



Northamptonshire Archaeology

Archaeological evaluation (Phase 1) at Bury Ground, Bury, Greater Manchester



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QUALITY CONTROL

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OASIS REPORT FORM

PROJECT DETAILS		
Project name	Archaeological evaluation (Phase 1) at Bury Ground, Bury, Greater Manchester	
Short description	Northamptonshire Archaeology undertook the first phase of trial trench evaluation at Bury Ground, Bury, Greater Manchester in advance of commercial development. Two trenches were excavated in the northern part of the site where historic mapping and documentary evidence suggested that structural features associated with the Howarth, Peel and Yates Calico Print Works (1773) may have survived together with the fabric of subsequent industrial buildings. Stone-built culverts associated with the calico works were found as well as wall foundations and surfaces dating to the 19th to mid 20th centuries.	
Project type	Evaluation (BCS10)	
Site status	Brownfield	
Previous work	Desk-based Assessment, Watching Brief	
Current Land use	Demolition site	
Future work	Unknown	
Monument type/ period	Industrial/post-medieval	
Significant finds	n/a	
PROJECT LOCATION		
County	Greater Manchester	
Site address	Bury Ground, Carlyle Street, Bury	
Study area	2.3ha	
OS Easting & Northing	NGR SD 7990 1100	
Height OD	80-80.5m OD	
PROJECT CREATORS		
Organisation	Northamptonshire Archaeology (NA)	
Project brief originator	Greater Manchester Archaeological Unit	
Project Design originator	Gifford	
Director/Supervisor	Paul Mason	
Project Manager	Tony Walsh (NA), Peter Owen (Gifford)	
Sponsor or funding body	The Property Alliance Group	
PROJECT DATE		
Start date/end date	February 2010	
ARCHIVES	Location	Content (eg pottery, animal bone etc)
Physical	n/a	n/a
Paper	Northamptonshire Archaeology	Site records, photographic, drawings
Digital	Northamptonshire Archaeology	Mapinfo GIS data, photographs
BIBLIOGRAPHY		
Unpublished client report (NA report)		
Title	Archaeological evaluation (Phase 1) at Bury Ground, Bury, Greater Manchester	
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ARCHAEOLOGICAL EVALUATION (PHASE 1)
AT BURY GROUND, BURY, GREATER MANCHESTER
FEBRUARY 2010

ABSTRACT

Northamptonshire Archaeology undertook the first phase of trial trench evaluation at Bury Ground, Bury, Greater Manchester in advance of commercial development. Two trenches were excavated in the northern part of the site where historic mapping and documentary evidence suggested that structural features associated with the Howarth, Peel and Yates Calico Print Works (1773) may have survived together with the fabric of subsequent industrial buildings. Stone-built culverts associated with the calico works were found as well as wall foundations and surfaces dating to the 19th to mid 20th centuries.

1 INTRODUCTION

In February 2010 Northamptonshire Archaeology (NA) was commissioned by the Property Alliance Group, to undertake a trial trench evaluation at Bury Ground, Bury, Greater Manchester (NGR SD 7990 1100, Fig 1). The work was undertaken at the request of Greater Manchester Archaeological Unit, archaeological advisors to Bury Metropolitan Borough Council, to fulfil a condition attached to planning permission for commercial development.

The evaluation complied with a written scheme of investigation formulated by Gifford (Owen 2010) and was undertaken between 8th and 11th February 2010. Two conjoined 15m-long trenches were excavated in the northern part of the proposed development area (Fig 2).

The site code BCS10 was allocated to the project and the site archive will be held at Northamptonshire Archaeology until a suitable repository is identified.

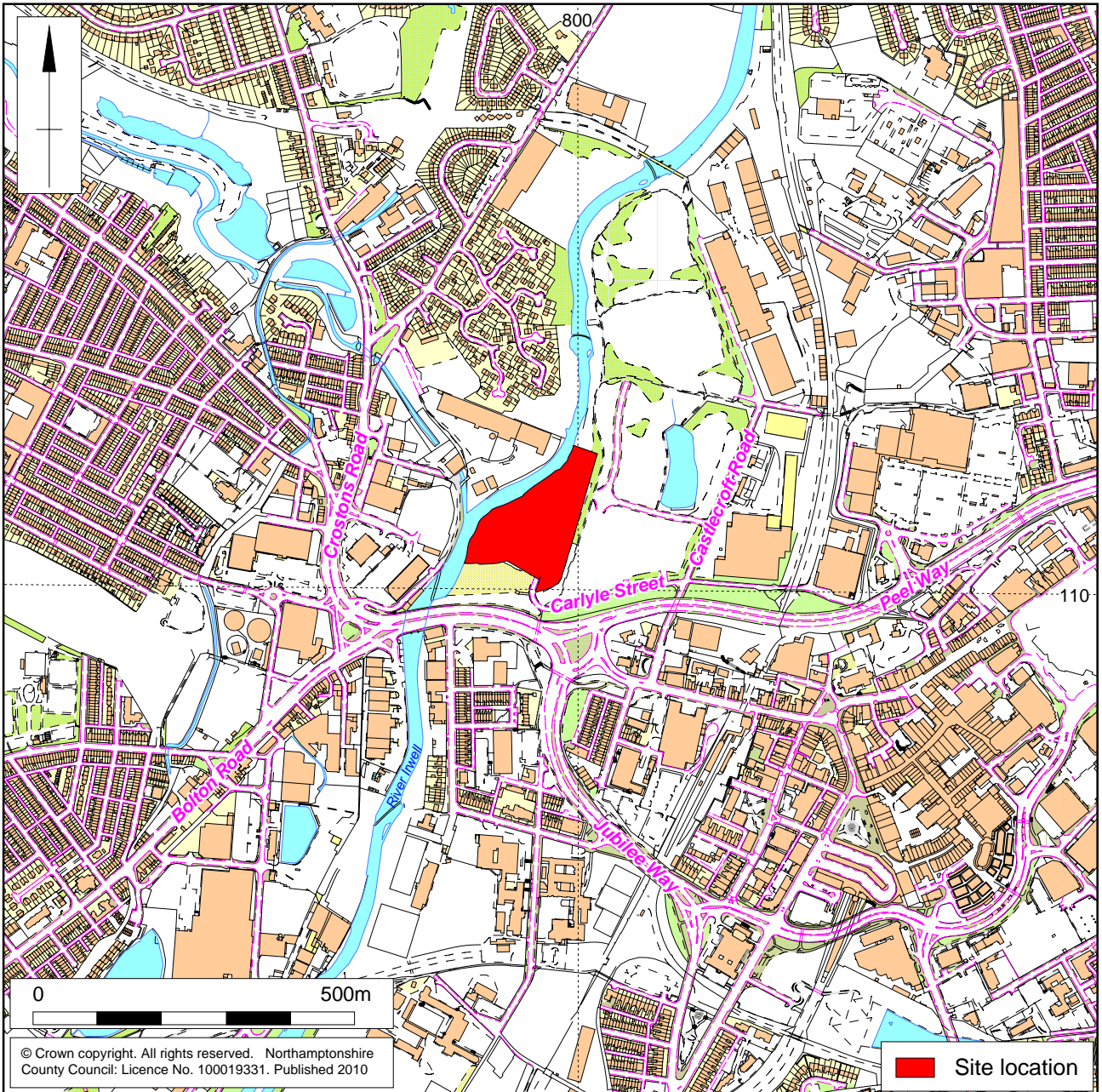
2 BACKGROUND

2.1 Topography and geology

The Bury Ground site lies c 0.5km north-west of the centre of Bury. It is bounded by parkland to the north, the A58 to the south, a construction site for a new police station to the east and the River Irwell to the west. The development area (c 2.3ha) is currently a levelled demolition site with most of the existing ground surface comprised of brick rubble (Fig 3).

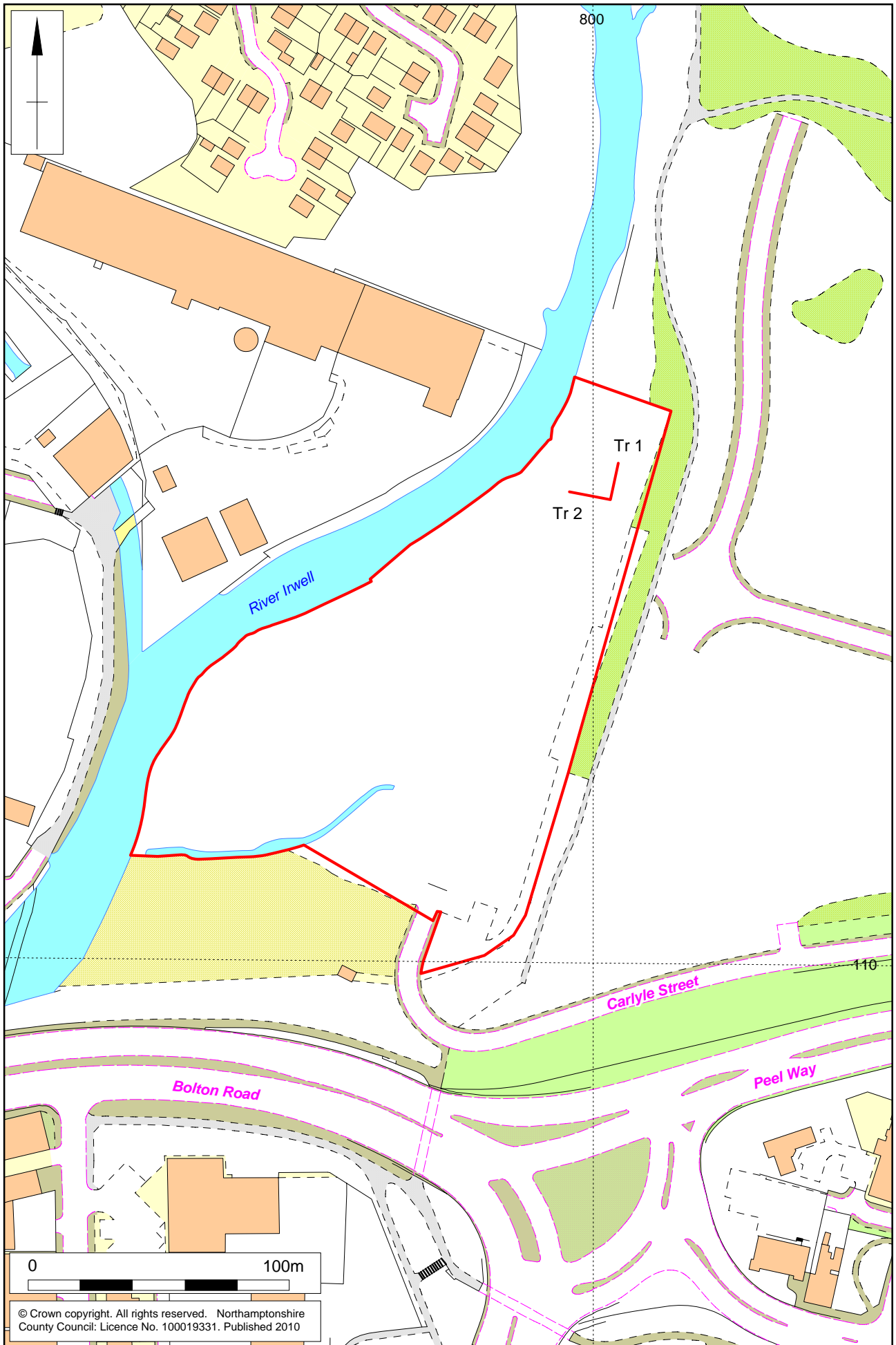
The Phase 1 evaluation trenches were located in the northern part of the site, only 25m east of the bank of the River Irwell. The ground surface here lay at c 80.0-80.50m OD.

The geology is recorded as Pennine Lower Coal Measures Formation overlain by River Terrace Deposits (www.bgs.ac.uk/GeoIndex).



Scale 1:10,000

Site Location Fig 1



Scale 1:2000

Trench location plan Fig 2



View of northern development area, looking east Fig 3

2.2 Historical background

The following summary of the site's historical background is based upon a desk-based assessment prepared by Archaeo-Environment Ltd (Archaeo-Environment 2008).

Earlier prehistoric

There is no recorded prehistoric activity within the site and evidence for prehistoric settlement in and around Bury is sparse.

Iron Age and Romano-British

There is no evidence for Iron Age activity within the site. A 5th-century terracotta cruse of probable Roman or Greek origin was discovered in a clay deposit on the eastern edge of the site (NMR 44378).

Early medieval

There are no finds or activities dating from this period within the site and, in general, material from the early medieval period remains rare across the region.

Later medieval

Bury Ground almost certainly formed part of the manorial lands associated with Bury's 15th-century castle which lay to the south-east and there is documentary evidence for a cornmill that may have occupied the southern part of the site. References to the cornmill continued to appear in the historical record until the mid-18th century. It's thought that the mill would have been powered by water diverted from the river and channelled along a race or *goit* which ran along the eastern edge of the site. A large mill dam and reservoir were located to the east of the site.

Post-medieval

In 1773 the Howarth, Peel and Yates Calico Print Works were founded on Bury Ground using innovative new technology to print onto cotton; their success triggered the growth of the town. A decade later the first plan of the site was commissioned by the Earl of Derby (Archaeo-Environment 2008, fig 6) which shows the mill goit running north to south along the eastern edge of the site to feed the mill at its southern end. There are a number of other structures depicted, some with associated watercourses suggesting that water-driven machinery was used.

The works continued to expand throughout the late 18th and first half of the 19th centuries. The first edition Ordnance Survey map of 1847 (ibid, fig 8) provides the first detailed evidence for the function of each building. A long, narrow structure, typical of textile printing works, was aligned north to south to the immediate west of the goit and housed machine rooms, a dye house and a stoving house. Further buildings, including a print works, dye house, roller place, millwrights shop and office occupied the ground between this and the river.

Wholesale change had occurred by 1891 when the second edition Ordnance Survey map was produced (ibid, fig 6). The site was no longer referred to as a print works; it was now a 'Cotton Waste and Bleach Works' and a number of the earlier buildings had been demolished or converted. A number of small units appear to have been operating alongside the bleach works including firms of hat manufacturers, tanners, wheelwrights and engineers.

Further changes occurred in the later 19th and 20th centuries, when new buildings were added, some of the early structures were demolished and the water channels, including the goit, were infilled.

By 1980 the only surviving structure from the original calico works was the Counting House; all of the other extant buildings on the site dated from the 1930s and 1950s. These were recently demolished when the site was cleared for development.

2.3 Previous archaeological work

Prior to the demolition, a historic building assessment focusing on the Counting House was undertaken by Matrix Archaeology (2007). After the site had been cleared, an intermittent watching brief was undertaken by Archaeo-Environment Ltd while Japanese Knotweed was removed from the south-eastern sector of the site. As a result of this work a number of structural remains representing different phases of the site's development were recorded – some ostensibly relating to the original calico printing works.

3 AIMS AND OBJECTIVES

The written scheme of investigation (Owen 2010) defines the aims and objectives of the evaluation as follows:

- To identify the location, nature, date, quality, condition and potential of any archaeological remains within the area of the development site.
- To identify the nature of any human activity within the development site and the relationship of that activity with the immediate environs in order to further the understanding of the history and development of this part of Bury.
- To prepare a report on the archaeological works, which will include a detailed summary of the methodology, site history, archaeological remains identified and an interpretation and assessment of the results.

4 METHODOLOGY

Two trenches (1 and 2) were positioned in pre-agreed locations (Archaeo-Environment 2008, Appendix 1) using a Leica System 1200 GPS (Fig 2).

Overburden was removed with a tracked mechanical digger fitted with a 2.1m-wide toothless ditching bucket to expose the first significant archaeological level, or in the absence of archaeology, the geology. Where deeply buried remains were encountered the trench edges were stepped to facilitate safe working conditions.

Cleaning of exposed surfaces, hand excavation and recording progressed in accordance with the written scheme of investigation (Owen 2010) and in fulfilment of the standards set by the Institute for Archaeologists' *Standard and Guidance for Archaeological Field Evaluations* (IfA 2008).

Following the completion of the work the trenches were backfilled with the up-cast material.

5 THE EXCAVATED EVIDENCE

5.1 General comments

Well preserved archaeological remains, including structural elements of factory buildings and water management features, were present in both of the trenches. Such was the depth of overburden, the geology, comprising coarse orange-brown sand and gravel (2010), was only observed in a deep, machine-cut sondage in the centre of Trench 2. It lay c 2.30m below the existing ground level (at c 78.03m OD) and was overlain by a 0.30m-thick layer of mid-grey alluvium (2025).

The sheer quantity and size of structural remains encountered, together with localised sequences of construction and demolition layers and modern truncation prevented the modelling of a general stratigraphic sequence typical to this area of the site. All sub-surface features and horizons were, however, buried beneath the remains of concrete floor surfaces relating to the later factory structures, or brick rubble resulting from their demolition which lay across the northern part of the site at c 80.20-80.50m OD.

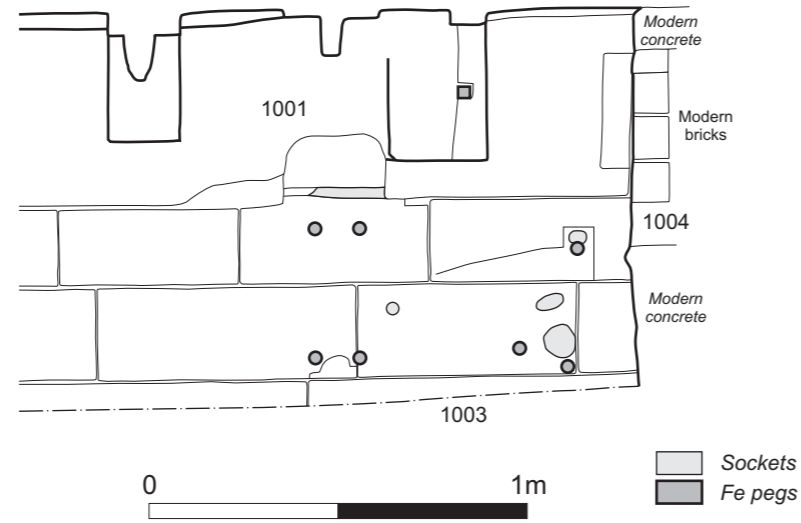
5.2 Trench 1

Trench 1 (15m x 2.1m; Fig 4) was aligned north to south and was located to evaluate a channel associated with the goit and to assess the potential for survival at the northern end of the site (Archaeo-Environment 2008, 50).

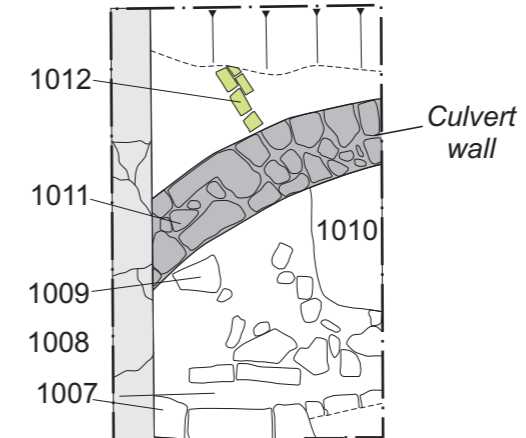
The earliest feature was a section of wall foundation [1011] that curved south-west to north-east in the extreme northern end of the trench (Fig 5). It was 0.75m wide and constructed from roughly-hewn blocks of yellow sandstone bonded with off-white lime mortar. To the north, and of later date, a single row of bricks [1012] abutted the foundation. To the south, and clearly associated with the earlier feature, was a crude surface of irregularly-shaped, flat sandstones (1009). Together these probably represent the severely truncated remains of the water channel first depicted on the Elton Tithe Map of c 1820 (ibid, fig 5).

On its southern side the sandstone surface (1009) was truncated by the northern end of a stoutly-built culvert or, perhaps, a large wheel pit [1007] and the space between this and the earlier foundation [1011] was backfilled with a deposit of clinker (1010) and clay (1008).

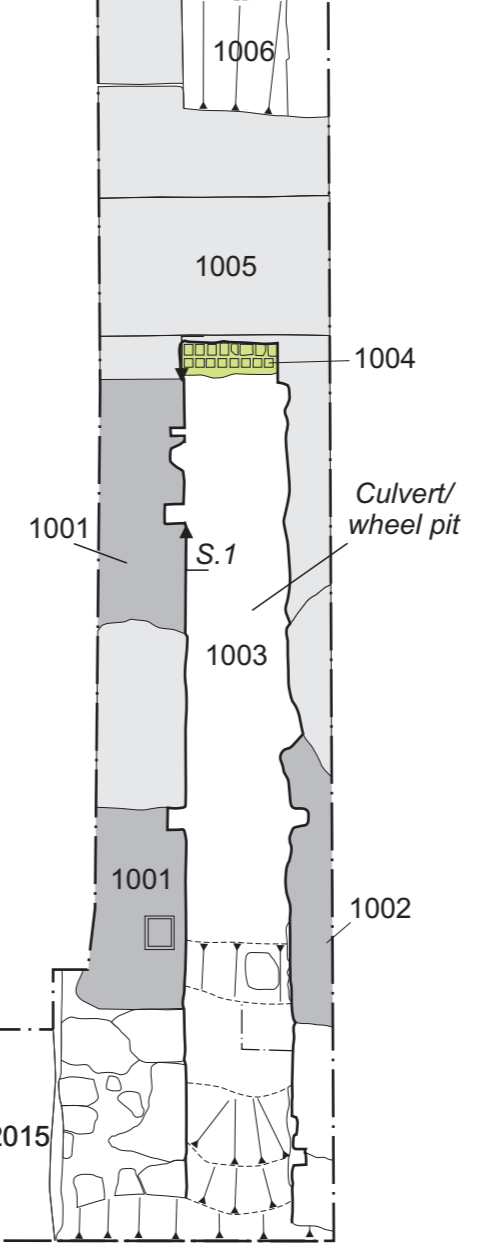
Section 1
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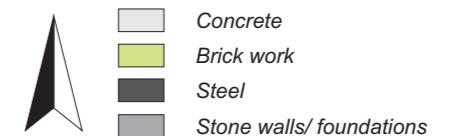
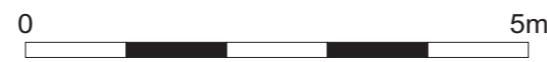
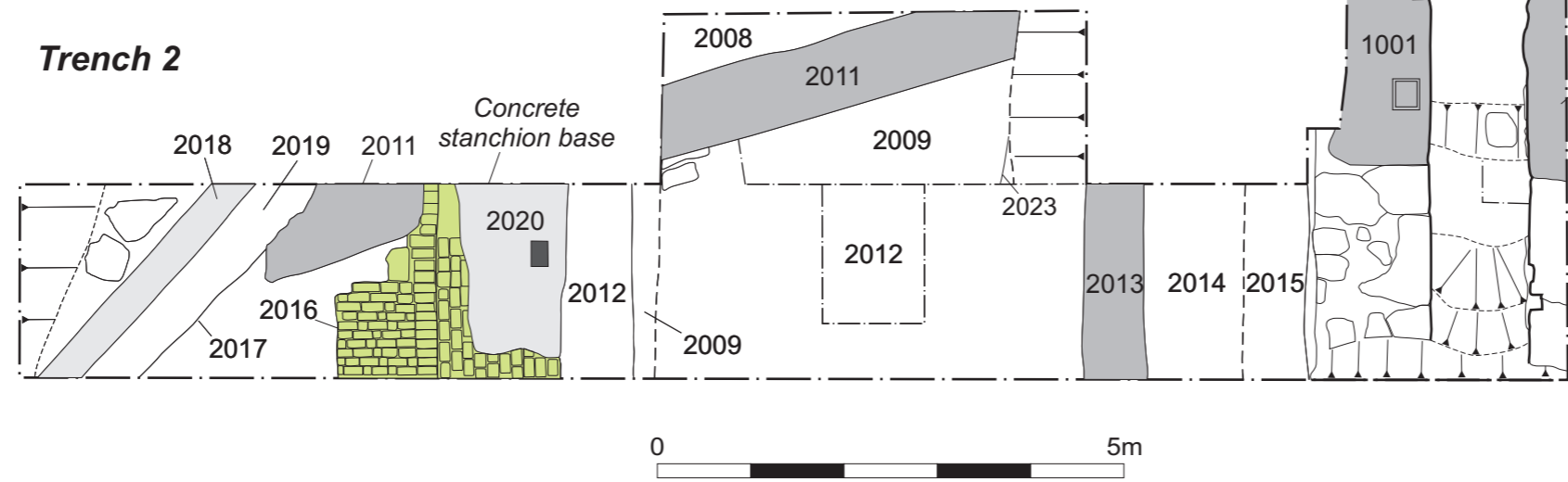
Elevation showing the interior of culvert [1001] with iron pegs and housings cut into the stonework



Trench 1



Trench 2



Plan of Trenches 1 and 2 and elevation of culvert/wheel pit Fig 4



Wall foundation [1011] for an early 19th-century culvert,
looking south Fig 5



Culvert/wheel pit in Trench 1, looking north Fig 6

The culvert, or wheel pit, comprised a pair of parallel north to south walls [1001/1002] constructed from massive yellow sandstone blocks [1001/1002] measuring up to 2.0m x 1.2m x 0.50m and enclosing a 1.0m-wide channel (Fig 6). The channel was filled with a homogenous loose dark grey clinker and loam (1003) - probably imported to backfill the feature when redundant. This was excavated to a depth in excess of 2m without reaching the base of the feature (Fig 7).



Elevation of east wall [1002] of culvert/wheel pit Fig 7

Iron pegs protruding at intervals from rectangular slots cut into the face of the culvert's walls suggest that something, perhaps machinery or brackets, were originally housed within the channel (Figs 4, Section 1; 8 and 9). Circular, square and rectangular sockets were also cut into the tops and sides of the walls - some had lead linings.

The northern end of the culvert was either truncated, or perhaps capped, by a massive concrete slab [1005] and brickwork [1004] that most probably relate to the factory rebuilds of the 1930s and 1950s.



View of culvert/wheel pit, looking north Fig 8



Iron pegs and sockets in west face of culvert/wheel pit wall [1001] Fig 9

5.3 Trench 2

Trench 2 (15m x 2.1m with a 1.8m x 4.5m extension to north; Fig 4) was aligned east to west and had been located to evaluate remains associated with the northern end of the linear workshop and a water channel aligned south-west to north-east across the northern part of the site (Archaeo-Environment 2008, 50).

The geology, a coarse orange-brown sand and gravel (2010), was revealed in a machine-cut sondage in the centre of the trench (Fig 10). It lay at c 78.03m OD and was overlain by a 0.30m-thick layer of mid-grey alluvium (2025).



Geological and alluvial deposits observed in Trench 2, looking north Fig 10

The principal feature exposed was a south-west to north-east aligned culvert wall [2011] constructed from large red sandstone blocks (up to 0.45m x 0.40m x 0.16m) bonded with a loose lime mortar (Fig 11). Its alignment and position appear to correlate with one of the water channels depicted on historic mapping of the early 19th century. The best preserved section of this culvert wall was revealed in the northerly extension of the trench where the top course of stonework sat at c 79.40m OD. Here, four courses overlay a 'kicker' that projected c 0.10m from the southern face of the wall at c 78.75m OD (Fig 12). Excavation did not proceed below this depth but it is assumed that the base of the wall foundation would have extended to the level of the geology.



Culvert wall [2011], looking east Fig 11



Southern face of culvert wall [2011], looking north Fig 12

On the basis of the cartographic evidence it would appear that this was the southern wall of the channel, however, the archaeological evidence is equivocal. To the south, overlying the alluvium (2025) and abutting the face of the wall, was a 0.75m-deep deposit of greyish-brown loam (2009) containing pebbles, fragments of sandstone, fragmented brick and mortar and lenses of clinker, sand and decomposing timber. This could either be the backfill of the construction trench for the culvert or the material infilling the redundant channel. A similar material (2008) overlay the wall and appeared to abut its northern face.

At the western end of the trench another short section of the same culvert wall was exposed (Fig 13). Here it was truncated to the west by a trench [2017] containing a concrete duct [2018] and to the east by a brick surface (2016) which was, in turn, truncated by a concrete stanchion base [2020] partially overlain with sandstone flags (2012). These features are assumed to be remnants of later 19th- and 20th-century industrial buildings.



Culvert wall [2011] (centre left), brick surface (2016) (centre) and concrete stanchion base [2020] in western end of Trench 2, looking east Fig 13

Towards the eastern end of the trench and cutting backfill deposit (2009) was a north to south aligned construction trench [2023] for a 0.65m-wide sandstone foundation [2013] packed in a deposit of loam and clinker (2014/2024) (Fig 14). This may be the foundation for the west wall of the north to south factory block that first appears on Benson's Map of c 1832 (ibid, fig 6). Abutting this foundation to the east was a 0.20m-thick layer of clay (2015) which may have been a levelling or bedding layer for a floor surface.



Foundation [2013] for west wall of early 19th-century (?) factory building, looking east Fig 14

At the extreme eastern end of the trench were the massive sandstone sides of the culvert exposed in Trench 1.

6 CONCLUSIONS

The trial trench evaluation recovered well-preserved structural evidence relating to the water management system used by the calico printing works of the late 18th and 19th centuries together with the remnants of both contemporary and later factory buildings.

The earliest identifiable remains appear to be related to leats or culverts first depicted on the Elton Tithe Map of 1820 (Archaeo-Environment 2008, fig 6). In Trench 1 the location and alignment of a curving wall foundation corresponds with a watercourse that projects westwards from the goit. Similarly, a substantial sandstone wall in Trench 2 corresponds with a watercourse that adjoined the River Irwell to the north of a building, annotated as 'Millwright's Shop' on the Ordnance Survey map of 1847 (ibid, fig 8). Both

of these watercourses are assumed to have powered machinery or provided the water used in the textile bleaching and printing process (ibid, 23-26).

Further remains, including another massive stone-lined culvert or wheel pit, probably relate to the northern end of the factory block that was aligned north to south along the eastern edge of the site. The most northerly cell of this building, which is built over the early channel connected to the goit, first appears on Benson's Map of c 1832 and is annotated 'new machine room' on the 1847 Ordnance Survey map (ibid, figs 6 and 8). A section of wall foundation aligned north to south in Trench 2 may have been the footing for the western wall of this building and the channel uncovered in Trench 1 could have been an interior feature aligned with the long axis of the building.

Although this feature resembles a wheel pit, the presence of iron pegs and slots along its interior face suggest that a number of brackets were attached to its interior, perhaps to hold calico 'ropes' - sheets of the fabric rolled lengthways to resist tearing during the bleaching and dyeing process (ibid, 24). As such the culvert could have carried water or any one of a number of liquid solutions used by the industry; or perhaps acted as a drain to remove waste products.

The water channel uncovered in Trench 2 last appears on the Ordnance Survey map of 1893 (ibid, fig 6) after which it was probably in-filled and built over in the 1930s. The brick surface, stanchion base and concrete duct located in the western end of Trench 2 relate to this, or later phases of development.

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Websites

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