



Site Location: The study area is bounded by Vesta Street, Old Mill Street and a new

section of canal in the New Islington area of Ancoats, Manchester

NGR: Centred on NGR 385370 398310

Project: Vesta Street, New Islington, Ancoats, Manchester

Internal Ref: ELCA1063

Report No: SA/2017/37

Prepared for: Manchester Life Development Company

Document Type: Archaeological Evaluation Report

Version: Version 1

Author: Sarah Mottershead Position: Archaeologist Date: May 2017

Approved by: Ian Miller

Position: Assistant Director of Archaeology

Date: May 2017

Copyright: Copyright for this document remains with the Centre for Applied

Archaeology, University of Salford.

Contact: Salford Archaeology, Centre for Applied Archaeology, LG 19 – 26

Peel Building, University of Salford, the Crescent, Salford, M5 4WT.

Signed:

/ THIS

Telephone: 0161 295 4467 Email: i.f.miller@salford.ac.uk

Disclaimer:

This document has been prepared by the Centre for Applied Archaeology, University of Salford for the titled project or named part thereof and should not be used or relied upon for any other project without an independent check being undertaken to assess its suitability and the prior written consent and authority obtained from the Centre for Applied Archaeology. The University of Salford accepts no responsibility or liability for the consequences of this document being used for a purpose other than those for which it was commissioned. Other persons/parties using or relying on this document for other such purposes agrees, and will by such use or reliance be taken to confirm their agreement to indemnify the University of Salford for all loss or damage resulting therefrom. The University of Salford accepts no liability or responsibility for this document to any other party/persons than by whom it was commissioned.



Summary

In April 2017, Salford Archaeology was commissioned by the Manchester Life Development Company to undertake an archaeological evaluation of a parcel of land in the New Islington area of Ancoats, Manchester (centred on NGR 385370 398310). The evaluation was required to determine the presence, extent, depth, state of preservation and significance of the archaeological resource of the proposed development area to enable informed recommendations to be made regarding the future treatment of any surviving remains.

The archaeological interest in the site was highlighted in a desk-based assessment that was produced by Arup to support the planning application for the proposed development. This concluded that the site has high potential to contain buried remains of an iron foundry that was occupied in the mid-19th century by the eminent engineer William Fairbairn, together with a late 19th- or early 20th-century textile mill.

The archaeological evaluation comprised the excavation of a single trench, which was placed along the footprint of the mid- 19^{th} -century iron foundry, and part of the later textile mill. Whilst the evaluation revealed that north-western part of the site had been subject to considerable disturbance in the late 20^{th} century, with the resultant loss of all buried remains, significant structural elements of the former iron foundry and textile mill were revealed across the south-eastern part of the trench.

Following consultation with the Greater Manchester Archaeological Advisory Service, it is concluded that further archaeological investigation of the site is merited in advance of the groundworks required by the proposed development. This further investigation should comprise an open-area excavation, targeted on those elements of the mid-19th century iron foundry that survive *in-situ*, together with the steam-power plant for the later textile mill.



1. Introduction

1.1 Background

Manchester Life Development Company (MLDC) has proposed to redevelop of a parcel of land in the New Islington area of Ancoats, Manchester. The development proposals allow for the construction of 171 residential units and ancillary amenity space, including 168 apartments within a part nine-, part eight- and part seven-storey block and three townhouses, car-parking provision, hard and soft landscaping, access and servicing and other associated works. The site lies in the heart of New Islington (formerly the Cardroom Estate), which was identified in the late 1990s as one of English Partnerships (now the Homes & Communities Agency) 'Millennium Communities' that was to be delivered as a public/private partnership. A key component of this major regeneration scheme was the construction of a new section of canal that links the Rochdale Canal and the Ashton Canal, immediately to the north of the proposed development area (Plate 1).

Delivery of the development proposals will necessitate considerable earth-moving works, which will impact on any below-ground archaeological remains that survive *in-situ*. The potential for any such archaeological remains was highlighted in a desk-based assessment that was prepared to support the present development proposals. This concluded that the site has high potential to contain buried remains of an iron foundry that was occupied in the mid-19th century by the eminent engineer William Fairbairn, together with a late 19th- or early 20th-century textile mill (Arup 2017).



Plate 1: Recent aerial view across the proposed development site, showing the recently opened section of canal that provides a link between the Rochdale and Ashton canals



In order to establish whether any buried remains of the 19th-century iron foundry and the later textile mill survived *in-situ*, MLDC commissioned Salford Archaeology to undertake a scheme of evaluation trenching. The work was carried out in order to determine the presence, extent, depth, state of preservation and significance of the archaeological resource, enabling informed recommendations to be made for the future treatment of any surviving remains. The evaluation was undertaken during April 2017.

The evaluation was intended originally to comprise the excavation of two trenches. On site conditions, however, meant that only one of these trenches could be excavated (Figure 2). After completion of this trench it was agreed with Greater Manchester Archaeological Advisory Service the results of this single trench were enough to inform a planning response and that a second evaluation was not needed. It was agreed that an interim report could be produced for submission to GMAAS, and from this a planning response could be made informing the extent of any further investigation.

1.2 Location, Geology and Topography

The study area is situated within the New Islington area of Ancoats, which lies on the north-eastern side of Manchester city centre. The site is currently wasteland used as a temporary car park, bounded by Old Mill Street, Vesta Street and a new section of canal that links the Ashton-under-Lyne Canal and the Rochdale Canal (centred on NGR 385370~398310). The centre of the site lies at a height of c 49m above Ordnance Datum (aOD).

The solid geology comprises Carboniferous sedimentary material and a series of Permo-Triassic rocks, consisting mainly of New Red Sandstone. The overlying drift incorporates Pleistocene boulder clays of glacial origin, and sands, gravels, and clays of fluviatile/lacustrine origin (Hall *et al* 1995, 8).

Topographically, the Manchester Conurbation as a region is within an undulating lowland basin, which is bounded by the Pennine uplands to the east and to the north. The region as a whole comprises the Mersey river valley (Countryside Commission 1998, 125), although the topography of the study area reflects the shallow valley of Shooter's Brook, a rivulet that flows westwards from Newton Heath, through Ancoats and into the River Medlock (Ashworth 1987, 22). Shooter's Brook was culverted during the early 19th century, and the topography of the valley has since been masked considerably by urban expansion.



2. Historical Background

2.1 Introduction

A desk-based assessment was compiled by Arup in 2017 to support the planning application for the proposed development. The following section is drawn from this earlier study, and is intended to provide a contextual background to the results obtained from the evaluation trenching.

2.2 Development of Ancoats

The proposed development site is situated within the Ancoats area of Manchester. By the beginning of the 13th entury, the area was known as *Elnecot*, derived from the Old English *ana cots* which means '*lonely cottage*' (Cooper 2002, 13). A 14th-century document refers to Ancoats as one of eight hamlets within the township of Manchester, itself forming part of the Salford Hundred (Tait 1904). Ancoats retained a semi-rural aspect until the late 18th century, but by 1800 the area had been transformed into an effective industrial suburb (Miller and Wild 2007).

This transformation began in the 1770s, when land owned by the Leigh family was sold to Thomas Bound, a builder, who then sold it on to others for development (Little 2002, 31). William Green's *Map of Manchester and Salford*, surveyed between 1787 and 1794, shows the focus for initial development to have been at the corner of Great Ancoats Street and Oldham Road, and depicts the main elements of the existing street plan laid out on former fields of the area. Building speculation then drove further expansion, with plots of land within a grid-iron pattern of streets being sold for development. The principle driving force of development was the national demand for textiles, particularly cotton, and the introduction of steam-powered spinning mills (Williams and Farnie 1992, 3).

The earliest textile factories in the area included several water-powered mills erected along Shooter's Brook, to the south of Union (now Redhill) Street. There is some evidence to suggest, for instance, that New Islington Mill and Salvin's Factory originated in the late 1780s as water-powered textile mills situated on the bank of Shooter's Brook (Miller and Wild 2007). However, this was a small watercourse, and in seeking a solution to the inadequate power supplied to their waterwheels from the brook, some manufacturers experimented with steam power. Notably, John Kennedy is reputed to have first applied steam power to one of his spinning mules whilst renting space at Salvin's Factory in 1793 (Lee 1972, 9). The application of steam power to the factory-based textile industry essentially resulted in a massive expansion of Ancoats as an industrial district of Manchester.

Numerous trades ancillary to textile manufacturing were also established in Ancoats during the 19th century, including iron foundries and engineering works to serve the textile industry, together with large areas of workers' housing. The net result was the creation of the world's first true industrial suburb: an edge-of-town industrial estate with associated housing, community facilities (churches, pubs and charitable refuges) and related businesses.



2.3 Development of the Study Area

Whilst the proposed development site is shown as undeveloped on the Ordnance Survey map of 1850 (surveyed in 1848-9), Adshead's map of 1851 shows a foundry and engineering works occupied by William Fairbairn & Sons to have been erected across the northern part of the site (Plate 2). William Fairbairn was a hugely influential 19th-century engineer in Ancoats, who set up business initially with James Lillie '...having hired a miserable shed for about twelve shillings a week' (Pole 1877, 112). After completing a highly successful contract with the leading local cotton-spinning firm, A & G Murray, in 1817, Fairbairn supplied all of the line shafting to McConnel & Kennedy's Sedgwick Mill, on an improved design that he had devised. Shortly after completing this contract, Fairbairn moved to new premises on Canal Street in Ancoats, where his business expanded greatly to become one of the leading engineering concerns in the country (Musson 1960, v). Over the following years, Fairbairn expanded his business, and established additional premises in Ancoats, which included the foundry and engineering works within the present study area.



Plate 2: Extact from Adshead's map of 1851, showing the development area boundary

The southern part of the site appears to have been used throughout the 19th century for wharfage purposes, and is shown on the Ordnance Survey map of 1891 to have contained a U-shaped range of single-depth buildings that may have been used as stores. An entry in a trade directory for 1879 implies that these buildings were occupied by the Manchester Val de Travers Asphalte Paving Company Ltd, a company that was registered in February 1871 and supplied tarred limestone for road building and construction purposes. However, the company appears to have been short lived, as voluntary liquidation was applied for in 1884, and this part of the site was used subsequently as an eyelet factory and engineering works.



It is uncertain precisely when the iron foundry and engineering works in the northern part of the site was abandoned, although it is not listed in a trade directory for 1895. Nevertheless, the unlabelled buildings shown on the Ordnance Survey map of 1891 may have been part of the foundry. The largest of these comprised a rectangular block with a chimney abutting the external south-western corner. This building is shown on the next edition of Ordnance Survey mapping, published in 1908, to have been expanded with an extension to the south-eastern side, enveloping the chimney marked on the 1891 map. An entry in a trade directory for 1909 indicates that the building was known as York Mill and was occupied by E Tweedale & Sons, cotton waste dealers (Slater 1909, 611).

A view of the study area is captured in an aerial photograph taken in 1949 (Plate 3). This clearly shows the multi-storey building identified in documentary sources as York Mill, together with its attendant chimney. The majority of the buildings occupying the site were demolished piecemeal between the early 1970s and the mid-1990s.

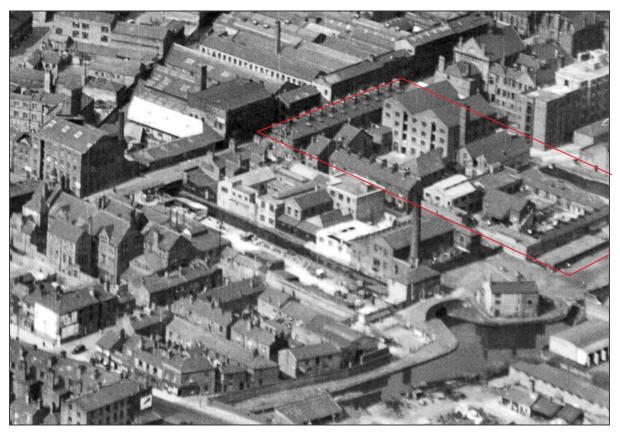


Plate 3: Aerial view across of the study area in 1949



3. Methodology

3.1 Excavation Methodology

Before excavation, the client provided Salford Archaeology with service plans for the area, and the position of the evaluation trench and surrounding areas were scanned with a cable avoidance tool to ensure that no live cables would be disturbed during the programme of works. A single trench was excavated using a tracked mechanical excavator with a 1.80m wide toothless ditching bucket down to the level of surviving archaeological features or natural geology. A breaker was used to initially remove areas of hard standing. The machine excavation was supervised by a professional archaeologist at all times. The locations of the trench are shown on the trench location plan (Figure 3).

The evaluation trench was placed across the study area in order to determine the presence, extent, depth and state of preservation of the remains identified by the archaeological assessment.

3.2 Recording Methodology

Separate contexts were recorded individually on Salford Archaeology *pro-forma* trench sheets. The trench was located and planned by total station theodolite using EDM tacheometry. Levels were established using an Ordnance Datum height taken from a station used for the client's initial topographic survey of the site area.

Photography of all relevant phases and features were undertaken in digital format using a digital SLR camera. General working photographs were taken during the archaeological works, to provide illustrative material covering the wider aspects of the archaeological work undertaken.

All fieldwork and recording of archaeological features, deposits and artefacts were carried out to acceptable archaeological standards. All archaeological works carried out by the CfAA are carried out to the standards set out in the Code of Conduct of the Chartered Institute for Archaeologists.



4. Evaluation Results

4.1 Introduction

The evaluation consisted of the excavation of a single trench, which measured 25.8 x 3m and was aligned north-west/south-east across the northern part of the study area (Figure 2). Trench 1 measured 25.8 x 3m and ran in a north west/south east direction (Plate 1, Figure 3). The trench was excavated to a maximum depth of 1.9m (Plate 4), at which point the natural geology, comprising clay 28, was observed.

Unless otherwise stated, all bricks mentioned in the text were hand-made and of varying sizes, although each roughly measured 230 x 110 x 70mm and were bonded with lime-based mortar. The trench was overlain by reinforced concrete 01 with a thickness of 0.25m, which had been lain over blue plastic sheeting. Below this was a layer of modern gravel levelling (02) of approximately 0.75m in depth.



Plate 4: General shot of the evaluation trench looking south



4.2 Trench Description

In the south-east half of the trench, below the modern gravel levelling 02 layer was a layer of concrete (06), which ran along the eastern edge of the trench for approximately half its length, with a maximum width of 1.15m and was approximately 0.1m thick. Set into this were three concrete pads with four steel bolts embedded in each (07). Concrete 06 possibly related to a garage that had occupied the site in the later 20^{th} century. Below this was a series of brick walls and surfaces, some of which displayed evidence of exposure to high-temperature process, and almost certainly related to the 19^{th} -century iron foundry (Plate 5).



Plate 5: Brick structures of mid-19th-century iron foundry, looking north-west

Extending from the south-western corner of the trench was brick wall 08, which incorporated machine-made bricks, many of which were crushed. Situated alongside wall 08 were the remains of another wall of machine-made bricks (09). This wall was six courses wide, with the component bricks each measuring 230 x 110 x 80mm and set in hard black cement, indicative of a late 19th- or early 20th-century construction date. Wall 09 extended across the trench from its western edge and beneath concrete surface 06, and is likely to represent an element of the later York Mill. Situated to the north of wall 09 was a wall (11) that was composed of hand-made bricks. This wall measured two brick-courses wide, and extended 1.2m from the western edge of the trench. The absence of any machine-made bricks in the fabric of wall 11 suggests that it may also have formed part of the mid-19th-century iron foundry. Between walls 09 and 11 was a possible flue (10), aligned east/west, which was only partially excavated and filled with an ash and rubble clay infill with two possible structural stones at the eastern side.



Situated to the north of wall 11 was a brick platform (12), which extended 1.2m from the western edge of the trench, and was 1.4m wide. The component bricks of platform 12 were blackened with soot, consistent with its use as part of the iron foundry. On the eastern side of wall 11 and platform 12 was a slightly lower brick surface (13) that was heat damaged. Set into this surface was a possible flue (14), which was 0.14m lower than surface 13 (Plate 6).



Plate 6: Flue 14 running alongside wall 11, looking south

Situated to the east of flue 14, extending from beneath concrete 06, was a wall (15) constructed of refractory bricks, each having average dimensions of 230 x 110 x 70mm. This wall was covered on three sides by concrete 06, so only a 2.64m length was visible in the excavated trench.

Another brick platform (16) was also revealed to the north of structure 12. This extended 1.05m from beneath the western edge of the trench, and was 1.1m wide. East of platform 16 and to the north of brick surface 13 was another brick surface (17), which extended west for 0.72m from beneath platform 16 up to wall 15 on its eastern side and measured 1.22m north/south. North of platform 16 and surface 17 was another brick surface (18), which extended 1.3m from the western edge of the trench to beneath concrete surface 06. Surface 18 measured 0.73m north/south.

A 0.5m brick channel or walkway (19) was exposed to the north of surface 18. This extended 1.6m from the western edge of the trench and continued beneath wall 27, a 0.69m stretch of firebricks mostly covered by concrete 06 (Plate 7).





Plate 7: Surfaces 18, 19, 20 and 21, looking west

North of channel 19 was another brick surface (20), which extended 1.32m from the western edge of the trench and was covered by concrete 06 to the east. Surface 20 was 0.64m wide. Abutting surface 20 to the north was two-course wide brick wall 21, which extended 1.3m from beneath the western edge of the trench.

Partially covering the northern edge of wall 20 was an area of early concrete mixed with crushed bricks (22), which extended 1.48m from the western edge and measured 2.05m north/south. Concrete 22 also mostly covered another brick wall (23), of which only a small part was visible.

Immediately north of wall 23 was a small area of tarmac (24), which extended 1.06m from the western edge of the trench and was 0.64m wide. Tarmac 24 also partially covered another brick wall (25), which extended 1.06m from the western edge of the trench and had a maximum visible width of two courses.

Beyond this, the site had been excavated down to natural clay 28 at a maximum depth of 1.9m during the late 20^{th} century, and had subsequently been backfilled with gravel levelling material. At the northern end of the trench was concrete drain 26 which was approximately 0.22m wide and extended 2.08m from the northern edge of the excavated trench and continued beneath the its eastern edge.

4.3 Finds

No artefacts or ecofacts were recovered during the course of the evaluation trenching.



5. Discussion and Recommendations

5.1 Discussion

The fabric of the earliest buried structural remains exposed in the evaluation trench are consistent with an early 19th-century construction date, and almost certainly pertain to elements of William Fairbairn's mid-19th-century foundry and engineering works, as captured on Adshead's map of 1851 (Figure 4). This works appears to have been altered but not entirely rebuilt by 1891, with a range demolished but the main core of the works remaining (Figure 5). Elements of the later York Mill were also identified, and it is likely that further buried remains will survive *in-situ* beyond the excavated evaluation trench.

The evaluation trench demonstrated that any buried archaeological remains in the north-eastern part of the site, and to the north-west of truncated wall 25, have been removed. This enables the potential for the survival of much of the works depicted on Adshead's map of 1851 to be determined (Figure 6), together and part of the later textile mill, including its power systems and ancillary structures to the south-west, shown on the 1891 Ordnance Survey mapping (Figure 7).

5.2 Recommendation

Due to the clear potential survival of remains, and following consultation with the Greater Manchester Archaeological Advisory Service in their capacity as Archaeological Advisors to Manchester City Council, it is recommended that a further stage of archaeological investigation is undertaken in advance of the groundwork required to deliver the proposed development. The extent of potential archaeological interest can be largely defined on the basis of the results obtained from the evaluation (Figure 8). The areas outside this boundary would not require any further investigation.



Acknowledgments

Salford Archaeology would like to thank the Manchester Life Development Company for commissioning the archaeological works, and to Richard Hattan of Mace Ltd and David Lakin of Arup for logistical support. Salford Archaeology would also like to thank Norman Redhead for providing monitoring support and advice through GMAAS.

The on-site excavations were conducted by Graham Mottershead, assisted by Sarah Mottershead and Oliver Cook. This report was compiled and illustrated by Sarah Mottershead. The report was edited by Ian Miller, who was also responsible for project management.



Sources

Cartographic

Plan of the Townships of Manchester, Adshead, 1851

Ordnance Survey First Edition 60":1 mile, surveyed 1848, published 1850

Ordnance Survey First Edition 25":1 mile, Lancashire, surveyed 1888-9, published 1890

Ordnance Survey 25":1 mile, Lancashire, published 1908

Ordnance Survey 25":1 mile, Lancashire, revised 1915, published 1922

Ordnance Survey 1:1250, published 1951-2

Secondary Sources

Ashworth, G, 1987 The Lost Rivers of Manchester, Altrincham

Brennand, M, (ed), 2007 Research and Archaeology in North West England. An Archaeological Research Framework for North West England: Volume 2. Research Agenda and Strategy, CBA North West, 9 (19), Manchester

Countryside Commission, 1998 Countryside Character, Volume 2: North West, Cheltenham

English Heritage, 2006 Management of Research Projects in the Historic Environment, London

Hall, D, Wells, CE, and Huckerby, E, 1995 *The Wetlands of Greater Manchester*, Lancaster Imprints 3, Lancaster

Kidd, A, 1993 Manchester, Manchester

Lee, CH, 1972 A Cotton Enterprise, 1795 - 1840, Manchester

McNeil, R, and Newman, R, 2007 The Industrial and Modern Period Research Agenda, in M Brennand (ed) *The Archaeology of North West England: An Archaeological Research Framework for North West England: Volume 2*, CBA North West, **9** (19), Manchester, 133-58

Musson, AE, 1960 An Early Engineering Firm: Peel, Williams & Co of Manchester, *Business Hist*, **3** (1), 8-18

Pole, WM (ed), 1877 *The Life of Sir William Fairbairn, Bart, Partly Written by Himself,* Newton Abbot (1970 facsimile)

Tupling, GH, 1962 Medieval and Early Modern Manchester, in CF Carter (ed) *Manchester* and its Region: A Survey Prepared for The British Association, Manchester 115-130



Appendix 1: Figures

Figure 1:	Site location
Figure 2:	Trench location
Figure 3:	Plan of the excavated evaluation trench
Figure 4:	The excavated remains superimposed on Adshead's map of 1851
Figure 5:	The excavated remains superimposed on the Ordnance Survey map of 1891
Figure 6:	Extent of archaeological potential superimposed on Adshead's map of 1851
Figure 7:	Extent of archaeological potential superimposed on the Ordnance Survey map of 1891
Figure 8:	Area of proposed further excavation superimposed on modern mapping





Figure 1: Site location



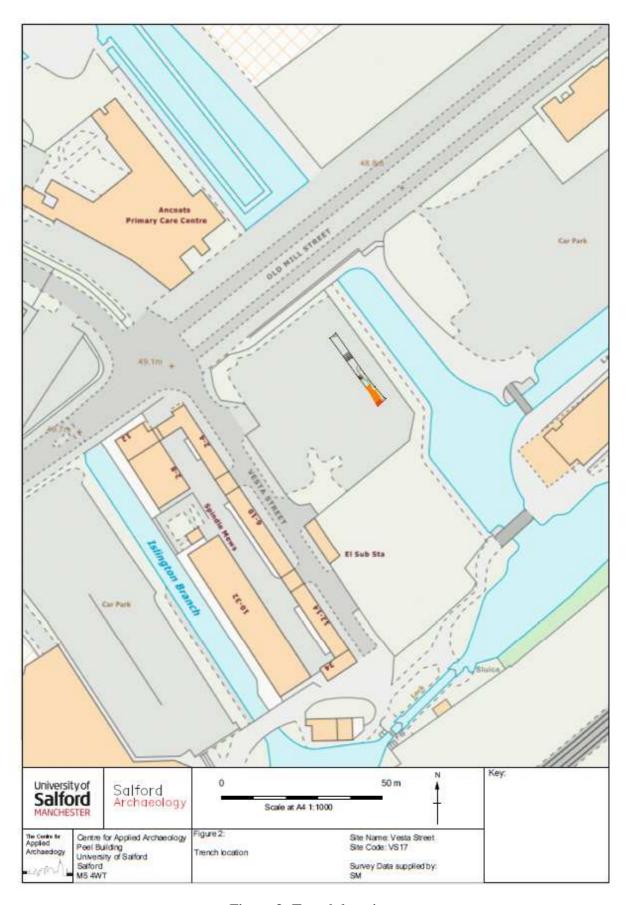


Figure 2: Trench location



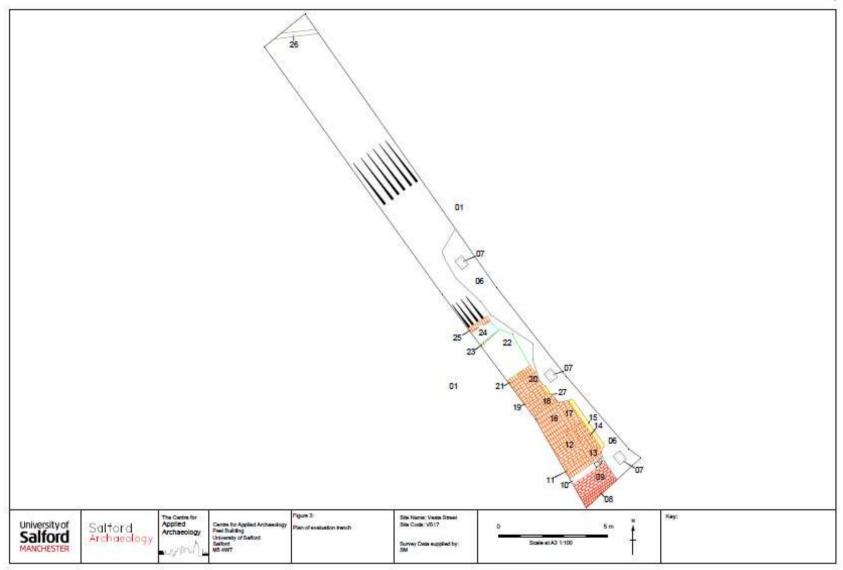


Figure 3: Plan of the excavated evaluation trench



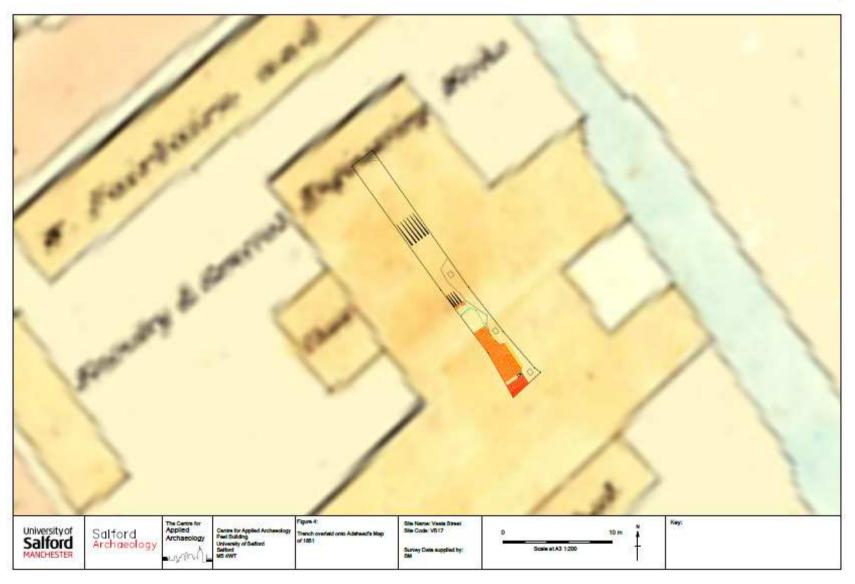


Figure 4: The excavated remains superimposed on Adshead's map of 1851



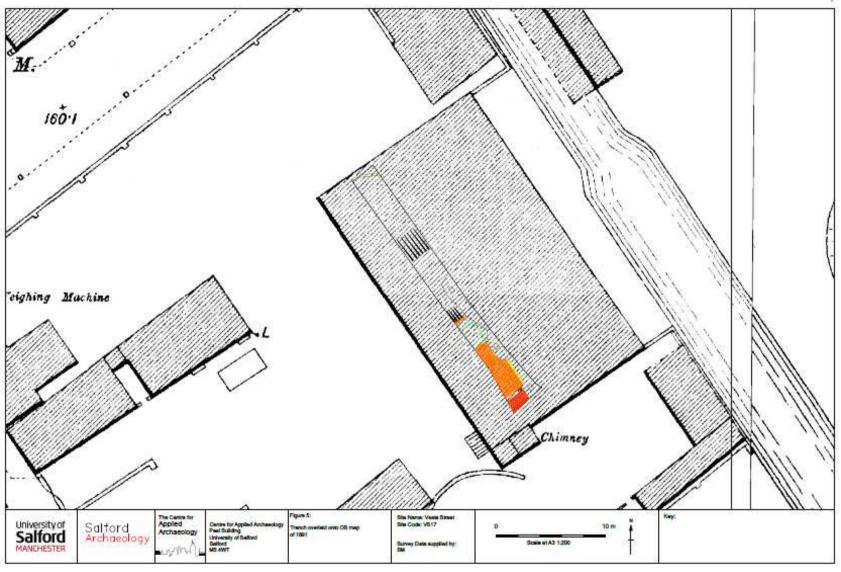


Figure 5: The excavated remains superimposed on the Ordnance Survey map of 1891



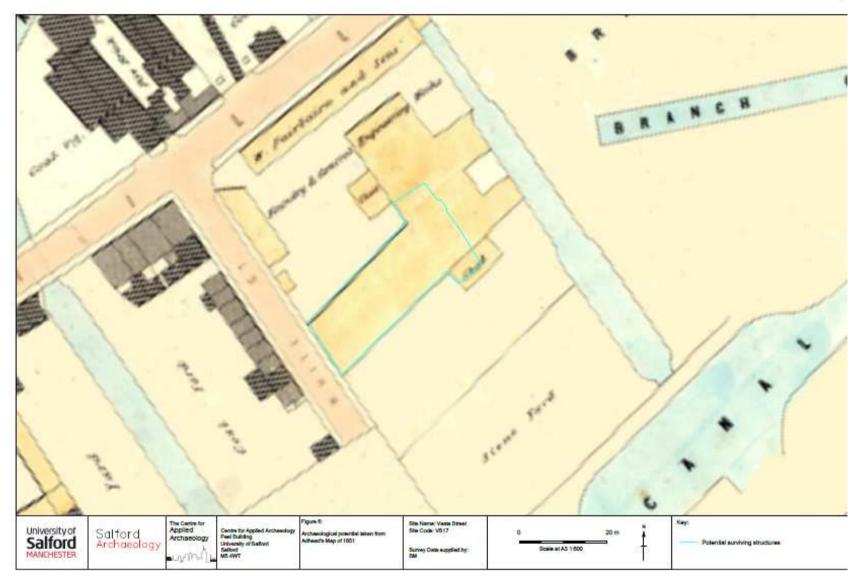


Figure 6: Extent of archaeological potential superimposed on Adshead's map of 1851



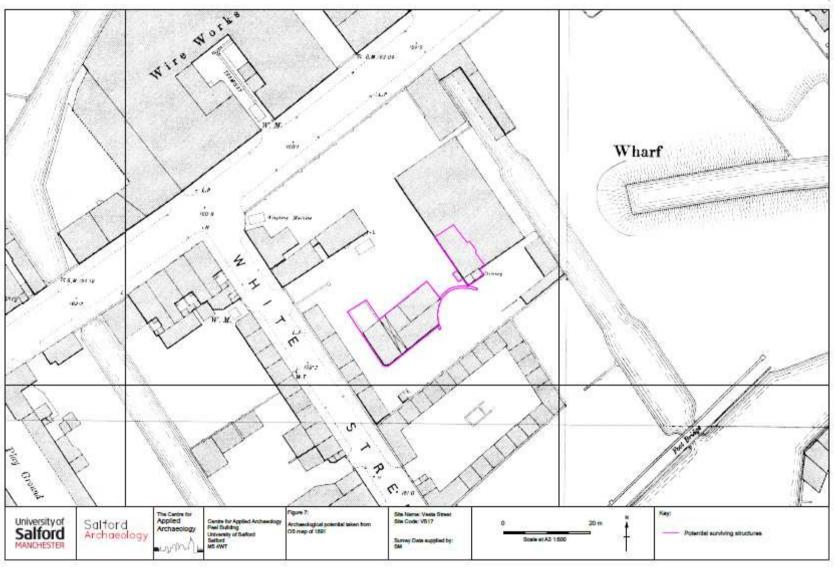


Figure 7: Extent of archaeological potential superimposed on the Ordnance Survey map of 1891



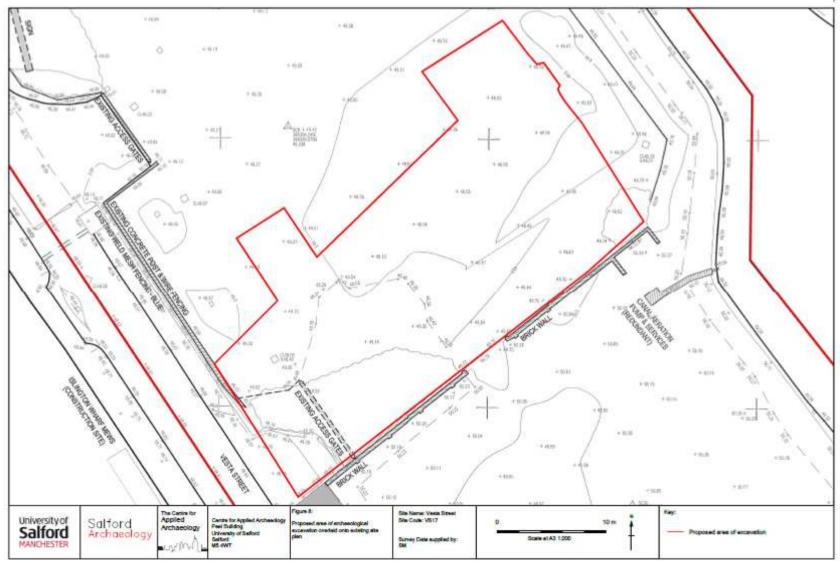
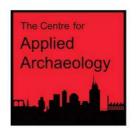


Figure 8: Area of proposed further excavation superimposed on modern mapping







CONSULTANCY



DESK BASED ASSESMENTS



WATCHING BRIEF & EVALUATION



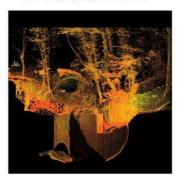
EXCAVATION



BUILDING SURVEY



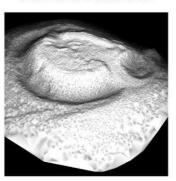
3D LASER SCANNING



COMMUNITY INVOLVEMENT



LANDSCAPE SURVEYS



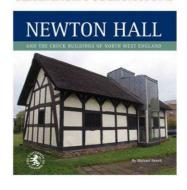
GEOPHYSICAL SURVEYS



WORKSHOPS & VOCATIONAL TRAINING



RESEARCH PUBLICATIONS



SEMINARS, DAYSCHOOLS CPD EVENTS

