban areas throughout Britain. In Carlisle, the construction of factories and their attraction to migrant workers from the adjacent countryside saw a concomitant rise in the urban population and a need for new residential housing outside the traditional city centre. A prime area, immediately outside the historic core, was the area north and east of Botchergate. Rydal Street, or Union Street as it was called in 1824, lay close to the Union Workhouse, which constituted one of the poorest areas of the expanding city. The area was characterised by narrow streets and cramped, back-to-back terraced housing.
- 5.5.3 The original Mains Cotton Mill dates back to the late 18th century. Further to the south the Corn Mill at Harraby Green also used a mill race along the same river. There were also a number of mills, which used the millrace along the River Caldew, to the south and west of the city.

6 RESULTS

6.1 The evaluation was undertaken by a team of professional field archaeologists under the direction of Chris Jones BA, MA, AIFA, NPA Archaeologist. He was assisted by Ken Denham, Joanne Beaty, Kevin Mounsey and David Reynolds.

6.2 A total of five linear trial trenches were excavated, of various dimensions, providing a 5% sample of the a predefined area of archaeological potential (figure 2). The dimensions of the trenches were less than originally specified due to the presence of unmarked live services, identified during a preliminary CAT scan.

6.3 All references to cardinal directions refer to site grid north.

6.4 Trench 1

6.4.1 Trench 1 was located adjacent to London Road, between the boundary of Bendall's and the paved street, measured 10m x 1.60m and was oriented east-west. The natural substrate was observed at a depth of 0.40m and consisted of light brown sandy clay (101).

6.4.2 An 18th century cobble-filled field drain was observed at the west of the trench, which were in a north-south orientation. A small, sub circular pit was observed (112) cutting the natural substrate. This was filled by a mid-brown clay loam (113), no archaeological material was recovered from within this deposit, however, and it is likely the feature was a small tree or large shrub bole.

6.5 Trench 2

6.5.1 Trench 2 was located adjacent to London Road, measured approximately 4m x 1.60m and was oriented north-south. The natural substrate was observed at a depth of 0.75m and consisted of a light brown sandy clay (101). This was sealed by modern overburden (100). No archaeological features or deposits were observed within this trench.

6.6 Trench 3

6.6.1 Trench 3 was located within the area adjacent to London Road, immediately north of Trench 2, measured 4m x 1.60m and was oriented north-south. The natural substrate was observed at a depth of 0.75m and consisted of light brown sandy clay (101). This was sealed by modern overburden (100). No archaeological features or deposits were observed within this trench.

6.7 Trench 4

6.7.1 Trench 4 was located to the east of the development site, within the yard of the former Armstrong Building Supplies area, measured 20m x 1.60m and was oriented east-west. The natural substrate was observed at a depth of 0.40m and consisted of light brown gravelly sand (114). This was sealed by a layer of modern overburden (100). No archaeological features or deposits were observed within this trench.

6.8 Trench 5

- 6.8.1 Trench 5 was located at the north part of the development site, on high ground within Bendall's compound. The trench was 'L' shaped and measured approximately 30m x 1.60m. The natural substrate was observed at a depth of 0.90m and consisted of light brown sandy clay (101). This was sealed by a buried topsoil (102), which was in turn sealed by a layer of ash and clinker (105). Context 105 was sealed by a thin layer of modern overburden (100). No archaeological features or deposits were observed within the trench.

7 THE FINDS

- 7.1 The majority of the finds recovered all dated to the 19th and 20th centuries. The finds included fragments of 19th century porcelain and vitrified stoneware pottery, window glass and bottle glass, 18th and 19th century clay pipe fragments and unidentified iron fragments, all from within context 102, a buried topsoil sealed by a modern dump (100). The finds also included 1 musket ball, which could relate to the activities on or close to Harraby Hill during the 17th century Civil War. None of the finds came from secure contexts.

8 CONCLUSIONS

- 8.1 No significant archaeological features were identified in any of the evaluation trenches. No traces of any medieval, Roman or earlier activity could be identified.
- 8.2 It is likely that the site was situated within primarily agricultural land which was developed in the late 18th and 19th centuries by the Mains Cotton Factory and subsequent Railway Goods Depot

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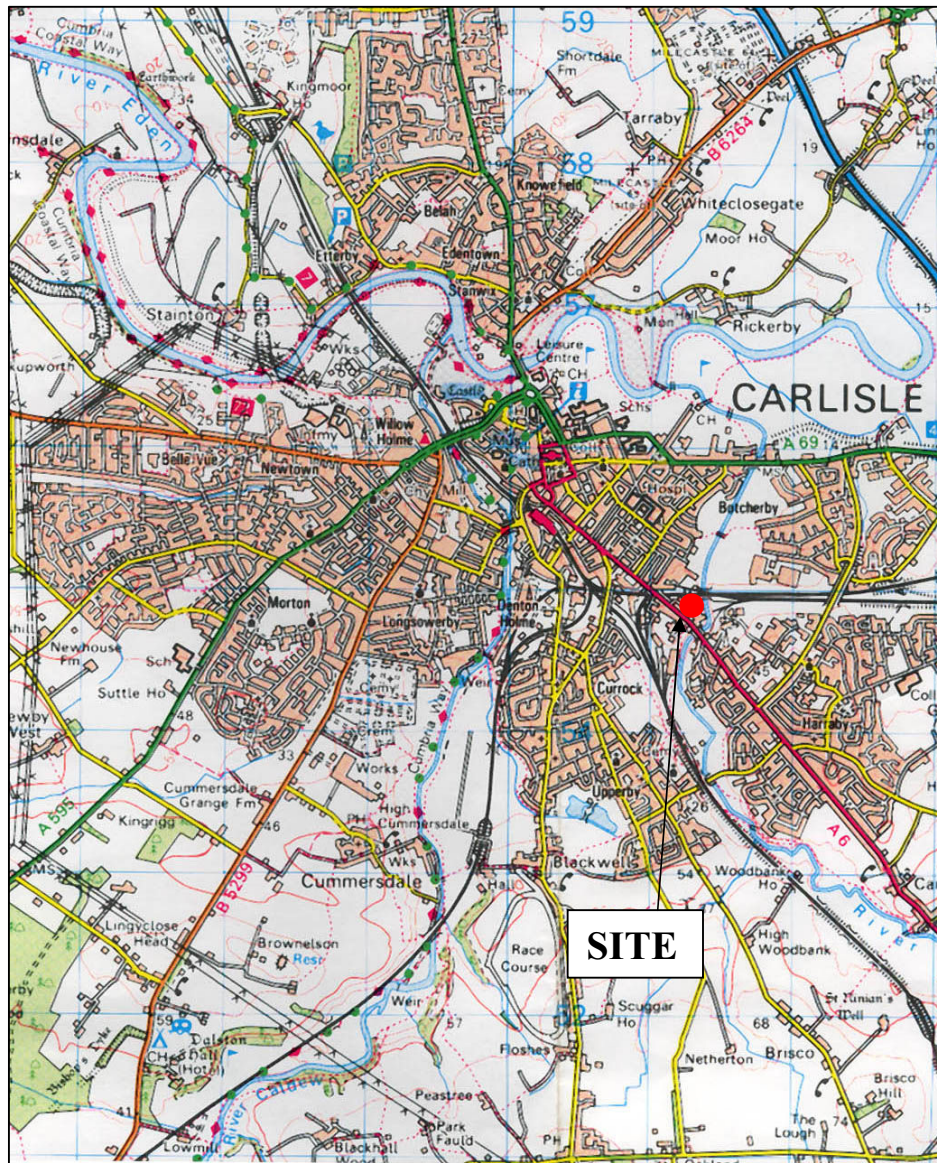


Figure 1: Site Location: Reproduced from Landranger® 1:50,000 scale by permission of Ordnance Survey® on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (1997) All rights reserved. Licence Number WL6488

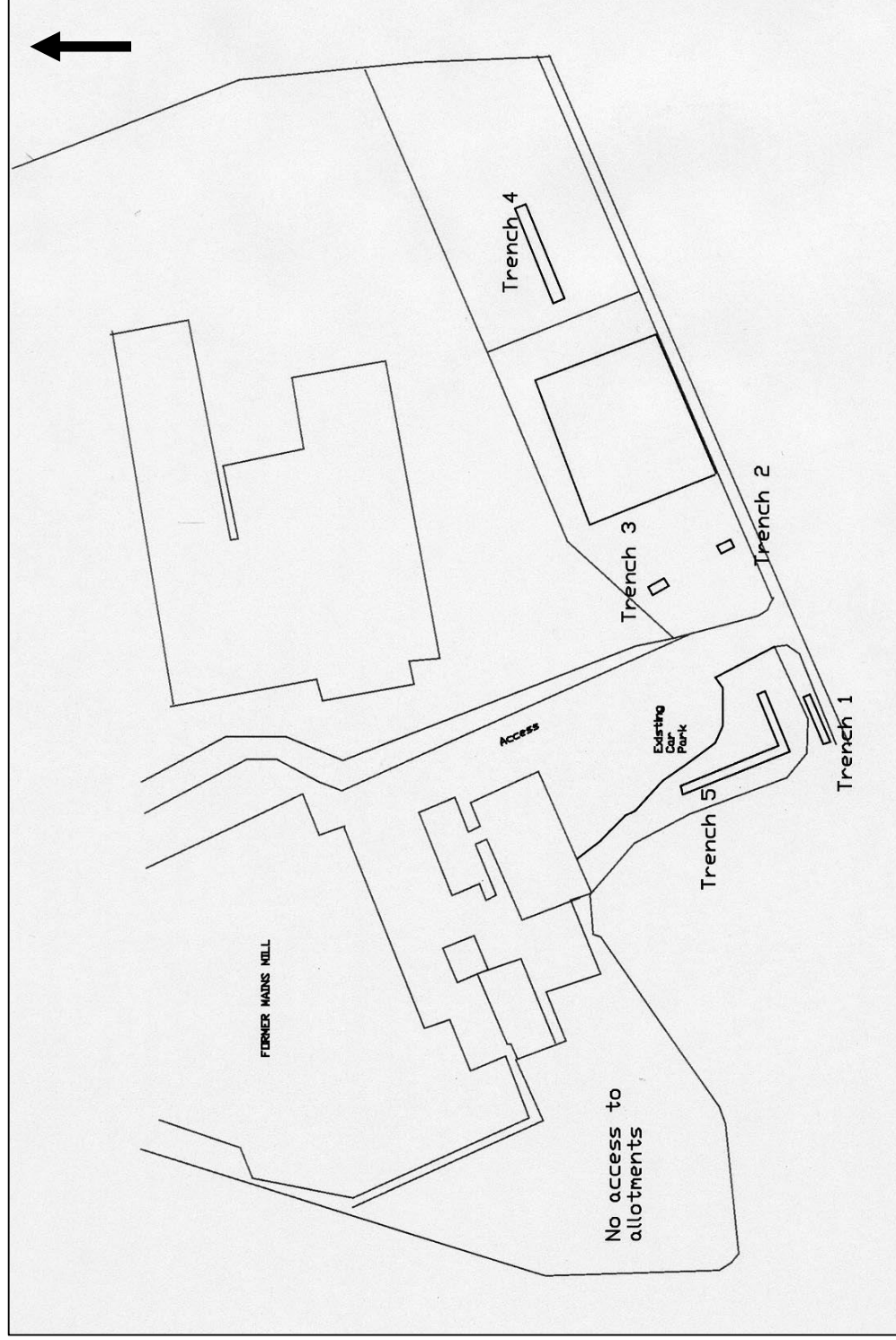


Figure 2: Trench Location Plan: Scale 1:1250