

birmingham archaeology

SOHO GLASSWORKS
WINSON GREEN, BIRMINGHAM

AN ARCHAEOLOGICAL DESK BASED
ASSESSMENT
2004

UNIVERSITY OF
BIRMINGHAM



Project No. 1230
September 2004

Soho Glassworks, Winson Green, Birmingham:

An Archaeological Desk-Based Assessment 2004

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Soho Glassworks, Winson Green, Birmingham: An Archaeological Desk-based Assessment

(SMR 20052, NGR SP 051883)

Planning Application Number C/04024/03/OUT

Contents

	Page
Summary	1
1.0 Introduction	1
2.0 Location of the Study Area	2
3.0 Objectives	2
4.0 Method	2
5.0 General Historical Background	3
6.0 Documentary Information	4
7.0 Cartographic Evidence and the Physical Development of the Site	8
8.0 Present Character <i>by Steve Litherland</i>	9
9.0 Implications and Recommendations	10
10.0 Acknowledgements	11
11.0 References	11
<u>Cartographic Sources</u>	11
<u>Primary Sources</u>	11
<u>Secondary Sources</u>	12

List of Figures

- Fig. 1 Site Location
- Fig. 2 Area Location
- Fig. 3 1810 Kempson
- Fig. 4 1832 Map of Birmingham
- Fig. 5 1855 Guest
- Fig. 6 1855 J. Pigott Smith
- Fig. 7 1857 Blood
- Fig. 8 1889 OS 1st Edition
- Fig. 9 1905 OS 2nd Edition
- Fig. 10 1918 OS 3rd Edition
- Fig. 11 1930 Building plan of extension
- Fig. 12 1930 Building plan of extension
- Fig. 13 1934 Building plan of extension
- Fig. 14 1934 Building plan of extension
- Fig. 15 1954 OS
- Fig. 16 1855 J. Pigott Smith showing outlines of modern building

List of Plates

- Plate 1 Illustration of John Walsh Walsh Letterhead
- Plate 2 Plan of the Richardson factory c. 1900
- Plate 3 Frontage of present building
- Plate 4 Back of building fronting Lodge Road
- Plate 5 Possible earlier unit at north end of site
- Plate 6 Retaining wall at north end of site
- Plate 7 Central courtyard of present building complex
- Plate 8 The Soho Branch canal looking north from the Bridge

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Summary

A desk-based assessment was carried out in September 2004 by Birmingham Archaeology in advance of a Planning Application by Dawlish Properties (Birmingham) Ltd for 112 Lodge Road, Winson Green, Birmingham (NGR SP 051 883). The site was originally occupied by the Soho Glass Works, an early nineteenth-century glass production site which included a glass cone, a large conical brick structure typical of glass production at the time but no longer a common feature of the industrial landscape. The site was initially owned by W. Shakespear, and later by John Walsh Walsh, a glass producer of international renown whose fine glasswares are still collectable today. By the late nineteenth-century the site had two furnaces, both dedicated to the production of fine glass and was a leader in innovations in glass technology. It was known as the Soho and Vesta Glassworks during this period, and has a history of over 100 years of glass production.

Cartographic evidence revealed that the site underwent several phases of expansion but suggests that the cone itself survived until the 1950s when the site was taken over by the Ford Motor Company when a new factory complex was constructed. As a consequence the subterranean features associated with the cone, such as walls and flues for the furnace and other structures associated with the glass works, are likely to survive beneath the courtyard of the present building. It is also possible that archaeological deposits survive beneath the present building itself.

1.0 Introduction

This report outlines the findings of an archaeological desk-based assessment of 112 Lodge Road, Winson Green, Birmingham, which includes the site of the Soho Glassworks (NGR SP 051 883). The work was carried out by Birmingham Archaeology in September 2004 and was commissioned by Dawlish Properties (Birmingham) Ltd as part of the planning application process overseen by the Department of Planning and Architecture, Birmingham City Council. The assessment conforms to a brief prepared by Birmingham City Council (Hodder 2003) and a Written Scheme of Investigation (BArch 2004, Appendix I) and adheres to the guidelines set down in the *Standard and Guidance for Archaeological Desk-Based Assessments* (Institute of Field Archaeologists 1999). The assessment was necessary because the proposed development at the site is likely to affect below ground archaeological remains.

The aim of the report is to provide a summary of known archaeological and historical information relating to the Study Area and to enable appropriate mitigation strategies to be devised regarding potential below ground archaeological remains.

2.0 Location of the study area (Figs. 1 and 2)

The site is bounded by Lodge Road to the south, the railway to the north, saw mills to the east and residential properties on Hobson Close and Coveley Grove to the west. It is currently occupied by workshops and associated yard areas, and disused buildings associated with the Ford Motor Company.

3.0 Objectives

The objectives of this report were to:

- Define the likely extent and survival of the glass cone and other contemporary features associated with the works (as outlined by Crossley (1993 and 1996) for English Heritage).
- Identify later elements associated with the expansion of the glassworks or new innovations in glass making technologies, such as later glasshouses with multiple furnaces, and engine houses for glass cutting wheels.
- Determine the need for further archaeological assessment by field evaluation in advance of consideration of development proposals.
- Determine the need for preservation of archaeological remains including historic buildings, and/or further archaeological work in advance of or during development.

4.0 Method

An inspection of the Study Area was carried out in order to assess current conditions and to evaluate the present building in respect of its historic/architectural interest and the potential impact on any surviving below ground remains. In addition to this a record was made of the exterior of the structure by means of written notes and photographs. Documentary research of primary and secondary sources, including maps, was undertaken at the Local Studies and Archives sections of Birmingham Reference Library (BRL), and Birmingham University Library. Archives relating to recent excavations of a glass cone in Dudley were also consulted, which are held by Birmingham Archaeology.

5.0 General Historical Background

Glass has been produced in England since the Roman period, although field evidence for pre-medieval manufacture is scarce. Material from the wood-using industry which existed from the thirteenth-century to the early years of the seventeenth-century is, however, wide-spread, and in most forest areas there were furnaces, though not on the scale of the Weald of Surrey and Sussex where the industry was concentrated. The English industry is unique in having undergone a sudden and total change to the use of mineral fuel, in the decade before 1620. This brought about a shift in location, and the industry was to remain closely connected with suitable coal-fields until recent years (Crossley 1993, 3).

The abundance of local fuel and resources needed to produce glass such as high quality fireclay for glass-making pots and crucibles, found chiefly around Stourbridge, combined with the vastly improved infrastructure created by the construction of the canals, led to a boom in the industry within the Birmingham and Black Country region during the nineteenth century. The production of glass toys and trinkets was an important constituent of the overall trade in these goods for which Birmingham especially became renowned, and the Soho Glass Works itself was at one time a major supplier of glass to the button industry.

High-quality vessel-glass production became concentrated in the West Midlands, with Stourbridge a centre with an international reputation for the production of quality crystal glass. The West Midlands as a whole saw the development of numerous small works, with specialisation in vessel and scientific products (*ibid.*, 17).

The most striking feature of glass manufactories in Britain during this period was the conical brick structure known as the glasshouse cone. Not only did the cone act as a giant chimney for the furnace, creating a sufficiently strong updraft to enable an adequate temperature to be maintained, but it was actually inside the cone that the glassmakers worked, in the area between the circular furnace in the centre and the surrounding cone wall. The upper part of the furnace consisted of a low shallow domed chamber containing the clay pots in which the glass was melted, arranged in a circle. In the furnace wall above each pot there was an opening through which the glassmakers inserted their irons to gather the molten glass. Below the pots in the centre was the fire on an iron grate, to which air was conducted via an elaborate tunnel system running underneath the floor of the cone. At the base of the furnace was a stokehole through which a man known as the *teaser* fed the coals on to the fire (Dodsworth 1982, 13).

During the early nineteenth-century, in England experiments and innovations in glass technology were hampered by regulations of the Excise Act. However, this was repealed in 1845, and by the time of the 1851 Great Exhibition a striking range of colours were being shown by several of the Birmingham and Stourbridge factories (*ibid.*, 21).

The manufactories themselves changed considerably during the later nineteenth century. Glass cones ceased to be built after about 1830 although existing cones continued in operation. The new type of glasshouse was a much more anonymous structure, in the form of a large shed housing one or two furnaces connected to a giant

central chimney that rose through a cast iron roof. The later nineteenth-century factory was generally larger than its Georgian predecessor as all the different operations in glass making now tended to be concentrated on one site. The grander works had, besides several glass houses, their own potmaking and mouldmaking departments, cutting, engraving and etching shops, packing warehouse, storerooms and large areas for preparing and mixing the raw materials (*ibid.*, 25).

The glass producing industry continued to evolve and change with new technologies. However, the rationale for the protection of nineteenth-century glass works structures has in the past been questioned, due to apparently plentiful written records, in a period when published journals and text-books commonly contained descriptions and diagrams of current practice (Crossley 1996, 9). In cities such as Birmingham, London and Manchester most glass-works buildings have been demolished (Crossley 1993, 30). This view has been challenged by recent work which has shown how, in a period of rapid development in methods, structures were modified due to new innovations and experience, in ways which were not recorded by contemporary sources, but which are identifiable by submitting archaeological surveys to analysis by specialists in the technology of modern glass production (Crossley 1996, 9).

6.0 Documentary Information

The first glassworks in Birmingham grew out of one of the town's major industries, the toy trade, with the first glasshouse being constructed by Mayer Oppenheim in 1757 on Snow Hill (Demidowicz and Hodder 1997, 101). The industry greatly expanded following the arrival of the canals, and by the mid-1800s the city had built a reputation for producing high quality goods. The Soho Glassworks was established in 1805 on land owned by Shakespear, and during its lifetime was associated with some of the principal names of the Birmingham glass industry. The glass house was located adjacent to the Soho Branch canal, which linked Soho Wharf and Matthew Boultons Soho Manufactory to the Birmingham Old Canal, and was the second canalside Glass House built on Birmingham Heath; the first being the Park Glass House owned by Issac Hawker (Demidowicz pers comm., Birmingham City Council leaflet). The initial owner of the Soho Glass Works was a member of the Shakespear family who with Johnson and Berry were cut and plain glass and glass toy manufacturers (Hodder 2003).

The Shakespear and Johnson families were both involved in the glass industry of Birmingham at the beginning of the nineteenth-century, as were other families that would be influential in the development of the glass trade for the next two centuries. Hudson and Shakespear are mentioned in the Birmingham Directory of 1791 as glass manufacturers based in Snow Hill and William Shakespear is recorded in the Birmingham Rate Books in 1794 and 1800 as owning a glasshouse on Lancaster Street and Snow Hill. The Soho Glassworks, built by William Shakespear, were a successor to the Lancaster Street Works. Shakespear and Johnson are mentioned in Holdens Triennial Directory (1805-7) as cut and plain glass and glass toy makers, New Town Row. William Shakespear was also recorded as a glass button and toy maker on Great Charles Street. Owen Johnson was recorded as a glass and glass toy manufacturer and dealer in cornelians at Islington (Fiveways). Bills relating to Matthew Boultons housekeeper from 1805 put Shakespear, Johnson and Berry (plain

and cut glass manufacturers) at New Town Glass House. This may be the first reference to this new triumvirate/partnership.

Bisset's Magnificent Guide, or Grand Corporate Directory for the town of Birmingham in 1808, mentioned only the most eminent public companies and records Owen Johnson in Islington. Chapman's Annual Directory of the same year describes Shakespear, Johnson and Berry as cut and plain glass, and glass toy makers at Birmingham Heath, the site of the Soho Glassworks. Shakespear (Seakspear – misprint) and Osler are also described as general manufacturers of chandelier furniture and toys in glass in Gt. Charles Street. A John Shakespear is recorded as a glass seller on Church Street and Thomas Osler as a glass cutter in St. Pauls Square. Other Johnsons and Berrys are also mentioned associated with the glass industry.

Household correspondence from the Matthew Boulton Papers dated to 1810 records Shakespear, Johnson and Berry as still being associated with New Town Glass House, and it seems likely that the partners were at this point working at both sites. Wrightson's Birmingham Directory of 1812 describes Shakespear, Johnson and Berry as plain and cut glass manufacturers at Soho Glass House, and Shakespear and Osler as chandelier furniture and toy manufacturers at New Town Row. The same directory (Wrightsons) of 1815 also describes Shakespear, Johnson and Berry as plain and cut glass manufacturers at Soho Glass House, with Jane Shakespear now occupying New Town Row.

On January 26th, 1816 the Aris Gazette ran an article on the Soho Glassworks:

'In succeeding to these premises WILLIAM SHAKESPEAR begs leave to return his most grateful thanks to all his friends and the public for the many favours conferred on him during his late partnership with Messrs Owen Johnson and John Berry and while he respectfully solicits a continuance of those favours he assures them it will be the constant study of himself and his present partner Mr THOMAS FLETCHER to merit the same. Soho, Glasshouse, nr Birmingham.'

There are also housekeepers bills from the Matthew Boulton Papers dated from 1816 also related to Shakespear and Fletcher, plain and cut glass manufacturers, Soho Glass House, Birmingham. In the Commercial Directory of Birmingham 1816-17 the Soho Glass Works was under the control of Shakespear and his new partner, Fletcher. Johnson and Berry had at this time joined with Rice Harris at the Islington Glass Works. This remained for over ten years until Pigot and Co's National Commercial Directory of Staffordshire 1828-9 listed Shakespear and Son as glass manufacturers (flint) at Birmingham Heath (Soho Glass Works).

Wrightson's Directory of Birmingham 1833 describes Shakespear and Son as flint glass manufacturers. Pigots National and Commercial Directory of Warwickshire (part 2) 1835 states that in this year Hannah Shakespear and Son were present at Soho. The Directory of Birmingham, Coventry, Dudley, Wolverhampton and their immediate environs (Robson 1839) lists Samuel Shakespear at Soho Glass House but by 1849 the glassworks were held by the trustees of the estate of Samuel Shakespear, and remained in trust until 1850 (from Slater's Directory of Warwickshire). In this year (1850) the factory was purchased by John Walsh Walsh (Reynolds 1999).

In Slater's Directory of Birmingham 1852-3 the glassworks were first listed as the Soho and Vesta Flint and Coloured Glass Works, Birmingham Heath. John Walsh Walsh was also described in this directory as a manufacturer of soda water and mustard, and an importer of cigars. Thus began the career of one of the most prominent glass manufacturers of his day, one whose products are still held in regard today and are highly collectable. The history of John Walsh Walsh and the Soho Glassworks has been written about in detail in *The Glass of John Walsh Walsh 1850-1951* by Eric Reynolds (1999) and will therefore only be summarised here.

A letterhead/advert dated to around 1855 (Plate 1) describes John Walsh Walsh as the successor to Mr Samuel Shakespear, and a manufacturer of every description of flint, opal, enamel and coloured glass lamp and lustre work, chemical apparatus, lenses, shades, vases etc etc. John Walsh Walsh himself died in 1884 and the executors of the estate had the power to provide income by either continuing to operate, or to dispose of the business and decided to sell (Reynolds 1999). Ellen Eliza, a daughter of John Walsh Walsh from his first marriage, had married Birmingham businessman Thomas Ferdinand Walker, and she persuaded him to buy the glass business from the executors. Ellen Eliza was, therefore, successful in securing the long-term family ownership of the business (ibid., 9).

Thomas Ferdinand Walker was, then, in effective control of the business, and appointed Lewis John Murray to manage it. Murray introduced many new designs which were also registered and patented to avoid copies (ibid., 11). The introduction of new ranges increased production requirement far beyond the capacity of the existing factory, and in 1886 it was necessary to build a second furnace. *The Pottery Gazette* of 1888 reported that:

'Mr Walsh can still boast of being the only manufacturer in the fancy goods trade in the Midlands who has two furnaces at work.' (ibid., 12).

The factory continued for many years to produce a wide range of high quality, highly desirable glasswear, whilst continuing to introduce new ranges and patterns, and developing modifications of existing ranges in order to prevent imitation (ibid., 15).

Following Lewis Murray's death in 1912, Philip Jeffrey Walker, John Walsh Walsh's grandson, took over the management of the firm (ibid.). A major addition to the product range during the period 1913-1915 was the development of the *Koh-i-Noor* cut pattern. This soon became extremely popular and was the flagship of Walsh production for many years (ibid., 17). Colour had never previously been a major feature of Walsh glass but the growing market awareness of the importance of colour during this period prompted experiments in various shades, including blue, that became a standard feature in bowls and vases (ibid., 18).

The years following the 1914-1918 war were difficult for Walsh, but attention was now directed towards rebuilding the company's original skills base. Walsh employees were respected in the trade as some of the most experienced and versatile glass workers in the country (ibid., 19), these skills included cutting, acid etching and other glass working techniques. Many reports from several generations of the families employed at the Lodge Road Glassworks also gave a favourable view of the factory's working conditions (ibid., 19).

In 1922, conversion to a private limited company was arranged with a registered capital of £10,000. One of the first actions on becoming a limited company was the registration of the trademark 'WALSH' which was later modified to include 'ENGLAND'. Following this William Riley (whose wife was the great-granddaughter of John Walsh Walsh) was appointed managing director in 1927 and continued in this position until the demise of the factory in 1951. In 1929 a specific trademark 'VESTA' was registered for the Twelve Labours of Hercules series of lighting panels designed by the sculptor Walter Gilbert, though the manufacture of these appears to have been limited to the period 1929 to 1932 (ibid., 22).

The period between 1930 and 1945 was one of the most exciting in the history of John Walsh Walsh, and as the country recovered from the 1930's recession, Riley courageously embarked on a major reconstruction and investment programme (ibid., 24). The furnace facility was rearranged with the installation of new equipment controlled by the most recent developments in measuring techniques. The annealing department was reorganised with the object of increasing output as well as improving quality (ibid., 24). Riley recognised that an effective way to expand was to acquire businesses which were manufacturing complementary, but not identical, products. His foresight in purchasing Hands, who primarily manufactured commercial and industrial lighting, and Robinsons, manufacturers of contract orders for hotels and shipping lines, would impress many business tycoons of the late-twentieth century (ibid., 24)

In 1933 there was a move away from the almost total dependence on the complex, decorative cut patterns of the past twenty years, to the inclusion of simpler forms of flute cut patterns, and the designs of Clyne Farquharson, who had been a designer for the company since he was a young man, became prominent (ibid., 27). However, the outbreak of the Second World War brought an end to the rising fortunes of the company. As employees were called up to serve, so simpler patterns were introduced to combat the shortage of labour. These were primarily for export, targeted at the American and Australian markets with only a limited availability in the home market. An increasing amount of capacity was directed towards the wartime effort by transferring resources to products required in the medical and scientific fields (ibid., 28) as well as lighting arrays for the RAF.

Of all the glassworks in Birmingham, only two, those of John Walsh and F & C Olser, survived beyond the second world war (Hodder 2003) and by 1951 part of the Soho Glassworks had been turned into The British Heat Resisting Glass Co. Ltd. at 112a Lodge Road (Kelly's Directory of Birmingham 1951). The inability to restore the company's former worldwide reputation gradually eroded the will and determination of the management team. The cut glass department continued to be more and more uneconomic, and a decision was taken in 1949 to close this down. Without a core product line the future of the business was in serious jeopardy, and the final closure of the factory was announced in the autumn of 1951 (Reynolds 1999, 38). The site of 112a Lodge Road continued to be owned by The British Heat Resisting Glass Co. Ltd, and the site of the Soho Glassworks was taken over by The Ford Motor Company (Kelly's Directory of Birmingham 1952). Anecdotal evidence from the current occupiers of part of the site suggest the Ford works were associated with the Ford Anglia model of car, recently made famous by the Harry Potter films, though documentary research was unable to corroborate this.

7.0 Cartographic Evidence and the Physical Development of the Site.

The first cartographic evidence relating to the site of the Soho Glassworks is on Snape's 1801 Enclosure map of Birmingham which depicts Shakespears plot of land adjacent to the Soho Branch Canal and Lodge Road. Kempson's map of 1810 (Fig. 3) illustrates the circular glass cone and two rectangular associated buildings, one parallel to the road and one parallel to the canal. Neither the glassworks nor the canal are depicted on the map of 1832 (Fig. 4). The glass cone is depicted on Guests map of 1855 (Fig. 5), and annotated as Shakespears Glasshouse, though by this time the documentary evidence records reveal that the Soho Works were owned by John Walsh Walsh.

The Board of Health Survey maps (1850-55) and John Pigot Smith's map of 1855 (Fig. 6) depict the works in much fuller detail. The outline of the glass cone is visible in the south-east corner of the site, surrounded by adjoining buildings. To the north-west of the cone was a yard with a possible well, flanked by blocks of buildings on the north and east sides. To the east of the cone there was an open area adjacent to the canal, and to the north-east another range of buildings enclosing a smaller courtyard. To the west of the works a house with a semi-circular path and formal gardens is depicted. Bloods map of 1857 (Fig. 7) only depicts the outline of the works, and is annotated Soho and Vesta Glassworks.

The Ordnance Survey 1st Edition (dated to 1889, Fig. 8) illustrates important changes within the glassworks. While the majority of the building outlines remain the same, the open area adjacent to the canal depicted on the 1855 maps was by now occupied by a second glasshouse known, from documentary sources to have been built c.1886. The site is annotated Soho and Vesta Glass Works, and the house adjacent to the works identified as Vesta House.

The layout of the site at this time bears comparison with the Richardson factory in Wordsley, established in 1825 (Plate 2, from Dodsworth 1982, 24). The Richardson factory was another canalside glassworks that possessed two glasshouses, one with a traditional cone, the other of the new chimney type incorporated into the same building block (ibid.). The plan of the factory is similar to the Soho Glassworks with the glasshouses surrounded by adjoining buildings, and with a courtyard flanked by rectangular buildings divided into stores, acid and cutting shops and offices. It was clearly the intention of the grander nineteenth-century factories to be as self-sufficient as possible (ibid.).

The Ordnance Survey maps of 1905 and 1918 (Figs. 9 and 10) depict only minor changes to the works, mainly concerning the peripheral buildings. By 1905 the railway had been cut through the area immediately to the north of the site, and by 1918 part of the canal had closed, ending at the Soho Wharf Basin within the study area. The factory itself, however, was still probably supplied by the canal. Building plans drawn up by Dallas and Lloyd Architects, Newhall Street, Birmingham in 1930 and 1934 clearly illustrate the specifics of the reconstruction and investment programme embarked upon by William Riley. Also, more interestingly, it is possible from the annotation of the existing buildings to pinpoint which parts of the factory complex were being used for specific purposes.

The plans dated to 1930 (Figs. 11 and 12) show extensions and alterations to the stores and works to the north-east of the cone. It also depicts coal bunkers situated directly adjoining the north-east wall of the cone near to where the canal access was, as well as a cone cleaning room and a sand washing room. Earlier buildings incorporated into the design of the new works include a crate shop, stock room, shade store, blue lining room, cleaning room, acid polishing shop, acid store, Earnshaws cutting shop and a boatmans room next to the canal (Fig. 12).

Plans from March 1934 show a new building immediately to the north of Vesta House in the area previously occupied by gardens, with a part glazed, part corrugated iron roof (not illustrated). More significantly, however, are plans from April 1934 (Figs. 13 and 14) that show alterations to the earlier buildings to the east of the glass cone. This plan describes the original cone as the large glass house and the newer 1886 building to the east as the small glass house. This is important as it highlights the commitment at the time to the production of fine glass wares, as diversification into the production of window glass would have required a larger glass house than the cone.

The Ordnance Survey map of 1954 (Fig. 15) illustrates the plot of 112 Lodge Road as two separate entities, the Glass Works and the Motor Research Works. The Glass Works would have been owned by The British Heat Resisting Glass Co. Ltd and occupied Vesta House and the new building erected in 1934. However, a new factory had been constructed on the site of the main glassworks which was owned by the Ford Motor Company. It is these buildings that survive on the site today.

8.0 Present Character *by Steve Litherland*

The current site is occupied by a two-storey factory building, with typical 1950s modernist style offices at the front with a series of workshops behind with open courtyards at the front, middle and rear of the complex. The buildings are steel-framed and brick clad with english garden wall bond incorporating seven courses of headers, have concrete floors, steel-framed windows with concrete sills and an asbestos-tiled roof. The reception area of the front office is the most flamboyantly styled, with curving open stairs lit by lass brick panels and a spacious open feel (Plates 3 and 4).

The large building at the back of the site (to the north) appears to be an earlier unit (Plate 5), and as such may relate to the glass works phase of the site. Also at the back of the site, the boundary is delineated by a Victorian engineering brick retaining wall (Plate 6) suggesting that the truncation and terracing that is evident outside the site to the north occurred during this period.

The overall design of the building is light and airy, and makes a clear statement about the confidence of industry in the post-war decade of the festival of Britain.

9.0 Implications and Recommendations

The level of the present ground surface at the site is comparable to the road and bridge over the canal, and is meters higher than the modern residential development to the west (where Vesta House and the British Heat Resisting Glass Co. Ltd had been) and the land to the north of the site near the railway. Recent excavations at Stone Street Glasshouse, Dudley, revealed that the cone, flues, and furnaces were built up from, not cut into, the original ground level. The whole area had then been levelled up to create the new working level, thus creating sub-terranean features. If this is also the case at the Soho Glassworks, then there is high potential for good below ground preservation. The glass cone itself, as well as associated buildings and the possible well may survive within the central courtyard of the complex (Plate 7), and there is also the potential for the survival of buildings that flanked the north-west side of the courtyard. Given the amount of build-up that may be associated with the glasshouse complex, and the likely depth of foundations for the 1950s range of buildings, preservation should not be ruled out within the footprint of the modern building themselves. The proposed development area also encompasses part of the Soho Branch canal which is likely to be preserved along the eastern side of the site (Plate 8).

In summary, the glass-making industry was an important constituent of the rapid increase in industry and trade throughout the West Midlands region during the industrial revolution with markets flourishing both nationally and internationally. Glass cone structures were once a common feature of the industrial landscape of the area though, due to being superseded by later furnaces and structures and the general decline of the industry after the Second World War few survive intact.

Recent archaeological work suggests that these structures were not as well documented and recorded as once thought (Crossley 1996), the importance of below ground survival of glass cones and associated structures has become paramount in our understanding of the origins, infrastructure and development of the glass industry. There is high potential for the survival of part of the base of the cone, associated flues and structures, within the courtyard areas of 112, Lodge Road site as well as the possible survival of remains beneath the concrete floor and (possible) cellars associated with the present standing building. This would not only increase our knowledge of this important glass production site, but also contribute to our understanding of nineteenth-century glass-making structures on a regional and national level.

To this end, a programme of trial trenching is recommended, before demolition works commence, in order to assess the extent of survival of below ground archaeological remains. Given the historical significance of the site, the trial trenching would be just one part of a staged archaeological response, which is likely to lead to a more extensive programme of archaeological excavation and recording following demolition of the standing building stock, but prior to the redevelopment of the site, in accordance with guidelines laid down in Planning Policy Guidance Note 16 (DoE 1990).

10.0 Acknowledgements

The report was commissioned by Dawlish Properties (Birmingham) Ltd and thanks are due to Mr Desai for his help in moving the project forward. Thanks are due to the staff of Birmingham Library Archive Department and Mike Hodder, Planning Archaeologist for Birmingham City Council for their help in the compilation of this report. Sincere thanks also to Toni Demidowicz of Birmingham City Council for her advice and for sharing her previous research concerning Soho Glass Works. The research was conducted by Eleanor Ramsey, who also wrote the report, Steve Litherland conducted the building assessment. The figures were produced by Nigel Dodds and the report was edited by Kirsty Nichol, who managed the project on behalf of Birmingham Archaeology.

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Secondary Sources

BArch 2004 Written Scheme of Investigation for an Archaeological Desk-based Assessment of the Soho Glassworks, 112 Lodge Road, Winson Green, Birmingham

BCC (undated) *Some Birmingham Glasshouses*

Crossley, D. 1993 Monuments Protection Programme The Glass Industry Step 1 Report

Crossley, D. 1996 Monuments Protection Programme The Glass Industry Introduction to Step 3 Site Assessments

Demidowicz, T. and Hodder, M. 1997 *Birmingham: Glass Industry* West Midlands Archaeology 40, 101-102.

DOE (Department of the Environment) Planning Policy Guidance Note 16

Dodsworth, R. 1982 *Glass and Glassmaking*

Hodder, M. 2003 *Brief for Archaeological Desk-based Assessment in advance of determination of application* Site of Soho Glassworks, 112 Lodge Road.

Institute of Field Archaeologists 1999 *Standard and Guidance for Archaeological Desk-Based Assessments*

Reynolds, E. 1999 *The Glass of John Walsh Walsh 1850-1951*

<http://www.glass-time.com/Encyclopedia/JwalshWalshglass.html>

<http://www.netnz.com/glass/johnwalshwalsh.htm>

APPENDIX I

**Written Scheme of Investigation for an Archaeological Desk-based
Assessment of the Soho Glassworks,
112 Lodge Road, Winson Green, Birmingham
(SMR 20052, NGR SP 051883)**

Planning Application Number C/04024/03/OUT

1.0 Introduction

This document is based upon information contained in a brief prepared for Birmingham City Council (Hodder 2003). It outlines the programme of work required to undertake an archaeological desk-based assessment of the Soho Glassworks, Winson Green, Birmingham, and forms a written scheme of investigation required as part of the planning application process overseen by the Department of Planning and Architecture, Birmingham City Council. The assessment is necessary because a proposed development at the site is likely to affect below ground archaeological remains.

2.0 Site Location

The site is bounded by Lodge Road to the south, the railway to the north, saw mills to the east, and residential properties on Hobson Close and Coveley Grove to the west. It is currently occupied by workshops and associated yard areas.

3.0 Archaeological Background

The first glassworks in Birmingham followed the arrival of the canals, and by the mid-1800s the city had built a reputation for producing high quality goods. The Soho Glassworks was established in 1805, and during its lifetime was associated with some of the principal names of the Birmingham glass industry. The first owner was Samuel Shakespear with Johnson and Berry, who were cut and plain glass and glass toy manufacturers (Hodder 2003), latterly they were associated with the Islington Glassworks, Birmingham.

John Walsh Walsh took over the glassworks in 1852/3 (ibid), the company was advertised as a manufactory 'of every description of flint, opal enamel and coloured glass lamp and lustre work: chemical apparatus, lenses, shades, vases, &c, &c' (Birmingham City Council). Following his death in 1864 the John Walsh Walsh glassworks continued as a largely family run enterprise for the next 100 years, producing traditional cut crystal in a wide variety of designs. By the end of the First World War the factory was known as the Soho and Vesta Glass Works, and the firm had attracted several renowned glass designers, including Walter Gilbert and W.

Clyne Farquharson. With the help of its new designers and glassmaking techniques the company produced innovative pieces that captured much attention and firmly established the company as a world leader during the inter-war years (The Glass Museum).

The longevity of production on the site is obviously worthy of note as the glassworks played a dominant role in one of Birmingham's key manufacturing industries, and was in production for nearly 150 years. During the war production was turned over to the manufacture of prisms for episcopes, lighting arrays used by the RAF and Navy to assist navigation, as well as runway lighting for military airfields (The Glass Museum). It was one of only two glasshouses in Birmingham that continued production into the post-WWII period (Birmingham City Council), the other being that of F and C Osler on Broad Street. Following the close of war the firm fought to re-establish itself as a world leader in quality glass production, however in 1951 the entire business was closed.

The position of the glass cone is shown on Kempson's map of 1810 as being set back from the road (Hodder 2003). This evidence is supported by an etching of the glassworks that depicts the glass cone to the rear of properties fronting onto the street.

4.0 Aims

The aims and objectives of the research will be to:

- Define the likely extent and survival of the glass cone and other contemporary structures and features associated with the works (as outlined by Crossley (1993 and 1996) for English Heritage).
- Identify later elements associated with the expansion of the glassworks or new innovations in glass making technologies, such as later glasshouses with multiple furnaces, and engine houses for glass cutting wheels.
- Determine the need for further archaeological assessment by field evaluation in advance of consideration of development proposals.
- Determine the need for preservation of archaeological remains including historic buildings, and/or further archaeological work in advance of or during development.

5.0 Method

The desk-based assessment will comprise a site inspection and an examination of published and unpublished written records, illustrations and maps held by the Local Studies and Archives sections of Birmingham Reference Library (BRL), and Birmingham University Library. Archives relating to recent excavations of glass cones in Dudley will also be consulted, these are held at Birmingham Archaeology.

All appropriate sources recommended by the *Standard and Guidance for Archaeological Desk-Based Assessments* (Institute of Field Archaeologists 1994), and by the City Council's *Guidance on Sources* will be consulted. In particular, the Birmingham Sites and Monuments Record and the Local Studies and Archives Sections of the City Library.

6.0 Reporting

The results of the archaeological work will include the following:

- Description of the archaeological background.
- Method.
- A narrative description of the research and discussion of the evidence, set in its local and regional context.
- Appropriate illustrations.
- References to all consulted sources.
- A copy of the brief.

The written report will be made publicly accessible, as part of the Birmingham Sites and Monuments Record within six months of completion.

A summary report will be submitted for inclusion in *West Midlands Archaeology* and to the appropriate national period journals.

7.0 Staffing

The project will be managed for Birmingham Archaeology by Kirsty Nichol (BA, PG Dip. Arch, AIFA, Project Manager) and the work will be carried out by a suitably qualified archaeologist.

8.0 Archive

The site archive will conform to the guidelines set down in Appendix 3 of the Management of Archaeology Projects. The archive will be placed with an appropriate repository within a reasonable time of completion of the project. Advice will be taken from the Planning Archaeologist.

9.0 Timetable

The desk-based assessment will be carried out over 5 days, and a report will be submitted to the clients within an additional two-week period.

10.0 General

All project staff will adhere to the Code of Conduct of the Institute of Field Archaeologists.

The project will follow the requirements set down in the appropriate Standard and Guidance notes prepared by the Institute of Field Archaeologists.

10.0 References

Birmingham City Council *Some Birmingham Glasshouses.*

Crossley, D. 1993 Monuments Protection Programme: *The Glass Industry: Step 1 Report.*

Crossley, D. 1996 Monuments Protection Programme: *The Glass Industry: Introduction to Step 3 Site Assessments.*

Hodder, M. 2003 *Brief for Archaeological Desk-based Assessment in advance of determination of application.*

The Glass Museum <http://www.netnz.com/glass/johnwalshwalh.htm>

Birmingham Archaeology

July 2004



Fig.1



Fig.2

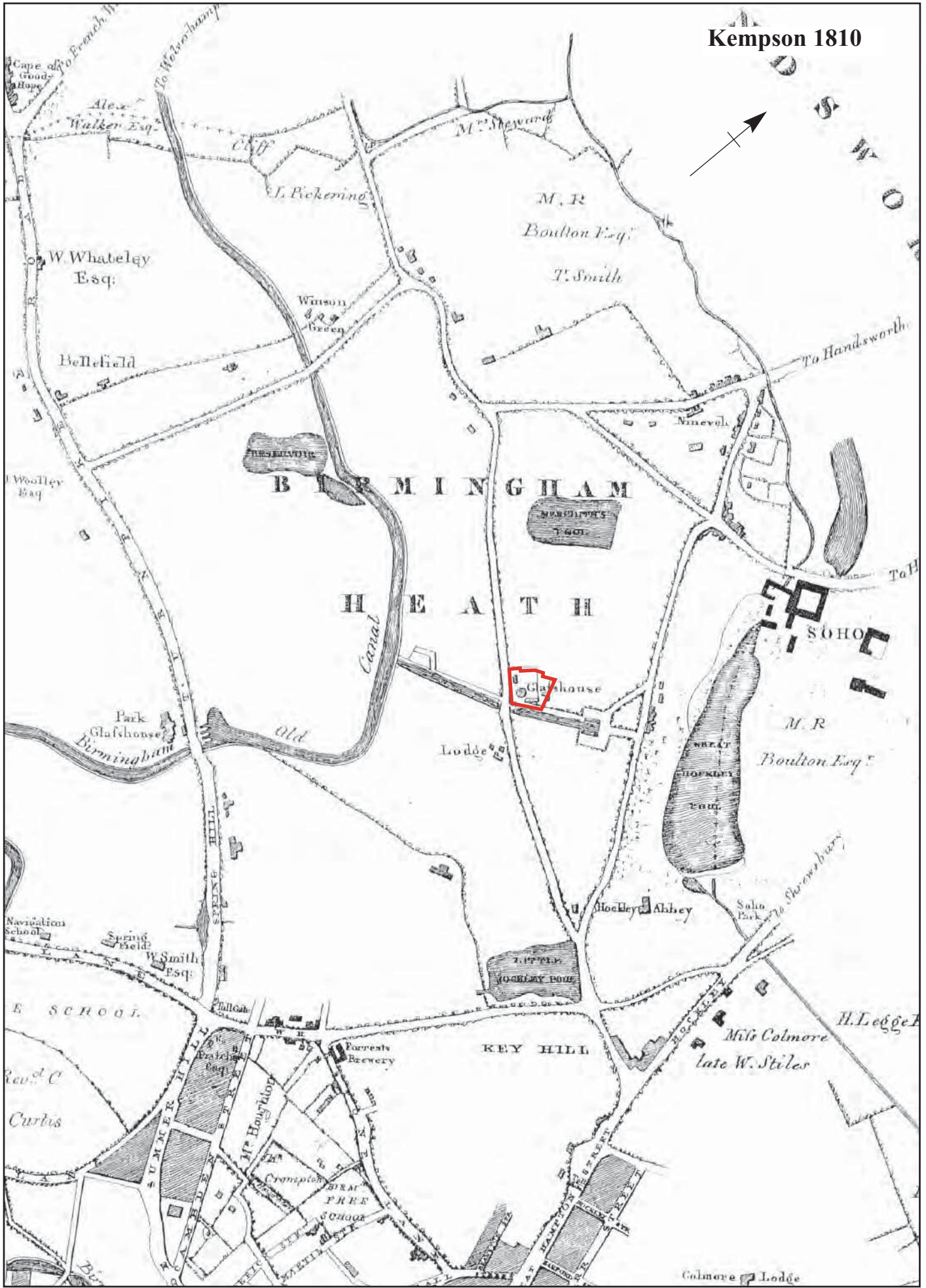


Fig.3

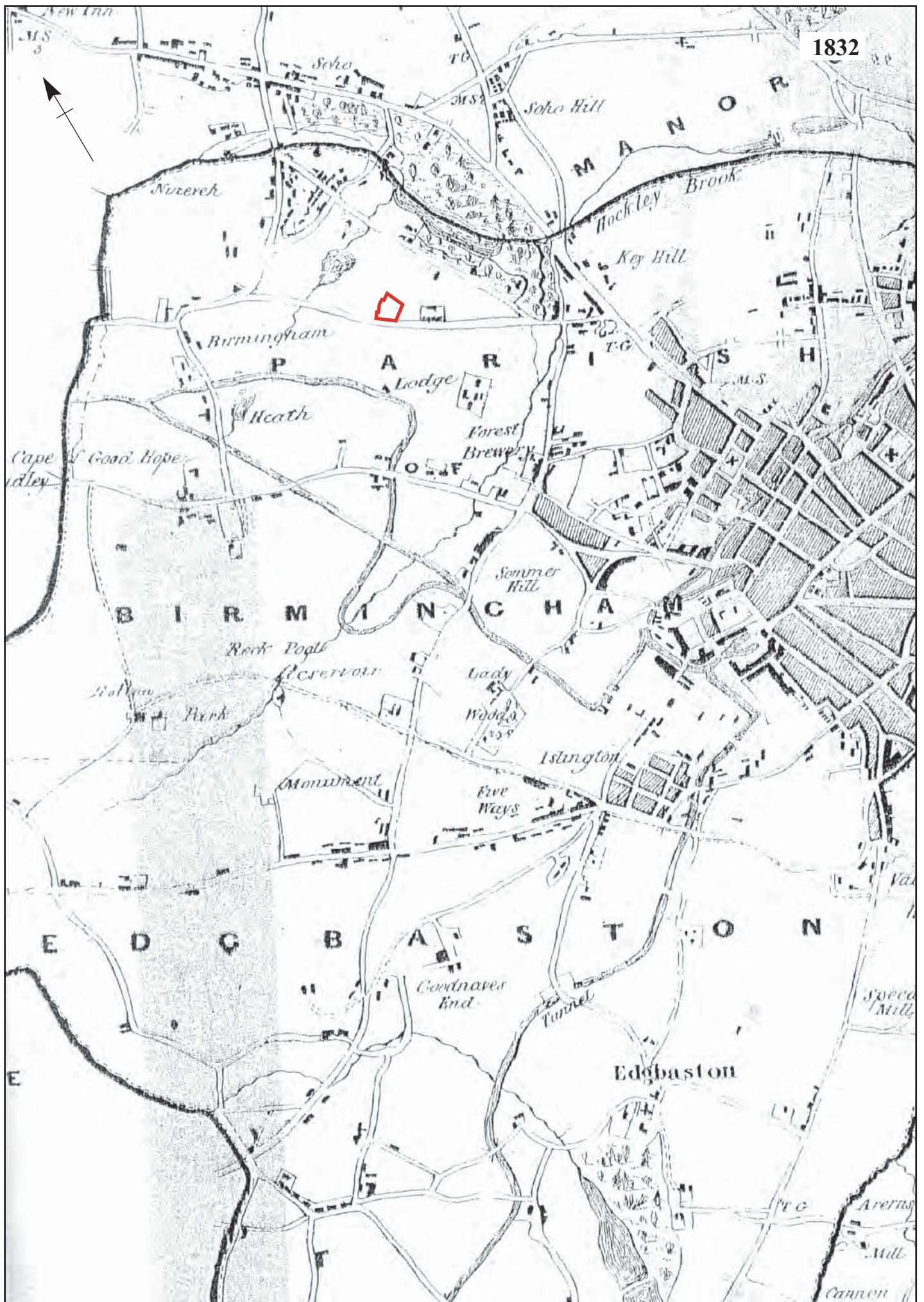


Fig.4



Fig.5

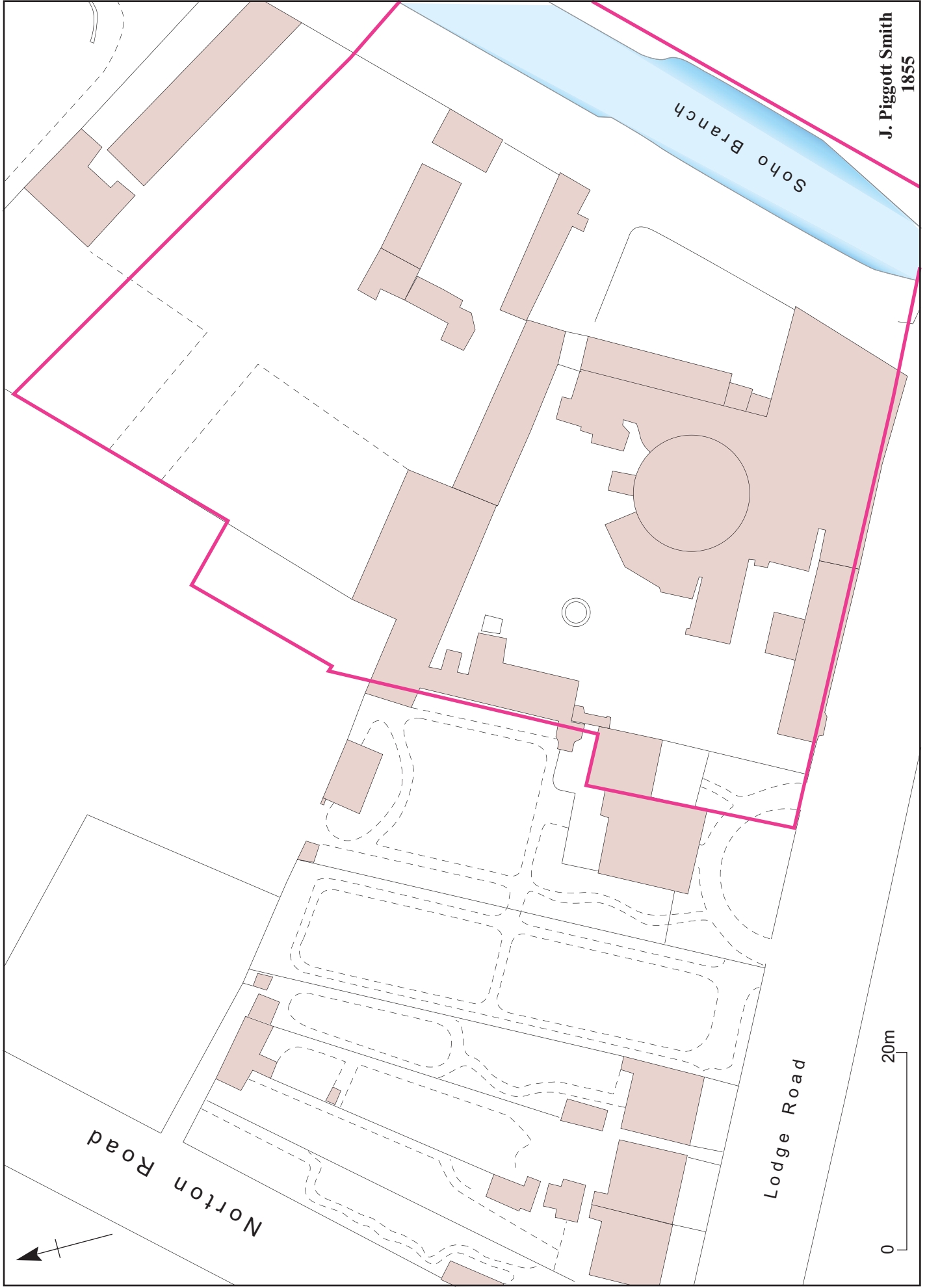


Fig.6



Fig.7

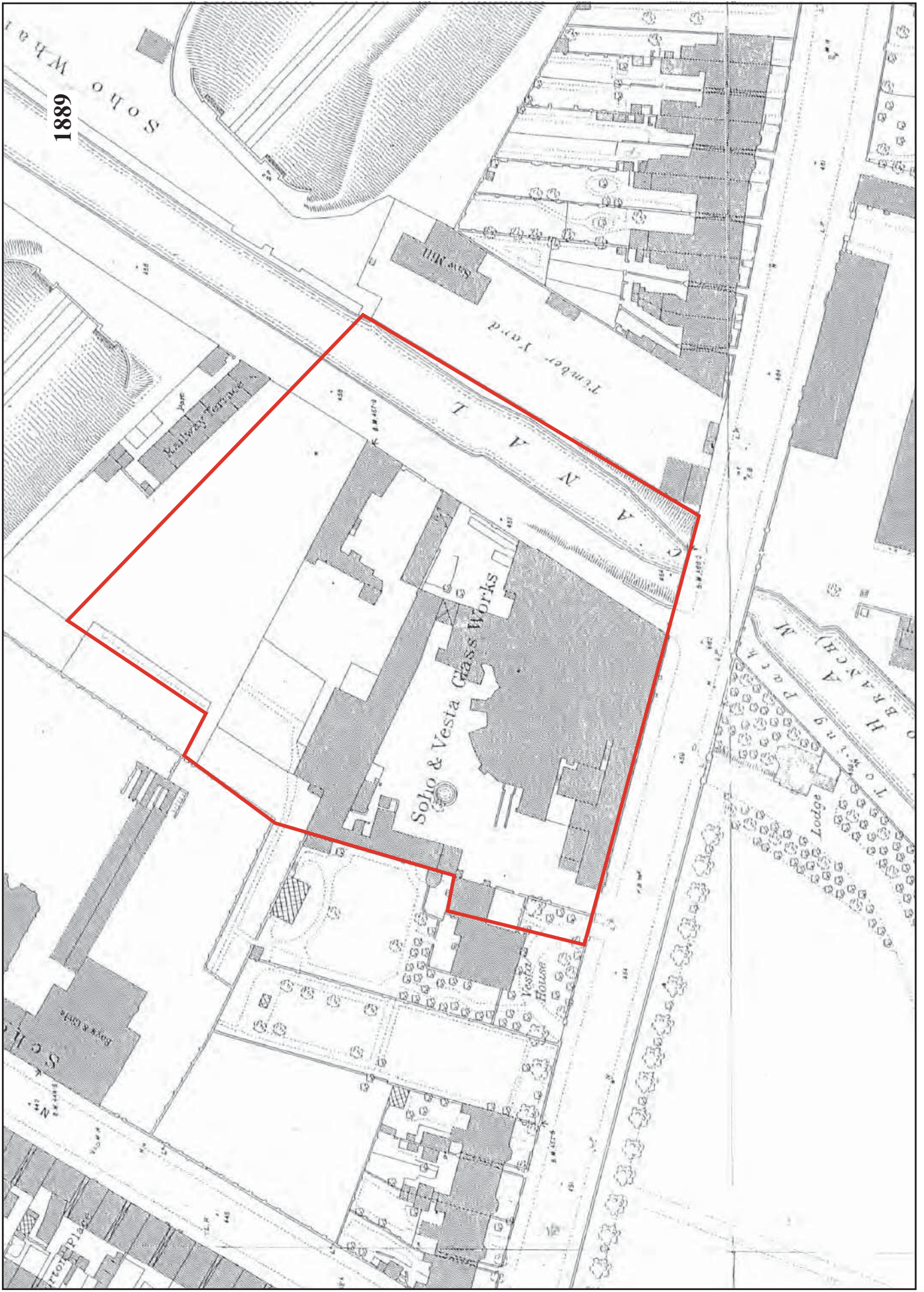
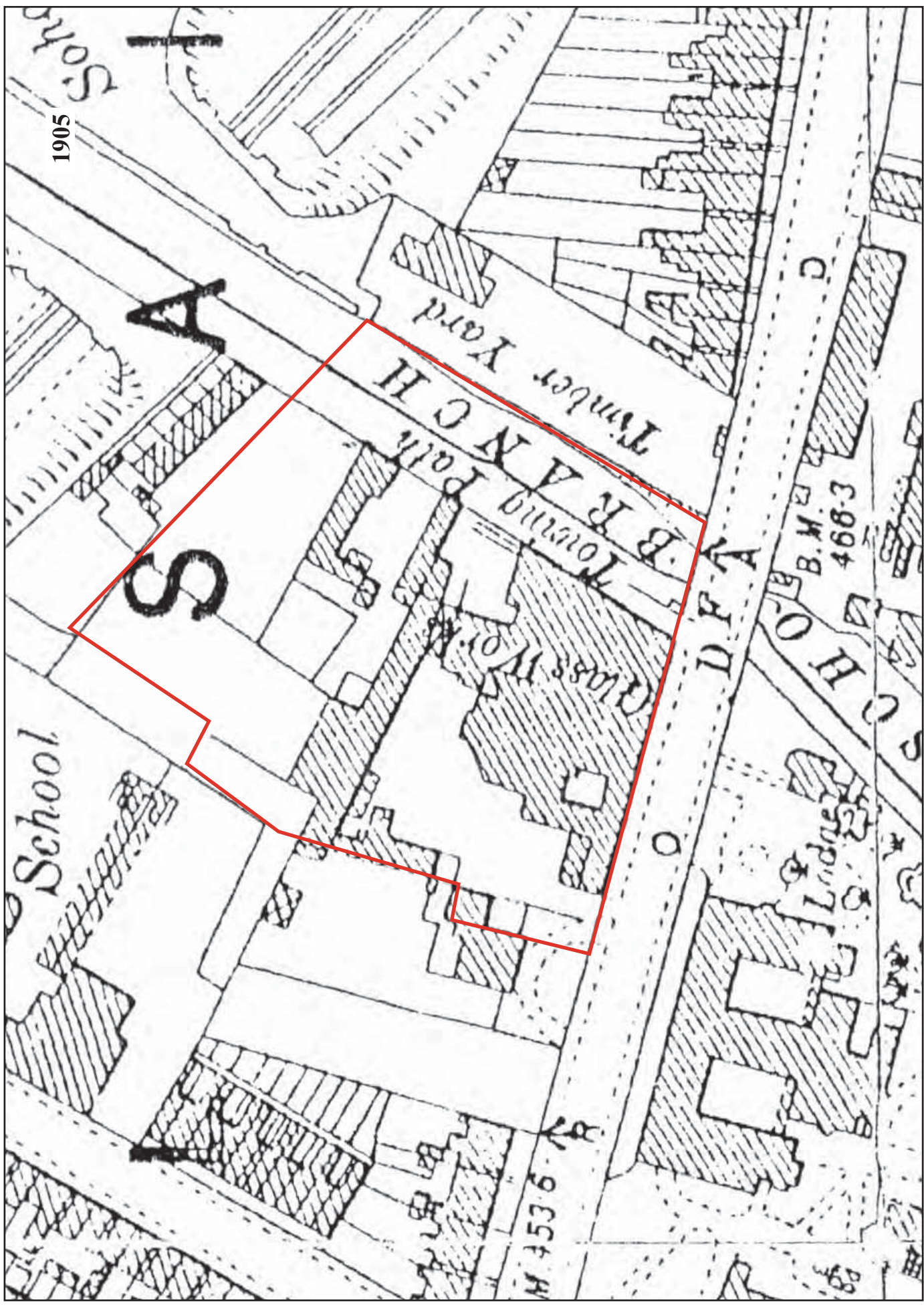
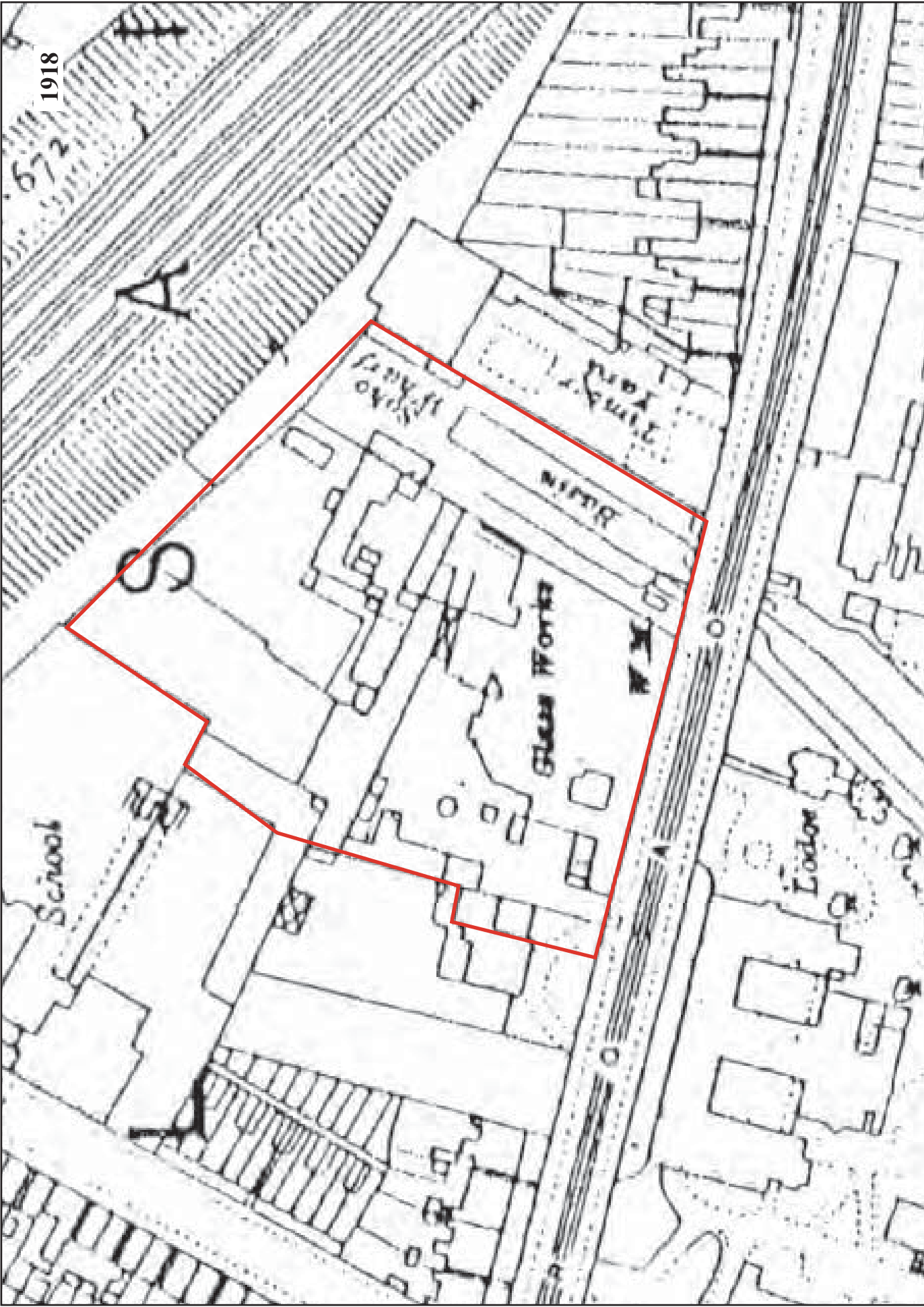


Fig.8



1905

Fig.9



1918

Fig.10

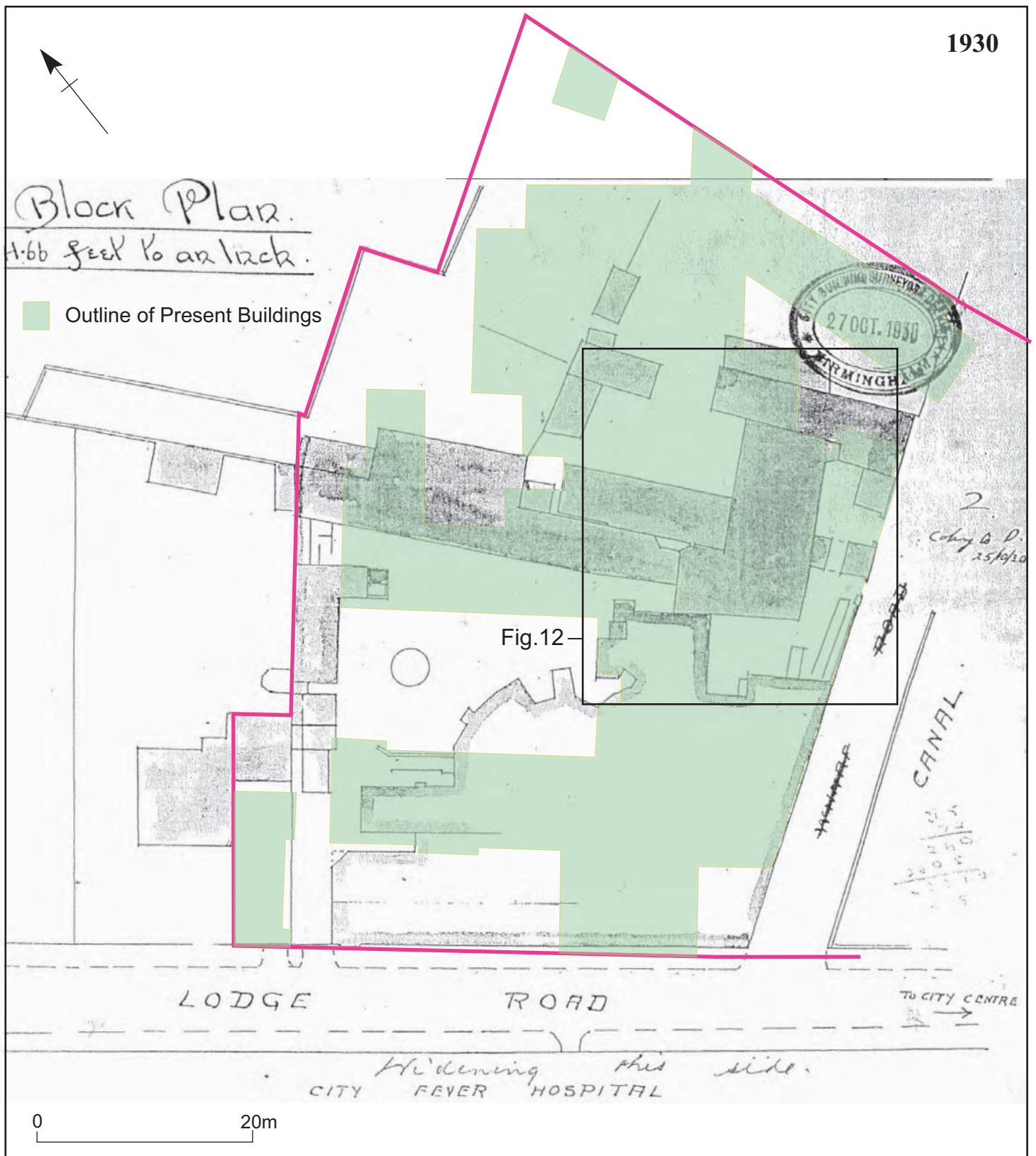


Fig.11

1930



Fig.12

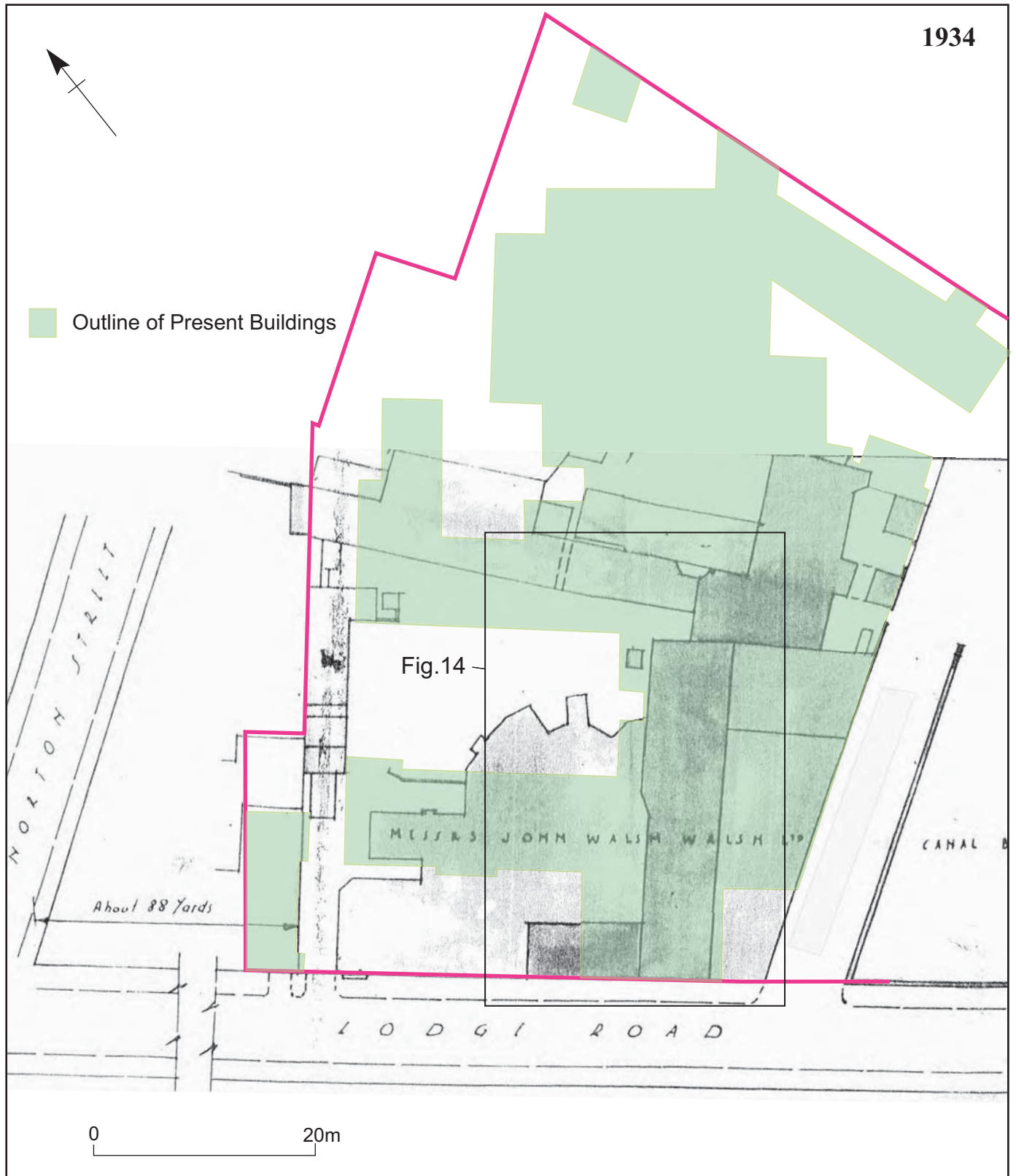


Fig.13

1934

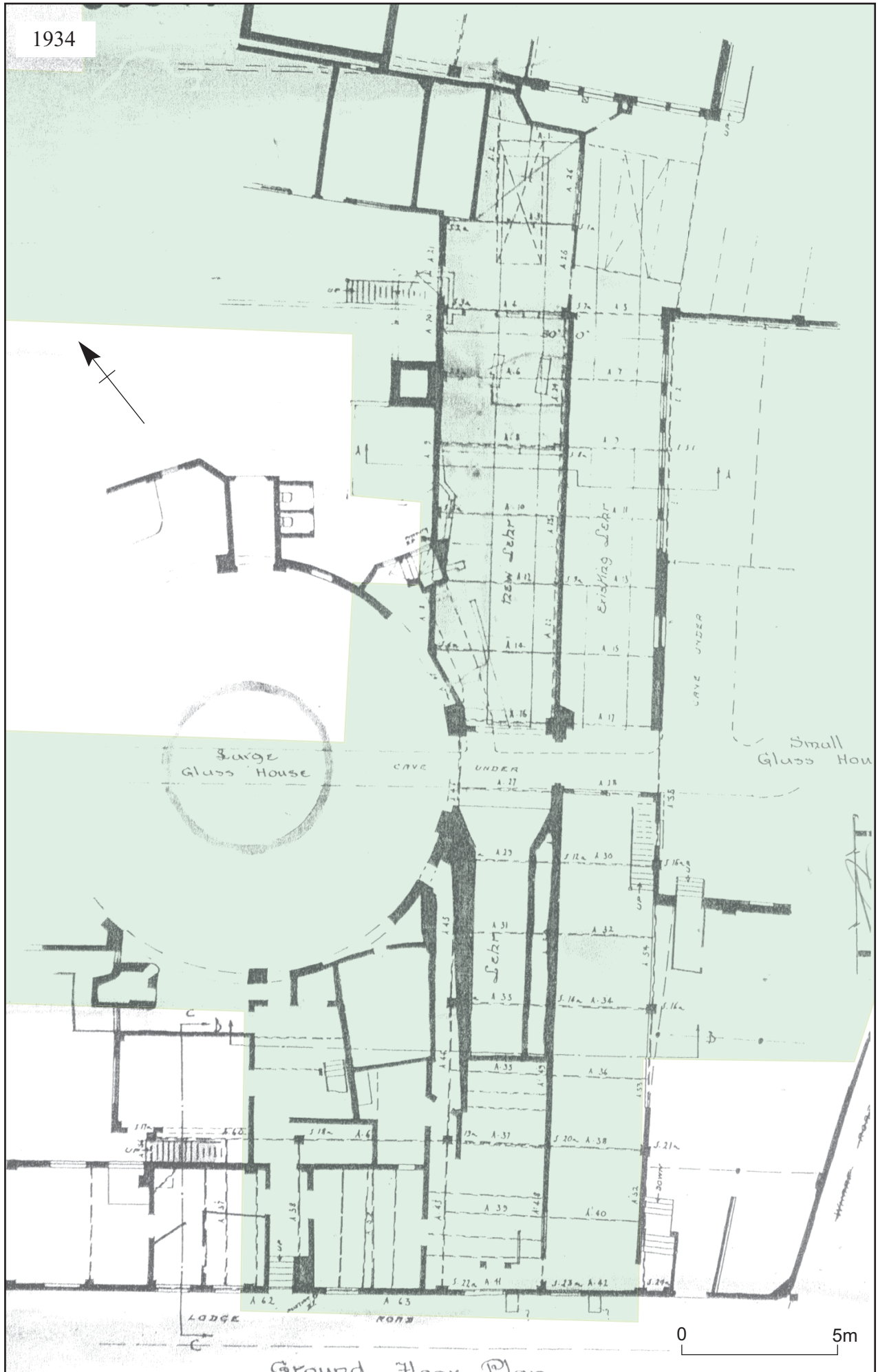


Fig.14

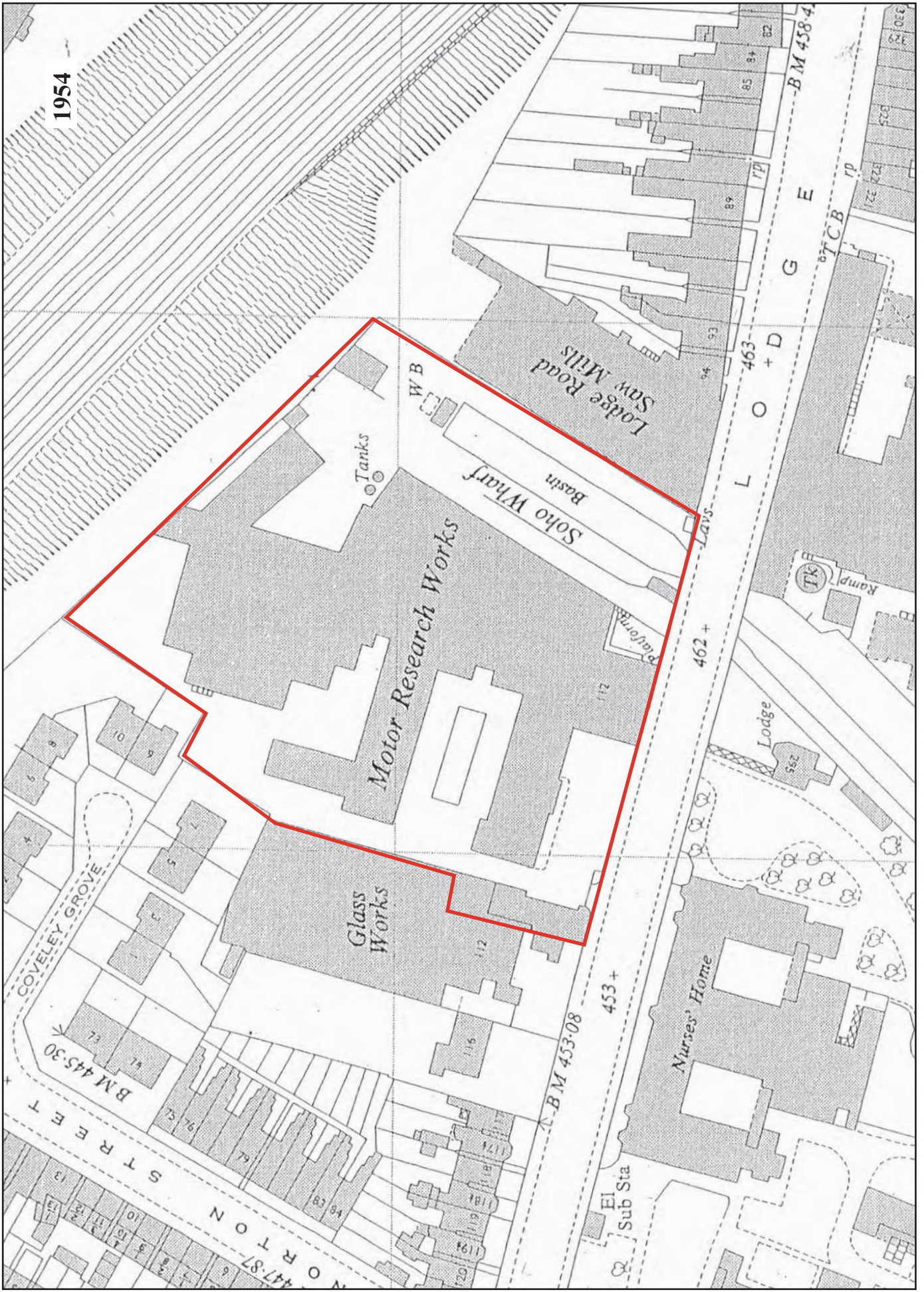


Fig.15

JOHN WALSHE WALSHE,
 — SUCCESSOR TO MR SAMUEL SHAKESPEAR —
 BIRMINGHAM HEATH, BIRMINGHAM.
 — MANUFACTURER OF EVERY DESCRIPTION OF
 FLINT OPAL ENAMEL & COLORED GLASS LAMP & LUSTRE WORK
 — CHEMICAL APPARATUS. LENSES. SHADES. VASES. &c. &c. —

Plate 1

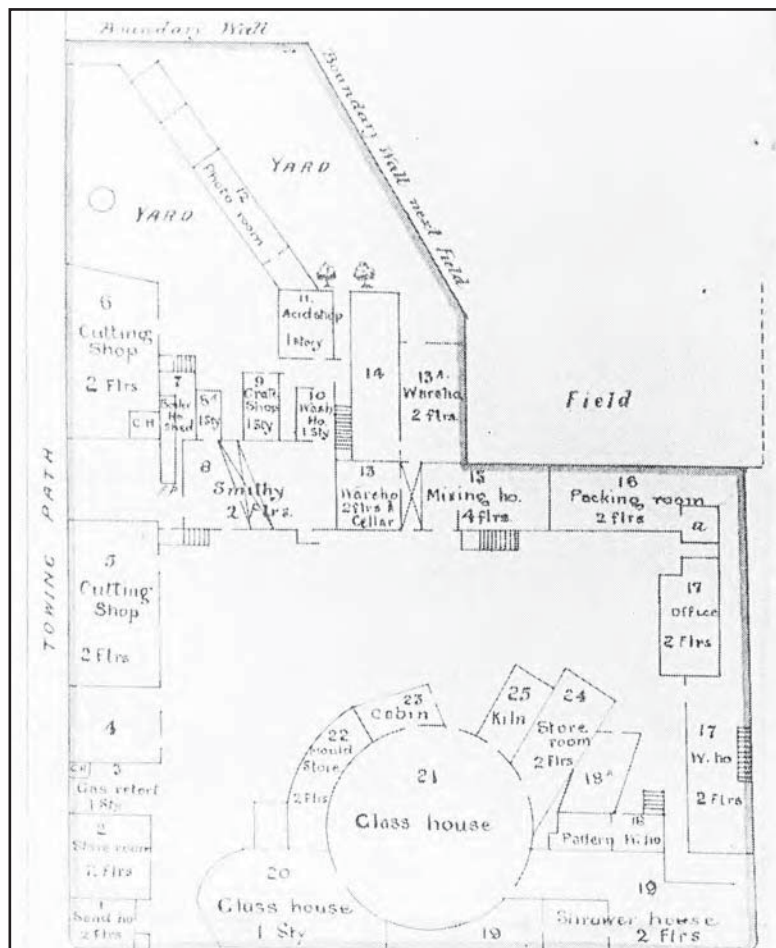


Plate 2

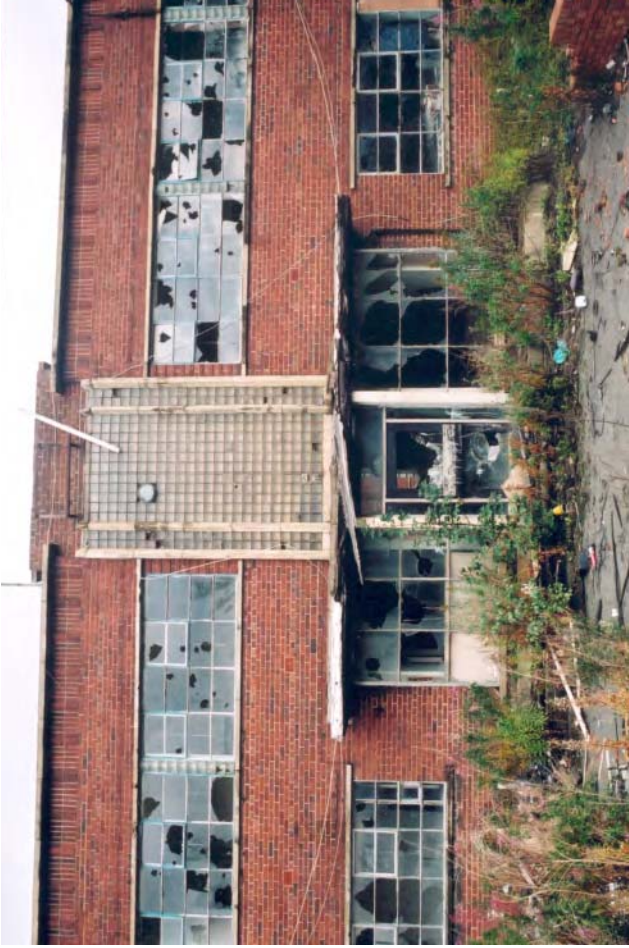


Plate 3



Plate 4



Plate 5



Plate 6



Plate 7



Plate 8