



Sandygate Mills, Weavers' Triangle, Burnley

Lancashire

Heritage Appraisal



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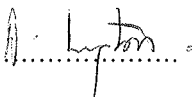
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SUMMARY

In August 2010, Oxford Archaeology North (OA North) was commissioned by Buttress Fuller Alsop Williams (BFAW), acting on behalf of Burnley Borough Council, to undertake a heritage appraisal of several historical buildings situated in the Weavers' Triangle area of Burnley (centred on NGR SD 83452 32551). This part of the town forms the core of the Canalside Conservation Area, which is widely recognised as being one of the most important historic industrial areas in the North West.

The heritage appraisal was required to inform current proposals for the repair, conservation and re-use of several important historical buildings in the vicinity of Sandygate, including Neptune House, Slater's Terrace and the adjacent warehouse and engine house, Sandygate Mill and weaving shed, the former Waterloo Hotel, Victoria Mill and weaving shed, the site of Sandygate Shed, and a former textile-machinery workshop on the west side of Wiseman Street. The study was required specifically to provide an archaeological perspective on the relative significance of these buildings. All of the buildings considered in the heritage appraisal are of considerable historical and archaeological significance, although some components are of especial significance, whilst some elements actually detract from the heritage value of the area.

The relative significance of each of the buildings in the study area was considered with reference to the four areas of heritage values outlined by English Heritage in their Conservation Principles Policies and Guidance, and the criteria used for the scheduling of monuments. Five categories of relative significance have been proposed, although some buildings have been ascribed two values, as individual items and as components of a group. Those components considered to be of the greatest relative significance, and of the highest priority, include: the external envelope of Slater's Terrace, warehouse and engine house; Sandygate Mill weaving shed; Victoria Mill tower, including the automatic sprinkler system that is housed within; and the remnants of the original spinning block for Victoria Mill.

Those elements considered to be in the next priority category, but still of great significance, include: Slater's Terrace, the adjacent warehouse, chimney and engine house; Victoria Mill engine house; Victoria Mill spinning block; the privy block associated with the original spinning block; and Victoria Mill weaving shed.

Elements considered to be of some significance, and constituting the third priority category, include: Neptune House; Sandygate Mill spinning block; and the remains of Sandygate Shed engine house. Of lesser significance are: the Waterloo Hotel; a stone-built element of a twentieth-century boiler house for Sandygate Mill; the remains of Sandygate Shed; and the former textile-machinery works on Wiseman Street. The final category of structures, comprising those structures considered to be negative elements, include: a twentieth-century outshut added to Neptune House; a twentieth-century brick partition in the warehouse adjacent to Salter's Terrace; and the twentieth-century boiler house for Sandygate Mill.

ACKNOWLEDGEMENTS

Oxford Archaeology North (OA North) would like to thank Mark Pearce of Buttress Fuller Alsop Williams for commissioning and supporting the project on behalf of Burnley Borough Council. Thanks are also expressed to Cecilia Whitaker, the Weavers' Triangle THI Project Officer, and Erika Eden-Porter, the Conservation Officer, for their support.

The report was compiled by Chris Wild, who also carried out the site assessment. The illustrations were produced by Marie Rowland, and the report was edited by Ian Miller, who was also responsible for project management.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

- 1.1.1 In August 2010, Oxford Archaeology North (OA North) was commissioned by Buttress Fuller Alsop Williams (BFAW), acting on behalf of Burnley Borough Council, to undertake an heritage appraisal of several historical buildings associated with the textile industry in the Sandygate area of Burnley (centred on NGR SD 83452 32551), which lies in the heart of the Weavers' Triangle. The buildings subject to the heritage appraisal included Neptune House, Slater's Terrace and the adjacent warehouse and engine house, Sandygate Mill and weaving shed, the former Waterloo Hotel, Victoria Mill and weaving shed, the site of Sandygate Shed, and former textile-machinery workshop on the west side of Wiseman Street.
- 1.1.2 The heritage appraisal was required to inform current proposals for repair work, conservation, and re-use of some of the buildings in the study area. The work was required as part of the regeneration of the Sandygate area of the Weavers' Triangle, which is being advanced by Burnley Borough Council. The principal aim of regeneration is to attract new development and economic activity in the Sandygate area, with anticipated development uses including a mix of residential, commercial, retail, leisure, offices and art galleries.
- 1.1.3 Burnley Borough Council and public sector partners have been working together for several years to bring forward the site for redevelopment, whilst maintaining the architectural and historic integrity of the area. The Council now controls the majority of the site, and urgent works have been undertaken to secure the fabric and safeguard the future of certain buildings. Funding for these works was provided by public sector partners, including the Northwest Development Agency (NWDA), the Heritage Lottery fund, English Heritage and the Prince's Regeneration Trust.
- 1.1.4 The Council is now advancing the development of the area. As an initial stage of this process, an archaeological perspective on the relative significance of the various buildings was required.

1.2 LOCATION, GEOLOGY AND TOPOGRAPHY

- 1.2.1 The study area lies on the western fringe of Burnley town centre (centred on NGR SD 383452 432551), astride the Leeds and Liverpool Canal, at a height of between 110m and 125m above Ordnance Datum (Fig 1). It is bounded by Trafalgar Street to the south-west, Sandygate to the south-east, with Wiseman Street and Neptune Street forming the northern boundary (Plate 1). This part of Burnley is known as the 'Weavers' Triangle', and forms the central part of the Canalside Conservation Area.



Plate 1: Recent aerial view of the study area

- 1.2.2 The study area is bisected by the Leeds and Liverpool Canal, which here forms the core section of its industrialised length through Burnley. Its route follows an elevated contour that encircles the town centre, providing an immense sense of place, and testament to industrial scale and distinctive canal engineering. The study area is occupied currently by industrial and commercial premises, the majority of which date from the nineteenth century. The buildings that have been examined as part of the present study are all vacant or derelict; Sandygate Shed, on the northern bank of the canal, was demolished during the later twentieth century, leaving an empty plot of land.
- 1.2.3 The solid geology of the region comprises mostly sedimentary rocks of the Lower Westphalian coal measures. These are Carboniferous period deposits which date to between 290 and 345 million years ago, and include sandstone and Millstone grits. The overlying drift geology is essentially post-glacial deposits, predominantly boulder clay with some areas of sands or gravels (Countryside Commission 1998). The soils of the surrounding area, as mapped by the Ordnance Survey Soil Survey of England and Wales (1983), are predominantly of the Brickfield 3 series, which are cambic stagnogley soils, deriving from the underlying geology.

2. METHODOLOGY

2.1 OBJECTIVES

- 2.1.1 The main objective of the Heritage Appraisal was to allow an informed decision to be taken with regard to the current proposals for repair work, conservation, and re-use of the buildings in the study area. This was achieved by carrying out a rapid visual inspection survey of the buildings, which was carried out in August 2010.
- 2.1.2 The visual inspection survey was intended to provide the minimum of information needed to identify the buildings' age, type, broad chronological development, and, crucially, relative significance; it was not intended to provide a detailed survey of the component buildings. It is anticipated that any development work carried out within the study area will be preceded by an appropriate programme of further archaeological investigation.

2.2 DEFINING SIGNIFICANCE

- 2.3.1 When applied to an historic building, the term 'significance' can be taken to have several definitions. The first is importance, suggesting that there is something about the site that is valuable, has status and should not be ignored. A site may be important because it is a rare survival, perhaps the only one in the world, or the earliest known example of its type. It may represent a benchmark in terms of the application of technological development, or be a typical example of such sites. The level to which a site has remained intact is also an important factor in determining its value. The next is the idea of conveying meaning, implying that the site is a source of knowledge. Finally, there is the concept of a sign, that the building is symbolic, and acts as a pointer to something beyond itself. The significance of any site is to a large extent embodied in its surviving fabric, which can incorporate evidence for how the site was built, how it worked, and how it was adapted to new technology over time.
- 2.3.2 It is necessary to define what it is that gives significance to a building and therefore warrants protection. The study area encompasses layers of archaeological and historical development, which include several different functional components. These may be valued for different reasons by different people, all of which should be taken into account in determining the overall significance of a place. In their *Conservation Principles Policies and Guidance*, English Heritage have identified four areas of heritage values, which will be considered in determining the overall significance of the component sites within the study area (English Heritage 2008):

- **Evidential:** this derives from the potential of a place to yield evidence about past human activity. This includes physical remains as the primary source of evidence and the people and cultures that made them. Significantly, where there is a lack of written records the importance of the material record increases;
- **Historical:** this originates from the ways in which past people, events and aspects of life can be connected through a place to the present. This may include illustrative value, such as its connection to an important development, such as technology, or associative value, such as the connection to an important event or person;
- **Aesthetic:** this is derived from the ways in which people draw sensory and intellectual stimulation from a place or building. These may be related to the design of a place for example through defensive reasons, or the informal development over time, such as the relationship of structures to their setting;
- **Communal:** this derives from the meaning of a place for the people who relate to it, this includes commemorative, symbolic, social and spiritual value. For example, some places may be important for reminding us of uncomfortable events in national history.

2.3 SIGNIFICANCE OF INDIVIDUAL FEATURES

2.3.1 All of the buildings considered in the present study are of considerable historical and archaeological significance, which is reflected in the statutory designation of several of the structures as Grade II Listed Buildings, and the designation of the area as a Conservation Area. Notwithstanding the accepted importance of the buildings and their setting, however, some components are of especial significance and are fundamental to their interest. Conversely, there are a few components of the study sites that actually detract from the heritage value of the area, and make it more difficult to appreciate as a textile-manufacturing centre of national or international importance, and these features may be considered to have a negative value.

2.3.2 Whilst no detailed guidelines for the retention of historic fabric have been produced by either English Heritage or the Institute for Archaeologists (IfA), standard English Heritage site attributes are appropriate for the present study. In particular, the criteria listed in the *Management of Archaeological Projects* (English Heritage 1991, 28) may be of relevance. These include:

- Survival/condition
- Period
- Rarity
- Fragility/vulnerability
- Documentation
- Group value
- Potential

2.3.3 Whilst these were intended for use to identify archaeological sites of importance, the criteria may also be usefully applied within an individual site. Their usage in this document is italicised for clarity and, in order to avoid confusion, a numerical system has been adopted, with Priority 1 being of the highest value, and Priority 5 the lowest, although this is not intended as a crude marking system; just because a feature is not in the highest category does not mean that it is dispensable. Some buildings may have two values, as individual items and as components of a group. The categories may be defined as follows:

- ***Outstanding (Priority 1)***: buildings or other surviving fabric of national or international importance. The earliest and most intact elements of the site, including rare or unique features. It is envisaged that removal or compromise of such features would have a substantial negative effect on the historical character of the area, and would reduce the site's potential as a future archaeological resource. The removal of such features should not be considered as an option in any future development scheme;
- ***Great significance (Priority 2)***: intact buildings or fabric of regional or national significance. Early but damaged parts of the site, which would usually have a high *Group* value and probably *Rarity* and *Period* value. The removal of such features should not be considered as an option in any future development scheme;
- ***Some significance (Priority 3)***: intact buildings or fabric of county or borough significance. May include fabric that now forms an integral part of an early building, or early but severely damaged parts of the site. These features may be significant to the development of an individual site or the local area, but are not of high *Rarity* value. Adequate archaeological recording of such features is likely to be required prior to any removal, and further recording may be necessary during or after removal;
- ***Lesser significance (Priority 4)***: buildings or fabric of local interest. Badly damaged remains of features that would have been of greater significance had they survived. Later features of little intrinsic value, but which form part of a more important building. Adequate archaeological recording is likely to be required prior to any removal;
- ***Negative elements (Priority 5)***: features of little or no intrinsic interest that damage or obscure buildings or features of significance. Adequate archaeological recording is likely to be required prior to any removal.

3. BACKGROUND

3.1 INTRODUCTION

- 3.1.1 In order to facilitate an understanding of the significance of the buildings in a local and regional context, the following section focuses on providing a summarised account of the buildings within the study area. This account is preceded by an overview of the development of the area.
- 3.1.2 By the sixteenth century Burnley was the market centre for its local area, and by 1650 it was regarded as a small market town at a national level (Farrer and Brownbill 1911, 442). The majority of the populace in the towns of the region at this time were engaged in the processing, manufacture, and distribution of textiles (Walton 1987), and Burnley was no exception. Many of the cloth workers were independent, operating a cottage-based industry, although the presence of clothiers, such as Richard Sagar of Coal Clough House in 1641, demonstrates that there were employers of weavers working in loomshops (Bennett 1948, 88).
- 3.1.3 A survey of Lancashire in 1787 by Tunnicliffe lists several textile manufacturers in the Burnley area, who would probably have been engaged in the production of woollens (*op cit*, 168). By the end of the eighteenth century, however, cotton began to predominate, and several of the existing woollen mills were converted to cotton production. The introduction of the cotton-spinning industry led to a rapid increase in growth of the town, with the population more than doubling between 1801 and 1821 (Lowe 1985, 29). Central to this expansion was the application of steam power to textile production, which allowed more machines to be powered and led to larger mills being built. The first steam-powered mill in Burnley is thought to have been Peel's mill at the bottom of Sandygate, erected in 1790 (Bennett 1948, 174). By 1830 there were a total of 32 steam engines employed in the town's textile mills, demanding an increasingly larger workforce (Table 1).

Year	Population	Difference	% Increase
1811	5405	+ 1487	37.9
1821	8242	+ 2837	52.5
1831	10026	+ 1784	21.6
1841	14228	+ 4202	41.9
1851	20828	+ 6600	46.4
1861	28700	+ 7872	37.8
1871	40858	+ 12158	42.4
1881	58882	+ 18024	44.1
1891	87016	+ 28134	47.8
1901	97043	+ 10027	11.5

Table 1: Population of Burnley, 1811 - 1901

- 3.1.4 Another crucial factor in the expansion of the steam-based textile industry was the completion of the Leeds and Liverpool Canal which, by 1816, formed a trans-Pennine route, and connected Burnley with the west coast port of Liverpool, and the east coast ports via the rivers Aire and Trent (Clarke 1994). The canal was opened in sections, and that which passed through Burnley was completed in 1796. This not only provided an arterial route for the import of raw materials and the export of finished goods, but also served the mill steam-power plants with a ready source of water for boiler feed and condensing purposes. This factor accounts for the dense concentration of mills flanking the canal as it passes through the present study area.
- 3.1.5 The application of power-looms and factory-based weaving was introduced to the region during the 1820s, although weaving sheds became a common feature of Burnley's townscape mostly after the 1850s (Ashmore 1982, 190). Nevertheless, the town developed to become the foremost weaving production centre, possibly in the world, just prior to World War I.
- 3.1.6 The 1960s saw great changes in Burnley with numerous buildings being demolished. In 1966 the Old Market Hall was demolished as part of the town centre redevelopment, which culminated in the extensive modern shopping centre present today. It was estimated that ten acres of the town were under reconstruction by 1969, reducing Burnley's 300-odd chimney stacks to just a handful (Fort 1988). This was focused on the town centre, however, and the industrial townscape of the Weavers' Triangle has survived remarkably intact, as demonstrated from more recent aerial photography.
- 3.1.7 The key characteristics of the canal, nineteenth-century textile mills and associated workers' housing still dominate the townscapes of the region today, although the Weavers' Triangle is undoubtedly the best surviving example in Lancashire (Lancashire County Council 2001), and probably one of the most important historic industrial areas in the country. The scale of materials and details used in the design of the buildings is generally massive, bold and simple.
- 3.1.8 The architectural heritage of the town is reflected in the large number of Industrial Period buildings that are listed, and the designation of sections of the canal corridor as a conservation area. The Canalside Conservation Area was designated in October 1988, and included part of the Weavers' Triangle. Due to the threat of demolition of neighbouring buildings and the originally very tight boundary, the Conservation Area was extended in August 1990 and again in March 1993 to enclose the whole of the Weavers' Triangle. A further extension in February 1997, to include other notable canalside buildings and engineering features, defines the current boundary. Covering an area of some 34 hectares the Canalside Conservation Area includes a fine collection of well-preserved canalside architecture and engineering features and is widely recognised as being one of the most important historic industrial areas in the North West. Nevertheless, some of the built heritage has been lost recently, frequently as a direct result of dereliction and decay. For instance, Woodfield Mill of 1888-9, situated on the corner of Keppel Place and Trafalgar Street, was destroyed by a devastating fire in November 2008.

3.2 GROWTH OF THE STUDY AREA

- 3.2.1 The development and growth of the study area may be traced reasonably well from the sequence of available historic mapping. The first detailed survey of the study area is provided by Fishwick's *Map of Burnley*, which was produced in 1827 and shows the site at an early stage in its industrial development. The Leeds and Liverpool Canal is marked, although there is only limited development of buildings along its route. The part of the study area to the south of the canal is shown to have been wholly undeveloped, comprising enclosed land dissected by Sandygate. The process of industrial and associated residential development has evidently commenced to the north of the canal, however, with several streets laid out and commercial premises established. Two plots of land immediately to the north of the canal, and to the east of Sandygate, are shown to have been laid out formally, perhaps representing plots awaiting imminent development.
- 3.2.2 The first available published map to show the study area is that produced by the Ordnance Survey in 1848, at a scale of 6": 1 mile. This was based on a survey completed in 1844, and affords a high degree of accuracy. This shows some development of the study area relative to Fishwick's map. The detail shown on the 1848 Ordnance Survey map is replicated on the 1851 edition, which was produced at a scale of 60": 1 mile (Plate 2).



Plate 2: Extract from the Ordnance Survey 60": 1 mile map of 1851

- 3.2.3 The next available plan is that surveyed by F Walsh in 1882. The scale of this plan is insufficient to furnish detail of individual buildings, although their locations are shown as blocked in grey areas. It shows Wiseman Street to have been built, and the land between there and Sandygate to have been infilled with Sandygate Shed (Plate 3). Sandygate Mill has similarly infilled the area to the south of Slater's Terrace, on the south side of the canal.

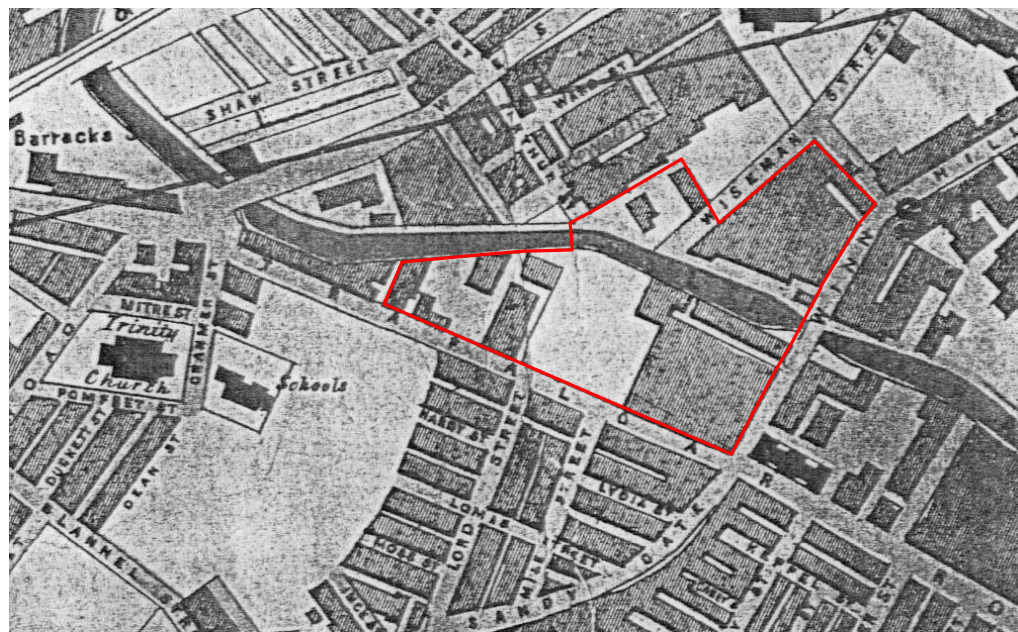


Plate 3: Extract from Walsh's map of 1882

- 3.2.4 The next edition of Ordnance Survey mapping for the area was published in 1892 at a scale of 1:500 (Plate 4); the survey was also published at 1:2500 in 1894. This shows the study area to have been developed fully, containing the core of the present buildings.



Plate 4: Extract from the Ordnance Survey 1:500 map of 1892

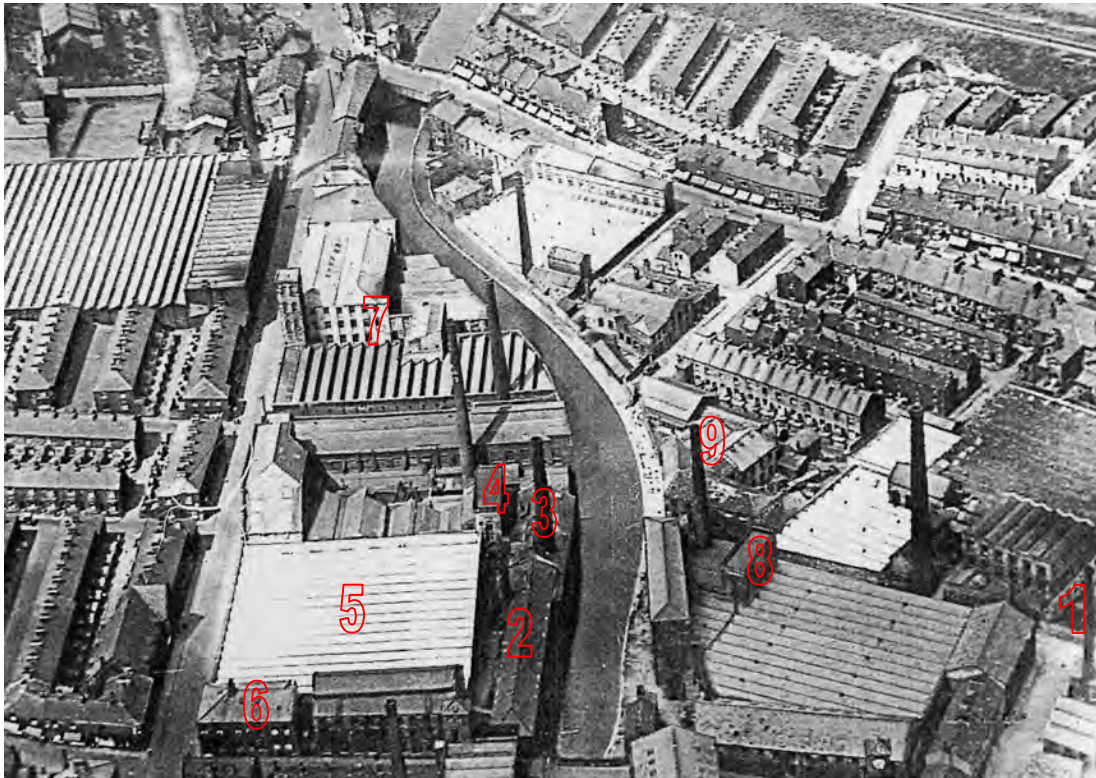


Plate 5: Aerial view of the study area from the early 1930s

1. Neptune House
2. Slater's Terrace
3. Warehouse
4. Sandygate Mill engine house
5. Sandygate Mill
6. Waterloo Hotel
7. Victoria Mill
8. Sandygate Shed engine house
9. Wiseman Street Works

3.2.5 The character of the area is captured on numerous photographs taken in the twentieth century. Early aerial photographs (*eg* Plate 5) are particularly useful, as they depict all of the buildings in the study area in a single image.

4. SUMMARY DESCRIPTIONS

4.1 INTRODUCTION

4.1.1 The following section provides an outline of the historical development of each site, together with a brief description of the buildings based on a rapid inspection of the surviving fabric. This information is intended solely to provide a basis to assess the relative significance of the various buildings and their visible component elements.

4.2 NEPTUNE HOUSE

4.2.1 **Historical development:** situated at the corner of Neptune Street and Sandygate, Neptune House is one of the oldest surviving buildings in the area, probably dating to the late eighteenth or early nineteenth century. The building may have been intended as a residence, perhaps with the first floor being used as a workshop for the cottage-based textile industry. However, it is marked on the Ordnance Survey map of 1851 as 'The Neptune Inn', adjacent to a block of four back-to-back houses, situated along the south side of Neptune Street. The Ordnance Survey map of 1892 also marks the building as an inn, but shows it to have been extended to the south-east. The same layout is depicted on the Ordnance Survey map of 1929, which identifies the building as a club. By the 1940s, it was occupied by John Watts Ltd, cotton waste processors that also owned Clock Tower Mill. It may have been this firm that erected an outshut against the western side of the building, shown on the Ordnance Survey map of 1960; the roof of this outshut has since been removed, leaving a shell of clinker block and steel joist construction.



Plate 6: Neptune House, viewed from the south-west

- 4.2.2 **Description:** Neptune House was originally a three-storey structure plus a cellar, with a two-storey addition fronting onto Sandygate (Plate 6). The earliest fabric appears to be of brick construction, with a stone façade below a string course at ground-floor level, suggesting that the present rendered external wall finish elsewhere reflects the original appearance of the building. The use of hand-made bricks in buildings is unusual in the area, particularly in those of a late eighteenth- or early nineteenth-century date. Neptune House originally had a stone flag covered timber-framed roof, although this has been replaced recently with temporary corrugated metal sheeting. However, two original wooden trusses survive *in-situ*, which are of a note in that they have two braces on each pitch from the king post to the principal rafter, typical of earlier examples of such trusses (Brunskill 1994, 149).
- 4.2.3 The surviving fabric provides physical evidence for several developmental phases. The taller, north-western portion is clearly the oldest part of the building, where evidence for at least 11 windows, including an oriel window unusual in this type of structure, is visible above the ground floor. Many of the windows have been blocked with brick, although the large number of windows suggests that the upper part of the building may have been used at some point as a domestic workshop. Although originally a three-storey building, the upper floor has been removed, and the level of the first floor raised, leaving it open to the rafters. The north-east-facing elevation on the first floor also incorporates a taking-in door at present floor level, suggesting that the building had a warehousing function in a later stage of its development.



Plate 7: View across the upper floor in the oldest part of Neptune House

- 4.2.4 Two flues against the north-west wall on the first floor demonstrate that the building was originally subdivided into at least two rooms by a longitudinal partition (Plate 7). Two further flues from the fireplaces on the ground floor

served two rooms within the later nineteenth-century extension, and were placed against the south-east-facing gable of the earlier building, taking a route that arched over a central window at first-floor level.

- 4.2.5 *Summary of significance:* notwithstanding the condition and internal remodelling of Neptune House, the rear portion of the building is reputedly the oldest surviving structure in the Weavers' Triangle. The surviving fabric offers considerable potential to yield information about its development since the late eighteenth century, affording the building a high *Evidential* value. The building also has *Historical* value, representing several key elements of the area: cottage-based industry; social value as an inn and, subsequently, as a club; and its use as a warehouse, presumably associated with the factory-based textile industry. The fabric in this part of the building also incorporates hand-made bricks, an unusual building material in the context of late eighteenth- and early nineteenth-century Burnley. The combination of all these elements in a single structure is rare in the area. Neptune House does not have a high *Aesthetic* value, although it may have some *Communal* value for the less direct sense of history and contact with past generations.
- 4.2.6 Neptune House similarly has high *Period*, *Rarity* and *Group value* ratings. It may also be ascribed a high *Potential*, primarily as an archaeological/historical resource, but also in an active role in the local community as a place of work and education, pending the future re-use of the building.
- 4.2.7 Neptune House is thus considered to be of *Some Significance*, although elements of the oldest portion to the rear of the building could be seen to be of *Great Significance*. Conversely, the twentieth-century outshut on the western side of the building may be considered as a *Negative element* (Plate 8).



Plate 8: Clinker-block outshut to Neptune House

4.3 SLATER'S TERRACE, WAREHOUSE AND ENGINE HOUSE

- 4.3.1 **Historical development:** a Grade II Listed Building erected between 1845 and 1850 by James Wiseman for George Slater, the owner of Clock Tower Mill. The building comprises a three-storey terrace and a two storey 'warehouse', situated on the southern bank of the Leeds and Liverpool Canal.
- 4.3.2 The terrace originally comprised 11 houses, each with a small back yard containing a privy, as shown on the Ordnance Survey first edition 60": 1 mile map of 1851. Access to the houses from Sandygate was afforded via a cast-iron balcony that overlooked the canal. The house forming the south-eastern end is shown on historical mapping to have been slightly wider than the other properties in the terrace, as this incorporated separate access to the canal-side warehouse on the lower ground floor.
- 4.3.3 Each of the houses had two rooms on the ground and first floors, and is thought to have each provided accommodation for one or two families. The standard of accommodation provided is likely to have been slightly better than much of the workers' housing in Burnley (and other industrialised towns in nineteenth-century Lancashire), whilst evidence from census returns indicate that not all of the residents were employed at Slater's Mill.
- 4.3.4 Sometime after 1858, the two houses at the north-western end were converted for use as a boiler house, which served a steam engine thought to have been situated immediately to the south, and probably at the level of the lower warehouse. The remains of the chimney associated with this boiler house survive against the south-western face of the end terraced house; no above-ground remains of the putative engine house have been identified.
- 4.3.5 The original steam engine and chimney were superseded by the existing structures, situated to the west, together with the large, two-storey canal-side warehouse, which may have been erected shortly after 1850. It is thought that the warehouse was erected first, and was partly converted for use as a boiler house by c 1860, when the chimney was built and extended through the roof of the warehouse; confirmation of this proposed developmental sequence requires a detailed archaeological survey of the buildings. A new engine house may have been erected to the south-west at this time.
- 4.3.6 The houses were last inhabited in 1900, after which the dividing walls of the upper storey were removed to provide a winding room for Sandygate Mill. The privies and small yards at the rear of the houses were also removed at this time, and the next edition of Ordnance Survey mapping, published in 1912, shows a raised walkway to have been built between the spinning block and the eastern end of the terrace.

- 4.3.7 **Description:** Slater Terrace is composed of coursed squared sandstone, with a hipped slate roof and ridge chimneys. Each house is two-storey, over a single-storey warehouse at lower ground level, with a rectangular, double-pile, single-fronted plan, repeated along the terrace (Plate 9). Each house frontage, overlooking the canal, has a vertical window to both floors, and a square-headed doorway, with continuous lintel-band and plain surrounds, placed at the left-hand side of the property (Plate 10). Replacement timber floors have been laid to the first floor, with a new timber roof.
- 4.3.8 The houses have been remodelled internally, with fireplaces, partitions, and original stairs to the first floor all removed; wall scars and fragments of masonry testify to the presence of these original features. Some of the houses retain elements of a flagstone floor, although the survival is fragmentary.
- 4.3.9 The warehouse on the lower ground floor has stone flags laid directly onto the ground, although most of the flags have been removed. Access from the upper ground floor is afforded via a flight of steps of stone and brick construction leading from the south-eastern end of the terrace, itself accessed from Sandygate. Two doorways also afford access onto a narrow canal-side wharf. The ceiling of the lower ground floor warehouse is of 'fireproof' construction, comprising brick arches built into the web of cast-iron beams, which span the width of the ground floor of the terraced houses (Plate 11). Additional support is provided by a single row of cast-iron columns along the centre line of the lower ground floor. A brick-built partition across the building, which incorporates an original cast-iron column, provides additional evidence for remodelling.
- 4.3.10 The adjacent warehouse is a two-storey structure, although the floor-to-floor heights within the warehouse are greater than within the terrace. The lower ground floor comprises a solid floor of stone flags, and with access afforded via the lower ground floor of Slater Terrace, and from a doorway at the end of the canal-side wharf. The warehouse is of 'fireproof' construction, with brick arches spanning onto cast-iron beams that traverse the building. Again, additional support is provided by an intermediate row of cast-iron columns, although the variety of style and position suggests that they have been remodelled subsequently.
- 4.3.11 An open loading area occupies the lower ground floor in the north-western part of the warehouse. This comprises large fabricated beams, which have been inserted beneath the ground floor to act as transfer beams, representing a later phase of major remodelling to the building, which also included replacement of one of the beams supporting the brick-arched ceiling. The roof of the warehouse comprises queen-strut timber trusses, which support timber purlins and rafters to a late roof. The warehouse has a wide loading door, directly onto the canal, with a large bearing in the wall above, demonstrating it had a powered hoist, presumably for raising coal to serve the boiler. A smaller loading door to the west, beyond the arched window apertures, suggests a different use for this end of the original structure. The original roof was of similar height to that of Slater Terrace to the south-east, and either incorporated a raised ridge, or had a false chimney stack at its northern end, matching those on Slater Terrace.



Plate 9: Iconic view of Slater's Terrace and adjacent warehouse, overlooking the canal



Plate 10: View along the rear of Slater's Terrace, looking towards Sandygate

- 4.3.12 A narrow, rectangular two-storey building immediately to the south-west of the warehouse is the engine house of c 1860. This is rectangular in plan, with one round-headed opening to each wall, except that to the north. The size and general appearance of the building is consistent with it having been designed to house a beam engine rather than a horizontal steam engine of a type that became increasingly popular from the 1860s; a large beam across the building close to the ceiling may represent part of an entablature beam, which would confirm that a beam engine had occupied the building. However, further archaeological survey will be required to establish that the building did indeed house a beam engine, rather than an early example of a horizontal engine.
- 4.3.13 The engine house is surmounted by an iron-panelled water tank (Plate 12), which is presumably an original feature. Internally, the foundation bed for the steam engine has been removed, although the building retains physical evidence for the engine it once housed, including a flywheel guard and elements of the power transmission system.
- 4.3.14 *Summary of significance:* the external elevations of Slater's Terrace, the adjacent warehouse and engine house cumulatively provide an iconic image of the Weavers' Triangle as an industrialised townscape of international importance, and in this respect these structures are of *Outstanding Significance*, with high *Evidential*, *Historical*, *Aesthetic* and *Communal* values.
- 4.3.15 Slater's Terrace is a unique structure, and has very high *Rarity*, *Vulnerability* and *Group value* ratings. The development of the houses, and its sequence of residents, can be traced through historical mapping, architects plans, and census records, giving Slater's Terrace a high *Documentary* rating. However, whilst there is almost complete *Survival* of the exterior of the houses on Slater's Terrace, the *Condition* of their interiors is poor, as they have all been stripped of historic fixtures and fittings; the fireplaces, room partitions, flooring and stone stairs to the first floor have all been largely removed, and there has been some rebuilding internally using cinder blocks, which contrast sharply with the historic stone fabric. Conversely, on the lower ground floor, the warehouse beneath the houses does appear to retain many historic features, including the cast-iron columns, brick arches built into the web of cast-iron beams, and stairs from the ground floor, although the brick partition across the building does detract from the original layout.
- 4.3.16 The houses at the north-western end of the terrace were reputedly converted for use as a boiler house to raise steam for the original engine for Sandygate Mill. There is little, if any, surviving physical evidence visible to demonstrate the building's use as a boiler house, although the remains of a square, stone-built chimney abut Slater's Terrace. This important structure has high *Vulnerability* and *Group value* ratings, together with *Period* and *Rarity* value. *Documentation* for the original steam-power plant is lacking, and the precise location of the first steam engine for Sandygate Mill remains uncertain, although it may have been situated in the yard immediately to the south-west of its associated boiler house and chimney. This part of the site has a high *Potential* for buried remains of archaeological interest.



Plate 11: Interior of the warehouse on the lower ground floor of Slater's terrace



Plate 12: The rear of Slater's Terrace, abutted by the original chimney. The original boiler house was situated behind the chimney, whilst the associated engine house may have occupied the yard area in front of the late, brick-built boiler house.

4.3.17 The warehouse adjacent to Slater's Terrace has very high *Vulnerability* and *Group value* ratings (Plate 13). Its status as a canal-side warehouse does not lead to a high *Rarity* value *per se*, although this is increased from its 'documented' conversion to a boiler house, and the stone-built chimney rising through its roof. There is almost complete *Survival* of the chimney and the shell of the warehouse, including the cast-iron columns and large brick arches, although there is little, if any, surviving physical evidence for its use as a boiler house. *Documentation* for this building is lacking, and its precise date, chronology, and functions do not appear to have been established with complete confidence. This factor perhaps increases the *Potential* of the building as an archaeological/historical resource.



Plate 13: The ground floor of the warehouse adjacent to Slater's terrace

4.3.18 The engine house to the rear of Slater's Terrace provided the power to Sandygate Mill, although it may not have been a primary feature of the mill complex (Plate 14). The building retains considerable physical evidence for the engine it once housed, including elements of the flywheel guard and the remains of the power transmission system (Plate 15), together with the iron-panelled water tank on the roof of the building. These features add to the *Period* and *Rarity* value of the engine house, which either housed a developed example of a beam engine, or an early example of a horizontal-type engine. The Sandygate Mill engine house has high *Vulnerability* and *Group value* ratings, although as with the adjacent warehouse *Documentation* for this building is lacking.



Plate 14: The north-west-facing elevation of the engine house



Plate 15: The flywheel guard and axle bearing in the engine house

4.3.19 In summary, Slater's Terrace and associated buildings are considered to be largely of *Great Significance*, although the exterior envelope of the buildings is of *Outstanding Significance*. The brick partition across the lower ground floor, and the clinker block walls within the houses, are considered to be of *Negative Significance*.

4.4 SANDYGATE MILL

- 4.4.1 **Historical development:** Sandygate Mill was established on behalf of George Slater of Clock Tower Mill in 1858-9, and comprised an integrated cotton spinning block and weaving shed. By 1862 the spinning block was three-storeys high and another storey was later added to the roof space. The total floor area was 2170 yards, and the warehouse area occupied 2000 yards on two floors. A year after George Slater's death, the notice of the formation of the Sandygate Mill Co Ltd was posted (*Burnley Gazette* 1874) and opened in 1875 (*Burnley Advertiser* 1875).
- 4.4.2 A new Lancashire boiler is documented to have been installed in 1913, and was supplied with water from the Liverpool and Leeds Canal. The steam from this boiler powered a 250hp engine. The mill was occupied and owned by Blakey and Nephews in 1923, who also worked the Gannow Shed, and was owned latterly by Lord Printers.
- 4.4.3 **Description:** the surviving elements of Sandygate Mill comprise several distinct structures, including the multi-storey spinning block, the single-storey weaving shed and its twentieth-century extension, warehousing/workshops below the weaving shed, and a brick-built boiler house.
- 4.4.4 The spinning block is a three-storey, stone-built structure fronting onto Sandygate, and forming the south-east part of the mill complex. Erected in 1858-9 as a key component of the original mill complex, it was largely remodelled in the twentieth century with the insertion of an internal steel frame, which supported pre-cast concrete beam and block upper floors (Plate 16). As part of this remodelling, the roof was raised centrally along the line of the former ridge, and rebuilt using steel beams and lightweight trusses clad in asbestos cement sheeting. The building was recently damaged by fire. Despite its remodelling, the building retains some interesting physical evidence for the original power transmission system (Plate 17).
- 4.4.5 The mill complex is dominated by the original weaving block of 1858-9 (Plate 18), which is mainly a single-storey structure, although a narrow warehouse/workshop lies below the north-eastern part of the building. Despite recent fire damage, the weaving shed survives largely intact and retains important evidence for its original layout and the power transmission system (Plate 19). The north-eastern part of the shed was rebuilt and extended slightly in the 1920s over the warehouse/workshops that face the rear of Slater's Terrace, and now form a partial basement to the weaving shed. It is possible that this structure originated as a two-storey warehouse, which was reduced in height before the weaving shed was extended to the north-east; the stone-built rear wall of this basement almost certainly represents part of the original building.
- 4.4.6 A brick-built boiler house was placed adjacent to the north-eastern corner of the weaving shed in 1937; this building presently contains a modern heating boiler. The building incorporates a small section of stone-built fabric, which clearly represents elements of an earlier structure.



Plate 16: View across the second floor of the former spinning block



Plate 17: Cast-iron housing, probably for a vertical shaft, affixed to the north-west-facing wall of the spinning block at third-floor level

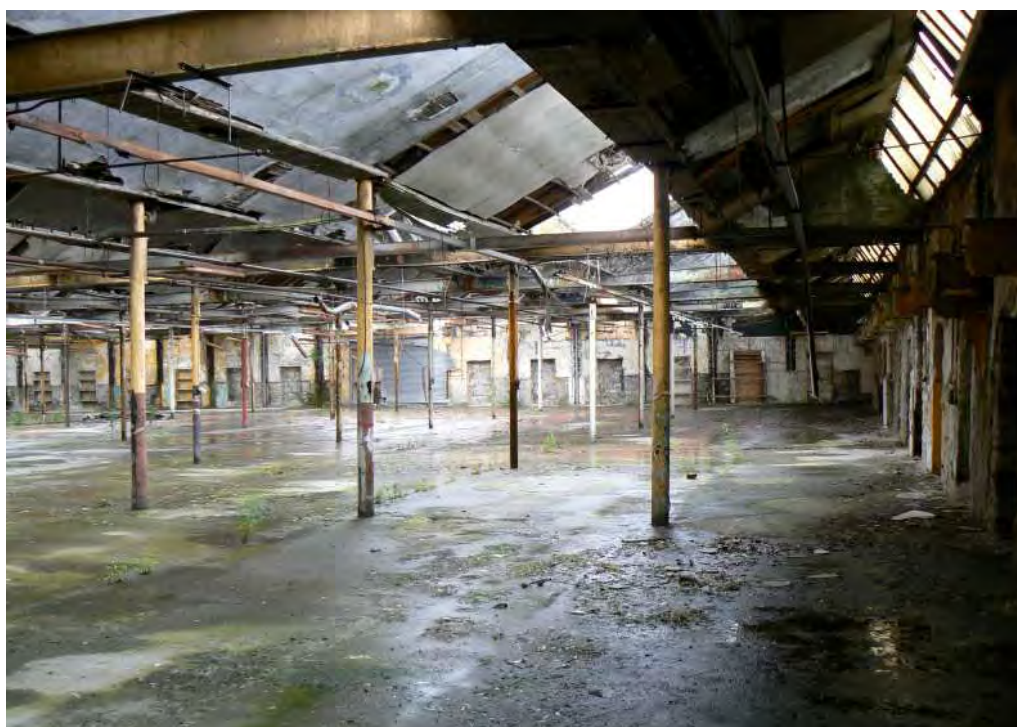


Plate 18: The weaving shed, showing the twentieth-century extension in the foreground



Plate 19: View across the weaving shed, showing the lineshaft bevel-gear housings

- 4.4.7 **Summary of significance:** as an early example of an integrated textile mill in a town that became the cotton-weaving centre for the world, the envelope of Sandygate Mill has high *Evidential* and *Historical* values. The setting of the spinning block and weaving shed adjacent to Slater's Terrace, the extant engine house, and the canal, may be considered to have a high *Aesthetic* value, as these components represent the key elements of the area's industrial townscape. In summary, the envelope of Sandygate Mill may be considered to be of *Outstanding Significance*.
- 4.4.8 Taking individual components, the spinning block has high *Period*, *Rarity* and *Group value* ratings, and a high *Vulnerability* rating. However, the building has been remodelled radically, and whilst some physical evidence for the original power systems is provided by surviving cast-iron transmission brackets affixed to the north-west-facing external wall, the building does not have a high *Survival* or *Condition* value; the interior is largely devoid of historic fixtures and fittings, and all original floor surfacing appears to have been replaced. Thus, whilst the exterior walls of the building (including the doorway entrance from the yard opposite Slater's Terrace) are of significance in terms of enhancing the character of the Sandygate Street frontage, the structure as a whole is only considered to be of *Some Significance*.
- 4.4.9 The associated weaving shed is of greater archaeological interest. A recent rapid survey of Lancashire textile mills (OA North 2010) concluded that the earliest weaving sheds in the modern county of Lancashire that survive in anything like their original form date to the mid-1850s, and include Garden Seat Mill in Blackburn (1853-4), Church Kirk Mill in Church (1853-4), and Roe Lee Old Mill in Blackburn (1856-7). In Burnley, Oak Mount Mill on Wiseman Street almost certainly incorporated a weaving shed before 1850, although the present weaving sheds were erected in the late nineteenth or early twentieth century with little, if any, original fabric surviving. Other weaving sheds that survive in the vicinity of Sandygate Mill include a small shed attached to Thorneybank Mill (c 1860), Waterloo Shed (1860s) and Hope Shed (1874), all situated on Trafalgar Street, Belle Vue Mill on Westgate (1863), and Westgate Shed on Wiseman Street (1886). Elsewhere in Burnley, early weaving sheds survive at Elm Street Mill on Danehouse Road (c 1863) and at Stanley Mill on Shackleton Street (c 1867). Elements of Harle Syke Mill at Briercliffe were built in 1855-6, although the earliest fabric of this weaving shed appears to have been remodelled or replaced. Similarly, Burnley Wood Mill on Parliament Street in Burnley was erected as a weaving mill in c 1850, and whilst the original two-storey preparation and office block survives largely intact, the weaving shed has been replaced with modern industrial units.
- 4.4.10 Sandygate Mill weaving shed is thus likely to be the earliest weaving shed in Burnley, and potentially one of the oldest surviving weaving sheds in Lancashire. It has high *Period*, *Rarity* and *Group value* ratings, and a high *Vulnerability* rating. In contrast to the spinning block, moreover, the weaving shed appears to retain considerable elements of its original fabric, and also retains physical evidence for the sequence of power systems. Several cast-iron drive housing and bearing boxes survive, together with the housing for the

bevel gears that transferred power to the series of lineshafts across the shed. The type, spacing and configuration of the cast-iron columns in the south-western part of the building reflects the original layout of the shed, providing a good example of a weaving shed of this period, although the use of whaleback cast-iron beams may be unusual. A series of recesses set into the walls of the shed at regular intervals are original features, providing storage space. Some of these recesses retain stone shelving as an interesting and unusual feature. The weaving shed also has good physical evidence for its slight expansion and associated remodelling in the twentieth century; the north-eastern wall of the shed was erected at this time, and is of lesser significance than other elements of the building. It is possible that the present concrete floor was laid at this date, presumably as a replacement for original stone flags; these may survive *in-situ* beneath the more recent surfacing.

- 4.4.11 Sandygate Mill weaving shed has good *Potential* as an archaeological/historical resource. Notwithstanding the north-eastern wall, the weaving shed is largely considered to be of *Outstanding Significance*, although it is recognised that the *Condition* of the north-light roof is currently poor and liable to collapse. However, this rating is based on an assumption that other weaving sheds in the vicinity (Oak Mount Mill, Thorneybank Mill and Waterloo Shed) do not retain a comparable level of original fixtures and fittings; confirmation that such features survive *in-situ* in these other early weaving sheds would reduce the *Rarity* value of Sandygate Mill weaving shed, and perhaps its significance value to *Great Significance*.
- 4.4.12 The twentieth-century, brick-built boiler house adjacent to the north-eastern corner of the weaving shed represents a late stage in the development of the mill complex, but detracts from the earlier historic fabric. The building has low *Period*, *Rarity* and *Group value* ratings, and has little *Potential*.

4.5 WATERLOO HOTEL

- 4.5.1 **Historical development:** the exact year in which the Waterloo Hotel was erected remains uncertain, although it probably dates to c 1865. It is named on the Ordnance Survey 1:1250 map of 1892, and depicted as an L-shaped block with a small yard containing several small structures in the northern corner of the site.
- 4.5.2 **Description:** the two-storey building is of stone construction, and appears to have been erected in a single phase. The exact date of construction has not been established, although there is physical evidence to demonstrate that it was later than the weaving shed of Sandygate Mill. It is six by three bays, with an additional bay projecting along the Sandygate frontage, forming a courtyard with cellar-drop to the rear. The hotel was constructed to a high standard of architectural detailing, with decorative lintels to all the windows on the street frontages, two embellished doorways, and a picture window into the main bar on the Trafalgar Street façade. Behind the two bays that formed the public house on the corner of the two streets, the building appears to have comprised accommodation to both floors, with additional rooms in the attic. A relatively ornate open staircase afforded access to the upper floors, with a large stair

window above the weaving shed in the north-western elevation. Whilst the bar area has been remodelled, possibly on several occasions, the remainder of the structure may retain its original layout, although it was recently badly damaged by fire.

4.5.3 **Summary of significance:** the Waterloo Hotel has some *Aesthetic* and *Communal* value, and provides an interesting example of a hotel/public house in the heart of a textile-manufacturing area. However, the interior of the building is in very poor *Condition*, and has been remodelled and damaged severely. The building does not have a high *Period*, *Rarity* or *Documentation* rating, and whilst it does have a *Group value* with the adjacent mills and Slater's Terrace as a component of the industrial townscape, there are other examples of small hotels in the immediate vicinity, such as The Plane Tree, situated at the junction of Westgate and Sandygate. Originally a private house belonging to William Hopwood, the building was converted for use as an inn during the 1890s.

4.5.4 The principal significance of the buildings is in terms of enhancing the historical character of the Trafalgar Street frontage and, in this respect, the façade of the building is considered to be of *Some Significance*. The rest of the structure, however, is considered to be of *Lesser Significance*.



Plate 20: The Trafalgar Street elevation of the Waterloo Hotel

4.6 VICTORIA MILL

- 4.6.1 **Historical development:** built in 1855 for the Massey family as a throstle cotton mill, it was converted during the 1890s to an integrated mill. The earliest part forms a L-shaped plan, the longer range (running parallel to the street) double depth with paired gables to west, hipped (and possibly shortened) to the east. This part of the mill contained carding engines and roving frames on the ground floor, and mules on the upper floors. Internally, the disposition of iron columns reflects use of different machinery on upper and lower floors, with exceptionally wide aisles to the top two storeys. The mill retains its original hoist gear, and is thought to contain an early sprinkler system. The return range contained an integral engine house, marked by a tall round-headed window opening. A seven-stage tower (to the south-east of the original building) and two-storeyed weaving sheds to the east were added in 1889.
- 4.6.2 A fire in 1856 damaged some of the buildings but was extinguished quickly. Another fire broke out in 1882 causing far greater damage (£20,000). By 1887, the mill housed between 18,000 and 20,000 spindles; 16 double carding engines, five pairs of roving engines and two roving frames were located on the ground floor. However, the mill was bought by the Victoria Mill Company in 1890, which used it for spinning and weaving. In 1892, all of the spinners employed by the Victoria Mill Company went on strike on account of 'bad work and consequently low wages' (*Blackburn Standard* 17 December 1892). By 1900, the company was only dealing in cotton waste. By the mid-1940s, the mill was in use by mattress-maker Hammond and Company, and later tenants may have included Leyfield Products, Victoria Tannery and Boldsworth Holdings (Nadin 2008, 87-8).
- 4.6.3 **Description:** the Victoria Mill complex incorporates several distinct elements including a multi-storey spinning block, engine house, weaving shed, additional weaving shed, toilet tower, stair tower, and a chimney. The mill complex occupies a roughly triangular site bounded by the Leeds and Liverpool Canal and Trafalgar Street.
- 4.6.4 The earliest surviving fabric comprises what appears to have been a four-storey spinning block, placed perpendicular to Trafalgar Street, and of ten bays length, incorporating an integral engine house at its northern end. The engine house survives, albeit in a heavily remodelled form, as does the western wall, which was incorporated into the later, double-depth spinning block. This also retains a privy tower, projecting two bays to the south of the engine house, which has a distinctive tall round-headed window. All but a stub of the internal wall between the engine house and the original spinning block has been removed, and rebuilt subsequently to form the boundary of a courtyard, formed when the spinning block was demolished and the first weaving shed erected. This rebuilt wall appears to have been built above an existing wall in this position at ground floor level, which probably represents the outer wall of an internal boiler house, adjacent to the engine.

- 4.6.5 The later spinning block, running parallel to Trafalgar Street, is of double-depth construction with paired gables at its western end, and a hipped roof to the earlier spinning block to the east (Plate 21). Its 10 x 7 bay plan form is most unusual for a spinning block, with its 71' (21.7m) width being exceptional for the period; spinning blocks more typically being 10-15m wide, and considerably longer, relative to their width, as the original spinning block, which appears to have been approximately 15m wide. The probable reason for this short wide spinning block is probably two-fold: first, it incorporated the existing wall of the earlier spinning block, the reversed window apertures, having their inner recessed embrasures on the outer, courtyard face of the extant building; and second, probably reflecting the more varied use of the lower floors of the structure for carding and roving machinery.
- 4.6.6 The structure incorporates a very basic form of fireproof construction, comprising thick timber floors, undersealed with lath and plaster, itself covered by a timber plank ceiling below (Plate 22). This is supported on large-scantling timber beams, supported on cast-iron columns, of various styles, and with a variety of inserted props of timber, iron and steel, utilised at various times, and reflecting the structural instability of such a wide spinning block. Many of the columns bear evidence for lineshafting, and some evidence for drive shafts survives within the external walls. However, much of the power system would have been bolted directly onto the beams, leaving little trace. Indeed, the beams spanning the upper floor appear to be performing little structurally, as the trusses above do not carry purlins, suggesting that the roof is supported entirely by the side-walls, and that beams served only as lateral ties, and to carry the power system. The beams at the north-western corner of the spinning block also carry the original hoist, which survives intact (Plate 23), although it was converted to an electrical motor supply, presumably in the mid-twentieth century.
- 4.6.7 Power appears to have entered the spinning block at second-floor level at the north end of the east wall, from where it was transferred to the upper floor. The original privy tower was retained, with access inserted from the new structure. At top floor level, however, an alternative access to the privy was afforded from the adjacent bay, via a cast-iron balcony (Plate 23), although the reason for this remains unclear.
- 4.6.8 The Trafalgar Street facade has a two-bay projection towards its south-eastern end, and this almost certainly denotes the position of the original stair tower. Rectangular windows in each bay have continuous lintel bands, diminishing in size to each floor, and mainly house six-pane casements, some having been altered subsequently. The rear elevation and western gables are similarly-fenestrated, with a loophole of taking-in doors in the centre of the rear gable, retaining what appears to be the original hoist on the upper floor.



Plate 21: Victoria Mill from Trafalgar Street



Plate 22: Second floor in the spinning block, showing density of columns and timber props

- 4.6.9 The later 1889 stair tower is of sandstone and brick fireproof construction, with flag floors. It has greater architectural detailing than the earlier structures, including round-headed windows and decorated plasterwork internally, giving the effect of a dressed stone staircase. The tower was constructed to a height of six storeys, with the supply pipe for the automated sprinkler system, manufactured by Witter & Son of Bolton, housed within the rectangular newel. The upper floor of the tower housed the decorated cast-iron water tank which fed the automated system. 'The 'Witter' automatic sprinkler gained a reputation for reliability and robustness, and was one of the earliest such systems developed, following the introduction of sprinkler systems into Britain during the early 1880s. Indeed, by 1888, the year prior to the installation of the system at Victoria Mill, only 233 cotton mills in England had working automated sprinkler systems (Wormald 1923). The main valve is located within the courtyard (Plate 24). From the main valve, sometimes referred to as a 'Christmas tree', the water supply entered the spinning block, before being transferred between floors in vertical pipes placed adjacent to columns. The system, including the glass bulb sprinklers themselves, appears to survive almost completely intact.
- 4.6.10 The tower was contemporary with the construction of a two-storey weaving shed and warehouse along the eastern boundary of the mill complex. This was of red brick construction, with the exception of the Trafalgar Street façade, which is of stone, and may be a remnant of an earlier weaving shed, as are sections of the west elevation. The lower floor is of fireproof construction, with lime-cement rendered, wide-spanning brick arches. It is punctuated by a passageway through the building, placed immediately north of, and parallel to the engine house. To the south, the warehousing is divided by an inserted transverse wall, which encloses a row of columns, and marks a change in the present floor level. The smaller, irregularly-shaped ground floor to the north, follows the line of the Leeds and Liverpool Canal, and is also of fireproof construction, and with high brick-arched ceilings. A partitioned room in its south-western corner represents the remains of an earlier boiler house, constructed originally in sandstone, and with the remnant of flues in its eastern wall. It presumably served the engine house immediately to the south of the passage, with the flues leading to a tapering stone chimney, which was incorporated into the east external wall of the 1889 weaving shed. Recent subsidence within the warehouse by the canal-side revealed structural remains below floor level, suggesting that culverts and features relating to earlier processing within this part of the site survive.
- 4.6.11 The first floor of the structure comprises a large weaving shed (Plate 25), with north-light multi-span roofing, supported on joists that are probably of wrought iron. These are carried on cylindrical cast-iron columns to the south and east of the engine house, each column having lineshaft mounting surfaces on their eastern side (Plate 26), whilst in the northern part of the shed, the valleys were carried on transverse whale-backed cast-iron beams, supported by similar columns to alternate bays, thus increasing the floor area available for looms.



Plate 23: The original hoist, situated on the top floor of the spinning block



Plate 24: The main valve for the sprinkler system



Plate 25: The first-floor weaving shed



Plate 26: The interior of the weaving shed in Victoria Mill, showing the lineshaft mounting surfaces on the cast-iron columns

- 4.6.12 **Summary of significance:** as with Sandygate Mill, Victoria Mill represents an early example of an integrated textile mill in a town that became the cotton-weaving centre for the world, and likewise has high *Historical* values. This *Evidential* value is further enhanced by fabric relating to a former spinning block which was demolished subsequently, as the complex expanded throughout the nineteenth century. The mill retains different structural elements, including the spinning block, the engine house, the stair tower, a privy tower, and a weaving shed, all positioned at the western end of the Weavers' Triangle, on both the road and canal, giving the complex a high *Aesthetic* value. Whilst many elements are in a poor state of repair, the Victoria Mill complex as a whole is considered to be of *Great Significance*.
- 4.6.13 Taking individual components, the spinning block has high *Period*, and *Group value* ratings, and a high *Vulnerability* rating. Given the re-use of the earlier spinning block wall, leading to a potentially unique arrangement for a spinning block, the structure also has a very high *Rarity* rating. Unlike other buildings within the study area, there has been little remodelling, and some physical evidence for the original power systems survive, as does the hoist, giving the building a high *Survival* rating. Unfortunately, the building is in a poor state of repair, with much water ingress and floor collapse having occurred in recent years, giving it a low *Condition* value. This dilapidation of the structure detracts slightly from the significance of the building, which is considered to be of *Great Significance*.
- 4.6.14 The adjoining privy tower is somewhat similar, having high *Period*, *Group value*, *Survival*, and *Vulnerability* ratings. Privy towers are not particularly rare *per se*, although the age of that serving Victoria Mill, and its remodelling to incorporate an external balcony entrance, increase its *Rarity* value to high. Unfortunately, its relatively poor quality of construction, and its poor *Condition* value, reduces the relative significance of the structure to being of *Great Significance*. However, the original spinning block wall, to the north and south, represents better-preserved evidence for the earliest structure within the complex, and has evidence for power transmission and original floor construction technology, in the form of a sawn-off timber beam. It has high *Period*, *Group value*, *Survival*, *Vulnerability*, *Rarity* and *Condition* ratings, and is considered to be of *Outstanding Significance*.
- 4.6.15 The engine house also forms part of the original spinning block, giving it a high *Period* and *Group value* rating. It also has a high *Vulnerability* rating. However, little survives of the power system, or any related features, giving it a low *Survival* and *Condition* value. Whilst engine house survival within the locality is fairly common, the majority of these are detached structures (*eg* Sandygate Mill, and Oak Mount Mill), giving the structure a moderate *Rarity* rating, and it is considered to be of *Great Significance*.
- 4.6.16 The 1889 stair tower is well-preserved, and of high-quality construction, and is rated as being of high *Period*, *Group value*, *Survival*, *Vulnerability*, and *Condition* values. The survival of its integrated early automatic sprinkler system and associated water tank, complete with water level gauge, increases its *Rarity* rating, and the structure is considered to be of *Outstanding Significance*. Likewise, the sprinkler system itself represents a rare survival,

and an early example of such a feature, having similar ratings to the tower, and also considered to be of *Outstanding Significance*.

4.6.17 The weaving shed is a rare example of a two-storey weaving shed in Lancashire. Whilst many other sheds within the locality and wider area utilise natural ground slopes to create partial basements below single-storey sheds, the Victoria Mill weaving shed presents a rare example of a purpose-built, fully two-storeyed shed. Thus, although it is only one of many extant weaving sheds erected in Burnley in the latter years of the nineteenth century, it has high *Rarity* and *Group value* ratings, and a high *Vulnerability* rating. It does, however, appear to retain elements of an earlier structure, increasing its *Period* value, and also retains physical evidence for the power system. Several cast-iron bearing boxes survive, together with the mounting bolts for the bevel gears that transferred power to the series of lineshafts across the shed. The type, spacing and configuration of the cast-iron columns in different parts of the weaving shed reflects alterations in the layout of the shed, providing a good example of a weaving shed of this period. The incorporation of the boiler house and chimney within the fabric of the new structure also increase the *Group value* and *Rarity* ratings of the building. It is possible that an earlier flagstone floor survives below the present stepped concrete floor in the southern part of the basement, and a small area of collapsed floor in the north has already revealed *in-situ* remains below present ground level within this part of the building. This good *Potential* as an archaeological/historical resource is enhanced by the presence of two boiler houses, a chimney, and probably the associated flue, within the structure. Although the *Condition* of the north-light roof is currently poor and liable to collapse, and despite its relatively late date, the structure is considered to be of *Great Significance*.

4.7 SANDYGATE SHED (SITE OF)

4.7.1 ***Historical development:*** Sandygate Shed was built on behalf of George Slater in c 1840 as the initial element of what became known as Clock Tower Mill. It comprised a six-storey warehouse, a stone-built weaving shed, three-storey preparation block, and a stone-built engine house with semi-circular arched windows and open cast-iron water tank on top (Ashmore 1982, 191). However, it was largely destroyed by fire in the 1990s, and was demolished subsequently.

4.7.2 ***Description:*** the site of the large weaving shed has been largely cleared, although the north-western stone-built wall survives along the south side of Wiseman Street (Plate 27).

4.7.3 The remains of the demolished engine house survive in the south-western corner of the mill site (Plate 28). These remains comprise huge stone ashlar blocks that formed the foundation bed for the mill steam engine; some of these blocks incorporate original tool marks representing rare evidence of engineer-erector's marks (Plate 29). Whilst incomplete, the surviving elements of the engine bed form a tall and imposing structure, which incorporates some evidence for the system of power transmission from the engine to the machinery in the weaving shed. These remains are integral to the surviving wall of the weaving shed along Wiseman Street.



Plate 27: Surviving elements of Sandygate Shed, looking south-west along Wiseman Street

- 4.7.4 The site of the boiler house and chimney associated with this engine lie beneath the modern turning area in the road. These sites have some potential to contain buried remains of archaeological interest.



Plate 28: Surviving elements of the engine house for Sandygate Shed



Plate 29: Engine-erector's marks in the foundation bed masonry

- 4.7.5 **Summary of significance:** the surviving fabric of Sandygate Shed, and particularly the remnants of the engine house, has some *Evidential* value for one of the earliest purpose-built, steam-powered weaving sheds in the area. Notwithstanding the recent demolition and clearance of a large part of the mill, the surviving remains along Wiseman Street are tall and imposing, providing a reminder of the monumental industrial buildings that once dominated the townscape of the area, and the scale of the engines that powered them; the loss of this wall, and the resultant open space that would be created, would detract from the historic character of the area. However, a wider appreciation of these *Aesthetic* and *Communal* values requires appropriate interpretation of the surviving remains, which can perhaps be demonstrated vividly elsewhere in the area.
- 4.7.6 The engine house was integral to the construction Sandygate Shed, providing the power for the new weaving factory. Although the engine house has been damaged through demolition, the surviving foundation beds have high *Period* and *Group value* ratings. The surviving structure also has a *Rarity* value; whilst the engine house survives at Victoria Mill, for instance, it does not retain the foundation beds for the engines that it once contained. The site also has good *Potential* for buried remains of archaeological interest, specifically pertaining to the steam-raising plant and chimney.
- 4.7.7 The remains of Sandygate Shed are considered to be of *Lesser Significance*, although the huge foundation beds of the steam engine may be seen to be of *Some Significance*.

4.8 WISEMAN STREET WORKS

- 4.8.1 **Historical development:** the origin of this building is difficult to trace with precision, although The Ordnance Survey map of 1848 shows the site to have been occupied by two detached buildings and a free-standing chimney, which may have been associated with Oak Mount Mill. These two buildings similarly appear to be depicted on Walsh's map of 1882 (*Section 3.2.3 above*). By 1892, however, these structures had been replaced by a small complex of three buildings around a small courtyard, accessed from the canal towpath via a covered entrance. By 1896, these buildings appear to have been occupied by Henry Eckersall, a textile-machinery maker and smith (Barrett & Co 1896, 230).
- 4.8.2 **Description:** of the buildings depicted on the Ordnance Survey map of 1892, substantial remains survive of a single structure, together with elements of the covered entrance and the former building in the southern part of the site surviving in a stone-built wall fronting onto the canal. Historical photographs (*eg Plate 5*) portray the surviving building as having been a two-storey structure, although this has since been reduced to a single storey, which incorporates a roof of a probable mid-twentieth-century date (Plate 30).
- 4.8.3 The surviving fabric testifies several developmental phases in the surviving building, and provides some evidence for power transmission through the approximate centre of the structure. However, whilst some original fabric survives, represented by the stone-built elements, the building has been subject to considerable remodelling, which detracts from an understanding of the intended function of the building.



Plate 30: Surviving building in the Wiseman Street complex



Plate 31: Fragmentary remains of the covered entrance and building fronting onto the canal

- 4.8.4 **Summary of significance:** the surviving fabric of the Wiseman Street Works has some *Evidential* value as the vestiges of a textile-machinery works, which represented a crucial element of the industrial townscape associated with the manufacture of cotton goods. The surviving fabric, and particularly that fronting onto the canal, adds a positive contribution to the historical character of the area, specifically a sense of the canal corridor being lined with industrial buildings for its entire route through the Weavers' Triangle (Plate 31).
- 4.8.5 The structures on the site have low *Survival* and *Condition* values, and do not merit high *Period*, *Rarity* or *Documentation* ratings. They do have a *Group value* with other industrial buildings in the area, and the site has good *Potential* for buried remains of archaeological interest.
- 4.8.6 The remains of the Wiseman Street Works are considered to be of *Lesser Significance*. However, the substantial stone wall of the former covered entrance from the canal towpath maintains the industrial character of the area. The loss of this wall, and the resultant open space that would be created, would detract from the character of the area.

5. ASSESSMENT OF SIGNIFICANCE

5.1 INTRODUCTION

5.1.1 This assessment of significance is not intended to be a definitive report on the structures within the study area, and has been based on a very rapid inspection, undertaken broadly to English Heritage Level I-type survey standards. Elements of many structures were inaccessible, and with further study the complex phasing, and thus a greater understanding of the significance of many other features, may be clarified.

5.1.2 Clearly, the study area as a whole can be defined as being of *Outstanding Significance*, incorporating a wide range of structures, of differing *Rarity* and *Survival*, with an extremely high *Group Value* and archaeological *Potential*, and forming a rare and iconic representation of a late-nineteenth century industrialised locale. However, the individual elements which form the study area have varying significance within the overall scheme, and accordingly, assessments have been made for individual structures, and in some cases, different elements within these buildings. Thus, some buildings may contain multiple significance ratings, as sub-divisions within an overall assessment.

5.2 PRIORITY 1 STRUCTURES

5.2.1 Those elements of the study area considered to be of *Outstanding Significance* are:

- External elevations of Slater's Terrace, warehouse and engine house. The envelope of this block provides one of the iconic images of the Weavers' Triangle, particularly when viewed from the canal;
- Sandygate Mill weaving shed, south-western part. Notwithstanding the poor structural condition of the roof, the original weaving shed attached to Sandygate Mill survives largely intact, representing a good example of one of the earliest surviving purpose-built steam-powered weaving sheds in Lancashire. The shed contains good physical evidence for the power transmission system;
- Victoria Mill tower. Despite its relatively late date within the buildings incorporating this assessment, this well-preserved structure and the remains that survive *in-situ* internally, represent a very rare survival of the development of the automatic fire-fighting systems. Indeed, the sprinkler system as a whole survives almost intact throughout the otherwise badly damaged spinning block, and is itself of *Outstanding Significance*;
- Victoria Mill original spinning block. Although only comprising a single elevation, this feature is crucial to the phasing and interpretation of almost all the other features within the Victoria Mill complex. It also retains evidence of the fabric of the original spinning block, demonstrating it to have also comprised timber floor beams, rather than cast-iron examples.

5.3 PRIORITY 2 STRUCTURES

5.3.1 Those elements of the study area considered to be of *Great Significance* are:

- Slater's Terrace. This unique row of mid-nineteenth-century workers' cottages is an extremely important structure. It is reduced from *Outstanding Significance* as the interiors have been damaged severely, and historic fixtures and fittings largely removed, including evidence for its conversion as a winding room in 1900;
- Slater's Terrace warehouse. Although a slightly later addition, the warehouse is inextricably linked with Slater's Terrace;
- Slater's Terrace chimney. The chimney rising through the roof of the warehouse is another key element of the Slater's Terrace group of structures;
- Sandygate Mill engine house. The detached engine house serving Sandygate Mill latterly retains many of its original internal features, including the engine bed, flywheel guard, axle bearings, and potentially the entablature beams;
- Victoria Mill engine house. Although remodelled heavily and stripped of many original fixtures and fittings, this structure represents the earliest extant building of the Victoria Mill complex, and somewhat less-common survival of an internal engine house within the locality;
- Victoria Mill Spinning Block. This feature represents the most intact of the multi-storeyed buildings on the site. It retains many original features and is a very important structure. It is reduced from *Outstanding Significance* only as a result of its poor state of preservation;
- Victoria Mill Privy. This early feature represents an important part of the original spinning block, but is reduced from *Outstanding Significance* as a result of its poor state of preservation;
- Victoria Mill Weaving Shed. Although of relatively late date, this represents a very rare example of a two-storey weaving shed. Whilst the top floor was used exclusively for weaving, the ground floor retains evidence for different phases of the power system, and incorporates an earlier chimney.

5.4 PRIORITY 3 STRUCTURES

5.4.1 Those elements of the study area considered to be of *Some Significance* are:

- Neptune House. Much of the interior of the building, including the later nineteenth-century extension that fronts onto Sandygate, has been severely damaged or remodelled, although the exterior largely retains its historic character;
- Sandygate Mill, spinning block. The exterior walls of this building incorporate original fabric of historical importance, although the interior of the mill has been damaged severely;
- Sandygate Shed engine house foundations.

5.5 PRIORITY 4 STRUCTURES

5.5.1 Those components of the study are that may be considered to be of *Lesser Significance* are:

- Waterloo Hotel. The external envelope of the Waterloo Hotel contributes to the historical character of the area, although the interior has been damaged severely;
- Sandygate Mill late boiler house. For the most part, the twentieth-century brick-built boiler house is of little intrinsic interest, and is largely considered to be a negative element. The structure does, however, incorporate a small fragment of historic, stone-built fabric, which attracts a higher level of significance;
- Sandygate Shed. The surviving section of the weaving shed wall along Wiseman Street is only a fragment of the original building, although this adds a positive contribution to the historic industrial character of Wiseman Street;
- Wiseman Street Works. The extant single-storey building has been damaged severely, with a resultant loss of its historic character. The boundary wall fronting onto the canal adds a positive contribution to the historic industrial character of the canal corridor.

5.6 NEGATIVE ELEMENTS

5.6.1 All structural fabric within the study area forms an intrinsic part of the history of its development, use and decay, and are thus of value to the researcher. However, a few elements detract from the features that make the site as a whole of such *Outstanding Significance*. Some mask earlier features, hindering their understanding, or obscuring their significance. Some of these paradoxically also lie in the category of *Some Significance*, as they document an important later event. Nevertheless, the Negative Elements may be considered to be of such modest significance that their demolition would not be unreasonable, providing an appropriate archaeological record is compiled in advance. Those components of the study that may be considered to be *Negative Elements* are:

- Neptune House. The remains of the twentieth-century outshut, placed against the south-west-facing elevation, detract from the historic fabric of the main building;
- Slater's Terrace. The twentieth-century brick wall sub-dividing the originally open basement detract from the *Aesthetic* value of the warehouse, and the late twentieth-century clinker block partitions within the houses detract from the historic fabric;
- Sandygate Mill. The twentieth-century brick-built boiler house represents a late stage in the development of the mill complex, and is of little intrinsic interest. Moreover, it obscures a view of the earlier historic structures, particularly the stone-built engine house.

6. FURTHER ARCHAEOLOGICAL RECORDING

6.1 INTRODUCTION

6.1.1 Redevelopment of the study area is likely to attract a requirement for further archaeological investigation. In particular, refurbishment or demolition of standing structures may require an archaeological building survey in order to compile a record of any historic fabric that will ultimately be altered or lost. Similarly, any earth-moving works carried out in the study area may impact on buried archaeological remains of interest, the location of which may be assessed from studying the sequence of historical mapping.

6.2 BUILDING RECORDING

6.2.1 The extent of any further archaeological recording of individual buildings in the study area would be driven by the nature of the proposed works, and the relative significance of the buildings.

6.3 BURIED REMAINS

6.3.1 **Sandygate Mill:** there is some potential for buried remains of an earlier structure, possibly an engine house, to survive in the area adjacent to the twentieth-century boiler house. Any buried remains of an engine house in this location would be of considerable archaeological interest.

6.3.2 **Sandygate Shed:** the buried remains of the boiler house and associated chimney for Sandygate Shed may survive *in-situ* beneath modern tarmac surfacing at the western end of Wisemen Street.

6.3.3 **Wiseman Street Works:** the Ordnance Survey first edition map of 1852 portrays several structures on the site that had been demolished by the end of the nineteenth century. These include a detached chimney and two rectangular buildings of uncertain function. Earth-moving works across the footprint of these buildings would merit archaeological investigation, which would be intended to determine the nature of these structures.

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ILLUSTRATIONS

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- Figure 3: Location of buildings in the study area superimposed on the Ordnance Survey map of 1894
- Figure 4: Location plan of Priority 1 areas, superimposed onto the Ordnance Survey map of 1894
- Figure 5: Location plan of Priority 2 areas, superimposed onto the Ordnance Survey map of 1894
- Figure 6: Location plan of Priority 3, 4 and 5 areas, superimposed onto the Ordnance Survey map of 1894

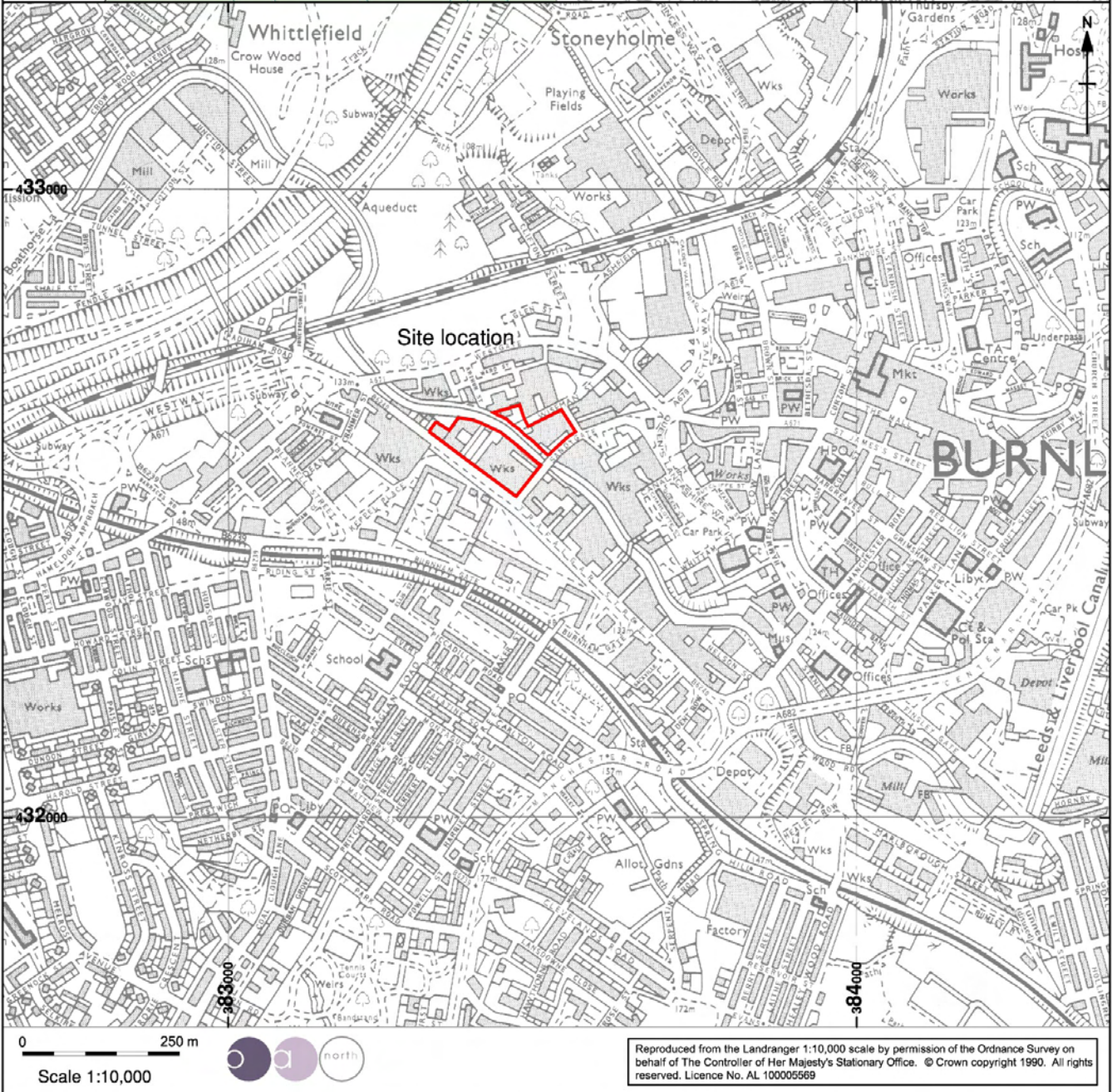


Figure 1: Site Location

- 1 - Neptune House
- 2 - Slater Terrace, warehouse, and engine house
- 3 - Sandygate Mill and weaving shed
- 4 - Waterloo pub
- 5 - Victoria Mill and weaving shed
- 6 - Sandygate Shed engine house
- 7 - Wiseman Street Works

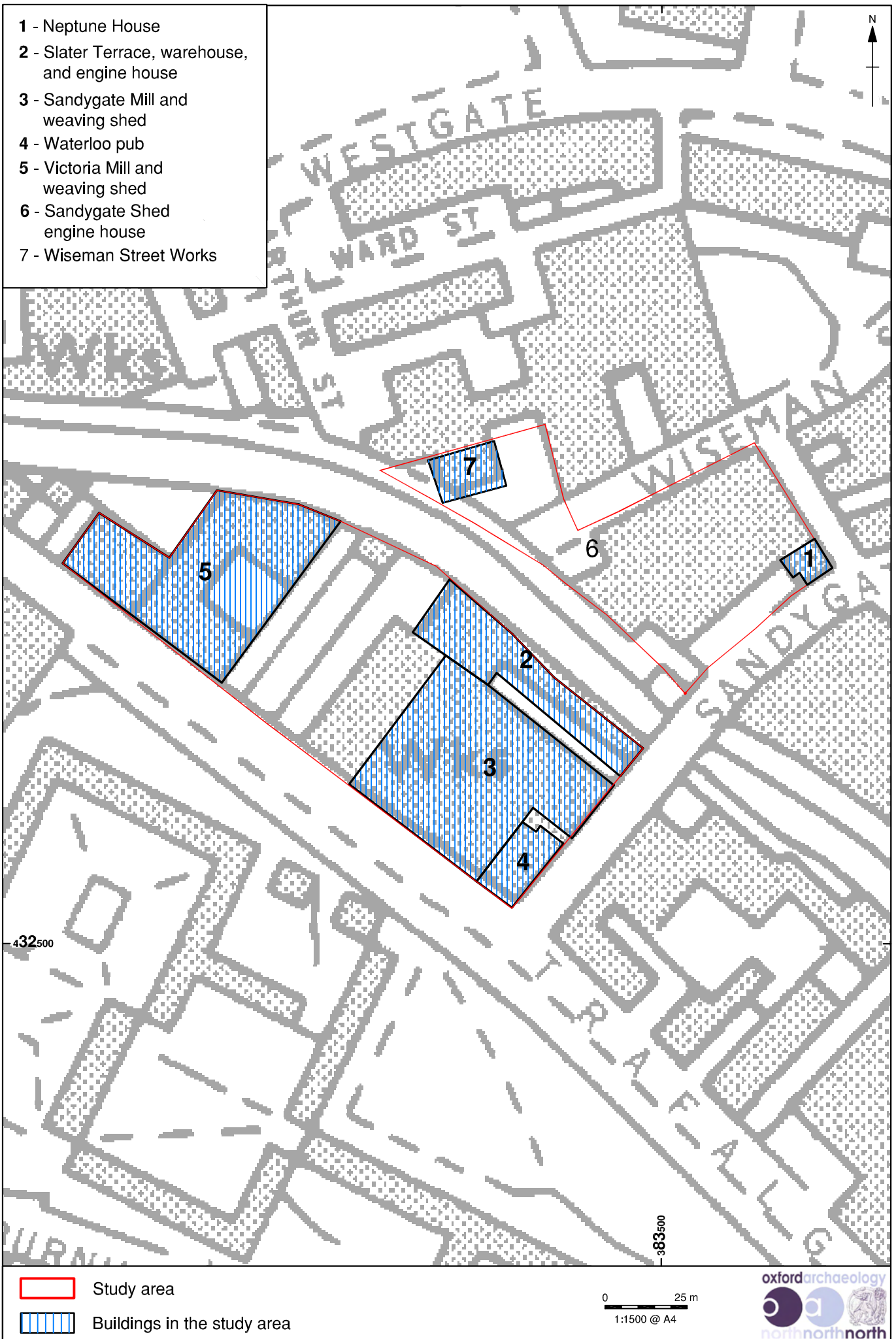


Figure 2: Location of buildings in the study area

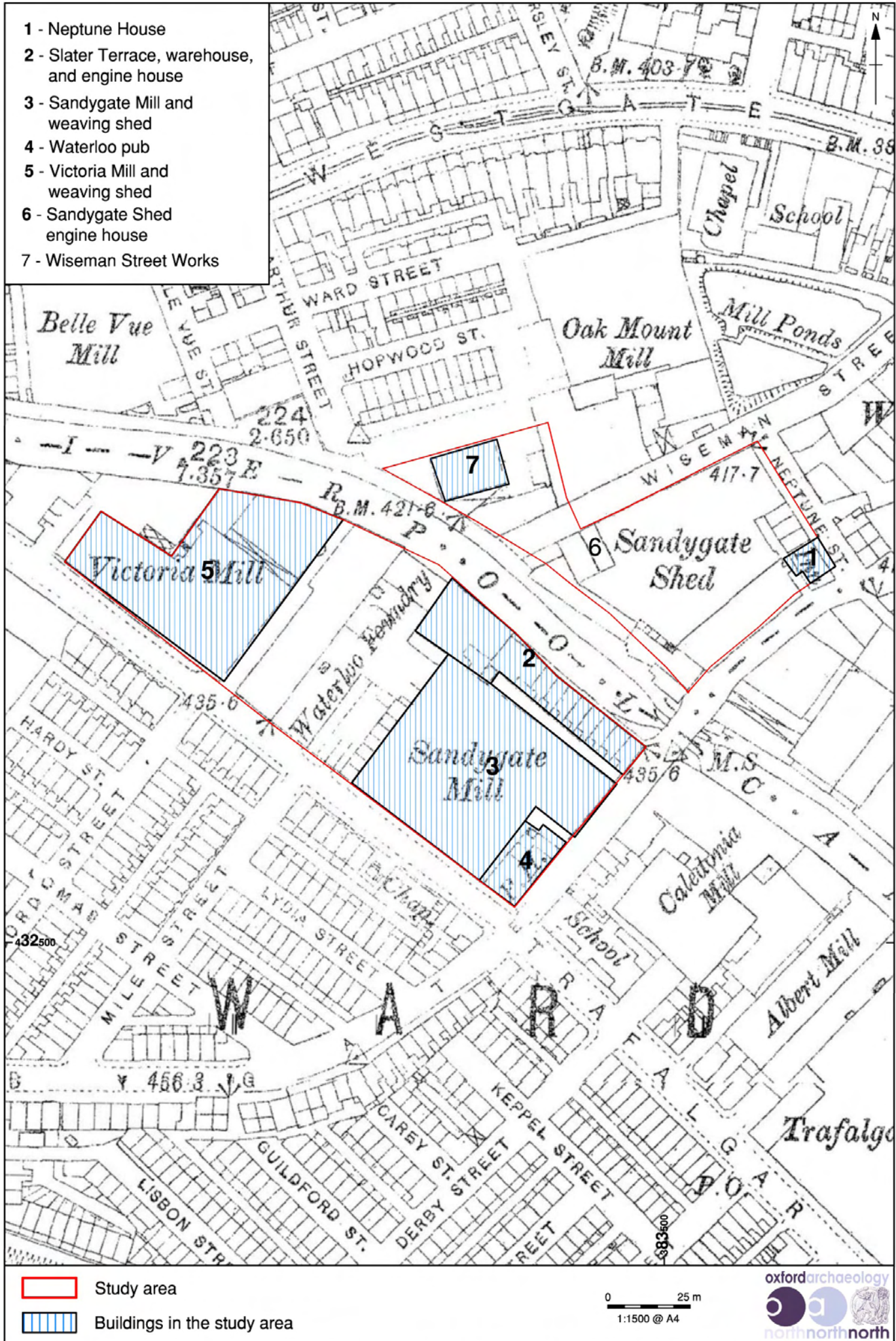


Figure 3: Location of buildings in the study area superimposed on the Ordnance Survey map of 1894

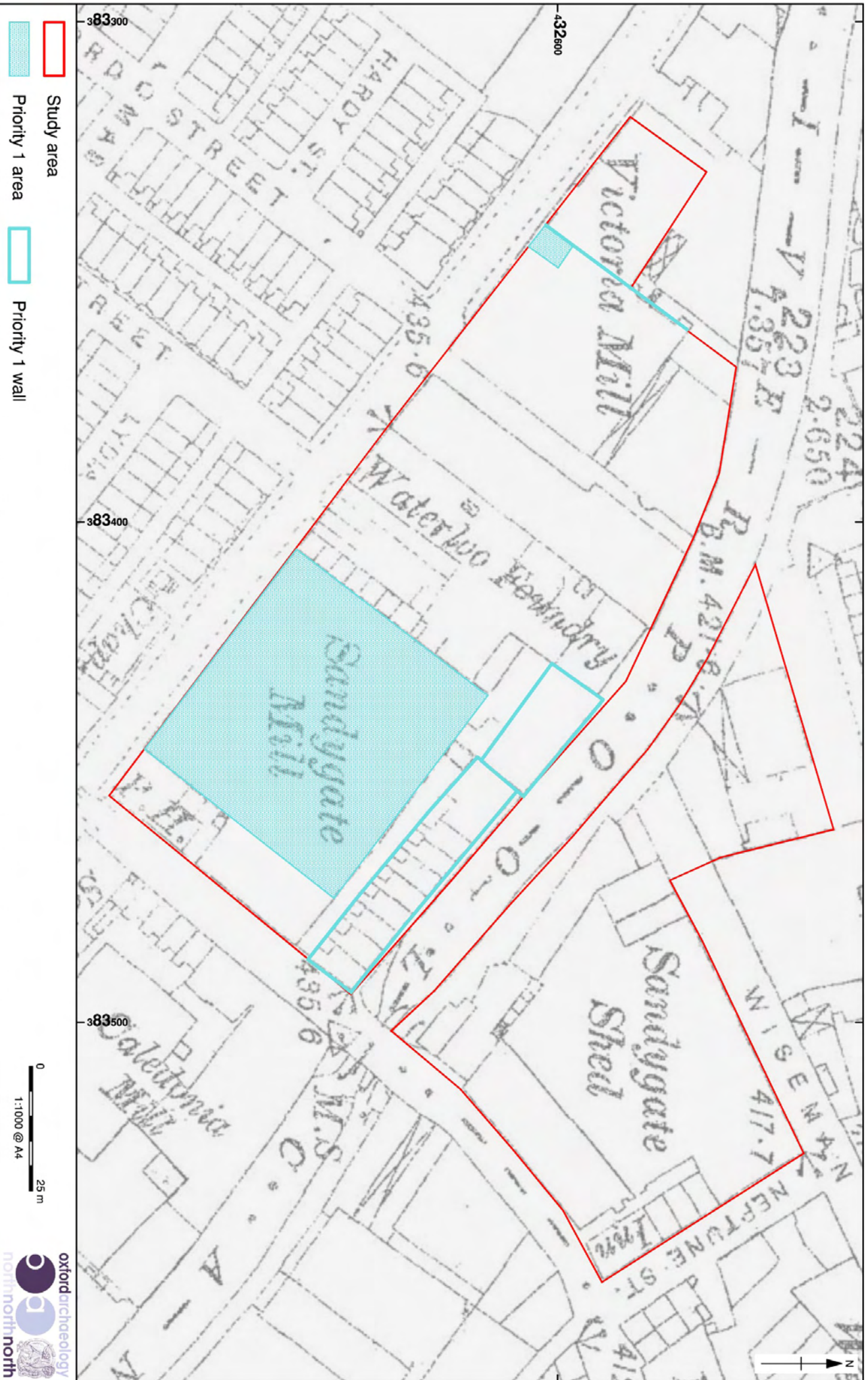


Figure 4: Location plan of Priority 1 areas, superimposed onto the Ordnance Survey map of 1894

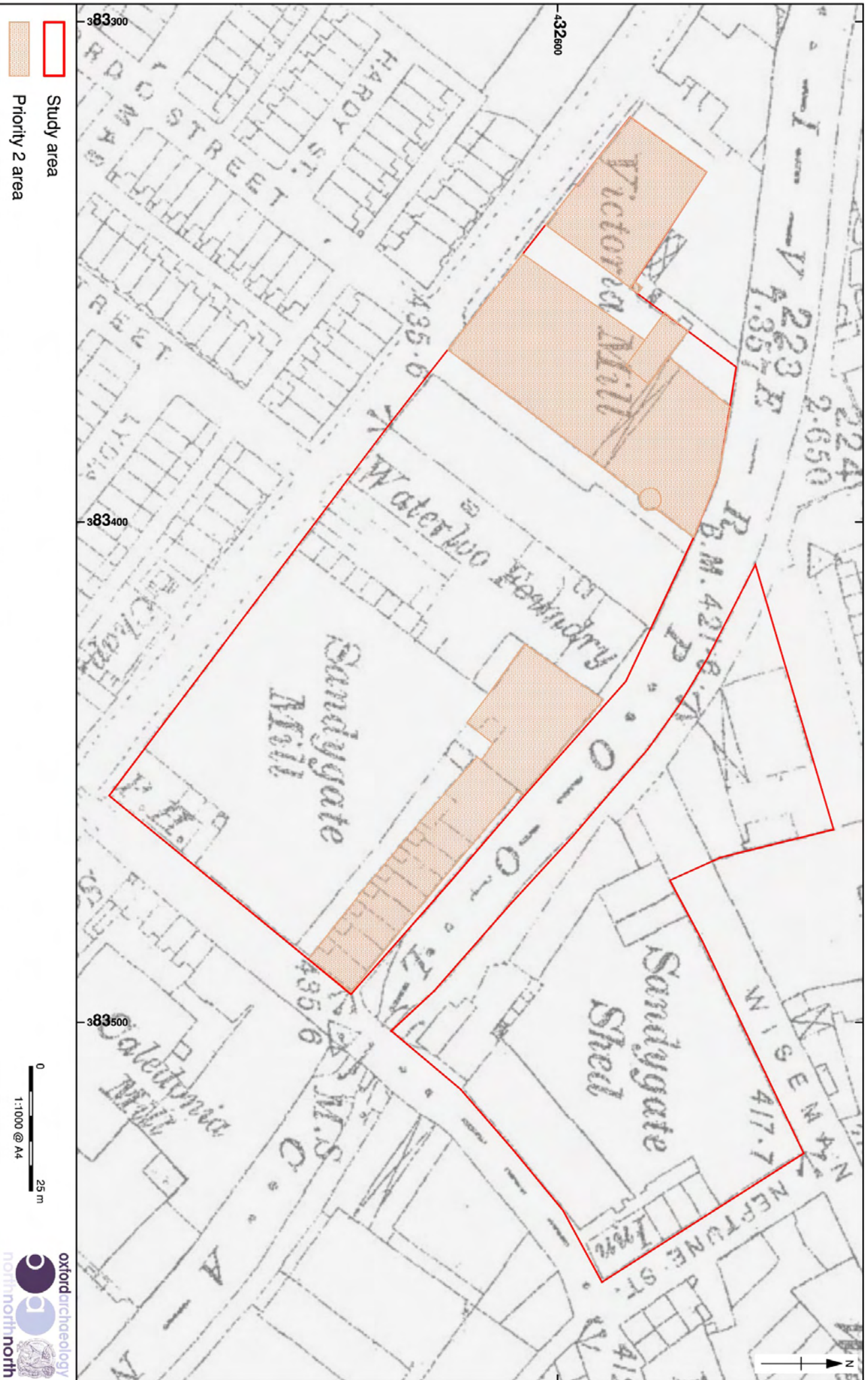


Figure 5: Location plan of Priority 2 areas, superimposed onto the Ordnance Survey map of 1894

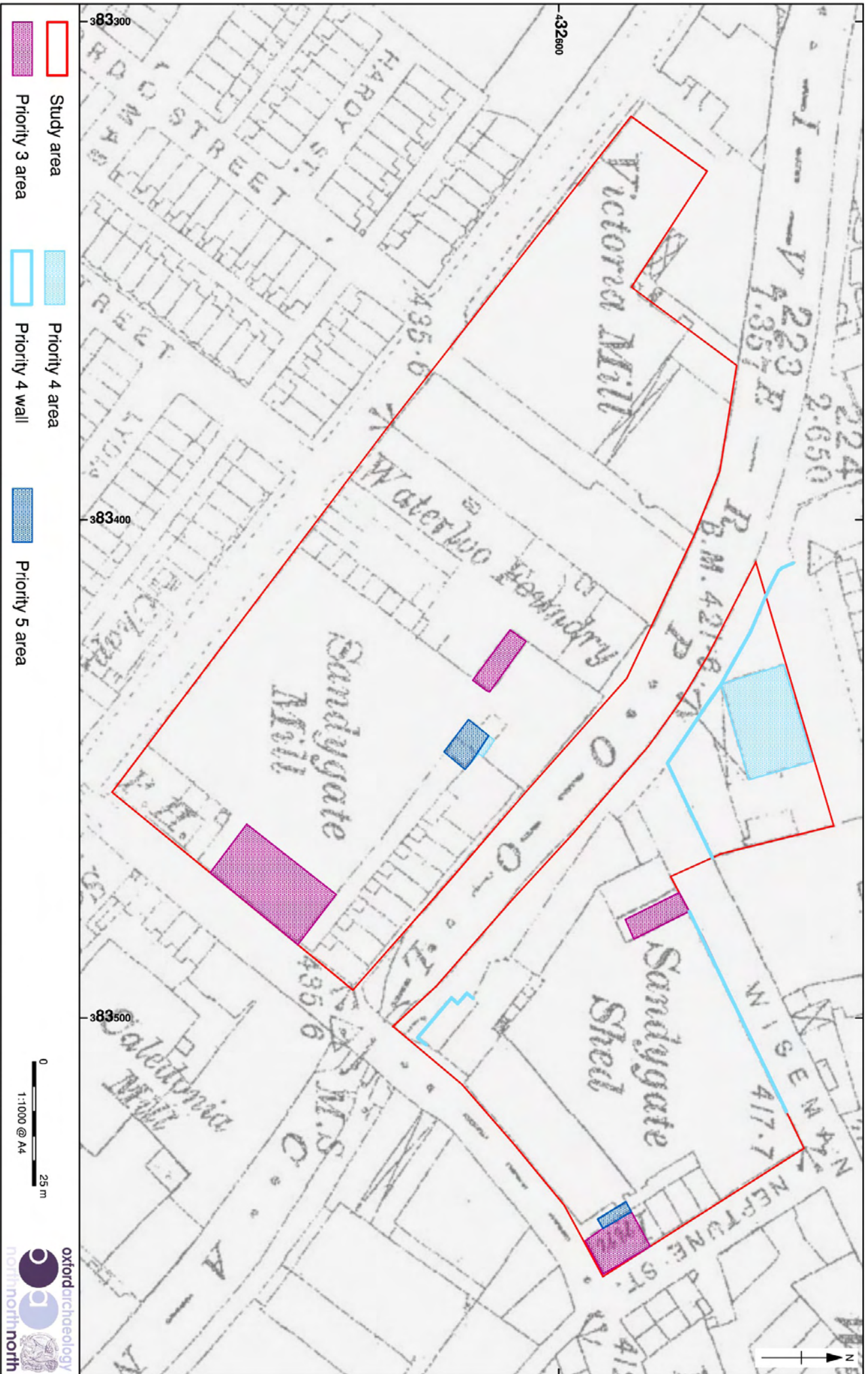


Figure 6: Location plan of Priority 3, 4, and 5 areas, superimposed onto the Ordnance Survey map of 1894