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Archaeology

## **Trafalgar Works, Trafalgar Street, Sheffield, South Yorkshire**

Archaeological Building Recording

ARCUS report 899e.2(2)

September 2011

Client: Hammerson UK Properties plc

**Historic Building Recording**



# Trafalgar Works, Trafalgar Street, Sheffield, South Yorkshire

Grid Reference: SK 3497 8701

Archaeological Buildings Recording

Report No. 899e.2(2)

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(Report prepared by Wessex Archaeology on behalf of The University of Sheffield)

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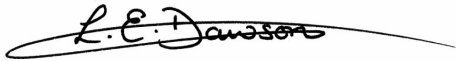

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| Lucy Dawson<br><i>Project Officer</i>   | Oliver Jessop, MIFA<br><i>Project Manager</i>  |

# OASIS SUMMARY FORM

| PROJECT DETAILS                              |  |   |
|--|--|---|
| OASIS identifier                             | Wessexar1-101087   |   |
| Project title                                | Trafalgar Works, Sheffield   |   |
| Short description of the project             | Historic building recording was carried out at Trafalgar Works, Trafalgar Street, Sheffield. The works was a late 19 <sup>th</sup> century industrial works, part of the larger Trafalgar grinding Wheel complex. The works was a medium sized integrated works for the production of edge tools, and later cutlery and blades. The recording entailed the detailed recording of the standing buildings using an EDM and hand tape measurements to produce floor plans and sections. Record photography was also undertaken using both 35mm and medium format black and white film as well as a selection of colour slide. |   |
| Project dates                                | October 2007 – June 2008   |   |
| Previous/future work                         | Archaeological desk based of land and buildings within the proposed New Retail Quarter, ARCUS Report 899.1, 2005; A detailed archive assessment for the proposed New Retail Quarter, ARCUS Report 899c.4, 2006; A historic buildings assessment of the Kangaroo and the Trafalgar Works, RPS, 2007; Archaeological evaluation at the former Trafalgar Works and Kangaroo Works, ARCUS Report 899f.1, 2008  |   |
| Monument type and period                     | Cutlery Works – post medieval (19 <sup>th</sup> century)   |   |
| Significant finds (artefact type and period) | None   |   |
| PROJECT LOCATION                             |  |   |
| County/Parish                                | South Yorkshire, Sheffield   |   |
| Site address                                 | Trafalgar Works, Trafalgar Street, Sheffield S1 3RL  |   |
| Site co-ordinates                            | SK 3497 8701   |   |
| Site area                                    | [in m <sup>2</sup> or hectares]  |   |
| Height OD                                    | 278masl  |   |
| PROJECT CREATORS                             |  |   |
| Organisation                                 | ARCUS  |   |
| Project brief originator                     | RPS & SYAS   |   |
| Project design originator                    | Rob Kinchin-Smith, RPS   |   |
| Project supervisor                           | Lucy Dawson  |   |
| Project manager                              | Oliver Jessop  |   |
| Sponsor or funding body                      | Hammerson UK Properties plc  |   |
| PROJECT ARCHIVES                             |  |   |
| Archive Type                                 | Location/Accession no.   | Content (e.g. pottery, metalwork, etc)            |
| Physical                                     | None   | None  |
| Paper  | Sheffield Archives & Sheffield SMR   | Report, photography, plans, sections, field notes |
| Digital                                      | Sheffield SMR  | Paper and pdf copy of report                      |
| BIBLIOGRAPHY                                 |  |   |
| Title  | Archaeological Building Recording at Trafalgar Works, Trafalgar Street, Sheffield, South Yorkshire   |   |
| Report no                                    | 899e.1(2)  |   |
| Author                                       | Lucy Dawson  |   |
| Date   | May 2011   |   |

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- 415 Detail of former paint scheme, G15, machine shop – dark grey/blue lower half and a light brown/beige upper half divided by a black band (film 23.24)
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- 429 Detail of southwest corner of furnace house showing join with west building of the range and remains of spring of segmental brick arched head of former doorway in south elevation (film 23.3)
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- 432 Detail of southeast corner of south elevation of furnace house showing remains of spring of segmental brick arched head of former doorway (film D.33)
- 433 General view of truncated trusses, north wall of G11, furnace house (film 23.4)
- 434 General view of lower section of north wall of furnace house (film 51.4)
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- 436 Detail of lower section of chimney stack, northeast corner of furnace house – note blocked arched opening (film 51.6)
- 437 Detail of upper section of chimney stack, northeast corner of G11, furnace house – showing inserted pipes (film 23.7)
- 438 Detail of base scar within secondary concrete floor, northwest corner of G11, furnace house (film 51.8)
- 439 General view of G12, east building of furnace house range (film 19.9)
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- 443 General view of bolted angle iron roof structure of G12, east building of furnace house (film 23.15)
- 444 View from G12 towards small yard G14 and privy block, wash house range with G13 wash house to the left (film 23.16)
- 445 General view of west elevation of wash house (G13) (film 23.14)
- 446 General view of G13, wash house (film 44.4)



- 447 General view of G13, wash house (film C/S 4.4)
- 448 General view of shower cubicles, G13, wash house (film 44.3)
- 449 General view of G13 towards doorway in west wall (film 44.2)
- 450 Detail of tiling, G13, wash house (film 44.1)
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- 454 Detail of timber planked door, G14 privies, wash house range (film 23.15)
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## NON-TECHNICAL SUMMARY

*This report describes a programme of archaeological building recording of the former Trafalgar Works, Trafalgar Street, Sheffield, South Yorkshire. The work was commissioned by Hammerson UK Properties plc in advance of the Sevenstone development, formerly known as the New Retail Quarter (NRQ). Fieldwork was undertaken by ARCUS in October 2007. Final report edits have been completed by Wessex Archaeology on behalf of The University of Sheffield.*

*Previous archaeological work undertaken regarding the site includes ‘an archaeological desk-based assessment of land and buildings within the proposed New Retail Quarter’, ‘a detailed archive assessment for the proposed New Retail Quarter’ and ‘a historic building assessment’.*

*The Trafalgar Works (initially depicted as Portland Works) was constructed between 1889 and 1894, as part of a reordering of the Trafalgar Grinding Wheel owned at the time by R. Sorby & Sons. The works was built not only as an extension to Trafalgar Grinding Wheel, but also as a works which could be self contained and therefore be part-let easily. The works was taken over by Harrison Fisher & Co Ltd in 1934 who produced electroplated goods. Trafalgar Works was fairly large with workshop ranges set around a central and rear yard. Positioned around the central yard was a principal range to the west, fronting Trafalgar Street, a south range, which abutted Trafalgar Grinding Wheel, an east range, attached to the south range, and a later north range which was largely detached and positioned against the north boundary wall, originally connected to the west range via a small passage at second floor level.*

*Around the rear yard was a continuation of the south range which would have contained forges at ground floor, and a forge and machine shop building was attached to the southeast corner of the south range. To the north of the rear yard was a furnace house and two later flanking structures. In addition was a wash house and mid-19<sup>th</sup>-century toilet block to the east, added to the complex in the 1940s. The works had undergone numerous alterations since its initial construction which included changes in function, removal of forges, additional structures, abandonment of structures and most drastically the removal of third floor of south and east ranges. These alterations together with the demolition in the 1980s of the Trafalgar Grinding Wheel, makes accurate interpretations of historic features and functions difficult.*

*The works was typical in layout and architectural style of a medium to large integrated works from the period. It contained generous fenestration to light workshops and forges and the principal façade was dressed with ashlar sills and lintels, sash windows and a centrally positioned cart passage. However, the architectural style differed from that of the adjacent Trafalgar Grinding Wheel (constructed much earlier – c.1833) and Kangaroo Works which is unusual for a works complex.*

*Each range was constructed for a particular function and encompassed features associated with enabling that function and specific process to be carried out, such as power transmission or fireproofing measures, although it is clear that the function of areas had been altered throughout the history of the works.*

# 1 INTRODUCTION

This report describes a programme of archaeological building recording at the former Trafalgar Works, Trafalgar Street, Sheffield, South Yorkshire (**Illustration 1**). The recording was requested in order to create an archive record of the building prior to its demolition, in advance of the construction of the Sevenstone development formerly known as the New Retail Quarter (NRQ) within the city centre of Sheffield. Wessex Archaeology were commissioned by The University of Sheffield to undertake the final report edits.

Previous archaeological investigation undertaken by ARCUS regarding the works includes an archaeological desk-based assessment of land and buildings within the proposed New Retail Quarter, ARCUS Report 899.1 (Roberts and Stenton, 2005) and a detailed archive assessment for the proposed New Retail Quarter, ARCUS Report 899c.4 (Badcock et al. 2006). A historic building assessment of the Kangaroo and the Trafalgar Works was also undertaken by RPS (Kinchin-Smith, 2007).

As part of the planning consent for the Sevenstone development (formerly known the New Retail Quarter (NRQ)), Sheffield City Council required a programme of archaeological recording. The programme was agreed by the South Yorkshire Archaeology Service (SYAS), the Sheffield Urban Design and Conservation Team (SUDCT) and RPS Planning and Development, in accordance with government guidance as set out in Planning Policy Guidance Notes – Archaeology and Planning (PPG15 and 16). The programme comprised four elements:

- detailed archaeological building survey of the former Trafalgar Works, Trafalgar Street (described in this report);
- detailed archaeological building survey of the former Kangaroo Works, Wellington Street (see ARCUS Report 899e.1(2));
- a programme of detailed archive research to be undertaken regarding the use of the works complex (including Trafalgar Grinding Wheel, Trafalgar/Portland Works and Kangaroo Works) (see **Sections 5 and 8**);
- a programme of excavation across the site post demolition of the buildings (see ARCUS Report 899f.1(1)).

# 2 NOMENCLATURE AND LAYOUT OF REPORT

The report which follows documents the archaeological building recording which took place during late 2007, of the Trafalgar Works, Trafalgar Street, Sheffield. The report for ease of understanding has been divided into a number of sections, the contents of which are listed below: A brief archaeological and architectural description of the former Trafalgar Grinding Wheel is described within **section 6**. **Section 7** documents a detailed archaeological and architectural description of the Trafalgar Works as a walk around and through each building, starting with setting, progressing to all sides of the structure, and finally an internal description from the basement or ground floor up. This section is to be used in conjunction with the illustrations and plates in **Sections 12 & 13** and **Appendix II**. A detailed account of process flow through the works at three periods in time has also been included within **section 8**. The works complex as a whole included three works buildings: Trafalgar Works (formerly Portland Works, on the site of former north ranges of Trafalgar Grinding Wheel); Trafalgar Grinding Wheel (main southern portion of Trafalgar Grinding Wheel, formerly Well's Wheel); and Kangaroo Works (to the south of Trafalgar Grinding Wheel).

## 3 AIMS AND METHODOLOGY

### 3.1 Aims

The aims of the building recording were:

- to identify and objectively record by means of photographs and annotated measured drawings any significant evidence for the original and subsequent historical form and use of the works;
- to create a detailed archival record of the works to be deposited within the South Yorkshire SMR;
- to produce an illustrated report with the roles of historical plan form, constructional detail and process flow demonstrated.

### 3.2 Methodology

The drawn survey comprised measured floor plans at 1:100 scale for the basement, ground, first and second floors. 19 elevations with structural sections were produced, elevations 1-12 and 17-19 were drawn at 1:50 scale, whilst elevations 13-16 were drawn at 1:20 scale. A further 5 longitudinal sections were also produced at 1:50 scale (see **Illustrations 17 - 46**). No site plans were available prior to the survey, and all drawings were measured using electronic distance measurement (EDM) and enhanced using hand-tape measurements. The drawings formed the basis for phased site plans and photographic location plans. A written record was compiled in the form of note annotations on the drawings.

The photographic record included all external elevations, with viewpoints selected from vantage points as nearly parallel to the elevation being photographed as possible. In addition a general external photographic record was made, to demonstrate the structural relationship between the individual elements of the building and to also show the building within its setting.

A general internal photographic record was made of the building, comprising photographs of each room, or discrete space, to record the general appearance, form and internal arrangement. A graduated photographic scale was used wherever possible. These were supplemented by detailed record shots of all historic elements noted within the building.

The photographs were taken using both medium format and 35mm format using black/white film. Each individual photograph was recorded on a photographic register, recording the film and frame number (**Section 14**). The location and direction of each photograph were also recorded on corresponding plans of each floor of the building (**Illustrations 47 - 51**).

A selection of 35mm colour slide photographs were also taken to complement the black/white photographic record, particularly where colour information was deemed significant. The location and direction of each colour slide photograph was also recorded on corresponding floor plans and a photographic register was produced.

Digital photography was also used during the structural watching brief of the works, documenting features previously obscured. The locations, directions and film/frame numbers were recorded in the same way as black and white and colour slide photography.

### 3.3 Fieldwork

Fieldwork was undertaken in October 2007 by Oliver Jessop, Lucy Dawson, Jennifer Barnes, James Thomson and Isabel Kendall. Geometric data was collected and processed by Chris Breeden, Chris Swales, Kathy Speight and Tom Sparrow.

Medium format photography was carried out by Simon Jessop. Watching brief visits were made during November and December 2007 by Lucy Dawson and in June 2008 by Oliver Jessop, James Thomson and Jennifer Barnes.

Archive, historic research and oral histories were produced by Victoria Beauchamp.

### 3.4 Data Collection

The following sources were consulted for the purposes of this report:

- Sheffield Archives;
- Sheffield Local Studies Library;
- The Hawley Collection;
- Mr Inman – oral history.

## 4 SITE LOCATION

The site (centred on SK 3497 8701) was located on the east side of Trafalgar Street, Sheffield (**Illustrations 1 and 2**). The principal façade of the building fronted Trafalgar Street with access gained to the site via a cart passage located within the centre of the principal façade (west elevation). Located to the south of the building was the site of the former Trafalgar Grinding Wheel (demolished) and beyond this was the Kangaroo Works (**Illustration 2**).

## 5 HISTORICAL AND ARCHAEOLOGICAL SUMMARY

The following summary documents the history of the works complex as a whole including Trafalgar Grinding Wheel (previously Well's Wheel, demolished at the time of survey), Trafalgar Works (previously Portland Works) and Kangaroo Works.

### The 1830s and 1840s

The historic map evidence for the area (**Illustrations 3 and 4**) demonstrates that although Trafalgar Street and Wellington Street had been laid out by 1832 (Taylor's Map, **Illustration 4**), the plots of land later occupied by Trafalgar Grinding Wheel, Trafalgar Works and Kangaroo Works remained undeveloped by this date. It has been suggested that a need to secure and consolidate the known mineshafts beneath the site may account for the site's late development (Roberts and Stenton, 2005).

On the 1850 OS map (**Illustration 5**) 'Well's Wheel' is shown to occupy the land overlapping with the plot to the north which would later become the Portland Works. Samuel Wells (a table cutler, part of Sarah Wells & Co) is recorded as having taken indentures for land in 1832 and 1833, from the Twelve Capital Burgesses, on the opposite side of Trafalgar Street, for dwelling houses of at least £75 each in value. Later these would become part of the Well's Works (in 1896 called Trafalgar Works and occupied by Harrison Fisher – not to be confused with the Trafalgar Works originally Portland Works or the Trafalgar Engineering Works originally situated to the north of Portland Works). The Burgesses were clearly hoping for a domestic area to develop on the new streets, for conditions were applied for the 99 year term of the lease that no workshops, steel furnaces or steam engines, amongst buildings for other restricted trades, were to be erected or built on the plots. (Sheffield Archives CB1026).

In 1842 William Flockton gave a detailed valuation of a wheel giving its address 'situate in Wellington and Trafalgar Streets the property of Sarah Wells and Sons' (SY B141/B p68-71). In White's Directory of 1841 Sarah Wells & Son were described

as 'table knife and fork and steel manufacturers, Trafalgar Works (56 Wellington Street)'.

The total value of the wheel including a 25-horse power steam engine was £2151-0-0. Sixty tons of Ashlar were laid to fix the engine and gearing, and a reservoir with puddling 38 x 72 yards was constructed (on the site later to be occupied by the Kangaroo Works) to supply the steam engine at a cost of £35-0-0. In total there were 21 heavy troughs and 40 light troughs. Numerous workshops, houses and warehouses are also listed. Lot 2 for example lists 'workshops adjoining the wheel'.

This wheel first occurs in the rate book for 1840 (the valuations by Flockton could refer to a later extension in 1842 as the description in the ratebooks was extended).

In 1843 Thomas Wiley became the owner and occupier of the wheel. It is difficult to ascertain what his occupation was. In 1846 Slater's directory lists a Thomas Wiley, table knife cutler, as being resident in Trafalgar Street, the most logical owner of such a building. Beauchamp (1996) has shown however that cutlers were rarely the owners of the buildings they occupied and following the rate book evidence, Thomas Wiley was more likely to be a wine, spirit and porter merchant & news agent of 27 (late 12) Old Haymarket & 2 Castle Folds (White's 1841) - a fact supported by Anna Wiley being listed as the occupier on Thomas' death and she too is recorded as wine, spirit and porter merchant & news agent of 27 (late 12) Old Haymarket (White's 1852). Although listed as the occupier in the rate books, it is more likely that the wheel was let as a tenanted works and for the Wileys it was a speculative venture into a booming industry. At the same time (1843-4) the rate books also show that he was buying other property from the Wells family in the same area.

The rate book evidence appears to suggest that the wheel was replaced in the 1850s by a 'new wheel and machinery' erected by Thomas Wiley (**Appendix I**).

### **The 1850s-1870s**

The rate books indicate that Thomas Wiley occupied the site until 1853-54 when the rate books states the owner as Wiley's Executors. Anna Wiley appears to have rented out the wheel as a tenanted or 'public' wheel until a Thomas Waterhouse took over in 1854-55, (Merchant & mfr of Peace Ward & Co who were Merts & Steel Mfrs, file, saw, edge tool, hammer & Cutlery, Agenoria Works, Saville Street (White's 1864)). Wiley's Executors, however, retained ownership of the building until the early 1860s. In 1857-58 'Trafalgar Wheel' is first used as a description of the site. Waterhouse became the owner by the rate books of 1866 and it is at this point that the first record of the name of 'Sorby' being associated with the property in Trafalgar Street as occupier of 'Trafalgar Wheel'. This appears to relate to the complex that is shown on the 1889 OS map (**Illustration 6**) later occupied by the Trafalgar Works, Trafalgar Grinding Wheel and Kangaroo Works (**Illustration 10**).

### **The 1870s-1890s**

In 1870/71 the Sorbys become owners and occupiers of Trafalgar Wheel. The Sorby Company History ([www.robert-sorby.co.uk](http://www.robert-sorby.co.uk)) states that '*Thomas Austin Sorby was engaged in Robert Sorby & Sons all his life until his death in 1885 at the age of 63*'. The business of R Sorby had on Robert's death in 1857, passed to his sons Robert and Thomas Austin. Robert died in 1865 leaving the firm in the hands of Thomas Austin. The rate books show that he remained at the Trafalgar Wheel until the mid 1880s.

On the death of Thomas Austin Sorby in 1885 the firm passed into the hands of his sons Robert Arthur Sorby and Thomas Heathcote Sorby. It was on the death of Robert Arthur Sorby in 1896 that the whole firm moved from Carver Street to Trafalgar Street (Sorby Company History [www.robert-sorby.co.uk](http://www.robert-sorby.co.uk)).

## Occupation of Trafalgar Wheel (1880-1890)

Under the tenure of the Sorbys the directories suggest that at least part of the wheel was sub-let. In 1883 Kelly's directory lists the occupants of Trafalgar Wheel as:

*"Ellin Jos & Walter - bone haft & scale cutters, Ash J & Son silver polishers Darling Wm, wood turner, Farrow Thos, wood turner, Wheatcroft Sam, wood turner, and Kenyon JA, comb mfr."*

In Kelly's 1893 directory a similar list appears:

*"Ash J, silver polisher, Darling W, ivory & wood turner, Farrow Thomas, wood turner, Wheatcroft Saml, wood turner, Birkett Ed, butchers' steel handle & swivel maker"* (Kelly's 1893)

The Sorbys may have made use of the grinding facilities as extra capacity for their edge tool, saw, shear, scythe or machine knife production, either dedicating space to a specific aspect or for more general use, but without surviving company records their precise use of the building is unclear.

The trade directories do not record any property as occupied by the Sorby firm on Trafalgar Street until White's Directory of 1898. However, the 1896 Goad Insurance Plan depicts the works complex as owned and occupied by R. Sorby & Sons, with part of Portland Works (Trafalgar Works) as occupied/sub-let by J. Wilson & Marsden Bros & Co.

## The 1890s-1900s - the development of Kangaroo and Portland Works

By the 1889 OS survey (**Illustration 6**) the plot had changed little from the 1850 OS map (**Illustration 5**) except for some consolidation of the buildings occupying the later Portland Works site. The name was now clearly marked as Trafalgar Grinding Wheel and the site of Kangaroo Works was still occupied by the reservoir for the steam engine for Trafalgar Wheel.

Between 1889 and 1896 the plots were substantially redeveloped with Kangaroo Works occupying the site of the old reservoir and Portland Works redeveloping the whole of the northernmost part of Trafalgar Grinding Wheel. Part of the original Trafalgar Wheel overlapped with this section, but after the redevelopment of the Trafalgar Works (Portland Works) the Trafalgar Grinding Wheel appears to have been reduced in size and was retained within the original plot boundaries. No precise date for this rebuild can be identified, leaving the construction dates between 1889 and 1894. An exhaustive survey of the building registers for the period 1889-1896 (CA205/7-11, Sheffield Archives) revealed that no building plans were ever granted planning permission and no building plans have been traced either in firms' archives or the Sheffield archives.

The 1896 Goad's fire plan (**Illustration 10**) clearly depicts the new Trafalgar Works (shown as Portland Works) and Kangaroo Works, both of which are marked as being occupied by Robert Sorby & Sons, along with Trafalgar Grinding Wheel. In addition, the Trafalgar Works is also shown as being jointly occupied with J Wilson & Marsden Bros.

The old workshops built as tenement factories in the mid-nineteenth century were demolished and newer more integrated works appear to have been developed.

## 1900-1967

By 1901 Thomas Heatcote Sorby was in charge of the firm of R Sorby & Sons. 'In 1901 he acquired John Wilson Marsden (Marsden Brothers having recently been purchased by John Wilson)' a firm manufacturing edge tools and ice skates, which had been occupiers of the Portland (Trafalgar) Works (Company History,

www.robert-sorby.co.uk). According to the firm's history, this was a prudent move as in subsequent years skate sales outstripped those of edge tools.

In 1906 Kelly's directory shows both firms having the address of Trafalgar Street. The 1907 Catalogue for Sorby shows the united works under the name of Kangaroo Works (**Illustration 14**) and depicts the range of products produced by R.Sorby and Sons which included "edge tools, adzes and axes, augers, saws, joiners', engineers', plasterers' and iron moulders' tools, scythes, hooks and sheepshears". The Trade Directories however continue to identify the whole site as Portland Works until the 1930s when Kangaroo Works is mentioned (see below):

| Year            | Description   |
|-----------------|---|
| White's 1900    | edge tool mfrs [Sorby Rbt & Sons]   |
| White's 1911    | edge tool mfrs [Sorby & Sons]   |
| White's 1919-20 | Portland Works- skate mfr [Wilson John Marsden Bros & Co], edge tool mfr [Sorby Rbt & Sons], edge tool mfr [Howarth James & Sons] |
| Kelly's 1931    | skate mfrs[ Wilson Jn Marsden Bros & Co Portland Wks]<br>edge tool Mfrs [Sorby Rbt & Sons Ltd (Kangaroo Wks)]                     |

In 1922 the firm of Robert Sorby acquired James Howarth and Sons of Bath Street, manufacturer of edge tools and joiners tools, a previous supplier to Robert Sorby. However, in 1923 Robert Sorby & Sons was bought by Hattersley and Davidson, a Sheffield Engineering firm.

Sorby's retained its identity and occupied the Trafalgar Street site until 1934 when it moved to join Hattersley & Davidson at its new works on Chesterfield Road, thus ending a 78 year use of the site by the Sorbys.

Harrison, Fisher and Co. Ltd., cutlery, acquired the site en-bloc in 1934 (NRQ Historic Building Assessments Volume 2: Trafalgar Works, RPS 2007 p 8). The take-over of the site by Harrison, Fisher & Co resulted in a further change of name in the 1950s from Kangaroo Works and Portland Works to Trafalgar Works; the name for the factory they occupied on the opposite site of the street in the 1890s. The 1937 Goad's map (**Illustration 11**) still shows the names of Portland and Kangaroo Works but the 1957 Goad's map (**Illustration 11**) shows it as Trafalgar Works. Harrison, Fisher's old factory on the opposite side of the road became a tenanted works. At sometime between the Goads updates of 1937 and 1959 the second-storey of Kangaroo Works was given over to 'polishing' whilst the third-storey became a 'razor factory'. The Kangaroo trade mark continued to be used by Robert Sorby & Sons. Harrison, Fisher & Co. remained at the Works until 1967. They specialized in electroplating and producing table cutlery and flat ware, pocket knives, scissors, hollow-ware and safety razor blades. They continued to use most of the range of workshops, whilst the former furnace house became a stamping shop and two of the three forges were given over to workshops and grinding.

Robert Sorby is still trading, manufacturing specialist wood carving and wood turning



chisels. Their other edge tool interests were subsumed into a hand tool manufacturing group whose brands include the well known Sheffield manes of Spear and Jackson, Eclipse and Moore & Wright. The Hattersley & Davidson name remains in the form of the Sheffield firm of HD Skates, specialist ice-skate manufacturers. Harrison, Fisher are also trading, recently re-branded as Taylors Eye Witness Limited, production having been consolidated at the Eye Witness Works in Milton Street in the late 1960s (R. Kinchin-Smith, pers.comm)

### 1967 and later use

In 1967 Sheffield City Council compulsorily purchased the building for an abortive redevelopment scheme. Some parts of Trafalgar Works & Kangaroo Works were let for ephemeral uses such as Karate Dojo, a boxing gym and a printing shop in the Kangaroo Works and an artists' studio within Trafalgar Works. The central Trafalgar Grinding Wheel building was demolished in the 1980s and the plot left vacant. In 2007 the site became part of Sheffield's New Retail Quarter/Sevenstone Development and planned from redevelopment. The remaining Trafalgar Works and Kangaroo Works were demolished in November and December 2007.

## 6 TRAFALGAR GRINDING WHEEL

The Trafalgar Grinding Wheel structure was demolished in the 1980s but had originally been located at the centre of the works complex, bounded by Trafalgar Works to the north and Kangaroo Works to the south. It was constructed c.1833 and was originally known as Well's Wheel. The 1850 OS map (**Illustration 5**) depicts Well's Wheel as a large central building with smaller ancillary ranges to the north, surrounding a courtyard area (later the site of Portland/Trafalgar Works) and reservoir to the south (the position of the later Kangaroo Works). By 1889 (**Illustration 6**) the layout of the buildings appeared to have been much the same as in 1850, but by this time the complex was known as Trafalgar Grinding Wheel. The 1850 and 1889 OS maps depict the central Trafalgar Grinding Wheel building as overlapping the plot boundary to the north. After the redevelopment of the complex with construction of Portland/Trafalgar Works and Kangaroo Works, the original Trafalgar Grinding Wheel building appeared to have been set back in line with the original plot boundary with the new south range of Portland/Trafalgar Works constructed abut. This map evidence would suggest that the original Trafalgar Grinding Wheel had been truncated to the north for the construction of Portland/Trafalgar Works. This is further supported by Williams (2003: Vol. 1) where the length of the Well's Wheel central building is stated as measuring 24.56m. However, the archaeological survey of the area between the north wall of Kangaroo Works and the south wall of Trafalgar Works measured only 20.85m. The lower section of the south wall of the south range of Trafalgar Works was older, predating the remainder of the works, indicative of the reuse of an earlier structure. The historic photographs of the building however, (**Illustrations 16 and 17**) show no evidence for the truncation or re-roofing of the building which would have been required. This may indicate that there was a probably a smaller 1 or 2-storey range originally attached to the north of the building which was partially demolished, thereby leaving the main structure unchanged.

The Trafalgar Grinding Wheel was a four-storey structure, rectangular in plan, and unusually set back from Trafalgar Street bounded by a brick wall. Attached to the rear (east) was a two-storey extension which may have housed an engine, with two single-storey extensions attached to its south and a further single-storey extension to its north, which is depicted as housing a dynamo on the 1896 Goad plan (**Illustration 10**).

The principal façade was constructed from hand-made red bricks set in a regular

English bond. The fenestration consisted of large windows with segmental brick arched heads, projecting stone sills and timber frames and casements. Those on the third floor were smaller, but more frequently spaced, positioned above a stone string course. Positioned slightly off-centre within the principal façade, overlooking Trafalgar Street, were taking-in doors at both first and second floor levels (**Illustration 15**). The roof of the building comprised a hipped roof along each side which sloped into a central valley in the middle of the roof, with a slate covering. This was an unusual design.

Internally the building was made up of brick jack-arched ceilings at ground and first floors with concrete floors over. The third floor likely had a timber boarded floor.

The Trafalgar Grinding Wheel was demolished in the 1980s.

## **7 BUILDING DESCRIPTION**

### **7.1 Introduction**

For the purposes of effective recording and ease of reference the works was divided into ranges set around two yards and each internal space was assigned a room number. These are shown in **Illustrations 2, 17-20**. Furthermore, a fenestration typology was produced (see **Appendix II**) and should be referred to for details of specific window types.

### **7.2 Building Structure**

The Trafalgar Works (originally Portland Works – although not known as this by the workers/locals from at least the 1950s onwards - Ken Hawley, pers.comm) comprised several brick built ranges set around two yards; a central yard and a rear yard. Around the central yard were the principal/west range, the south range, the east range and the north range. Set around the rear range was the south range (east end), toilet/wash block (wash house range), and furnace house range. The main part of the works was constructed between 1889 and 1894, with a series of later additions and modifications throughout the works history. The main workshop ranges were originally three-storeys in height, however, after the demolition of the adjacent Trafalgar Grinding Wheel in the 1980s, the third-storeys of the south and east ranges were removed. Where the upper-storeys had been removed, the original concrete floors were covered in bitumen and corrugated metal sheeting in order to waterproof the building. Much of the internal layout of the works had been retained, however most historical features had been removed, whilst some areas had lain largely derelict for a number of years prior to the survey.

Trafalgar Works could easily have functioned as a self contained works, yet it was also constructed as part of the Trafalgar Grinding Wheel with clear power transmission and access between the two buildings

### **7.3 External Description of Works**

The principal façade for the Trafalgar Works was the west elevation of the west range, which fronted Trafalgar Street. The architectural style of the Trafalgar Works conformed to the vernacular style of industrial works of the time, but was dissimilar to that of both the earlier adjacent Trafalgar Grinding Wheel and the later Kangaroo Works. The windows located on the first and second floors had all been removed and boarded, but have been reconstructed from the evidence of retained frames and historic images of the works.

#### **West elevation – West Range**

The west elevation was brick built in an English bond and three-storeys in height with

a centrally positioned cart passage, maintaining the symmetry of the façade (**Plates 1-3**), also noted at Baltic Works. Flanking either side of the cart passage were pedestrian doorways, dividing the ground floor of the range into two distinct spaces, also noted at Brooklyn Works, Green Lane and Eye Witness Works (Wray, 2000). The cart passage and adjacent pedestrian doorways were embellished with a stone lintel (**Plates 4-7**), those above the doorways being chamfered (**Plates 9 and 11**). Above was a moulded stone cornice. Either side of the cart passage were two cast iron plates to protect the corners from vehicular collisions (**Plate 10**). There was also a large timber gate with incorporated small pedestrian door. Large sections of the gate had been repaired over time. The adjacent pedestrian doors had stone steps leading to the threshold, single, fixed overlights above the doors, timber frames and original timber panelled doors (**Plates 9 and 11**). The cart passage contained a weighbridge, surrounded by stone setts which had been partially covered by a layer of modern tarmac.

Below the ground floor fenestration in the west elevation was a projecting plinth with chamfered stone top. The fenestration to the north of the cart passage consisted of five type 2 windows with chamfered stone lintels and projecting stone sill which formed part of a string course (**Plate 8**). The fenestration to the south of the cart passage comprised four type 1 windows and a blocked type 1 window at the south end (**Plate 12**). Positioned directly below these window openings were five blocked light wells - type 6 windows. All had been blocked with brick, with two having formerly been converted to coal drops. All had chamfered stone lintels (**Plate 13**).

At first floor were 14 windows. The southernmost window opening had been blocked with brick, the northernmost 6 windows were type 3, whilst the remainder were type 1 windows. All had a projecting stone sill which formed a string course along the elevation (**Plate 14**). Between the ground and first floor windows was a painted section of brickwork which would have, at one time, housed the company's name and trade, as depicted on the 1960s historic photographs (**Illustration 15**).

The second floor fenestration was shorter in height than that on the first floor, but also consisted of 14 type 1 windows, the southernmost being blocked with brick. The projecting stone sills again made up a string course along the elevation. Between the first and second floor windows was further advertisement space for the company. At the top of the elevation was a timber gutter which was supported by evenly spaced pairs of moulded brick brackets.

The roof was pitched and hipped at the north end, covered with slate.

### **South elevation – West and South Range**

The south elevation comprised the south gable of the west range and the south elevation of the south range (both west and east ends), also exposing part of the basement level of the elevation, due to the variation of ground levels across the site (approximately Trafalgar Works basement level = Trafalgar Grinding Wheel ground floor level – **Illustration 46**). The west end of the elevation was the south elevation/gable of the west range. This was divided into two sections: that to the west which was originally visible from Trafalgar Street (**Plates 15-18**); and that to the east which was built against the set back Trafalgar Grinding Wheel, defined by a clear change in the quality of brickwork and finish (**Plate 23**). The western section of this contained a doorway at ground floor, which would have led from the front yard of Trafalgar Grinding Wheel into the stairwell, G22. It had a segmental brick arched head and two *in situ* stone steps, although the stairway from the front yard of Trafalgar Grinding Wheel had been removed at the time of survey. The door was a timber planked door with overlight (boarded). Below the *in situ* stone steps, the brickwork had been replaced and appeared to have been built against a structure (**Plate 20**), probably stone steps leading to the doorway from the front yard area,

required due to the difference in ground level. Directly above this were two windows, one at first floor level, and one at second floor level (**Plates 17 and 18**). The window at first floor would have lit the stairwell, F11. Part of the original type 4 window frame had been retained however the window had been boarded internally. It also had a segmental brick arched head and bull nosed brick sill (**Plate 21**). The second floor window appeared to have been changed. It had been altered from a window to a door, probably a taking-in door, with a scar in the reveals indicating the removal of the primary bull nosed brick sill and the insertion of the lower section of the opening. The ends of three joists at the bottom of the doorway were visible within the elevation, protruding through the segmental arched head of the window below (**Plate 22**). These joists were part of an inserted raised floor within S1. This original window also had a segmental brick arched head and would probably have also contained a type 4 window. This had been altered to a taking-in door and had subsequently been blocked with brick. Above this was a continuation of the timber guttering present along the west elevation which ends at the previous join with Trafalgar Grinding Wheel. Situated to the west of the windows were the faint remains of the painted sign of "HARRISON FISHER & Co. Ltd. TRAFALGAR WORKS" (**Plate 21**).

The east section of the west range was distinguished by the uneven, unfinished brickwork, clearly built against the north side of the earlier structure of the Trafalgar Grinding Wheel. It contained few features, with small patches of repaired/altered brickwork. At the top was a horizontal scar indicating the position of the stone string course below the third floor windows of the Trafalgar Grinding Wheel (**Plate 22 and Illustration 24**).

The south elevation of the south range was a continuation of the rough brickwork previously described, indicating the position of the former Trafalgar Grinding Wheel (**Plate 23**). The lower 1-1.5 metres of this wall was older, phase 1 (**Plates 27 and 28**), and most likely part of an original Trafalgar Grinding Wheel wall of a smaller structure attached to the north, shown on the 1889 OS Map (**Illustration 6**) and discussed in **section 6** above. This was largely demolished for the construction of Trafalgar Works. However it would appear that the previous structure was retained at ground/basement level. Within this elevation were several blocked primary openings, within both the older section of wall and the Trafalgar Works wall above. At basement level, there was one small arched opening, a further three at ground floor (**Plates 26 - 30**) and a tall rectangular blocked opening at the west end of the first floor (**Plate 24**). In addition, positioned at the east end of the section was a further tall rectangular blocking extending from ground floor up to first, and most likely would have also continued at second floor level (**Plates 27, 31 and 32**). All these blockings were noted internally also and were probably associated with power transmission from the adjacent Trafalgar Grinding Wheel into the Trafalgar/Portland Works. The blocking at the east end was likely to have been a transmission shaft tower due to its proximity to a dynamo and steam engine positioned at the rear of Trafalgar Grinding Wheel, similar to rope races in textile mills, feeding power at every level of the range – a similar shaft tower was also noted at Cornish Place, although this was an external feature (Wray, 2000. pp68). These larger openings were later altered to doorways between the buildings, probably as machinery became self motored.

Denoting the extent of Trafalgar Grinding Wheel, adjacent to the transmission shaft blocking, was a small vertical projection of bricks from ground floor to the top of the elevation (**Plate 32**). This probably served to close any gap between the two buildings, next to the shaft tower.

The remainder of the elevation was the south elevation of the south range (**Plate 33**) at the east end, although the far east end at basement and ground floor levels was obscured externally by the attached machine and forge shop (**Illustration 18**).

At first floor were thirteen type 4 windows (10 at the east end, 3 at the west end), broken by an area of elevation which had originally been constructed about a large chimney (**Plate 36**), depicted on the 1889 OS map (**Illustration 6**) and 1896 Goad plan (**Illustration 10**). This chimney was demolished in the early 20<sup>th</sup> century. At ground floor, west of the demolished chimney, three type 4 windows were positioned directly below those at first floor. A fourth window had been inserted into the space which had previously been against the chimney (**Plate 34**). This window had a segmental brick arched head, timber sill and frame with 4 panes, one of which was a casement. The sill of this window was higher than the adjacent type 4 windows due to the position of a phase 5 structure against the elevation, which acted as a store for the works positioned on the former site of the steam engine.

The ground floor at the east end contained three type 9 windows (**Plates 39 and 43**) which would have generously lit the hand forges originally positioned within G16 – G18 of the ground floor. These all had raised sills, presumably carried out during **phase 6** - the addition of the plating shop to the south, shown on the 1959 Goad plan (**Illustration 11**). A fourth type 9 would have been located at the far east end of the elevation, although this was altered to a door between G16 and G15 in the machine shop and forge by 1896 (Phase 3). The original windows segmental brick arched head was noted during the structural watching brief (**Plate 270**). In addition, adjacent to the westernmost type 9 windows was a second inserted window (phase 5) within the elevation, this was a type 8 window (**Plate 40**) lighting G18.

At basement level (externally Trafalgar Grinding Wheel ground floor level), was a doorway with segmental brick arched head and timber frames, positioned to the west of the former chimney standing. The door was timber and probably secondary. The western jamb of the opening was part of a projecting wall, truncated however after the demolition of Trafalgar Grinding Wheel (**Plate 35**). This wall was part of a single-storey structure attached at the rear of Trafalgar Grinding Wheel, depicted on the 1896 Goad plan as housing a dynamo (**Illustration 10**). The doorway led into the basement passageway, B7 which accessed the Trafalgar Work's central courtyard and also B6 to the west.

To the west of the doorway was a blocked primary opening with steel I-section lintel (**Plates 34 and 38**). This would have been open into B6, from the former single-storey structure with dynamo as previously discussed.

To the east of the doorway was a change to rougher brickwork with several possible blockings (**Plates 34 and 36**). These were likely associated with the former chimney and may have linked with a flue observed beneath the range during the structural watching brief (**Plate 37**), adjacent to the pedestrian B7 passageway. Surrounding this feature and continuing along the elevation to the east was a roof scar and removed/truncated brick piers from a later (phase 6) single-storey plating shop and stores which had been subsequently demolished (depicted on the 1959 Goad plan, **Illustration 11**). Prior to the plating shop, a single-storey structure housing a steam engine was positioned on the same footprint (**Illustration 10**). No features from this structure were observed within the south elevation.

### **West elevation – Machine Shop**

The original machine and forge shop was attached to the southeast corner of the south range (east end) and first appears on the 1896 Goad plan (**Illustration 10**) labelled as a machine shop and forge. It was a single-storey brick structure with raised ridge louvered hot working roof (**Plate 47**) covered with secondary asbestos sheeting. The structure was originally adjacent to a building housing a steam engine to the west and most latterly a plating shop and stores (demolished at the time of survey). This ongoing development and change has meant that the west elevation (**Illustration 35**) had been subject to many alterations.

There was a significant difference in floor level between the interior and the exterior to the west, giving rise to openings at odd levels. The main body of the elevation was constructed from red brick laid in an English bond. The lower half of the elevation was dominated by scars delineating the position and roof pitch of the previously adjacent plating shop (**Plate 47**). This included a number of truncated angle-irons which had acted as purlins and holes indicating the complete removal of further angle-iron purlins. Three inserted openings, two possibly used as doorways, were situated within the elevation, although the lower half of the openings were below the internal floor level. The first was situated within the centre of the elevation and contained a steel I-section lintel and appeared to have been blocked with blockwork in two phases (**Plate 49**). The second (**Plate 50**), positioned at the south, had a timber frame, stone threshold and was also blocked with blockwork. Leading from the threshold to the external floor level was a scar indicative of a removed timber staircase. Internally the floor level had been lowered in order for the opening to function as a pedestrian doorway. Adjacent to this was a third inserted opening with steel I-section lintel which had been blocked with brick. The function of this opening is indeterminate as only the upper quarter of the opening was above the internal floor level and may have been associated with an activity within the adjacent demolished structure.

At the bottom of the elevation, to the north was strip of projecting concrete render, with an area of irregularly coursed sandstone walling above, possibly part of the foundations of the building (**Plates 48 and 49**).

Truncated by the scars from the demolished building were five equally spaced primary openings, all of which had been blocked with brick (**Plate 51**). All had segmental brick arched heads. The centrally positioned opening was probably a doorway whilst the other four, were windows. Positioned above the central blocked doorway was a partially blocked window with a stone lintel and bull nosed brick jambs and sill. A timber frame had been retained with three fixed lights, although this had been partially boarded externally and blocked with brick internally (**Plate 52**).

### **East elevation – Machine Shop, Wash House, Furnace Range and East Range**

The east elevation of the complex is divided into two sections: the east elevation of the structures around the rear yard (including the machine shop, the privies and wash house and the east end of the furnace range) to the south (**Plates 57 and 58**); and the east elevation of the north end of the east range (**Plate 61 and Illustrations 29 and 36**).

The east elevation of the south end comprising those structures set around the rear yard (**Illustration 36**) encompassed the machine shop to the south. The southern half of this elevation contained a type 4 window and an adjacent doorway which had been altered from a second type 4 window (**Plates 53 and 54**). The door was a timber planked door which had been further secured with boarding externally. The southern half of the elevation was constructed from bricks in an English bond. The northern half and most of the raised ridge gable of the elevation had been rebuilt externally with modern bricks after the demolition of an adjacent phase 2 building, depicted on the 1896 Goad Plan (**Illustration 10**) as a workshop and warehouse. Within this section of elevation was an inserted doorway with concrete lintel and modern timber door (**Plate 54**). This was located in the position of a former, larger phase 5 inserted doorway (noted internally). The truncated north and south walls of this demolished structure remained *in situ* against the machine shop indicating its position, with modern brickwork to make the building structurally sound. Originally this adjacent structure was not part of the Trafalgar Works, but was an earlier independent workshop. By the early 20<sup>th</sup> century however, it appeared to have been amalgamated into the Trafalgar Works complex as a canteen and store (1937 Goad

plan, **Illustration 11**).

Located to the north of the machine shop were a block of phase 1 privies (combined into the works in the 1940s) and a wash house (**Plates 53, 55 and 56**). The privy was a brick lean-to structure with slate covered roof and an off-centre doorway opening with segmental brick flat arched head and timber lintel. Part of the timber door frame had been retained. Attached to the north of this was the wash house constructed in the 1940s (phase 6). The structure was brick built in an English bond with an off centre type 23 window (**Plate 55**). Flanking either side of the window were two small vents. The roof was pitched with a corrugated sheet covering. The plain brick east elevation of the south range could be seen beyond the privies and wash house (**Plates 55 and 56**).

To the north were the remains of a phase 5 steel framed structure attached to the east of the former furnace house. The building had been severely fire damaged with only the steel frame remaining, constructed from bolted angle-irons with a pitched roof (**Plate 57**). The structure would have been covered by asbestos sheets, reinforced by concrete to the east and north to retain the surrounding higher ground level.

The north end of the east elevation of the east range was constructed from brick in an English bond and overlooked a modern car park at the time of survey (**Plates 61 and 62 and Illustration 29**). At ground floor level were six blocked type 4 windows (**Plate 61**). It is likely that these were blocked in two phases reflecting the changing external ground levels. The range at first floor was divided into two sections: one to the south with type 4 windows and which originally had a second floor, removed in the 1980s; and the north end which was originally only two-storeys in height with a staggered lean-to slate covered roof, truncating the upper section of the first floor windows. This north end contained two type 10 windows and a single type 11 window, both of which were adaptations of type 4 windows.

### **North Elevation – Furnace House Range, East Range, North Range and West Range**

The north elevation (**Plates 60, 64 and 65 and Illustration 31**) of the works was in two parts: the north elevation of the furnace house range; and the north elevation of the east, north and west ranges. The north elevation of the furnace house range has four separate elements (**Plate 60**). The easternmost section is part of a steel framed building with only the steel structure retained. The north elevation of this had been covered with corrugated sheeting. Adjacent to this was the 'furnace house'. Its elevation was constructed from brick laid in an English bond. The top of the wall had been capped with a cement render. Attached to the west was a later section of brick wall, delineated by a vertical joint, which was part of the later structure housing toilets and most latterly an incinerator. This section of the elevation and the west end of the furnace house north elevation was covered with painted plaster. This indicated the position of an attached structure depicted on the 1959 Goad Plan as a machine shop (**Illustration 11**). At the westernmost end of the elevation was a lower brick wall which acted as a boundary wall at the end of the former Canning Street.

The northern elevation of the east, north and west ranges was obscured by the internal elevation of the south wall of a demolished works which was positioned abut the elevation to the north (Originally called Trafalgar Engineering Works and later Trafalgar Works, 1896 Goad plan, **Illustration 10**, which then subsequently became James Bros Engineers, 1957 Goad plan, **Illustration 11**). The majority of the wall was not original and was part of a range which was rebuilt in the 1940s against the Trafalgar/Portland Works north party wall. The wall (**Plates 64 and 65**) comprised structural brick piers which supported horizontal I-section beams which would have carried concrete floors/ceilings. A scar of the ground floor ceiling above truncated I-

section beams within the brick piers remained. It also contained a window at first floor level overlooking the Trafalgar/Portland Works central courtyard. The lower half of the wall, below ground level to the north but noted within the central courtyard of Trafalgar/Portland Works, was older, likely part of the original boundary wall (phase 1).

Beyond this adjacent works wall, the roof pitches of the west, north and east ranges of Trafalgar Works could be seen (**Plate 65**). The north and west range roofs were hipped to the north with a slate covering and centrally positioned truncated chimney stacks. The top of the lean-to addition between the west and north ranges could just be seen within the north elevation.

## 7.4 General internal description of works

The Trafalgar/Portland Works had undergone a variety of change throughout its history which included a multiplicity of internal alterations. Access through and around the works complex, together with right of entry into the adjacent Trafalgar Grinding Wheel and changes in process flow across the site would have been modified over time.

The west range, which was essentially warehouse space and partitioned offices, appeared to have fundamentally remained unchanged in structure. The range was attached at the southeast corner by the south range. The south range was divided into two sections: the west end; and the east end. Access between the two areas would have been restricted with doorways between the sections being inserted at later dates. The west end of the range could be accessed from the west range and probably functioned originally as workshops. The north wall contained generous fenestration at each level and probably had work benches positioned below them to take advantage of the light. The south wall contained blockings at basement, ground and first floor levels which probably related to power transmission from Trafalgar Grinding Wheel indicating machinery within these areas. At the east end, the south range connected with the east range (**Illustrations 2 and 17-20**).

The east end of the south range originally contained hand forges on the ground floor, accessed from the rear yard, with large fenestration within both the north and south walls. Above these were originally two (the second floor had been removed at the time of survey) floors of workshops, also accessed from the rear yard at the time of survey. The first floor workshop contained a floor constructed from timber joists and floor boards with a thick layer of lime ash which acted as a fire proofing method. Again the spaces included generous fenestration with work benches against the north and south walls.

Attached to the southeast of the range was a single-storey machine shop which had been substantially altered over the years. Internally the concrete floor had been replaced, although a large portion of the structural walls and roof had remained largely intact.

To the north of the south range was the east range, dividing the central yard from the rear yard. At ground floor level the range was divided into two by a central cart passage. All three original floors of the range would have functioned as workshops. Access was gained into each of the floors from the central yard via an external stairway to the first and second floors.

Within the central yard, against the north boundary wall was the north range. The ground floor of this range originally housed hand forges and contained brick floors, which had subsequently been removed. The first and second floors functioned as a warehouse and workshop, with concrete floors, creating a fireproof layer between them and the hand forges below. Little had been altered on the first and second floors of the building. The north range was attached to the west range by a later lean-



to structure. An external stairway which would have led from the central courtyard to the first floor of the north range had been removed at the time of survey.

At the east end of the site, located to the north of the rear yard was the furnace house range. The former furnace house and attached structure to the east were both derelict at the time of survey, each lacking roofs and internal fixtures and fittings. At the far east end of the site were the toilets/privies which were largely unaltered since their construction in the mid-19<sup>th</sup> century along with a 1940s wash house which was never used for its constructed purpose or subsequently altered.

## 7.5 The West Range

The west range of Trafalgar Works was first depicted on the 1896 Goad plan (**Illustration 10**) and was constructed between 1889 and 1894 (phase 2). The range was a three-storey brick built building with basement, central cart passage and weigh bridge. The main structure appeared to have undergone little change, with much of the alterations associated with inserted office partitions at first floor and the addition of a lift shaft within the southwest corner of the range.

### 7.5.1 Exterior – West Range

The west, north and south elevations of the west range have been described previously (section 7.3). The east elevation of the range (**Illustration 22 and Plate 66**) was similar to that of the west elevation, but unadorned and practical in design. The north end of the elevation had been obscured and altered at all levels by the addition of a brick lean-to structure, joining the west range with the north range (**Plate 69**). This was a phase 5 and 6 structure, although previously depicted on the 1896 Goad plan (**Illustration 10**) was a connecting passageway at second floor level between the two ranges, therefore some alterations within the elevations related to this. The east elevation contained nine type 4 windows (**Plate 68**), evenly spaced along the second and first floors with segmental brick arched heads and bull nosed brick sills (**Plates 66 – 69**). At the north end of the second floor was a further two original window openings, however the northernmost windows upper half had been blocked with brick for the addition of a passageway between the west and north range (phase 3). The lower half was obscured externally by the phase 5 lean-to structure, but had been converted to a doorway (**Plate 69 and 209**). Adjacent to this was a further window which had a blocked lower half as this was truncated by the lean-to roof of the attached structure (phase 5) (**Plates 69**). At ground floor the elevation was divided into two by the central cart passage. To the south were three type 4 windows. Positioned below these was a stone stairway leading down from the central courtyard to the basement (B3 and B6) (**Plate 82**). At the bottom was a doorway opening (the door had been removed at the time of survey) with segmental brick arched head and bull nosed brick reveals. To the north of this was an opening which was utilised as a lightwell into room B2 (**Plate 70**). This opening had a segmental brick arched head but no window had been retained within the opening. The area (the excavated ground in front of the opening) was bounded by stone with a recess for the positioning of a grille over the opening, since removed.

To the north of the cart passage the elevation had undergone a multitude of alterations. The northern two thirds were obscured externally by the later lean-to structure (**Plate 81**). The southern third contained a small phase 6 type 21 window which had been altered from an inserted phase 5 doorway (**Plate 79**). Adjacent to this was a doorway which had been altered from an original window (**Plates 79 and 80**), probably in phase 6 at the same time as the alterations to the adjacent inserted door/window. The opening had a segmental brick arched head, panelled timber door above which was boarding covering the top section of opening and concrete steps leading down into the central courtyard.

The northern section of the ground floor elevation, within the lean-to extension, contained a blocked window, with the original type 4 frames retained externally (**Plates 114 and 115**), and a blocked doorway with stone steps, truncated by a modern timber staircase at the time of survey (**Plate 118**).

The central cart passage contained a weigh bridge, the outer edge of which could still be seen (**Plates 71 - 74**). Positioned either side of the cart passage, at the east end of the north and south walls, were taking-in doors. These had a raised stone threshold, the same height as the internal floor level, timber lintels and timber double doors (**Plate 75**). Within the south wall, adjacent to the taking-in door was an inserted door within an original window opening which had formerly been blocked (**Plates 75 and 77**). In addition, to the west was an original doorway with segmental brick arched head and stone threshold, which was blocked with brick (**Plate 76**). The cart passage also contained an inserted hatch overhead, which opened into F18 above (**Plate 78**).

### 7.5.2 Basement – West Range

The basement of the west range was situated below the southern end of the building only, and comprised four rooms B1 – B4 (**Illustration 17**). The basement was rectangular in plan with access gained from a doorway in the east wall which led from an external staircase in the central courtyard of the works in to room B3. The floor was concrete, as was the ceiling. The ceiling was carried on large horizontal I-section beams supported by brick piers within the west wall.

#### Rooms B1 – B4

B2, B3 and B4 were originally one space (**Illustration 17**) which had been subsequently divided to include a further two rooms, B2 to the north and B4 to the south. B3 acted as the principal room within the basement (**Plates 84 and 85**). The west wall of B3 contained structural brick piers/buttresses projecting into the room which supported large horizontal I-section beams above (**Plate 84**). Between these piers were originally five type 6 windows, acting as light wells from Trafalgar Street. The southernmost of these had been blocked with brick presumably due to alterations within the lift shaft in the southwest corner in the early 20<sup>th</sup> century. A further two of the light wells had been partially blocked with brick and replaced by metal coal hatches. The remaining two lightwells had been blocked externally with brick, yet the type 6 windows had been retained internally (**Plates 86 - 90**). The west wall was constructed of smooth white bricks in a regular English Bond in order to reflect as much light as possible within the basement, whilst the projecting buttresses had alternate white and red bricks creating a decorative design (**Plate 88**). These buttresses supported horizontal I-section beams which in turn carried a concrete ceiling above. Two modern brick partitions were positioned across B3 in a west-east alignment about the west wall, likely associated with the later use of the basement as storage. There were also the remains of a brick base at the north end of the room, directly in line with a passageway in the east wall and adjacent to the northern lightwell in the west wall. In the southwest corner of the room was a lift shaft. This shaft was original although it would appear that the mechanism may have been updated and access into the basement restricted at a later date. Within the east wall of B3 was an inserted doorway into B5 (south range) to the east, a primary doorway (**Plate 85**) leading from the external staircase into the basement, with bull nosed brick reveals and timber frame, and a primary passageway at the north end of the room (**Plates 91 and 92**). This had a stone lintel and ran in a west-east direction beneath the central courtyard. Beneath the external staircase the passage had flat stone head, whilst beyond it was arched brick. The function of the passageway is currently unknown, but may be associated with power transmission.

B2 (**Plate 95**) was located at the northeast corner of the basement (**Illustration 17**) and was a later partitioned room probably to accommodate an inserted weighing

machine within G21 above. It was accessed via a timber framed doorway from B3 to the south (**Plate 93**). Within the east wall was a lightwell although the window had been removed (**Plate 70**). Full access into the space was restricted at the time of survey due to a large amount of debris.

B1 was positioned at the northwest corner and could be accessed via a timber door from B3 (**Plate 93 and Illustration 17**). Within the north wall (**Plate 94**) was a metal doorway with segmental brick arched head which presumably accessed the weighbridge mechanism beneath the cart passage. Access into B1 was restricted due to the high level of debris. There was no lightwell within the west wall of this room due to the positioning of the pedestrian doorway from Trafalgar Street into G23 above which contained a lower floor level.

At the southeast corner of B3 was room B4 (**Plate 96**). This was a small rectangular space which functioned as a safe room (**Plate 97**). The room was situated directly beneath the staircase of the range and may have been adapted from a former staircase which led into the basement from G20. However, little evidence for the removal of the staircase was observed. B4 had in parts been altered and the ceiling level was lower than the surrounding B3.

### 7.5.3 Ground Floor – West Range

The ground floor of the west range was divided into two distinct spaces by a central cart passage. Positioned to the north were rooms G1 and G2 with an attached lean-to structure added to the east which contained room G3 at ground floor. To the south of the cart passage were rooms G21-G23.

#### Rooms G1 and G2

G1 was located at the south end of the northern section of the west range (**Illustration 18**). It was essentially a small lobby with access to G2 through a doorway to the north and a stone stairway which led up to the first floor of the range (**Plates 98 and 99**). Access into G1 was gained directly from Trafalgar Street from the pedestrian doorway positioned to the north of the cart passage (**Plates 4 and 9**). The steps to the first floor were stone with remnants of white paint at the edges, leaving a plain unpainted strip in the centre (**Plates 153 and 154**). The walls were painted in a typical design of red lower section and white upper section (**Plate 99**) and the staircase had a plain wooden hand rail. This paint scheme matched the office spaces on the first floor which indicated the use of this space as restricted to the higher status offices workers rather than the lower status workmen and women. The staircase also had a high arch (**Plate 155**). The position of this arch was structural to support and distribute the weight of the chimney stacks located on the floors above.

G2 (**Plate 100**) was located at the north of the range and could be accessed either via a doorway to the south from G1 or from an inserted doorway in the east wall directly from the central courtyard at the time of survey. There was also a primary taking-in door from the cart passage, below the staircase of G1 (**Plates 103 and 104**). G2 was probably originally a workshop or warehouse space, but had been altered to function as a tool store and time office in the late 1940s/1950s (phase 6) and then into office space during the late 1950s/1960s (Phase 6/7). The room had an inserted suspended timber floor with carpet covering (the original concrete floor was observed during the watching brief), and the walls had been covered with painted plaster and mock timber framing (**Plates 100-102**). The ceiling was painted lath and plaster also with mock timber beams (**Plates 109 and 110**). The west wall contained five type 2 windows (**Plate 106**) which internally had timber sills and added timber reveals obscuring the original brick nosed reveals. The north wall contained a brick chimney breast, which had been plastered and a timber phase 6 fire surround added (**Plates 102 and 107**). The fireplace opening had been blocked at the time of survey.

Either side of the fireplace below the suspended floor were recess within the floor, possibly secondary (**Plate 108**). The purpose of these is currently unknown. The east wall of G2 had been highly altered. Originally there was a doorway at the north end which led into the central courtyard and two windows to the south. At the time of survey, the original doorway to the north had been blocked internally and plastered over, although the opening was still visible from within G3 (**Plate 118**). To the south of this, the adjacent window had also been blocked internally, although the window had been retained externally (**Plates 114 and 115**). The second original window had been altered to a doorway (**Plates 79 and 105**). The upper section of the original window had been boarded over both internally and externally and a timber panelled door inserted into the opening (**Plates 80 and 105**). To the south of this was a window which had been positioned into an inserted doorway opening (**Plate 79**). This was likely to have been altered when the adjacent original window was altered to a doorway (phase 5)

The room was divided into two areas in the late 1940s/early 1950s: a tool store at the north of the room and a time office at the south end. A small pedestrian pathway for the workers led from G1 to the southern doorway (inserted within a previous window) in the east wall, leading into the central courtyard. The northern doorway in the east wall was accessed via G3 from the central yard. The internal décor (**Plate 102**) of the room, which covers the blocked door to the north and adjacent blocked window must date to the 1960s after it ceased to function as a tool store and time office (phase 7).

### Room G3

G3 was located within the attached lean-to structure to the east of the north end of the west range. This lean-to was constructed in two phases. Initially the building's southern extent was the same as that at first and second floor level, in line with the northwest chimney of the northern range, phase 5 (**Illustration 18**), as depicted on the 1937 Goad (**Illustration 11**). At ground floor at this time, the structure may have been open to the south, being extended later (phase 6) with a further lean-to entranceway into G3 with a multi-paned timber framed window and central doorway set within a low brick wall with bull nosed brick sills (**Plates 81 and 111**). This extension had a lean-to timber roof with timber and bitumen covering and is depicted on the 1959 Goad plan (**Illustration 11**). Prior to this lean-to was a much smaller passageway between the two ranges at first and second floor only, shown on the 1896 Goad plan (**Illustration 10**).

G3 was accessed from the doorway in the south wall from the central courtyard. Internally the room provided access into room G4 (north range) to the east through an inserted opening (**Plate 112**). Originally access into G5 (north range) would have also been available, however this opening had been blocked with blockwork (**Plate 113**). Within the west wall, the blocked window and doorway once serving G2 were clearly observed (**Plates 114, 115 and 118**) and at the north end of the room was a modern timber staircase, leading up to F3 (**Plate 112**). Access from G3 to the floor above would originally have been unavailable. The staircase was inserted during phase 7 after Harrison, Fisher had left the premises. The north wall of the room was earlier in date (phase 1) and was the original boundary wall of the site. A low wall had been added in front of this within G3 (**Plates 112, 116 and 117**) which dated from phase 6. Positioned within the north wall was a large cast iron bracket, beneath the modern staircase (**Plate 119**). Its function is known, but was probably associated with the room's later use.

### Room G23

G23 was positioned within the northwest corner of the south side of the west range, to the south of the cart passage. It was a small rectangular room which was originally the works time office. Access was gained via the main doorway in the west wall from

Trafalgar Street (**Plate 120**). Within the north wall there was originally a doorway to the west and an adjacent window which opened on to the cart passage. This doorway (**Plate 76**) and window however had been blocked and a later doorway inserted within the window blocking (**Plates 77 and 121**). The floor was timber boarded and had a small square area of re-boarded floor, delineating the position of a former hatch within the floor associated with the weigh bridge mechanism beneath the cart passage. Within the south wall was a doorway leading into G21 (**Plate 122**). This doorway was an insertion after G23 ceased to function as a time office (phase 6), which was moved to within G2.

### Room G21

Room G21 (**Plate 123**) was the main ground floor room within the south side of the west range. It was positioned to the south and east of G23 (**Illustration 18**) and provided access into stairwell G22 and room G20 (south range) at the south end of the room. The room was accessed via G23 to the north. Within the northeast corner of the room was a loading door from the cart passage which had timber double doors (**Plate 124**). Within the concrete floor, directly in front of the loading doors, was an inserted opening for a removed weigh machine which had been blocked with concrete. Part of the weigh machine would have been located within B2 below. To the east of the blocking was an iron ring set within the floor which was part of the base for the scales of the weigh machine. This would have been utilised for the weighing of goods leaving the works after being packed within G21, likely inserted during phase 6, and removed and blocked in phase 7. Within the east wall were three type 4 windows which overlooked the central courtyard (boarded internally) (**Plate 124**). Adjacent to the southernmost window was a blocked fireplace (**Plate 126**) and a doorway leading to G20. The doorway had been widened to the north and subsequently blocked with blockwork. Its original timber lintel had been retained. Above the doorway was a blocked secondary square opening. Its function is unknown, but may have been associated with the mezzanine area discussed below or possibly power transmission into the room.

Within the south wall was a doorway leading to stairway G22. This opening contained a timber frame and lintel, although no door had been retained. The southwest corner of G21 contained a lift shaft. This was enclosed from the room by an original large timber panelled door (**Plate 127**). Within the lift shaft was a metal frame within which the lift was set and an inserted pulley wheel was positioned in the east wall (**Plates 129 and 151**). At the time of survey the counter weight was positioned against the west wall of the shaft and there appeared to be an inserted timber frame at ground floor level in order to stop the lift from going down to basement level (**Plates 148 - 150**). This would suggest that the lift mechanism at the time of survey was a secondary addition, replacing an earlier lift or hoist within the space which originally accessed all floors. It can also be noted that the lift had not worked since c.1940s and was stuck at first floor level at the time of survey. The west wall of G21 contained four type 1 windows (**Plate 125**) and a blocked window within the lift shaft. The lift shaft window was likely blocked after the change in mechanism (phase 3) within the first few years after the construction of the building.

Along the west and north walls of the room were regularly spaced holes within the walls which are indicative of removed benches. At the south end of the room, within the south wall were high regularly spaced blocked holes which suggest the position of a mezzanine storage level within the room, removed at the time of survey (**Illustration 18**).

### Room G22

G22 was located at the south end of the west range and was the main stairwell for the west and south ranges (**Plate 128**). The stairwell could be accessed from G21 to

the north or from a doorway in the south wall which would have originally led from the front yard area of Trafalgar Grinding Wheel. This door was a timber planked door with boarded overlight above. Between the two doorways was an inserted overhead mechanism (**Plate 129**) which went through the west wall of G22 into the lift shaft, connecting to the pulley wheel described above. The stairs were constructed from stone with a wooden hand rail on either side. The stairs led up to F10 (south range), which also provided access to the first floor of the west range (**Illustration 19**).

#### 7.5.4 First floor – West Range

The first floor was the full length of the building, continuing over the cart passage. Access to the floor could be gained from the stairway G22 via F10 (south range) or from staircase G1 which led to corridor F18 along the east side of the building at first floor (**Illustration 19**). The northern half of the first floor contained original partitioned office spaces and staircase, whilst the southern half of the floor contained phase 6 partitioned office spaces, toilets and corridor.

##### Room F11

F11 was located at the south end of the building and crossed both the west and south ranges (**Plate 130**). The staircase G22 led into F11, located within the southwest corner of F10, south range. F11 also continued around the north side of the stairwell into the west range and functioned as a small corridor for ease of vertical circulation through the building. F11 was created by the insertion of phase 6 partitions (**Illustration 19**). The partition with F10 was timber with a section of glazed panels (**Plate 130**). This glazing had been boarded over on the north side of the partition. The north partition of F11 (creating F12 to the north) was also timber with partial glazing opposite the lift doorway (**Plate 131**). A scar in the northern partition and the south wall of F11 suggests the position of a removed partition across F11. Access to the stairwell leading to the second floor of the west and south ranges and access to the lift was located within the south wall of F11. The lift contained an original timber panelled door, the same as that within G21, and wooden shelves above (**Plate 132**). The proximity of the phase 6 partitions to the lift shaft, leaving very little space in front of the lift door would suggest that the lift had already fallen into disuse or that it was at least not utilised for the movement of large items at this time. The staircase leading to the second floor contained a window opening within the south wall, which overlooked the front yard of the Trafalgar Grinding Wheel. The window had been removed at the time of survey but would have originally contained a type 4 window.

##### Rooms F12 and F13

Rooms F12 and F13 were two phase 6 partitioned offices within the west range. Room F12 (**Plate 134**) was located at the south end of the range and could be accessed via corridor F11/F18 (**Illustration 19**) through a doorway in the east wall. It was irregular in plan, with an angled partition to the southwest due to the position of the window serving F11 in the west wall. The partitions of the room were all stud partitions with a doorway in the north wall to F13. The east partition was glazed at the upper level (**Plate 133**.) in order to share light with corridor F18. The floor had a lino covering at the time of survey. The original window in the west wall had been removed at the time of survey and the west wall had been clad with studwork.

F13 (**Plates 135 and 136**) was located to the north of F12 and was a large irregularly shaped office room with an angled partition with window to the north due to the position of the windows in the west wall (**Plate 138**). This angled partition with four light window allowed light into F14 located to the north. F13 was accessed from F18 to the east or F12 to the south. The east partition was the same as that in F12, being of a stud partition with upper glazing (**Plate 135**). There was the scar of a removed

partition which would have partitioned the southern quarter of the room into a separate office space (**Plate 137**). Two structural horizontal I-section beams were noted running west-east flush with the lath and plaster ceiling. The phase 6 stud partitions to the east, north and south had small moulded skirting attached, however, the west wall did in part retain original deep moulded skirting which would suggest the space functioned as either as office space or packing/warehouse space from the onset. The west wall also contained four windows all of which had their original type 3 windows removed. The west wall had been plastered and painted in blue (**Plate 139**). The floor of the room was timber boarding covered by areas of carpet and lino.

### **Rooms F14, F15 and F16**

Rooms F14, F15 and F16 comprised a small corridor and two toilet cubicles respectively, positioned in the centre of the first floor, to the north of F13 (**Illustration 19**). The partitions were all phase 6 stud partitions. F14 (**Plate 140**) was accessed from F18 to the east and was a small corridor with an angled south wall with four paned window, sharing light with F13 to the south. F14 led to F15 located to the northwest. F15 (**Plate 141**) was a small toilet cubicle, rectangular in plan with modern w.c fittings. One type 3 window opening was located within the west plastered wall. F16 functioned as a second w.c (**Plate 142**), positioned to the east of F15 and was accessed from F18. The north wall of F15 and F16 was a primary division and contained a blocked fireplace within F16. This wall was plastered and painted white. This appears to have been the only fireplace within the south side of the first floor which would suggest the space (comprising F11 – F16 and F18) was originally one open space, possibly functioning as a packing or warehouse space (**Plates 145 and 146**).

### **Room F18**

F18 (**Plates 143 and 144**) was a corridor along the east side of the first floor, created by the phase 6 partitioned offices and toilets F11-F16 to the west. It also continued to the north across the top of the staircase leading down to G1 with four timber steps either side of the top of the staircase and to the east of F1. The northern extent of F18 was bounded by a secondary timber panelled partition which appeared to be late 19<sup>th</sup>-early 20<sup>th</sup> century in date (**Plate 152**). The west wall was a 1930s stud partition with upper glazing, whilst the east wall of F18 was plastered and was the east wall of the west range, overlooking the central courtyard. This contained six type 4 windows with timber sills and bull nosed brick reveals and one type 5 window at the north end of F18. There was also a projecting brick flue at the south end of the corridor from the fireplace in G21 below. The corridor had been painted with a red and white colour scheme. The lower halves of the walls were painted red, whilst the upper halves were white. Within the floor, directly to the east of F16, was an area of cut floor boards. This created a small hatch above the cart passage below.

### **Room F1**

F1 (**Plate 156**) was an office located to the north of the G1/F18 staircase and was accessed via F18 (**Illustration 19**). The room could also be accessed from rooms F2 and F3 to the north (**Illustration 19**). The room was L-shaped in plan, defined by an original timber, lath and plaster partition with panelled timber door leading from F18 to the east, in a north-south alignment. There were four wooden shelves positioned adjacent and above the doorway (**Plate 167**). This partition had been truncated directly north of the doorway. Scars within the ceiling and north wall of F1 indicate the continuation of the partition, and therefore corridor F18, to the south wall of F3/north wall of F1 (**Illustration 19**). Located to the north of the doorway, running east-west across F18 was a timber panelled partition with upper glazing. Two of the upper panes were casements with inward pivoted openings (**Plate 166**), whilst the lower panes were frosted glass. This panelled partition was a later insertion truncating the

original extent of F18, making F1 larger to the east. The north wall of F1 was a timber partition with lath and plaster covering, painted white (**Plates 157 and 168**). It contained three primary doorways. All three contained timber four-panelled doors with moulded architraves. The westernmost led into F2 whilst the remaining two led into F3. The easternmost would have originally led from corridor F18. The east wall contained two type 5 windows (**Plate 165**). The west wall had three type 3 window openings, none of which had retained their windows (**Plate 163**) and had been boarded internally at the time of survey. Within the wall were scars indicating the position of a former bench below the windows. The south wall contained a fireplace with original cast iron insert and green surround tiles. The fire surround was moulded with a fairly simple mantle piece (**Plates 158 – 162**). To the west of the fireplace was a timber panelled door and moulded architrave leading to F17 (**Plates 159 and 160**). Above the door were scars of removed shelving. The floor was timber boarding and the ceiling was papered lath and plaster. All walls retained original deep moulded skirting boards (**Plate 164**).

### **Room F17**

F17 (**Illustration 19 and Plate 169**) was positioned directly above G1, to the west of the top of the staircase leading from G1 to F18 and the southwest of F1. The room was accessed via F1, through a timber panelled door within the south wall. F17 was a small rectangular shaped room which functioned as a small w.c for the adjacent office, F1. F17 was a w.c of higher status than that of F15 and F16. Some fittings suggest an early date, possibly being original (phase 2). The w.c contained a toilet, deep moulded skirting along the west wall and an original type 3 window with timber sill, moulded architrave and the only type 3 window to have retained 6 lower glass panes. The bottom three panes had remains of white paint on them, presumably the remnants of an attempt to make the w.c more private. The walls had been plastered and painted white. It is likely that the space F17 was original, but primarily functioned as a cupboard or store for F1 and that the toilet was inserted at a later date, possibly in the 1920s considering the style of toilet bowl.

### **Room F2**

Room F2 (**Plate 170**) was located at the northwest of the range, accessed from F1 to the south and F3 to the east. The room was square in plan, with a corner fireplace to the northeast (**Illustration 19**). The fireplace consisted of a cast iron insert with fairly simple timber surround with shallow mantel piece. The east and south walls of the room were made from timber, lath and plaster. The north and west walls were also plastered and the room was painted white. The doorways leading to the adjacent offices (F1 and F3) each had timber panelled doors and moulded architraves. The west wall contained two type 3 windows (**Plate 171**), although the windows had been removed and boarded internally at the time of survey. The floor was timber boarding and the ceiling was painted lath and plaster.

### **Room F3**

Located to the east of F2 and to the northeast of F1 was room F3 (**Plate 172**). This was originally a square office room with doorway connections to F2 to the west, F1 and F18 to the south. All had primary timber four panelled doors with moulded architraves (**Plates 173-175**). The northwest corner of the room contained a fireplace, although the fire insert and surround had been removed at the time of survey (**Plate 173**). The room had been extended to the east with the addition of the phase 5 lean-to, joining the west range with the north range (**Plate 172**). The original east wall of the room had therefore been removed. The extension to the room had a type 25 window within the south wall, the style of which matched the fenestration within the adjacent north range (**Plate 172**). The north and south walls of the lean-to were carried by steel I-section beams inserted into the east wall of the west range



and the west wall of the north range (**Plate 117**). The east wall of F3, originally the external west wall of the north range, contained a blocked window, only faintly visible within F3 due to the wall being plastered and papered (**Plate 172**). There was also an inserted doorway into F4 of the north range, leading from the half landing of a modern inserted staircase from G3 below. This doorway contained a large timber lintel. Within the southeast corner was the original external north-western chimney of the north range, which the lean-to extension had been attached to (**Illustration 19 and Plate 172**). The room had been decorated with plastered walls and covered with an embossed patterned wallpaper around the lower third of the walls and a plain paper above, with a paper boarder at dado rail height (**Plate 175 and 177**). This wall paper continued along the north wall, in front of the inserted staircase (**Plate 176**) and was truncated by the inserted doorway in the east wall. Along the original north, west and south walls of F3 was a primary deep moulded skirting. Around the north, east and south walls of the extension was a later (phase 5) moulded skirting. Noted during the structural watching brief, the inserted doorway into F4, north range, appeared to have been inserted into an earlier opening which had been subsequently blocked. The original bull nosed brick jamb could be seen with a later keyed-in blocking which had been truncated for the insertion of the doorway (**Plate 391**). This would suggest that there was an original doorway into F4, probably via a passageway from the west range as depicted on the 1896 Goad Plan (**Illustration 10**). Although the Goad plan shows the connecting passage at second floor only, the evidence indicates this to be inaccurate. This was altered with the blocking of this doorway and the phase 5 lean-to replaced the former passageway, subsequently forming the larger F3 office.

### 7.5.5 Second Floor – West Range

The second floor of the west range could only be accessed from the staircase located at the southeast of the range, leading from F11 on the first floor into S6 of the south range. The second floor of the south range had been removed at the time of survey. The staircase from F11 comprised stone steps with timber handrails running either side (**Plate 178**). Above the stairs were three wooden shelves (**Plate 179**). The doorway at the top of the staircase, leading to S6, had a timber lintel and frame however, the door had not been retained. The second floor of the west range was accessed via a doorway within the west wall of S6 (**Plate 180**). This also contained a timber lintel and frame, whilst the door had been removed. However, the door had been propped against the wall within S2 and was a panelled timber door with glazed upper panes (**Plate 194**). The second floor of the west range comprised two large rooms (S2 and S3) with a partitioned off area (S1) to the southwest and the lift shaft within the southwest corner. The lean-to extension to the northeast contained one room (S4) connecting the range to the second floor of the north range (**Illustration 20**). **It must be noted that due to large amounts of pigeon guano throughout the second floor, the recording of historical features was limited.**

#### Rooms S1 and S2

Room S2 was accessed directly from S6, south range, to the east. S2 and S1 were originally one large room, with S1 being partitioned off to the southeast during phase 5, creating a rectangular room with lift shaft and shelving area to the south. S1 (**Plate 185**) comprised north and east timber partitions with internal shelving which were glazed at their ends (**Plate 186**). There was a doorway within the east partition. The west wall contained three type 1 windows with timber sills and lintels, although the windows had been removed at the time of survey (**Plate 185**). The room had been decorated with a patterned wall paper on boards covering the lath and plaster ceiling (**Plates 189 and 190**), whilst the timber shelves/partitions were painted black/dark blue. The west wall was painted white brick. Running overhead across the room was the tie-beam of the pitched roof trusses. This had been boxed in within S1 and

painted. There were four electrical lights with glass shades (**Plates 189 and 190**) which would have lit the space.

To the south, the lift shaft was lacking its original panelled door observed on the floors below (**Plates 187 and 188**). It had however retained its primary moulded architrave and metal accordion style inner safety door. Within the west wall of the lift shaft was a blocked or blind window. To the east of the lift shaft was a small square space, above the stairwell below. This had a raised timber floor and timber shelving against the east and west wall. Within the south wall was a blocked doorway, which had been altered from an original type 4 window. Externally the blocked doorway had three inserted truncated joists below it, which line up with those internally forming the raised timber floor (**Plates 21, 22, 187 and 188**). This indicates that the doorway functioned as either a taking-in door with external hoist, since removed, attached to the joists or the joists were part of an external platform or staircase leading from the front yard of Trafalgar Grinding Wheel. The wall dividing the lift shaft and adjacent store area was observed to be primary (**Plate 214**) and the lift mechanism was partially observed (**Plates 213 and 214**).

Room S2 was located to the north and east of S1 (**Plates 181 – 184**). The east wall contained five type 3 windows, the doorway leading from S6 at the south end and an adjacent brick flue, from the fireplace within G21 (**Plate 182**). The south wall of S2 had timber shelves built against it (**Plate 182**). The north wall of the room contained a centrally positioned fireplace and adjacent doorway to the east (**Plate 191**). The doorway had a timber door frame, but the door had not been retained and led into S3 to the north. There were two wooden shelves above the doorway. To the west of the fireplace was a further wooden shelving unit with curved supports (**Plate 193**). The west support stopped short of the floor which would suggest the height and position of a workbench against the west wall below the four type 1 windows (**Plate 191**). Running above the windows, within both the west and east walls, was a timber shelf (**Plates 192**). The lower part of the timber roof structure could be seen running across S2, exposing the tie beam and the lower section of the King-post, principal rafters and diagonal struts (**Plates 183 and 184**). The upper section of the roof trusses were obscured by a painted lath and plaster ceiling. The floor was timber boarding (**Plate 197**), and timber noggins were visible where a floor board had been removed (**Plate 198**). No further features within the floor were visible due to the amount of pigeon guano. The walls of the room were whitewashed brick.

### Room S3

S3 was located to the north of S2 and was a large room, rectangular in plan, accessed from S2 (**Plates 201 and 202**). Secondary access could also be gained from an inserted doorway at the north end of the east wall, from S4 within the lean-to extension (**Illustration 20**). The east wall contained five type 4 windows (**Plate 208**). Originally there were 6 windows, however the northernmost was partially blocked and altered to a doorway leading to S4 to the east. The adjacent window to the south had been partially blocked within its lower half, due to the roof line of the adjacent S4, lean-to. As within S2, a wooden shelf was positioned above the windows in the east walls (**Plates 200, 202, 205 and 208**). The west wall contained six type 1 hung sashes, although only the frames were retained at the time of survey. There was also a timber bench against the wall beneath the windows (**Plate 204**). This bench was fairly thin and would not have been used as a workbench as these would need to be at least an inch thick. This bench was more likely used during the packing and wrapping of products. The north wall contained a large central chimney breast with off centre fireplace with part of the original cast iron insert *in situ* (**Plate 203**). Attached to the chimney breast surrounding the fireplace was a timber shelving unit with further shelves positioned on the north wall, to the west of the chimney breast (**Plates 201 and 202**). The south wall of the room contained the doorway from S2

and a stepped brick flue positioned slightly off centre. This had a small square opening in the bottom of it with a metal door. To the west of this flue were the remains of wooden shelving (**Plate 206**). There were scars indicating the position of further shelves to the west and also to the east of the brick flue. The lower section of two trusses could be observed below the lath and plaster ceiling (**Plate 205**). The décor of the room was typically whitewashed brick.

Rooms S1-S3 appeared to be typical warehouse spaces, with a later partitioned showroom (S1). The abundance of shelving and small benches below the windows, are key features to warehousing, where the products would be wrapped before being sent to be packed in wooden boxes. The lift shaft within the southeast corner would have provided the ease of product movement through the building, down to the ground floor where they were dispatched. The oral history for the site obtained from Mr. Inman, a former employee of Harrison Fisher, described the second floor as 'hollow-ware'. This may relate to the cleaning or packing of hollow-ware as Harrison, Fisher did not produce hollow-ware and was not included within their catalogues (Hawley, pers.comm.). This could indicate that Harrison, Fisher were acquiring hollow-ware from a separate company and were selling it as part of matching sets with their cutlery and flatware, produced on-site. The second floor functioning as warehouse space also corresponds with the 1896 Goad plan (**Illustration 10**) which depicts part of the range as 'WHSE (J. Wilson, Marsden Bros. & Co.)' when owned by R. Sorby & Sons.

#### **Room S4**

S4 was located to the northeast of S3 (**Illustration 20**). The room formed the top floor of the phase 5 lean-to extension between the west and north ranges. The room was rectangular in plan and provided access from S3 west range to S5 north range, replacing an earlier passageway between the ranges, which may have been just a simple timber walkway. The west wall contained the inserted doorway within a former window opening from S3. This doorway contained a timber door and a small flight of three timber steps leading down from S3 into the room. To the south of this was the adjacent, partially blocked window and the top of a blocked window from the floor below (originally lighting F3) (**Plate 209**). The east wall contained a primary doorway leading into S5 (north range), with a further set of timber stairs leading into the lower floor level of S5. To the south of the doorway was a small cast iron stove (**Plates 211 and 212**). The roof was a simple lean-to with timber purlin and common rafters covered with slate. There was also a skylight set within the roof. The floor was timber boarded.

### **7.6 South Range**

The south range of the complex was contemporary with the west range, and first appears on the 1896 Goad plan (**Illustration 10**), dating to between 1889 and 1894. The range was constructed about Trafalgar Grinding Wheels north elevation and replaced a former range/structure which was formerly part of the original Trafalgar Grinding Wheel complex, depicted on the 1889 OS map (**Illustration 6**). The south range was originally three-storeys in height, plus basement, however the third-storey had been previously removed in the 1980s due to its unsafe condition. The range can be divided into two sections: the west end; and the east end, and was attached to the west range at the west end, the east range to the north and was also attached to the former machine and forge shop at the southeast corner (**Illustrations 2 and 18**). The range had been altered throughout its history, the most significant changes being the removal of hand forges within the ground floor of the east end during the mid- 1930s (phase 5) and the conversion of the basement into an air raid shelter during WWII, phase 5/6.

### 7.6.1 Exterior - South Range

The south elevation of the range has been previously described in section 7.3. The north elevation of the range was divided into two by the east range of the complex. To the west of the east range, the elevation fronted the central courtyard, whilst to the east of the east range the north elevation of the range overlooked the rear yard (**Illustrations 2 and 18**). The western section of the north elevation contained seven type 3 and one type 12 windows and a doorway on the ground floor, whilst the first floor had eight type 3 windows as well as a doorway (**Plates 219 and 220**). On the ground floor, the doorway leading from the central courtyard into G20 was originally a type 3 window which had been converted into a doorway. The brickwork below the original window had been removed and a stone threshold inserted. A plain timber door was positioned within the doorway, whilst the upper section of the original type 3 window had been retained above the doorway (**Plate 220**). Directly adjacent (west) of the doorway was a type 12 window. This was in insertion within a primary doorway opening. The original stone threshold was *in situ* whilst the lower section of the opening had been blocked with brick. The window had a bull nosed brick sill to match the other fenestration throughout the complex and contained a timber framed four-paned, fixed light window. It is currently unknown why the original doorway was moved to the adjacent window opening as both of these openings provided access into G20. One possibility is that the doorway was moved due to the positioning of machinery within the room. At first floor a primary doorway was located within the easternmost opening, leading from the external metal staircase within the central courtyard (**Plate 223 and Illustration 19**). The second floor of the range had been removed, therefore only a small section of the brick walling was retained at this level, with areas of modern brickwork dating to the removal of the floor (phase7). The location of a doorway was observed within this small section of original walling and can be observed on (**Illustrations 20 and 11 and Plate 222**).

Positioned at either end of the north elevation (west end) were stone stairs leading down to the basement of the range. The staircase at the west corner comprised stone stairs and brick wall with stone capping, in a north-south orientation, and an inserted doorway within the elevation which led into B5 (**Plate 221**). The doorway had an inserted steel I-section lintel and a modern timber door (**Plate 82**). The stairway at the east corner also comprised stone stairs with low brick wall with timber above to the north in an east-west orientation. This led down beneath the south end of the east range, into passageway B7 (**Plates 223 and 239**), which led to the rear yard of Trafalgar Grinding Wheel.

Also positioned at the east end of the elevation was a primary steel external staircase which provided access to the first and second floors of the south and east ranges. This was supported by large cast brackets set into the brick walls of the ranges (**Plate 224**).

The eastern section of the north elevation, overlooking the rear yard of the complex was arranged differently along the ground floor. This was due to it originally housing hand forges. The elevation reflected the internal layout of the forges which initially comprised four separate units each with independent access and large fenestration to generously light the working space of the hand forges. The north elevation therefore, contained four primary doorways with adjacent large type 7 windows (**Plates 225 and 226**). All four primary doorway openings had primary segmental brick arched heads and stone thresholds although all doors appeared to have been secondary replacements, with various modern additions. Located at the east end of the ground floor, the original doorway had been altered internally to provide access directly to the first floor whilst its adjacent window had been altered to a doorway into G16 (**Plate 267**) with a timber planked door and blocked overlight above. Externally the door and overlight had been boarded. At first floor the elevation contained ten

type 4 windows which at the time of survey had been boarded externally, but yet were retained internally. The second floor of the range had been removed at the east end also, although it can be assumed that the second floor would have been very similar to the first floor, with the same arrangement of windows along the north elevation (**Illustration 20**).

The east elevation of the range was about the 19<sup>th</sup>-century privies (part of the wash house range), originally serving domestic back-to-backs within a courtyard depicted on the 1854 OS map (**Illustration 5**) and the 1896-1959 Goad plans (**Illustrations 10 and 11**). These privies were incorporated into the Trafalgar Works complex during the 1940s due to enhancements of the factory regulations. The remainder of the east elevation (**Plate 55**) did not contain any features and was constructed from brick in a regular English bond. The truncation of the second floor was clearly visible, with the 1980s inserted roof of the building being slightly pitched to the south.

### 7.6.2 Basement – South Range

The basement of the range (**Illustration 17**) comprised two rooms (B5 and B6) and a small passageway (B7) which were located beneath the west end of the south range only. The south range was constructed on a former Trafalgar Grinding Wheel structure, of which the lower section of its south wall was retained and incorporated into the Trafalgar Works south range basement. This section of phase 1 wall was mainly located within room B5. The south range basement was connected to B3 (west range) to the west.

#### Room B5

B5 (**Plate 229**) was positioned at the west end of the range and was attached to the west range. The room was rectangular in plan with access provided by inserted doorways from B3 to the west, the external staircase from the central courtyard at the northwest corner of the room, and from B6 to the east. The room contained varying floor levels, with the lowest level at the west which rose up to the east. The room had been substantially altered and most significantly had been transformed to function as an air raid shelter for the works complex during WWII (phase 6). This adaptation of the space to an air raid shelter included the insertion of corrugated metal covering over the original ceiling/floor above (**Plates 203 and 235**). It would appear that the floor of the ground floor above was constructed with timber joists with a concrete filling (possibly added as part of the air raid shelter) with floor boards positioned over the top. This flooring along with the inserted corrugated metal sheeting was supported by a longitudinal horizontal steel I-section beam, six bolted transverse horizontal I-section beams and a centrally positioned I-section stanchion (**Plates 229, 230 and 235 and Illustration 17**). The alteration of the ceiling was the only feature of the room indicating the use as an air raid shelter. Other features expected to be found within a former air raid shelter would be benches or scars of removed benches and remnants of w/c facilities. None of these features were present at the time of survey. The room had most recently been used for band rehearsals with any original features removed or obscured by modern sound proofing material.

The room could be accessed via three doorways, however these all appeared to be inserted openings. This could suggest that the room was originally a space used for power transmission, with access only available via a small hatch for example, as access would only be required occasionally for maintenance of machinery. This original usage of the space is also supported by a blocked archway within the south wall and an arch with an opening passageway in the north wall, leading beneath the central courtyard (**Plates 233 and 234**). This passage likely joins with that from the east wall of B3, west range. This arch within the north wall is aligned with that in the south wall. This could be indicative of power transmission directly from Trafalgar Grinding Wheel to the south, into and through the south range. It is possible that this

power transmission was carried beneath the central courtyard to the other ranges. The archway within the south wall was located within the earlier phase 1 section of the wall which was originally part of the Trafalgar Grinding Wheel structure, and appeared to be primary. Due to later brick flues and soundproofing against the north wall, it was not possible to determine whether the lower section of the north wall was of phase 1 construction like the south wall or whether it was contemporary with the remainder of the phase 2 range. If this lower section of wall was phase 1, it is likely that the archways within the basement and passages beneath the central courtyard were phase 1 power transmission tunnels which connected power from the Trafalgar Grinding Wheel building with the former structures of the complex to the north, depicted on the 1889 OS map (**Illustration 6**).

The west wall of the room (**Plate 229**) contained an inserted doorway with modern door. To the south of this was a small section of projecting brick wall which supported the staircase between the west and south ranges above. The north wall (**Plates 229, 231 and 232**) of the room also contained an inserted doorway at the west corner, which led directly from the external staircase from the central courtyard. This doorway had a steel I-section lintel and metal doorframe with modern metal door. The opening had straight brick reveals rather than primary bull nosed reveals which were noted within the doorway from the same staircase into B3 west range. The remainder of the north wall of the room was obscured by mid-height oddly shaped brick structures, the function of which is unknown, but may have been a possible flue (**Plates 231 and 232**). These were constructed using a simple stretcher bond. The brick structure was divided by the low arched opening and passageway within the north wall. The upper section of the wall was obscured by a later soundproofing covering. The east wall also contained an inserted doorway at the north corner which had a timber door leading into B6. Within the southeast corner of the room was a projection of a brick structure, stepped in places. This was at least in part to support the chimney breasts and fireplaces on the floors above. However, to the south was a further brick structure of unknown function (**Plate 230**). The south wall of the room was obscured internally at the east end by modern plasterboard, whilst the western half of the wall was painted brick with a primary low blocked arch previously described. The floor was concrete at two main levels within the room with a further two modern brick and concrete steps at the east end of the room, followed by a concrete ramp leading to the doorway within the east wall (**Illustration 17**).

## Room B6

This room (**Plates 236 and 237**) was positioned to the east of B5 and was accessed via the inserted door within the west wall from B5 or from a primary doorway within the east wall from B7. This room had been converted for use as an air raid shelter, the same as within B5. The inserted corrugated metal sheeting and floor above was carried on 5 horizontal steel I-section beams. The north wall of the room was covered by modern boarding, whilst the other walls of the room had been white washed. There were timber shelves against the west wall and a large timber cupboard was positioned against the east wall. The east wall also contained an original doorway with timber frames and planked door (**Plate 236**). The south wall was originally open to an adjacent structure, attached to the east of Trafalgar Grinding Wheel, which housed a dynamo (depicted on the 1896 Goad plan, **Illustration 10**). This opening had been blocked with brick and electrical fuse boxes were attached to the wall (**Plate 237**). The floor was concrete and contained a square machine base scar close to the west wall (**Illustration 17 and Plate 238**). It is probable that the room always functioned as housing power supply and transmission around the complex from the adjacent dynamo and transmission shaft to the west within B5.

## Room B7

B7 (**Plate 240**) was a passageway which led from a stone stairway from the central courtyard of Trafalgar Works (**Plate 239**) down to the basement of the south range and through to the rear yard of Trafalgar Grinding Wheel. The passage comprised a phase 2 west wall and a predominately phase 1 east wall. To the south was a doorway opening to the Trafalgar Grinding Wheel yard which contained a timber door and frame, possibly primary. The floor was concrete whilst the ceiling comprised a single horizontal steel I-section beam supporting timber floor joists and boards of the floor above (room G19). To the north was a stone staircase leading to the central courtyard. The east wall of the passage contained a vertical joint in the brickwork, in line with the north wall of the range. To the north of this vertical joint was a newer brick contemporary with the Trafalgar Works (phase 2) construction. To the south the wall was constructed from phase 1 brickworks, contemporary with the earlier Trafalgar Grinding Wheel complex formerly on the site. This earlier walling from a former structure was incorporated into the Trafalgar Works south range, the same as the lower section of the south wall of the range. Furthermore, there was a blocked arched opening within this section of east wall (**Plate 241**) which may have been associated with the former adjacent chimney (phase 1) and flue/archway in the south elevation previously described in **section 7.3**.

### 7.6.3 Ground Floor – South Range

At ground floor the south range, again divided into west and east ends, comprised two large rooms at the west end (G20 and G19) and three rooms at the east end (G16, G17 and G18). The rooms at the east end were originally only accessed from the rear yard of the works. The rooms at the west end were accessed from the west range, the central yard and also from the east range.

## Room G20

Room G20 was a large rectangular space positioned at the west end of the south range (**Plates 242 and 243**). It was accessed from G21 to the west, the central yard to the north and from G19 to the east. The north wall overlooked the central yard and contained four type 4 windows and one type 12 window. The type 12 window had been altered from an original doorway. All fenestration for the room had been blocked internally with boarding and horizontal bars. At the east end of the room, the doorway leading from the central yard was altered from an original type 12 window and contained a timber planked door (**Plate 246**). The west wall of the room contained a widened doorway leading to/from G21, as previously described, which had been blocked with blockwork and subsequently re-opened prior to recording (**Plate 243**). No door had been retained. Above the doorway was a blocked square opening, as described previously in **section 7.5.3**. Within the southwest corner of the room was a void beneath the staircase of G22, west range, with no features other than the underside of the stairs. Within the south wall of the room, originally being abut to the adjacent Trafalgar Grinding Wheel, contained three arched openings which had been blocked with brick (**Plate 244**). Internally the brick blocking was earlier than the external blocking of the openings. These opening were located at two levels, both probably leading from the first floor of the Trafalgar Grinding Wheel and were likely associated with power transmission between the two buildings. It is possible that the openings were blocked internally when the works was taken over by Harrison, Fisher in 1934 (phase 5). Within the east wall was a centrally positioned chimney breast with small fireplace which had been altered/partially blocked from a much larger opening (**Plate 245**). To the south of the chimney breast was a blocked opening within the east wall which would have been open to G19 to the east. This appeared to connect to the probable power transmission shaft between the range and Trafalgar Grinding Wheel, situated within G19. Located to the north of the

chimney breast was a primary doorway which had been widened to the north. This contained a timber frame, although no door had been retained. The floor was timber boarding covered by carpet, whilst the ceiling was lath and plaster covered by a dark material. Modern strip lighting had also been inserted within the room.

### Room G19

G19 (**Plate 247**) was to the east of G20 (**Illustration 18**), within the west end of the range. The room was rectangular in plan, and was connected to the east range at the northeast of the room. The room was accessed via G20 to the west and G8 (east range) to the north. The north wall of the room contained three type 4 windows, overlooking the central yard of the works. These windows were all positioned at the west end of the room due to the east range being attached against the east end of the room (**Plate 247**). Further fenestration for the room was located in the south wall which overlooked the rear yard of Trafalgar Grinding Wheel. This comprised three type 4 windows and one modern inserted window with timber frames and casement. This inserted window had a higher sill than the original fenestration. All windows had been boarded and bars inserted internally (**Plate 248**). The west wall contained an inserted fireplace within the chimney breast serving room G20 (**Plate 252**). Within the south wall, in the southwest corner of the room, was a tall narrow blocking (as also described externally in section 7.3 – south elevation) which would have connected the room with the adjacent Trafalgar Grinding Wheel (**Plate 251**). As previously mentioned, it is likely that this opening was originally part of a power transmission shaft transferring power from the dynamo at the rear of Trafalgar Grinding Wheel into the south range which could have directly powered machinery within G19 and also transferred power through the west wall into G20, through an opening which had been blocked with brick at the time of survey. This theory is supported by a change in floorboard direction within the floor directly in front of the blocking, suggesting the former presence of a machine base/mechanism footing. It also appeared that there was originally an opening within the ceiling directly above the machine base scar which could be indicative of power transmission from this point to the floor above.

The east wall of the room contained a centrally positioned primary fireplace and chimney breast, although the original insert and surround had been removed and shelving brackets inserted within the space (**Plate 250**). To the south of the chimney breast was a high brick blocking which may have been a blocked wall box. To the north of the chimney breast was an inserted doorway (phase 5) which would have led into G18 to the east. This was inserted after the removal of the hand forges within rooms G16-G18. This opening had subsequently been blocked with brick within G18, although a simple timber planked door was retained within G19 (**Plate 249**). Within the north wall, in the northeast corner of the room was a primary doorway with timber panelled door which led to G8 to the north (**Plate 249**). Above the doorway appeared a faint square brick blocking which may also have been a former wall box, transferring power from G19 into the adjacent G8. At the east end of the room, a secondary raised concrete flooring was present representing the area of a former partitioned room and location of the former/removed studwork partition at the western extent of the raised flooring. Within the north and east walls within this defined space were holes which would have supported a modern suspended ceiling, since removed (**Plate 248**).

The floor of the remainder of the room comprised timber floorboards and large concrete with iron plate machine bases/scars. These were positioned close to both the possible power transmission shaft and the fenestration serving the room (**Illustration 18**). The ceiling was painted lath and plaster. The walls and ceiling had been white washed.



## Room G18

G18 (**Plate 253 and Illustration 18**) was located to the east of G19, within the east end of the south range. The room was square in plan and could only be accessed from the rear yard of the works. The room had been significantly altered with the removal of two hand forges: one within the northwest corner of the room; and the other from the southeast corner. Part of the east side of the south-eastern hearth was *in situ* at the time of survey (**Plates 253 and 254**). The north wall contained a primary doorway with probable secondary timber door. Adjacent was a large type 7 window. Within the northwest corner of the room, due to the removal of the original hand forge hearth, the north and west walls contained scars within the brickwork, a small section of projecting wall (parts of which were original) and a small section of the stepped flue of the removed hearth. This flue would have joined with the central chimney flue of the adjacent fireplace within G19 and that on the floor above in F7. This section of stepped flue was also supported by two small steel I-section beams (**Plate 256**). An inserted doorway into G19 had also been placed within the altered west wall of the former hearth, which had subsequently been blocked with brick. Located to the south of this removed forge, positioned centrally and high within the west wall were two stepped brick supports (**Plate 255**) carrying the fireplace and chimney breast located on the floor above within F7. To the south of these supports was a high brick blocking (**Plate 257**), as described previously in Room G19, which may have been an inserted wall box, later blocked.

The south wall of the room contained an original type 9 window, with a phase 6 raised sill and adjacent inserted type 8 window. The southeast corner of the room again bore the scars of a removed hand forge. The original stepped east side of the hearth was *in situ* and projected into G17 to the east (**Plates 253 and 254**). The entire west side of the hearth had been removed and the surrounding south and east walls had been patched/repared due to this removal. Within the east side of the original hearth was an inserted opening/hatch with timber door. The flue of the hearth had been blocked, although this would have originally joined with the south wall (noted within G17) of the building and continued up to a small chimney indicated by the projecting brick flues within the wall of the first floor above and depicted on the 1977 historic photograph of the works (**Illustrations 19 and 16**). To the north of the hearth within the east wall was a blocked inserted opening, also visible within G17. The floor of the room was concrete whilst the ceiling had been boarded and painted white. All walls of the room were white washed brick.

## Room G17

This room was located to the east of G18 (**Illustration 18**) and was essentially the same as G18. The room was originally a hand forge housing two hearths, and was accessed only from the rear yard of the works. However at the time of survey, both forges, originally positioned in the northwest and southeast corners of the room had been removed and an opening inserted in the east wall, connecting the room to the adjacent G18. The survey of this space was highly restricted due to the presence of structural scaffold poles, supporting the floor/ceiling above (**Plate 258**).

The north-western hand forge had been completely removed, with the only evidence of its position delineated by a scar within the concrete floor and a projecting brick flue within the corner - part of the north wall. The north wall of the room also contained a primary doorway and adjacent type 7 window. This window had been altered with a hatch inserted within the lower west pane, the insertion of which had removed some brickwork below the sill (**Plate 262**). The function of this hatch is unknown. Within the southwest corner of the room was the stepped east side of the hand forge hearth within G18 (**Plate 259**). The projecting brick flue for this hearth was observed within the south wall of the room, opposite that of the removed hearth in the north wall. To

the north of the projecting stepped hearth was a blocked inserted opening of unknown function (**Plate 259**). The south wall of the room contained a type 9 window with raised sill. The opening was original, however the sill had been raised during phase 6 after the addition of a plating shop to the south of the range.

A second removed hearth was originally positioned within the south-eastern corner of the room. Scars within the east and south walls, as well as within the floor, were clearly visible (**Plate 261**). The upper section of the original flue from the hearth had been retained, which joined with the stepped support and flue of the fireplace located on the floor above at the east end of room F7 (**Illustrations 18 and 19**). To the north of this within the east wall was the second stepped high support of the fireplace above (**Plate 261**). The north section of the east wall had been altered to incorporate an inserted doorway with timber lintel, leading into G18. G17 had a concrete floor, white painted brick walls and a timber ceiling (**Plate 263**).

### **Room G16**

Room G16 (**Plate 264**) was originally two separate hand forge workshops which had been altered into one space, with the central dividing partition having been completely removed, along with all the hand forge hearths (**Illustration 18**). Within the west half of the room the north wall contained an original doorway (although with secondary door) and adjacent original large type 7 window (**Plate 268**). Within the northwest corner of the room, the northern end of the west wall of G16 had been removed and an opening into G17 to the west had been inserted. This was the original location of one of hand forges within G16. This had been completely removed apart from a small projecting section of brick walling at the south side of the opening. This section of projecting wall was part of the hand forge which was also supporting a stepped brick support of the chimney breast/fireplace at the west end of F8 above (**Plate 266**). To the south of this was a second stepped support, again for the south side of the chimney breast/fireplace above. The flue of the removed hand forge within the northwest corner of G16 would have joined with the flue of the chimney in F8 above. Scars indicating the location of the hand forge were observed within the north and west walls. The south end of the west wall had been altered due to the removal of the hand forge within the southeast corner of G17. The east side of this hand forge would have originally projected slightly into G16, the same as that within G17 (**Plate 266 and 258**). Positioned against the southwest corner of the room was a small projecting concrete support, most likely for a secondary workbench against the south wall, since removed. Within the south wall was a type 9 window with a raised sill dating from phase 6 and a replacement window.

In the centre of the room, in both the north and south walls, were scars indicating the removal of a brick partition, which would have divided the space, and the removal of two hand forges – one against the north wall which would have served the east side of G16, whilst the other would have been against the south wall serving the west side of G16 (**Illustration 18**). The north wall had retained its projecting flue which would have been part of the hearth (**Plates 264 and 269**). This brick flue was also present within F8 above and would have also continued through the second floor and expelled as a small chimney noted on the 1977 historic photo (**Illustration 16**), the same as those within G18 (south wall) and G17 (north wall). The brick flue within the south wall had been truncated at its lower level with only its upper section retained (**Plate 265**). No further remnants of these two hand forges were present at the time of survey.

The east side of G16 had been substantially altered. The original type 7 window within the north wall had been altered to a large doorway, with timber planked door and overlight (boarded) above (**Plate 267**). The scars in the reveals of the door were clearly visible indicating the removal of the sill of the former window. The original

doorway which would have led directly from the rear yard of the works into the eastern half of G16 had been partitioned off to the east (**Plate 264**), creating a separate timber staircase leading from the rear yard up to the first floor (F8) of the range. This was created using a phase 6 brick wall with a low opening into G16 for storage beneath the staircase, built against the north side of a former hand forge with timber planking forming the northernmost and upper section of the partition (**Plates 264 and 265 and Illustration 18**). The southeast corner of G16 contained a small brick storage space (**Plate 265**). This was the location of an original hand forge, since removed. The entire hearth had been removed and phase 6 brick storage spaces inserted with the timber staircase leading to F8 positioned above. The hearth's brick flue was not visible within G16, however it was observed, projecting within the southeast corner of F8 above (**Illustration 19**). The south wall of the east side of G16 had also been highly altered with a doorway opening inserted within a former type 9 window (**Plates 265 and 270**), leading into the Machine Shop/Forge G15 (Wash House Range), attached to the south. Adjacent to this altered opening was an inserted window opening (no window present) dating from phase 6 or 7, with modern (phase 7) brick repairs around the window.

G16 contained a concrete floor and timber planked ceiling (**Plates 269**).

#### 7.6.4 First Floor – South Range

The first floor of the south range comprised four large rooms (F7-F10) with F9 and F10 located within the west end and F7 and F8 at the east end. F10 connected at the west with F11 of the west range whilst F9 connected with F6 of the east range to the north (**Illustration 19**).

##### Room F10

Positioned at the west end of the south range was F10 (**Plate 276**). This was a large rectangular room accessed from the staircase G22 in the west range at the southwest corner of the room. Surrounding this opening from the staircase was a modern timber doorway leading into F10. This was attached to an earlier partition with glazing (**Plates 271 - 274**), providing a second entrance into the room from the west range. The eastern section of the partitioning between the doors appeared to be of a later timber studwork (**Plates 275 and 277**) than the partially glazed section of partition. This arrangement of partitions providing access into the room was probably not original, and a product of several phases of partition arrangement around the stairwell and rooms leading off from it.

The north wall of the room contained six type 4 windows (**Plate 279**) and scars within the wall indicated the position of a former workbench. To the east was a centrally positioned chimney breast and fireplace (**Plates 276 and 278**) with a doorway, leading to F9. This doorway appeared to be a primary opening with a timber lintel and frame, which had been blocked with blockwork during phase 7. The south wall of the room would have been abut the adjacent Trafalgar Grinding Wheel. At the west end of the south wall was a blocked opening (**Plate 280**), the bottom of which was approximately 1m from the floor level of the room and extended up to the ceiling. It was probably used for power transmission between the room and the adjacent Trafalgar Grinding Wheel, and was later altered to function as a pedestrian doorway between the two, with possibly timber steps within F10 to the height of the opening. The opening had been blocked with brick externally during phase 7 and covered internally with painted horizontal boarding.

The floor was constructed using timber joists and boarding, whilst the ceiling was painted lath and plaster. Within the ceiling, and partly the partition at the west end of the room was a scar indicating the position of a removed partition (**Plate 277**). This was not a primary partition and most likely dated from phase 7, then removed within

the past 10 years.

### Room F9

F9 was a rectangular room, originally connecting with F10, F6 and F7. The room had been partitioned producing two spaces during phase 7, with a timber stud wall. The western area of the room contained a doorway within the west wall, which would have originally led to F10 (**Plate 281**). This had a timber lintel and replacement timber panelled door. To the south of this was a boarded fireplace which was flush with the wall, the chimney breast projecting within F10. This boarding was removed and the original fireplace revealed during the structural watching brief. The fireplace had retained its original cast iron insert and grille (**Plate 284**). The north wall contained two type 4 windows whilst the south wall had one type 4 window and an adjacent blocked opening (**Plate 282**). This blocking was very similar to that located within the south wall of F10 and is likely to have been utilised for the same function. The opening had been blocked with brick. The opening's lower edge was a similar height to the adjacent window's sill level. However, the opening continued to ceiling height and contained a timber lintel. The blocking was recessed and the lower edge appeared to be worn possibly from the movement of people and products between the room and Trafalgar Grinding Wheel. Within the ceiling and floor directly in front of the blocked opening were covered openings, the floorboards having been laid in the opposite direction and a board placed over the opening in the ceiling (**Plate 283**). This supports the theory that the openings were originally for power transmission between the two buildings, with openings above and below transferring power further between floors within the building. The remainder of the ceiling was painted lath and plaster whilst the floor comprised timber joists and boards.

The eastern section of the room (**Plate 258**) contained two type 4 windows within the south wall, overlooking the former rear yard of Trafalgar Grinding Wheel. Within the north wall of the room were two doorways (**Plate 286**). The westernmost doorway led to/from an external stairway accessed from the central yard of the works. This had a timber lintel, primary large timber panelled door and bull nosed brick reveals (**Plate 287**). The easternmost doorway led to F6 within the east range. This is likely to be an insertion as there was a difference in floor heights between the two adjoining rooms whilst the reveals were straight brick unlike the more commonplace bullnosed bricks. However the opening did contain a timber lintel and timber panelled door with cast iron latch (**Plate 289**), suggesting the doorway to be of some age, possibly phase 4 in date.

The eastern wall (**Plate 288**) contained a centrally positioned fireplace and chimney breast with the partial remains of a primary cast iron fire. Surrounding the fireplace was a stone hearth within the timber boarded floor (**Plates 285 and 288**). Located to the south of this fireplace was a door opening with timber lintel, leading to F7. No door was present at the time of survey.

### Room F7

F7 was located to the east of F9 within the east end of the south range. It was a rectangular room with centrally positioned chimney breasts and fireplaces within the east and west walls of the room (**Plates 290 - 293**). Both the north and south walls contained five type 4 windows. Between the third and fourth windows from the west within the north wall, was a projecting brick flue which was mirrored within the south wall. These originally served the hand forges within G17 and G18 located on the floor below. Sockets within the north and south walls below the fenestration indicated the former position of a removed workbench. In addition to this, attached running along the south wall were gas pipes (**Plate 295**). To the north of the fireplace within the west wall was a timber shelf unit with a large cast iron bracket positioned above (**Plate 294**). To the south of the fireplace was the doorway leading to/from F9. To the

south of the fireplace within the east wall was a doorway leading to F8. The room also contained electrical lighting, probably installed in the early 20<sup>th</sup> century, phase 4 (**Plate 296**). The floor of the room comprised timber joists and boards on which a layer of lime ash was laid in order to provide a fireproof layer between itself and the hand forges below. The ceiling was covered with painted lath and plaster. The room appeared to be largely unaltered since its industrial use came to an end in the 1960s.

## Room F8

Room F8 (**Plates 298 and 299**) was located at the east end of the south range. It was very similar to F7, being a rectangular room with five type 4 windows within both the north and south walls, again with projecting brick flues in the same positions. A further projecting brick flue was also positioned in the southeast corner of the room all serving the hand forges within G16 below. There was a centrally located chimney breast and fireplace within the west wall with the remains of a cast iron insert *in situ*, although this was surrounded by a large amount of debris (**Plate 301**). To the south of this was the doorway leading to/from F7 to the west. This contained a timber lintel and doorframe however no door had been retained. To the north of the fireplace was a large ceramic sink with two cast iron legs. Adjacent to this was a timber work bench (**Plates 300 and 302**). Located on the west wall above the sink were four evenly spaced metal fixings (**Plate 302**), the functions of which are unknown. Positioned against the south wall below the windows were two workbenches differing in height. To the west was a higher timber workbench with a more substantial top in comparison with the work benches in S3 of the west range (**Plates 303, 305 and 306**). This would suggest its function with heavier tasks. To the east of this bench was a lower timber workbench clearly constructed for a specific job (**Plate 304**). Both benches encompassed obvious areas of precise wear, again indicating a particular task undertaken on the bench producing a repeated wear pattern. At the east end of the room were two inserted timber staircases (**Plate 307**). The first led directly from the rear yard of the works, via the original doorway for room G16 below (**Plate 308**). The second was positioned directly over the first, leading from F8 to the second floor of the range. The opening which would have led into the second floor had been blocked due to the removal of the top floor and waterproofing of the ceiling above (**Plates 307 and 309**). The floor of the room was the same as that within F7, with a fireproofing lime ash layer. The ceiling was painted lath and plaster.

## 7.7 East Range

The east range of the works was positioned to the east of the central yard, projecting north from the centre of the south range. The range was originally three-storeys in height to the south and only two-storeys at the north end. However the second floor of the south end of the range had been removed, as in the case of the south range in the 1980s, with a modern corrugated sheet roofing placed on top. The range was contemporary with the west and south ranges of the works, being constructed between 1893 and 1894 (phase 2). At ground floor, positioned off-centre within the range was a cart passage linking the central and rear yards of the works (**Illustration 18**). There was no basement or cellar to the range. Both the ground and first floors of the range had contained concrete floors, however, during the structural watching brief it was noted that the removed second floor had timber joist and boarded floors, differing from below (**Plate 339**). This suggests the ground floor was fireproofed, indicating an original function involving hot work.

### 7.7.1 Exterior – East Range

The west elevation (**Illustration 28**) of the east range overlooked the central yard of the works. At ground floor the elevation was broken by an off-centre cart passage which was directly opposite that within the west range, and provided access between the central and rear yards. The cart passage contained a steel I-section lintel, either

end being supported on stone pads (**Plate 312**). To the south of the cart passage were three type 4 windows. Located directly in front of these attached to the elevation was a primary external metal staircase. The foot of the staircase was level with the southern edge of the cart passage and led up to the first floor at the south end of the elevation. The staircase was constructed from a bolted metal frame with metal treads and large cast brackets attaching it to the west elevation of the east range as well as the north elevation of the south range (**Plate 313**). At the southern end of the elevation at ground floor was a second external staircase leading down from the central yard to the basement of the south range (B7). This staircase had stone stairs and a brick wall to its north, projecting from the west elevation (**Plate 239**).

To the north of the cart passage at ground floor were originally six type 4 windows although the southernmost two had a large modern doorway inserted across them, leaving only the segmental brick arched heads of the original windows. The inserted doorway had large timber double doors with a steel I-section lintel (**Plate 312**). Directly in front of the inserted door was a concrete ramp, joining the external and internal floor levels. The remainder of the windows had been boarded internally. At the north end of the elevation was a secondary external timber staircase positioned against the northern boundary wall, leading to the first floor (F5) of the range (**Plates 314 and 338**). Furthermore, a modern roof had been erected over the yard area between the north end of the east range and the east side of the north range. This was positioned at a level which truncated the central ground floor windows (**Plates 312, 345 and 346**).

The elevation at first floor contained nine type 4 windows. At the northern end of the elevation the original type 4 window had been altered to a door, leading to/from the secondary external staircase. This probably dates to phase 5 (1923 – 1937). At the southern end of the elevation there was an original timber doorway leading from the primary external metal staircase. This doorway had a segmental brick arched head, bull nosed brick jambs and an original timber panelled door.

The second floor of the range would have originally extended from the southern end, adjoining to the south range, to three bays from the southern end. This floor had been removed at the time of survey. However, the chimney breast and blocked fireplaces were *in situ*, although truncated (**Plates 315 and 316**). At the northern end of the range the building did not extend higher than first floor and had two lean-to roof levels, covered with slate. The west elevation at this roof level contained plain brickwork set in an English bond to the height of each roof (**Plate 315**).

The east elevation of the range essentially mirrored that of the west (**Plates 61 – 63 and 317**) with matching fenestration, apart from to the north of the cart passage at ground floor level, serving room G7, where the windows had been blocked in two phases. These were originally six type 4 windows which were partially submerged by the difference in ground level to the east of the range at the north end. It is possible that each window acted as a lightwell, with a small external area around each one. These were later partially blocked with brick with smaller windows within the upper section of the openings which were above the external ground level. These were also subsequently blocked with brick and covered with a layer of cement (**Plates 61 - 63**). The most northern three windows on the first floor were adapted type 4 windows, two type 10 and one type 11 windows. These were different due to the different lean-to roof levels (**Plate 62**). It is unknown why the north end of the range only stood at two-storeys. One possibility is that due to the north end of the east elevation of the range originally fronting the former Canning Street, it overlooked the properties opposite. It is most likely that the east range was built in such a way as to respect these opposing properties which were largely domestic (**Illustration 10**).

The south side of the cart passage (north facing) contained a single centrally located

doorway leading to room G8. This had a primary timber panelled door (**Plate 318**). The north side of the cart passage (south facing) encompassed an off-centre doorway leading to G7. This had a modern steel door and frame. The ceiling of the cart passage was covered with lath and plaster and several electrical fixings had been attached (**Plate 319**).

### 7.7.2 Ground Floor – East Range

The ground floor of the east range comprised two rooms (G7 and G8) divided by the central cart passage.

#### Room G8

Room G8 (**Plates 320 and 321**) was located to the south of the cart passage of the east range. It was a small rectangular room which was connected to G19 of the south range (**Illustration 18**). There were three type 4 windows in both the east and west walls (**Plate 323**) and scars within the walls and floor indicated the position of removed work benches beneath the windows. A modern sink unit had been inserted against the east wall. Within the south wall of the room was a centrally positioned fireplace with primary cast iron insert (**Plates 321 and 322**). To the east of this was an original doorway which led to G19 to the south, however this had been boarded over within G8 and a shelf attached (**Plate 321**). To the west of the fireplace was an arched recess with modern shelves. Directly in front of this was a timber box which was boxing-in the top of the external staircase which led down to the basement B7, the stairs of which were directly beneath the south end of G8 (**Illustrations 18 and 25 and Plate 322**). The floor of the room was concrete whilst the ceiling was painted lath and plaster. In addition, several electrical fixings were located on the ceiling of the room, possibly indicating the later use of the room as a switch room (**Plate 324**).

#### Room G7

Located to the north of the cart passage was G7. This was a large rectangular room, which could originally only be accessed via the doorway in the south wall from the cart passage. The west wall contained four boarded type 4 windows which had modern shelving attached to the boarding of the windows, whilst the sills had been modified slightly to create a splay rather than the usual step (**Plate 326**). The southernmost two original windows had been removed and a large double doorway inserted. This had a large steel I-section lintel and modern timber double doors (**Plate 325**). The fenestration within the east wall had originally consisted of six type 4 windows which were partially submerged below the external ground level. However these had all been blocked with brick in two phases, as previously described (**Plate 327**). The south wall of the room contained a central fireplace, but no insert had been retained. To the east of this was the doorway leading from the cart passage. This had timber frame and modern door (**Plate 325**). The floor was concrete throughout and the ceiling was covered with painted lath and plaster. Modern strip lighting had been installed within the room.

### 7.7.2 First Floor – East Range

The first floor of the east range contained two rooms, F5 and F6. They were both rectangular in plan and each could be accessed via external staircases whilst also being interconnected. Both rooms had concrete floors and lath and plaster ceilings. The rooms had been painted white.

#### Room F6

F6 was located at the southern end of the range and could be accessed via F9 of the south range or the external staircase leading from the central yard (**Illustration 19 and Plate 328**). The room had four type 4 windows in the west wall, and five in the east. The southernmost opening within the west wall was a primary doorway with

original timber panelled door (**Plates 328 - 330**), leading from the external staircase. The southern wall of the room contained a central doorway leading from F9 in the south range, which was probably an insertion. This had a timber panelled door. To the west of this, located within the southwest corner of the room was a brick flue, stepped at the lower east side (**Plate 328**). The north wall of the room contained a central blocked fireplace. This had been blocked with blockwork (**Plates 331 and 332**). Located to the east was a primary doorway opening with timber lintel. However this had been boarded and modern shelves constructed within the opening. To the west of the fireplace was an inserted doorway opening, although no door had been retained (**Plate 331**). This change in doorway openings probably dates from phase 7. Positioned in the centre of the room, attached to the east wall, running transversely across the room was a modern (phase 7) stud partition (**Illustration 19**).

### Room F5

The room was located at the north end of the range, with the northern half having sloping ceilings to the east side due to the lean-to roofs above (**Plate 333**). The change between the normal ceiling height of the range and the lean-to roof was denoted by a large steel I-section beam supporting the north gable of the original second floor of the range (**Plates 333 and 334**). The west wall contained five type 4 windows (**Plates 334 and 336**). The northernmost opening contained an inserted doorway within the former type 4 window opening (**Plate 337**). This led to the secondary timber external staircase from the central yard of the works (**Plate 338**). This alteration and addition dates to phase 5 (1923-1937), with the timber staircase depicted on the 1937 Goad plan (**Illustration 11**). The fenestration within the east wall comprised three type 4, two type 10 and one type 11 windows.

Within the south wall was a blocked fireplace which had a modern cupboard directly in front. The flanking doors were the same as those previously described in F6 (north wall) (**Plate 334**). At the north end of the room, timber trusses were visible between the two varying lean-to roof levels (**Plate 335**).

## 7.8 North Range

The north range of the works dates to phase 3 (1894-1896) being built at the same time as Kangaroo Works, and was first depicted on the 1896 Goad plan (**Illustration 10**). This range was rectangular in plan and constructed with brick laid in an English bond. It was located to the north of the central yard, built against the northern boundary wall, centrally positioned between the west and east ranges (**Illustration 18**). It was a later addition to the Trafalgar Works, providing a further six hand forges on the ground floor and an additional two workshop spaces on the floors above. It would appear that the range was constructed with some kind of passageway or walkway between the west range and itself at first and second floor only, as the ground floor could only be accessed from the external courtyard and no access to the floors above could be gained from it. This passageway/walkway was depicted on the 1896 Goad plan (**Illustration 10**). This was later altered to the west range extension which was constructed in two phases (phases 5 and 6 – 1923-1937 and 1937-1959) (**Illustrations 18 - 20**).

The range differed architecturally to the Trafalgar Works surrounding ranges. The majority of windows encompassed concrete lintels and slightly projecting bull nosed brick sills with a decorative tile layer beneath and contained small casement windows. This was a contrast to the large and plentiful fenestration of the larger original ranges of the works with segmental brick arched heads.

### 7.8.1 Exterior – North Range

The west elevation was partially obscured at the north end due to the west range extension (**Plate 340 and Illustration 32**). However, the elevation was broken into



three sections by two external chimney stacks serving the ground floor hand forges. The elevation would have originally contained a single timber doorway and adjacent window (types 19 and 20) with overlight above the door in each of the three sections/bays, leading to a single hand forge shop. However, only one of these had been retained at the south end of the elevation (**Plate 344**). This had a timber planked door with a concrete step leading from the external yard ground level to the internal floor level and a type 19 window with bull nosed brick sill. These had a steel I-section lintel resting on stone pads at either end. The central section contained the opening of the door and adjacent window arrangement, with the doorway positioned to the opposite side to that in the southern bay. However, the door and window had been removed and the openings had been blocked with blockwork (**Plate 113**). The northern most bay had been opened up entirely, leaving just the steel I-section lintel, and the west range extension open to G4 (**Plate 116**).

At first and second floor levels, both the southern and central bays of the west elevation contained type 14 windows. The northern bay contained a blocked window (brick) and inserted door at first floor, which led to/from F3 (west range). The elevation had been plastered and papered (**Plate 172**). Whilst at second floor was a primary doorway to/from S4, although no door had been retained.

The south elevation (**Plate 341**) had two inserted windows at ground floor – type 17 to the west lighting G5 and type 18 to the east lighting G6. Type 17 dates to phase 6 (1937-1959) whereas type 18 is likely to be fairly modern (phase 7) and was crudely inserted with no sill or lintel (**Plate 343**). From the east side of the elevation to the centre, leading up to the first floor was a scar of a removed external staircase (**Plates 341 – 343**). This was probably a metal staircase like that serving the south and east ranges in the southeast corner of the central yard. Square fixing holes within the elevation may also have been related to the removed staircase. The stairs would have led to a central single doorway at first floor. This doorway had been widened to the east (phase 7) creating a double door loading door. The doorway had an inserted I-section lintel and timber double doors with an I-shaped hole in the centre, presumably to accommodate a crane/hoist which had since been removed. The concrete threshold of the original door opening was still *in situ* (**Plate 341**). Flanking either side of the doorway was a type 13 window, differing in style to the remainder of the windows within the range, but were more similar to the type 4 windows in the west, south and east ranges of the works. At second floor were three evenly spaced windows. The central window was a type 15. This was flanked either side by a type 16 window (**Plate 341**). Within the upper section of the southern gable were three air vents (**Plate 340**).

Located within the east elevation were two external chimney stacks, mirroring those in the west elevation and again dividing the elevation into three bays. The original door and adjacent window serving the original north-eastern hand forge, at ground floor had been retained (**Plates 349 - 353**). This comprised a secondary timber panelled door and type 20 window. The central bay had partially retained the original window, however the door had been widened, thereby removing a section of the window (**Plate 364**). A modern door had been inserted. The southern bay contained a large modern inserted doorway within the original door and window opening. The original steel I-section lintel was in place with large steel clad timber double doors in the opening (**Plates 347 and 348**). At both first and second floors was a type 14 window, centrally positioned within each of the three bays lighting the workshop spaces of F4 and S5.

The roof of the range was pitched and hipped to the north, covered with slate. Within the roof were skylights and in the hip of the roof was a truncated chimney stack (**Plate 64**).

### 7.8.2 Ground Floor – North Range

The ground floor of the north range had been substantially altered. It would have originally comprised six individual hand forge shops with access to each gained only from the central yard. These spaces had been modified creating two larger rooms (G4 and G5) and one original single unit (G6) – **Illustration 18**.

#### Room G4

G4 (**Plates 354 and 355**) was located within the north bay of the range. It was a long narrow room, rectangular in plan accessed from G3. The room would have originally been centrally divided into two separate rooms. The scar of the removed dividing wall with overhead supporting steel I-section beam was clearly noted (**Plate 354**). The door and window within the east wall had been boarded in several places and corrugated metal sheeting over the window (**Plates 354, 356 and 357**). The original flues within the southeast and southwest corners of the room which would have served small hand forges had been blocked. The floor was covered with concrete (secondary) whilst the ceiling was painted reinforced shuttered concrete.

#### Room G5

Room G5 was an L-shaped space which comprised the central bay and the southwest unit (**Illustration 18**). This would have originally been divided into three separate hand forge spaces. The scars of the removed walls were observed, with the steel I-section beam supporting the ceiling in place of the dividing walls (**Plate 362**). Again the original flues serving the forges had been blocked. Within the central bay, the original entrance in the west wall had been blocked with blockwork (**Plate 361**), whilst that in the east wall had been modified, as previously described (**Plate 364**). Positioned on the south wall of the central bay were two cast iron brackets (**Plates 364 and 365**). Their function is unknown. Within the south-western unit was the original doorway and type 19 window in the west wall (**Plates 358 - 360**) and an inserted type 17 window in the south wall (**Plate 358**). Socket scars within the north and south walls of the room are suggestive of the position of a removed workbench (**Plate 363**), whilst scars in the floor may indicate the position of the hand forges, adjacent to the flues (**Illustration 18**). The floor and ceiling was the same as that within G4 (**Plate 366**).

#### Room G6

Located in the southeast corner of the ground floor was G6. This was a small square room, representing the original footprint of a single forge shop unit (**Plate 367**). Access was gained via the modern doorway in the east wall, as previously described (**Plate 368**). Within the west wall was an inserted doorway which had been blocked with blockwork (**Plate 367**). Inserted across the room from the two doorways was an I-section beam with hoist/crane (**Plates 367 and 375**). There was an inserted type 18 window in the south wall. Located to the east of this window was a cast iron bracket (**Plates 368 and 374**). Mirroring this on the north wall were the fittings for another which had been removed (**Plate 373**). These may have been related to the inserted hoist. In the northeast corner were the remains of the original flue (**Plate 372**). There were sockets within the north and east walls suggesting the position of workbenches and hearth/oven (**Plates 369 and 370**), and to the west of the room was a small section of original brick flooring (**Plate 371**). The remainder of the floor had been covered with concrete.

### 7.8.3 First Floor – North Range

The first floor of the north range comprised only one room – F4 which was accessed from F3 (west range) (**Illustration 19**).

## Room F4

This was a large rectangular room with two cast iron columns carrying steel I-section beams which were supporting the reinforced concrete ceiling above (**Plate 376 - 379**). These columns were simple in design and had been painted white (**Plate 383**). The room was lit by three type 14 windows (**Plate 387**) in the east wall, two in the west and two type 26 windows in the south. Within the north corner of the west wall was an inserted door and adjacent blocked window (**Plates 378, 379 and 388**). The window was blocked during phase 5 when the west range extension was added and F3 enlarged. An original doorway was likely located within a similar position to that recorded, although evidence would suggest it was at a higher level with small timber stairs internally, as within S5 above (**Plate 391**). This was probably blocked during phase 5 also. The doorway was reinstated during phase 7 after the insertion of the staircase from G3 to F3. Located within the north wall was a central fireplace with cast iron insert *in situ* (**Plates 380 and 381**). Along the east wall beneath the windows was a workbench set on cast iron line shafting brackets (**Plate 386**). Located in the north and south walls above the bench were wall boxes (**Plate 385**), indicating the use of machinery along the bench. On the opposite side of the room, despite no workbench, the north and south walls also contained holes for removed wall boxes (**Plate 384**), suggesting the same layout.

Located within the south wall was a widened doorway which had been altered to function as a loading door (**Plate 382**). The original doorway would have led to an external staircase from the central yard. Directly in front of the blocked window in the west wall was an inserted hatch within the ceiling and a scar on the wall for a staircase (**Plate 388**). This hatch and staircase was clearly not original as the overhead line shafting would have had to have travelled straight through the middle of the stairs. This hatch would have provided access to the second floor of the range (S5). Positioned directly in the centre of the ceiling was a large primary hatch (**Plate 389**) presumably for as of movement of products between the two upper floors. The floor of the room was concrete and contained numerous scars (**Plate 390**) from various machinery used throughout the lifetime of the works (**Illustration 19**).

### 7.8.4 Second Floor – North Range

The second floor of the north range was essentially a similar layout as F4 below. There was one large rectangular room (S5) which could only be accessed via S4, west range.

#### Room S5

S5 appeared to have not been used since the termination of industrial productions in the 1960s (**Plates 392 - 394**) and due to the large amount of pigeon guano, the recording of the space was restricted. There were workbenches positioned along the east and south walls (**Plates 392 and 399**). There would have originally also been a workbench along the west wall, although this had been removed at the time of survey. A further bench was positioned centrally within the room. Running beneath the east workbench was *in situ* lineshafting (**Plates 400 and 401**), possibly originally to drive buffing machines. Above the central bench, running from the north to the south wall was overhead *in situ* lineshafting (**Plate 398**) and beneath it was the hatch in the floor, providing product movement to/from F4.

The room was lit by three type 14 windows (**Plate 402**) in the east wall, two in the west, and two type 16 and one type 15 windows in the south wall. Within the north end of the west wall was a primary doorway opening leading from S4, west range. The doorway was positioned at the floor level of S4 with a small timber staircase within S5 down to the room's floor level. There was no door present at the time of survey (**Plates 394 and 404**). To the south of this, within the floor was the inserted

hatch which provided access from F4. Scars in the floor surrounding the opening indicated the once position of a timber banister/rail surrounding the eastern side (**Plate 405**). There was also a centrally positioned brick flue in the north wall (**Plate 394**).

The roof comprised steel I-section tie beams with attached angle iron trusses in a fink formation. These supported timber purlins and common rafters (**Plates 395 - 397**). The roof was hipped to the north. Two original skylights were also present in the roof, although these had been covered over with slate (**Plate 396**). What appeared to be a motor was observed on the floor of the room, and may have been related to the machinery used within this space (**Plate 403**).

## 7.9 Machine Shop

The machine shop was a single-storey steel framed, with brick walling, building attached to the southeast corner of the southeast range (**Illustration 18**). It was constructed during phase 3 (1894-1896) and was first depicted on the 1896 Goad plan (**Illustration 10**). Access into the building was via G16 (south range – east end) or from two inserted doorways in the eastern wall which led from the rear of the works on an adjacent plot. The machine shop comprised only one room – G15. The visible exterior of the building has been described previously in section 7.3.

### Room G15

The room (**Plates 407 and 408**) had been substantially altered over several phases. The building had originally been depicted as a machine shop and forge (**Illustration 10**), however no historical fixtures or fittings related to these activities remained within the building at the time of survey. The west wall of the building contained a multitude of alterations (**Plate 409**) with the original five, evenly spaced, blocked windows being barely visible internally. There were two modern (phases 5 and 7) inserted doorways within the wall which had been blocked with blockwork (**Plate 410**). However, these were much lower than the internal floor level, with the eastern opening having steps leading down to it. Within the gable of the wall was a primary window opening which had been boarded internally (**Plate 411**). In the northwest corner of the room, within the north wall was an inserted opening within a former type 9 window, linking the building with G16, south range (**Plate 270**). To the west of this was another insertion in the form of a small window. This did not contain any frame (**Plate 412**).

The eastern wall of the room contained an inserted door (**Plate 407**) at the north end dating from phase 5 (1923-1937). This was inserted to provide access to a former canteen building which was located to the east of the machine shop. This was depicted as a canteen on the 1937 Goad plan (**Illustration 11**) and was demolished in phase 7. At the south end of the wall were a type 4 window and an adjacent doorway which had been inserted into a former type 4 window. This doorway would have led to a yard area to the south of the canteen building (**Plate 407**).

The roof of the building was constructed from bolted angle irons in a fink formation with a raised ridge with louvered vent (**Plates 413 and 414**). The roof was covered with corrugated asbestos sheets as well as corrugated plastic sheets which created skylights. This roof structure was supported by vertical I-section stanchions which had brick infill panels creating the north and south walls of the structure (**Illustration 37**). The room had been painted white, although a former paint scheme was identified as being a dark greyish blue around the lower half with a brown, beige upper half divided by a black band (**Plate 415**).

## 7.10 Furnace House Range

Positioned to the northeast of the works was the furnace house range. This was

located along the north side of the rear yard and comprised three structures from differing dates/phases (**Illustration 18**). These included: a toilet block to the west which had been altered to house an incinerator; a central structure described on the 1896 Goad Plan (**Illustration 10**) as a 'Furnace House' which later became a stamping shop; and a steel framed structure at the east end (**Illustration 18**). The central 'furnace house' and eastern structure were derelict at the time of survey with no roof remaining and very little of the eastern structure surviving except for the steel frame due to fire damage.

### 7.10.1 West Building (Rooms G9 and G10)

The western building of the furnace range is first depicted on the 1959 Goad plan (**Illustration 11**) on a similar footprint to a former single-storey store attached to the west of the central furnace house building. The west building was a single-storey brick structure, rectangular in plan. It contained two rooms - G9 and G10. G9 was a small lobby located at the northwest corner of the building and G10 was a larger room which originally housed w.c facilities. It is likely that the building may have not been used as a toilet block for long prior to the change in function to housing an incinerator.

The west elevation of the building contained a primary pedestrian doorway at the north end with concrete lintel, stone threshold and timber panelled door (**Plate 417**). This led into lobby G9. To the south of this was a large inserted doorway opening with steel I-section lintel and timber louvered double doors (**Illustration 42**). Within the south elevation a clear joint at the east end was observed where the elevation had been keyed into the west wall of the central furnace house (**Plate 429**). The roof of the building was pitched with a raised ridge with louvered vent (**Plates 422 and 423**) and was covered with corrugated asbestos sheeting.

Internally the inner door of the lobby G9 had been removed and the walls of G10 were tiled up to a height of 1.83 metres. Within the south wall were scars indicating the positions of removed toilet cubicles (**Illustration 18**). Located in the centre of G10 was a large incinerator (**Plates 418 and 419**) and an associated control panel was mounted on the wall (**Plate 421**). What the incinerator was used for is unknown. It was clear that the structure was a later addition to the west of the furnace house, confirmed by vertical joints within the north wall (**Plate 424**).

### 7.10.2 Furnace House (Room G11)

The 'furnace house' was centrally positioned within the range of structures. It was first depicted on the 1896 Goad plan (**Illustration 10**) and was contemporary with the construction of the west, south and east ranges of the Trafalgar Works. The building was a single-storey brick building with lean-to roof, although the roof and trusses had been removed at the time of survey. Furthermore, only the lower half of the south wall remained and internally the building had been filled with a large amount of debris, making it difficult to record features low down within the walls or in the floor. The building comprised just one room – G11 (**Plate 425 and Illustration 18**).

The south elevation of the building fronted the rear yard of the works. The upper section of the elevation had been removed however the lower section remained and had been constructed in an English bond. This wall appeared to comprise a pedestrian doorway at either end of the elevation, each with segmental brick arched heads and straight brick jambs (**Plates 429 and 432**). The doorway at the west end had been blocked with brick, though the stone threshold was still *in situ* (**Plate 430**). Between the doorways the elevation appeared to have had five windows (**Plates 425, 426 and 431 and Illustrations 43 and 44**).

The east elevation of the building had the east building of the range built abut. A large doorway opening had been inserted within the elevation with a large steel I-

section lintel (**Plate 427**).

Internally the west wall contained two truncated timber purlins however the south end of the roof line was missing (**Plate 427**). Also within the wall was an inserted wall box which had been blocked with brick (**Plate 428**), indicating the need for power within the building although not originally. The north wall contained truncated timber trusses as well as adjacent truncated timber beams which were inserted to support the line shafting which ran longitudinally across G11 (**Plates 425, 426 and 433 and Illustrations 43 and 44**). The wall also contained a small band of iron approximately 1.15 metres from the ground level and several holes for former fittings in the wall (**Plate 426**). Located within the northeast corner was a chimney stack with two inserted pipes within the west and south side, positioned high up (**Plates 425 and 436**). Within the west side of the chimney stack at floor level was a small arched fireplace which had been blocked (**Plate 436**). After the demolition of the building the lower section of the north wall and floor of G11 was examined due to it formally being obscured by debris. No further features were noted within the north wall (**Plates 434 and 435**). The floor of G11 was concrete which had a possible machine base scar within the northwest corner (**Plate 438**). This floor was later, probably laid during phase 5 when the function of the building was altered. An original brick floor was discovered during the archaeological evaluation in 2008.

The original function of this building is unknown. It has been suggested that it was a crucible furnace. However, there is no archaeological evidence for this being the case. No features associated with crucible furnaces such as a crucible stack, hole(s), cellar nor related material culture has been observed within or around this structure. The building later functioned as a stamping shop when the works was taken over by Harrison, Fisher. Prior to this, being depicted as a 'furnace house' on the 1896 Goad plan (**Illustration 10**) could imply a variety of functions and with few historical features, fixtures and fittings retained within the structure an accurate interpretation is difficult. One possibility is that metal was being re-heated or melted within G11. See **Illustration 44** for a reconstruction of the building.

### 7.10.3 East Building (Room G12)

At the east end of the range was a steel framed single-storey structure comprising one room – G12 (**Illustration 18**). This was constructed during phase 5 (1923-1937) and was originally covered with corrugated asbestos sheeting. The structure retained few features due to fire damage. The floor was concrete as were the north and east low retaining walls (**Plates 439 and 440**). The roof was pitched with bolted angle iron roof trusses (**Plate 443 and Illustrations 36 and 37**). Within the south wall were two type 24 windows (**Plate 441**). A pedestrian doorway was located at the west end of the south wall, and in addition the inserted opening within the east wall of G11 created access between the two structures (**Plate 440**).

## 7.11 Wash House Range

The wash house range was located at the east end of the works, at the east end of the rear yard. It comprised two structures – a phase 6 shower block/wash house; and a phase 1 privy/toilet block (**Illustration 18 and 36**).

### 7.11.1 Wash House (Room G13)

This structure first appears on the 1959 Goad Plan (**Illustration 11**) and was a result of new factory regulations. The building was L-shaped in plan and was a single-storey brick structure, laid in an English bond. Access was gained via a raised yard (G14) to the southeast of the rear yard (**Plate 444**) and through a primary doorway opening within the west elevation (**Plate 445**). This had a concrete lintel and threshold with timber door. Internally the building contained a single room, G13 (**Plates 446 and 447**). This had two shower cubicles in the southeast corner (**Plate**

448) and wash basins along the north wall. The shower cubicles were completely tiled whilst the remainder of the room the walls were tiled across the lower half only with a decorative black and white tiled boarder (**Plates 450 and 451**). Within the north wall was a centrally positioned type 22 window, whilst in the east wall was a type 23 window. The floor was concrete and the roof was a simple pitched roof with timber purlins and a corrugated asbestos sheet covering.

### 7.11.2 Privy Block

Positioned to the southwest of the wash house, and to the north of the machine shop was a w.c/privy block with six cubicles. This dates from phase 1 and was first depicted on the 1889 OS map (**Illustration 6**) when it served domestic properties surrounding courtyard no. 14. The privy block was incorporated into the Trafalgar Works during phase 5.

The north elevation fronted the raised yard of G14, with five cubicle doorways, each with a red timber planked door (**Plates 452 and 453**). The floor of the structure was concrete, although each doorway had a stone threshold. Four of the five cubicles accessed from G14 contained modern toilets. However, the fifth cubicle contained an older toilet (**Plates 455 and 456**). The most easterly cubicle could not be accessed from G14, or Trafalgar Works at all, at the time of survey. This cubicle contained a doorway to the east and was accessed from the adjacent plot (**Plate 55**), although this plot had also been part of the Trafalgar Works during phase 6 and part of phase 7. The privy block had a simple pitched roof with slate covering.

## 8 PROCESS FLOW

Due to the works' continuous development and change from an edge tool manufacturers of R. Sorby & Sons to an electroplate and cutlery factory of Harrison Fisher & Co. Ltd in 1934, the process flow through the works changed and continued to change over time. As a result of this the process flow within the works complex has been considered at three main dates: 1896, when owned and occupied by R. Sorby & Sons; 1937, when owned and occupied by Harrison Fisher & Co. Ltd; and 1940s/1950s as described orally by a previous worker of Harrison Fisher & Co. Ltd.

The Trafalgar Works complex, comprising Trafalgar Grinding Wheel, Trafalgar Works (Portland Works) and Kangaroo Works, was a medium size integrated works. The complex did not include on-site primary steel production – typical for integrated works built in the second half of the 19<sup>th</sup> century, also noted at Beehive Works and Eye Witness Works within the city (Wray, 2000).

In 1896 a 'furnace house' (Room G11) was located to northeast of Trafalgar Works. At the time of survey little remained of the building and the floor had been covered by a layer of concrete. However, during the archaeological evaluation (ARCUS, 2008) a small portion of the original brick floor was exposed along with a curvilinear sub-surface brick structure which ran from the furnace house in a southwest-northeast orientation. That said, no part of a furnace structure was uncovered and it is unknown what material was being processed within the furnace house at this time.

The Kangaroo Works contained a forge on the ground floor (Rooms G3-G5). At the time of survey a modern concrete floor obscured any evidence of hammer or anvil bases or hearths within the forge, although during the archaeological evaluation timber hammer bases were uncovered (ARCUS, 2008) and it can be assumed that the hearths were likely positioned next to the cast iron flues. This was the probable location of the initial forging stage, which would have used large hammers (probably steam powered) after heating the crucible or blister steel within hearths. This forging made the steel purer in quality, better textured, and stronger yet more malleable (Wray, 2000), necessary for the highest quality of edge tools.

After the initial power forging, the steel was taken to hand forges, located on the ground floor of Trafalgar/Portland Works. One area of hand forges was located within the north range, in the centre of the main courtyard (Rooms G4-G6), whilst another was situated on the ground floor of the south range (east end) (Rooms G16-G18), opposite the 'furnace house'. Each set of hand forges probably specialised in forging specific tools.

The tools were passed on to the grinders, located within the central Trafalgar Grinding Wheel. Here the edge tools were ground by hand on a revolving grindstone, to create a specific cutting edge prior to assembly. After grinding, the tools were transferred to the assemblers who were situated in workshops within the east and south ranges of Trafalgar/Portland Works (Rooms G7, G8, F5 and F6 – east range and Rooms G19, G20, F7-F10 – south range). Here the handles and pins were added to the product. Each type of tool was assembled by a workman skilled in that specific task/tool with its own job name, such as a 'self handler' (sheepshear assembler), a chisel handler or a gimlet header (Ken Hawley, pers. comm.). There was no generic term used to describe the jobs carried out, each job was highly skilled and specific and required its own title.

Some of the timber handles for the tools may have been produced on site in F4 (first floor of the north range), described as housing carpenters on the 1896 Goad plan (**Illustration 10**). Others were bought in, whilst some tools were also sold unhandled.

The products may have gone back to the grinders for a final sharpening before being cleaned and buffed – a job usually carried out by women – on the upper-storey of the south range of Trafalgar/Portland Works or top-storey of Trafalgar Grinding Wheel (both demolished at the time of survey). They were then packed and stored in warehouse spaces on upper floors of the west range of Trafalgar/Portland Works (Rooms S1-S3) or the top floors of Kangaroo Works (Rooms S3-S5), ready for sale and dispatch, close to cart passages where carts and vans could be loaded easily. Warehouse space was nearly always located on upper floors of the front ranges, out of site for safety from theft, close to cart passages for dispatch and yet away from the heavy and loud works located to the rear of a works complex.

Once occupied by Harrison Fisher Co. Ltd in the 1930s, the function of the works throughout would have changed substantially and would have included the production of blades and electroplated goods. The process carried out to produce cutlery and electroplated flatware were very different to those utilised formerly by Robert Sorby & Sons for the production of tools and edge tools. The Trafalgar Works complex had been designed and built specifically for the production of tools, and when taken over by Harrison, Fisher & Co, the company had to 'make do' and alter the buildings' to suit their own specialized needs. Both the 1937 and 1959 Goad plans (**Illustration 11**) however depict the former Trafalgar Grinding Wheel labelled as 'Tool Works', with the label 'Harrison, Fisher & Co Electro Plate and Cutlery Fac.' being laid over the Trafalgar Works (Portland) only. This and the change in name of Portland Works to Trafalgar Works seem to imply that it was primarily the Trafalgar Works that was used for Harrison, Fishers 'fancy' trades, whilst Trafalgar Grinding Wheel continued to be utilised as tool making. The same was probably true for Kangaroo Works, with the heavy forge and upper-storey workshops likely more intimately associated with the Trafalgar Grinding Wheel toolworks than Harrison, Fisher's 'fancy' products in Trafalgar (Portland)Works (hence the many interconnections between the Trafalgar Grinding Wheel and Kangaroo Works and the few connections between Trafalgar Grinding Wheel and Trafalgar Works (Kinchin-Smith, pers. comm.).

The two stages of forging, grinding and assemblage to produce steel cutlery probably underwent a similar process to edge tool manufacturing, although extra grinders



were located within the machine shop to the east of Trafalgar Grinding Wheel (Room G15). The assemblage of the cutlery which also included scissors and razors were again skilled jobs, known as a 'scissor putter together' and 'setting in' respectively. 'Cutlers' were those who assembled tableware knives and pen and pocket artefacts only (Ken Hawley, pers. comm.)

At this time the furnace house previously described had been altered to a stamping shop (Room G11). This was utilised during the first stage of flatware production, stamping out the basic shapes for forks and spoons, which were then shaped (cross rolling shop – Room G7), polished, electroplated and finished.

From the 1937 Goad plan of the works, no area was depicted as a plating shop. This may have been due to inaccuracies of the plans or imply the company were plating their goods elsewhere. However, Harrison, Fisher & Co. were a well established electroplating company and it is more likely that it was carried out on-site. It is possible that plating had taken over the former hand forges on the ground floor of the south range (east end) of Trafalgar/Portland Works (Rooms G16-G18). The area would have housed plating baths where articles were suspended in solution. The electric current passing through the solution caused silver to be deposited on the surface of the items. Once the plating baths were removed however, little archaeological evidence within the building would remain of the electroplating process.

After plating, the product underwent buffing, polishing and cleaning before packing ready of sale. This most likely occurred on the upper floors of the west and south range of Trafalgar/Portland Works. Women would have undertaken the buffing of the lighter articles, whilst men would have carried out buffing of the heavier items (Unwin & Hawley, 1999).

Some oral history was obtained from Mr. Inman who was a former employee of Harrison Fisher & Co Ltd, and dates from the 1940s/1950s. The oral history focused mainly on Portland/Trafalgar Works and much of the obtained information was similar to, but enhanced that depicted on the 1959 Goad plan (**Illustration 10**). During Mr Inman's time at Trafalgar Works, the cellar of Portland/Trafalgar was used as storage for packing cases. Located on the ground floor of the west range was a tool room and adjacent time office at the north side of the cart passage (Room G2), and a packing room to the south (Room G21). On the first floor were the offices (Rooms F1-F3 & F11-F18) and hollow-ware was situated on the second floor (Rooms S1-S3). At the southeast corner of the second floor was a small partitioned showroom (Room S1). Mr Inman noted that he was never allowed up to hollow-ware. Despite there being a floor dedicated to hollow-ware, Harrison, Fisher did not manufacture any hollow-ware. This may have been a warehouse for bought-in hollow-ware which matched cutlery and flatware which Harrison, Fisher were making, creating a set of tableware to purchase, displayed in the showroom, S1, or the floor was rented out to a separate firm. No hollow-ware was included within any Harrison, Fisher catalogues (Ken Hawley, pers. comm.). The lift which was situated within the southeast corner of the west range never worked during the time Mr Inman worked at the site. The north range was used for buffing on all three floors (Rooms G4-G6, F4 and S5).

The ground floor of the south range comprised of an invoice office (Room G20) and a warehouse space to the west where the final products were wiped and inspected (Room G19). To the east were the EP cutlers, within the former hand forges (Rooms G16-G18). At first floor level were the table-cutlers shops (Rooms F7-F10). Above this, the second floor contained a deep acid etching room at the west end (Room S6), whilst the remainder of the floor was occupied by the subsidiary firm, John Sanderson & Son, who produced high quality sterling silver and pearl cutlery (Rooms S7-S9).

A spoon cross-rolling shop was located on the ground floor of the east range (Room G7), to the north of the cart passage and a filing shop was to the south (Room G8). Positioned outside, against the west wall of the east range was an area for storing hydrochloric and other acids used in the works. The first floor was occupied by table cutlers (Rooms F5 and F6), attached to those on the first floor of the south range. The second floor contained the silversmiths shop (Rooms S10 and S11). This was where Mr Inman made his first product, a toast rack.

At the rear of the works, within the former furnace house was the press-shop (Room G11). This was also located within the adjacent steel framed building, dating from the 1920s/1930s (Room G12). However, Mr. Inman recalled that these press-shops had fallen into disuse long before the firm left the site.

To the southeast of the EP cutlers within the former machine shop was the grinding shop (Room G15). An adjacent structure, constructed on the site of the former steam engine of the works, to the west of the machine shop was the plating shop as depicted on the 1959 Goad plan (**Illustration 11**). This had been demolished at the time of survey.

At the eastern edge of Trafalgar Works was the toilet/privy block and wash room with showers (Room G13). The toilet block was a former dwelling courtyard toilet block which was incorporated into the works. This was added to the works along with the wash room in the 1940s in order to meet factory regulations. However, Mr Inman recalled that they were never used as they were too far away!

At this time, the central Trafalgar Grinding Wheel building produced scissors, whilst Kangaroo Works functioned as a forge on the ground floor with razor blade production, polishing and packing on the upper floors.

From this it is clear that the process flow through the works altered often over time. The workers usually had restricted access to areas within the works. As process flow altered, then changes in access to various areas would have also been modified in accordance.

## 9 DISCUSSION

The Trafalgar Works was constructed between 1889 and 1894 (Phase 2). It was built as part of a redevelopment of the north side of the Trafalgar Grinding Wheel. It was not constructed to be a stand-alone works, and was always a large component of a larger works complex with the adjacent Trafalgar Grinding Wheel and Kangaroo Works, despite it being designed so that it could be easily leased out as a whole or in parts to separate smaller firms.

The Trafalgar Works was typical in design for the period. The architectural style of the building differed substantially from both the Trafalgar Grinding Wheel and Kangaroo Works however.

The Trafalgar Works was typical in layout. Most integrated works enclosed at least one yard area, which Trafalgar also did, with in fact two yards. This was also the case at Beehive Works and Eye Witness Works (Wray, 2000).

The principal façades of Trafalgar Works conformed to the typical form of works' at the time. The façades presented a higher status and were the public face of the works, comprising dressed ashlar sills and lintels, symmetrical/ordered elevations, and a decorative stone surrounded, covered cart passage. Cart passages were generally centrally positioned within the façade, such as at Baltic Works. This was also the case at Trafalgar Works. The cart passages were always embellished with decorative surrounds, usually with ashlar blocks, Trafalgar being no exception, although it was fairly plain in design in comparison with the Kangaroo Works

pedimented cart passage. The principal façade of the Trafalgar Works contained higher status sash windows in comparison with the timber casements used in the remainder of the elevations, not seen by customers. This was the conforming format for this type of works from the period, which was not used within the Kangaroo Works (Wray, 2000).

Trafalgar Works had been substantially altered internally throughout with few indicative historic features remaining at the time of survey. No original hand forges were retained, whilst the only other features to indicate the type of processes carried out within the different rooms of the ranges were the type of floor, suggestive of a need for fireproofing, and power transmission features, such as wall boxes, brackets or blockings. The prior removal of the second floors of the south and east ranges, as well as the demolished adjacent Trafalgar Grinding Wheel meant that a full record of the works could not be made, hindering the understanding and interpretation of the function and flow within and around the works complex.

The west range was the principal range for the works. The structure was unusual in that the floors throughout were supported by I-section beams set regularly spaced transversely across the range. Above the basement at the south end of the range the floor of the ground floor was concrete carried by the I-section beams. The floors of the first and second floors however comprised timber joists, the ends of which were set into the recess of the I-section beams, longitudinally across the building. The floor boards were then laid across the joists. This is a very unusual design and was not observed in any of the other ranges of the works. Within the basement, there were four original lightwells in the west wall which were positioned between structural brick piers. Above the lightwells were timber lintels which were carrying the west wall of the remaining three-storeys above. The arrangement of the range was typical, originally with a small time office to the south of the cart passage controlling the workforce and deliveries for the works, and weighbridge beneath the cart passage. The upper floors contained the works offices and warehouse space, again situated within a usual location, with the noisy and dirty processes located within the rear ranges of the works. The features observed in the second floor of the range were characteristic of warehouse spaces with a large amount of shelving, and workbenches lit by generous fenestration. The south end of the range contained the main staircase vertically linking the floors in the west and south ranges.

The south range essentially comprised powered workshop spaces. In the south wall of the range were several blocked openings, interpreted as power transmission openings, enabling power to be transferred between Trafalgar Grinding Wheel and Trafalgar Works at all levels, some openings possibly positioned for specific machinery. The basement appeared to be of two phases which the lower half dating from phase 1, likely part of a former structure depicted on the 1889 OS map (**Illustration 6**) which was incorporated into the phase 2 Trafalgar Works south range. The basement appeared to have been altered substantially and used as an air raid shelter during WWII. It is possible that originally the basement of the range was essentially for power related machinery and pedestrian access was only needed for maintenance via a small hatch, as all the doorways leading into room B5 appeared secondary. At the east end of the range were eight hand forges (removed during phase 5) with two positioned in each single shop unit. The workshop above of the first floor contained a lime ash floor, presumably as a fireproofing method.

The east range was a simple workshop range. Evidence of primary power was not apparent within the range. Whilst at the north end of the range the building was only two-storeys with lean-to roofs. The reason for this is unknown, but was presumably to respect the surrounding nearby dwellings located on the east side of Canning Street.

The north range was a phase 3 addition to the works, providing a further six hand

forge shops on the ground floor, and workshops above. Both of the rooms on the floors above required powered line shafting.

At the southeast extent of the works was the machine shop and forge. At the time of survey very little original historical features had been retained. The only indicative feature was the louvered raised ridge on the roof, suggesting hot work was undertaken within it. This building later became a grinding shop and possibly plating shop.

The furnace house, located to the north of the rear yard was an unusual structure with small fireplace, and vented/louvered roof. The primary function of this building is unknown, but the use as a crucible shop can be ruled out. It is possible that metal was being re-melted within the building for a specific purpose. To the south east of this was the phase 1 privy block, depicted on the 1889 OS map, serving the domestic dwellings of court no. 14. These toilets somehow survived the surrounding demolition throughout the years and were incorporated into the Trafalgar Works in the 1940s, to comply with factory regulations. Prior to this, Trafalgar Works did not contain any toilets except for those serving the offices in the west range, suggesting toilets were situated within Trafalgar Grinding Wheel and could be easily accessed. The Kangaroo Works, in comparison was constructed with an unusually abundant amount of w.c facilities. These would have been too far away to serve the workers within Trafalgar Works however.

The works complex underwent a multitude of changes over the years to affectively function primarily as a tool factory and later as a cutlery and electroplating factory. The complex was typical in design and layout, with some historical features, fixtures and fittings aiding the interpretation of the form and function of the spaces through its history. It must be remembered however that the works was part of a larger complex, the central element being missing at the time of survey, impeding a complete contextual understanding of the site and its workings. It must also be noted that once machinery has been removed from such works, very few features remain to help interpret the function of a space.

## 10 ACKNOWLEDGEMENTS

ARCUS would like to thank Rob Kinchin-Smith and RPS. Furthermore, the author would also like to thank Mr Inman for his cooperation and invaluable historic information about the site, Victoria Beauchamp for her historic research and Ken Hawley and Christine Ball for their priceless knowledge.

## 11 BIBLIOGRAPHY

Badcock, A. Ball, C. Beauchamp, V. Holderness, H. May, R. & Unwin, J. 2006. *Detailed Archive Assessment proposed New Retail Quarter, Sheffield*. ARCUS Report 899c.4.

Beauchamp, VA, 1996. *The Workshops of the Cutlery Industry in Hallamshire 1750-1900*. Ph.D. University of Sheffield

English Heritage 2006. *Understanding Historic Buildings: A guide to good recording practice*, English Heritage

Belford, P. 2001. *Archaeological Building Recording at Cornish Place, Sheffield*. ARCUS Report 414.1

Bell, S. 2008. *Archaeological Evaluation at the former Trafalgar Works and Kangaroo Works, Sheffield*. Interim Report. ARCUS Report 899f.1(1)

Institute of Field Archaeologists 1999. *Standards and Guidance for Building*

*Investigation and Recording*, IFA

*Sorby Company History based on an article in the Hand Tool Preservation Association of Australia Inc*, in association with Ken Hawley, 1999 (HTPAA, 1999)

RCHME (English Heritage), 1998. *Trafalgar Works, Trafalgar Street* NBR 98293

Roberts, T. & Stenton, M. 2005. *Archaeological Desk Based assessment of the land and buildings within the proposed NRQ, Sheffield*. ARCUS Report 899.1

RPS Planning & Development. 2007. *NRQ Historical Building Assessments*. Vols 1 & 2.

Unwin, J & Hawley, K. 1999. *Sheffield Industries: Cutlery, Silver and Edge Tools*. Images of England: Tempus

Williams, A. O. 2003. *The Typology of Industrial Buildings with reference to the steel trades in Sheffield 1750-1900*. Ph.D Thesis: The University of Sheffield.

Wray, N. 2000. *One Great Workshop: The Buildings of the Sheffield Metal Trades*. English Heritage: York

### **Other sources:**

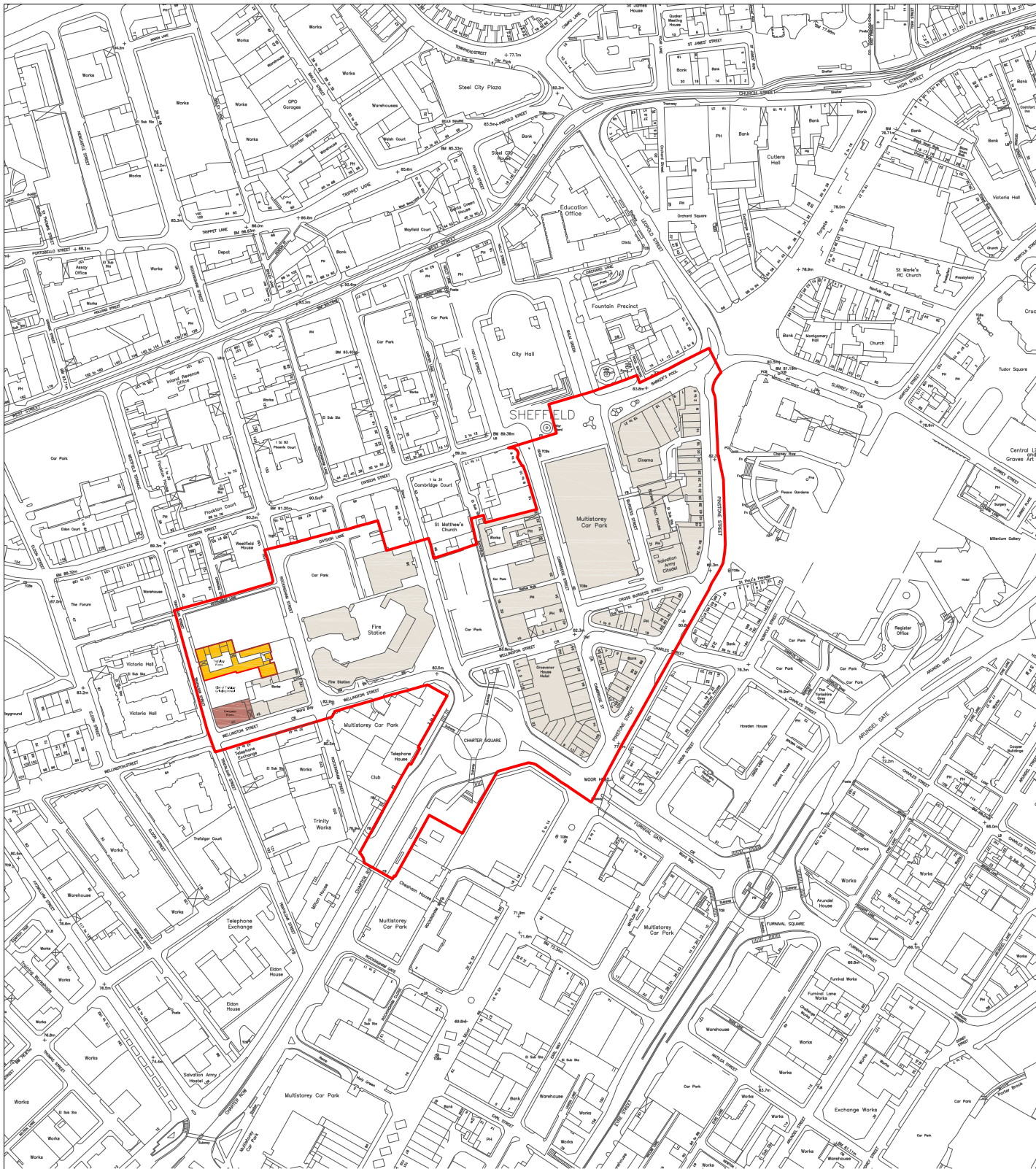
Ken Hawley – pers. comm.

Christine Ball – pers. comm.

Mr. Inman – former Harrison, Fisher & Co employee

[www.robert-sorby.co.uk](http://www.robert-sorby.co.uk)

## 12 ILLUSTRATIONS



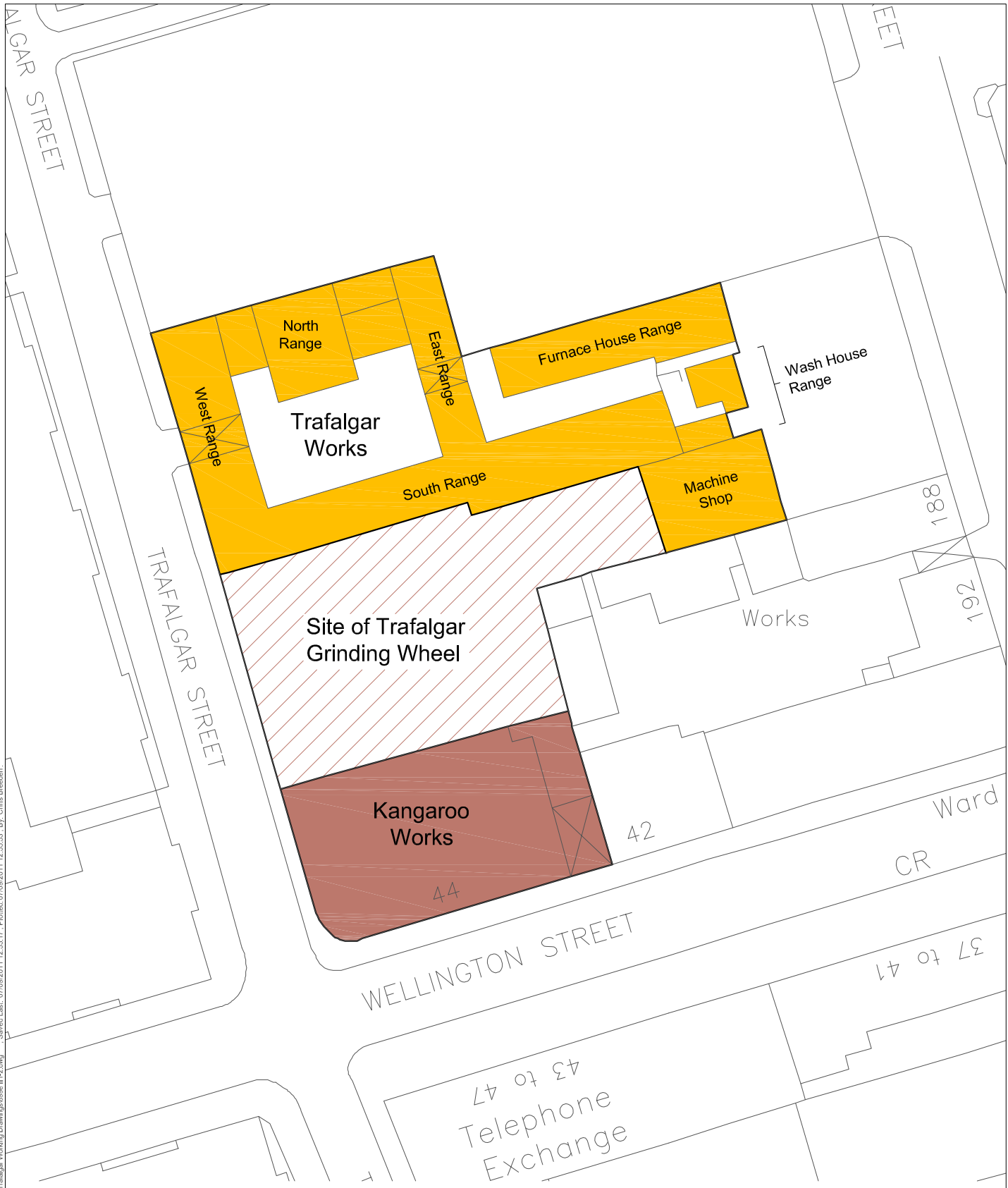
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| Site    | <b>Trafalgar Works</b>       | NGR         | SK 349 871  | Drawn            | CB        |
| Title   | <b>Site Location</b>         | Project No. | <b>899e</b> | Illustration No. | <b>1</b>  |



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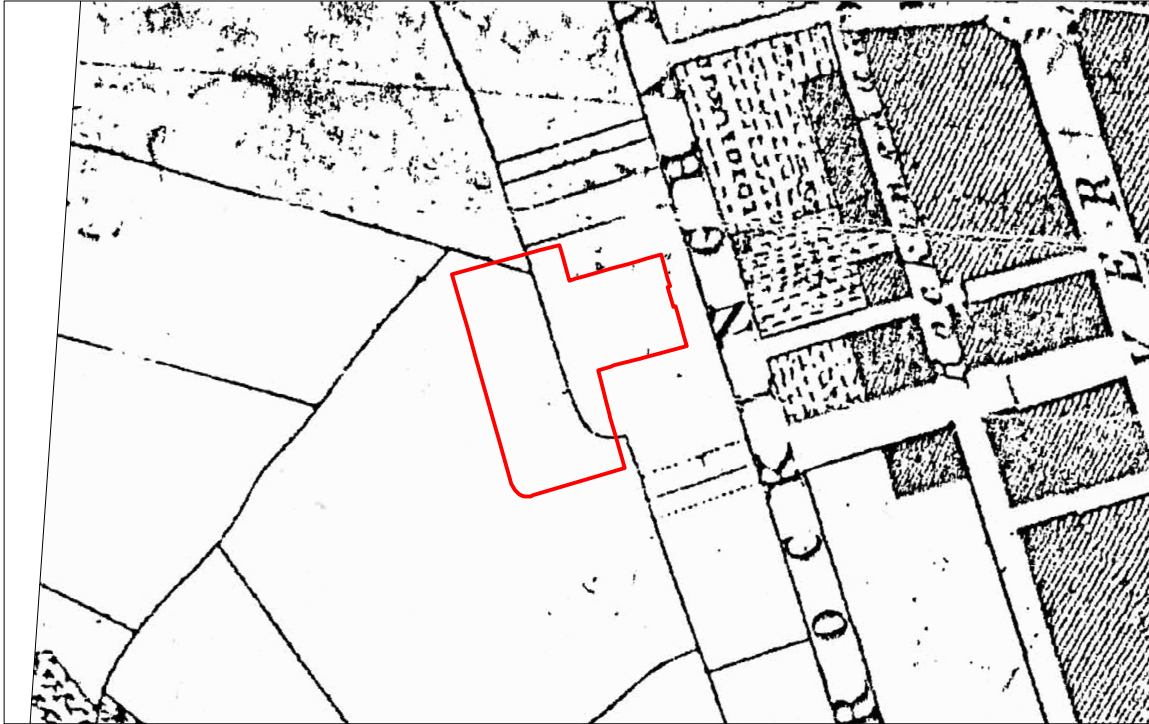


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| Title   | <b>Site Plan</b>             | Project No. | <b>899e</b> | Illustration No. | <b>2</b>  |





Excerpt from Fairbank 1808



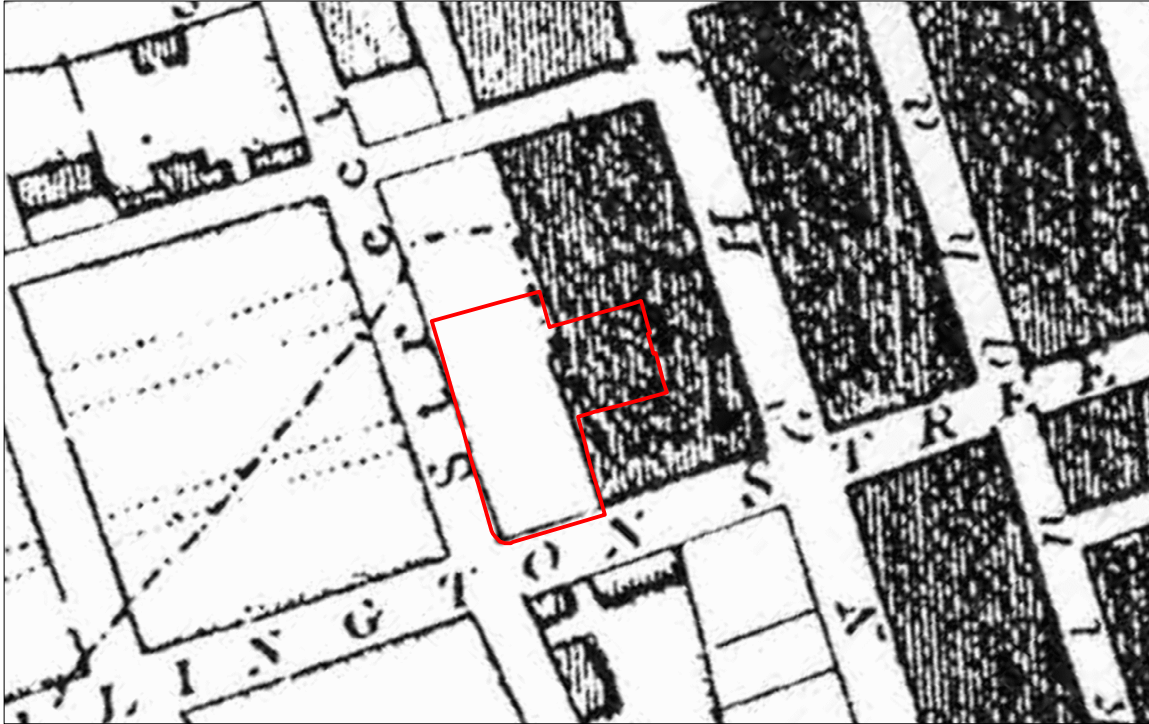
Excerpt from Leather 1828



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| Title   | <b>Trafalgar &amp; Kangaroo Works Complex<br/>         overlain onto Fairbank 1808 and Leather<br/>         1828 maps</b> | Project No. | <b>899e</b> | Illustration No. | <b>3</b>  |



Excerpt from Tayler 1832



Excerpt from White 1841



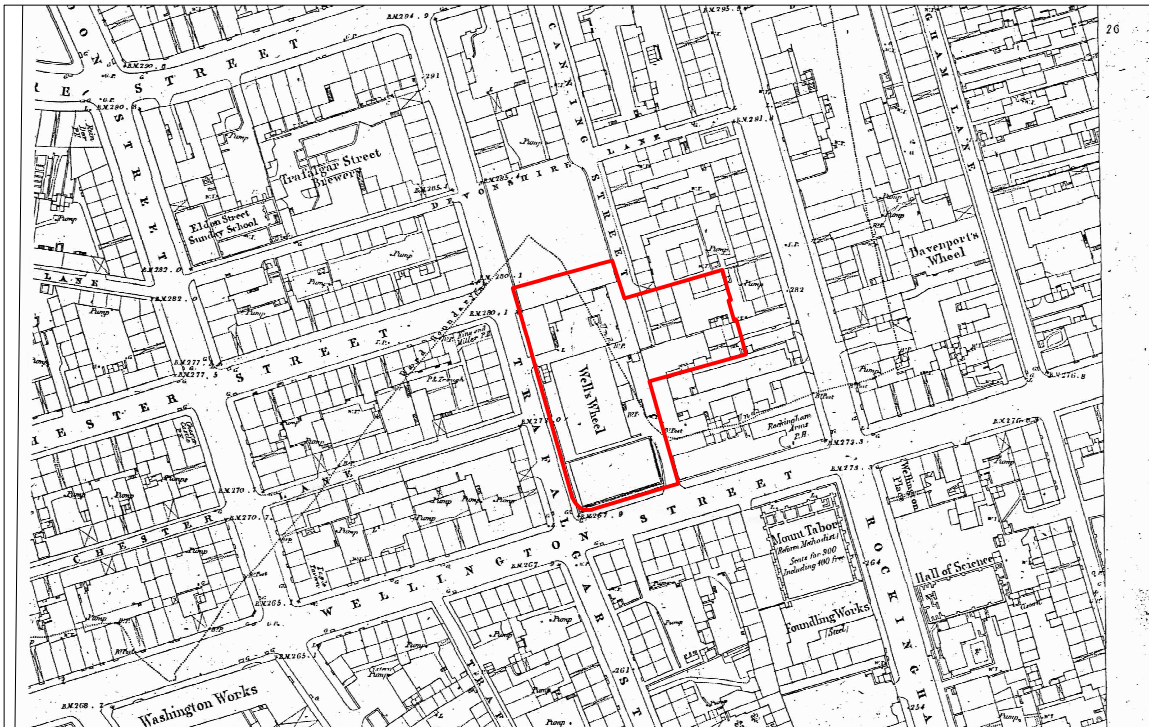
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| Site    | <b>Trafalgar Works</b>   | NGR         | SK 349 871  | Drawn            | CB        |
| Title   | <b>Trafalgar and Kangaroo Works Complex<br/>overlay onto Tayler 1832 and White 1841<br/>maps</b> | Project No. | <b>899e</b> | Illustration No. | <b>4</b>  |



Excerpt from 1850 OS



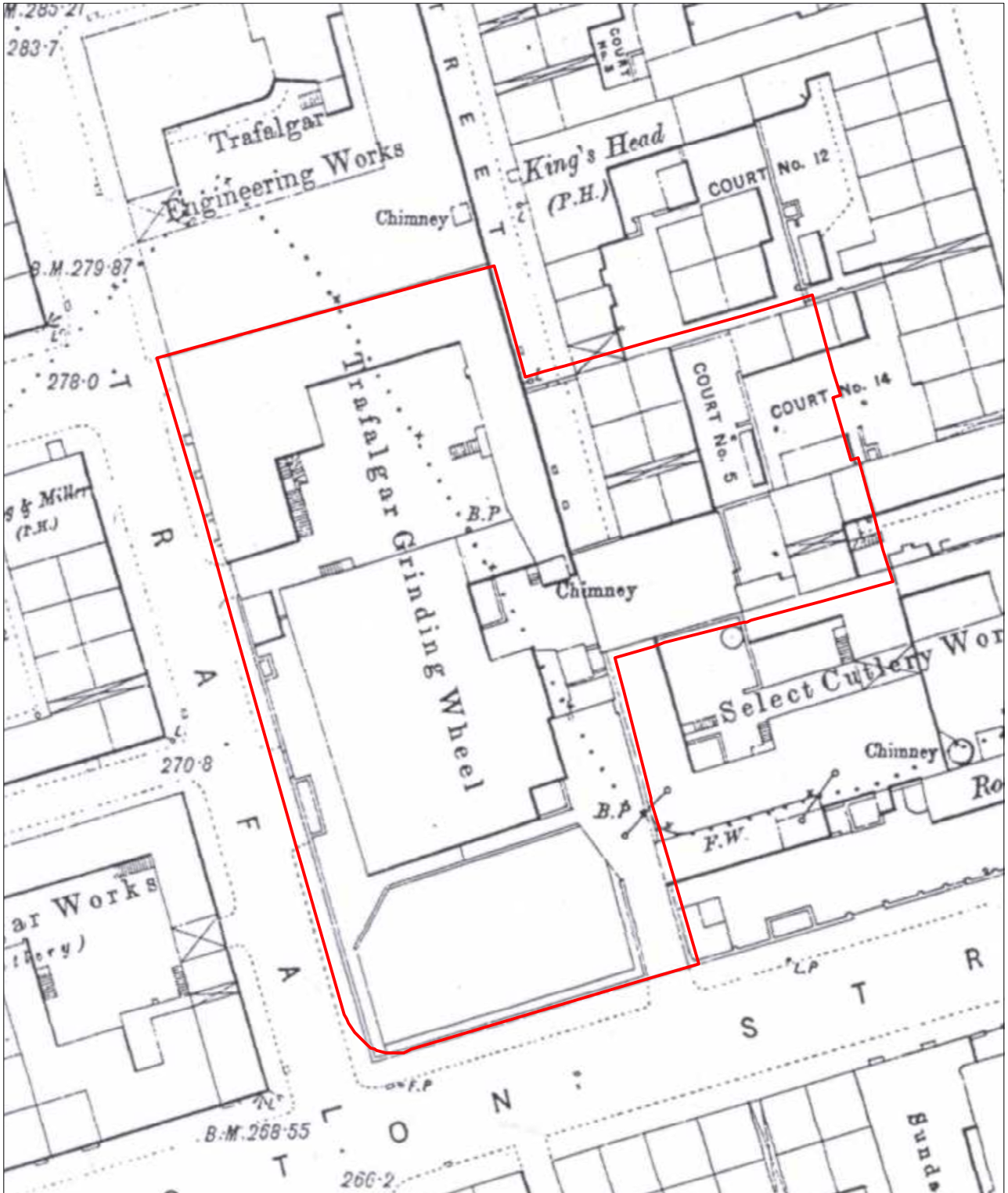
Excerpt from 1854 OS



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| Title   | <b>Trafalgar and Kangaroo Works Complex<br/>overlain onto 1850 and 1854 Ordnance<br/>Survey maps</b> | Project No. | <b>899e</b> | Illustration No. | <b>5</b>  |



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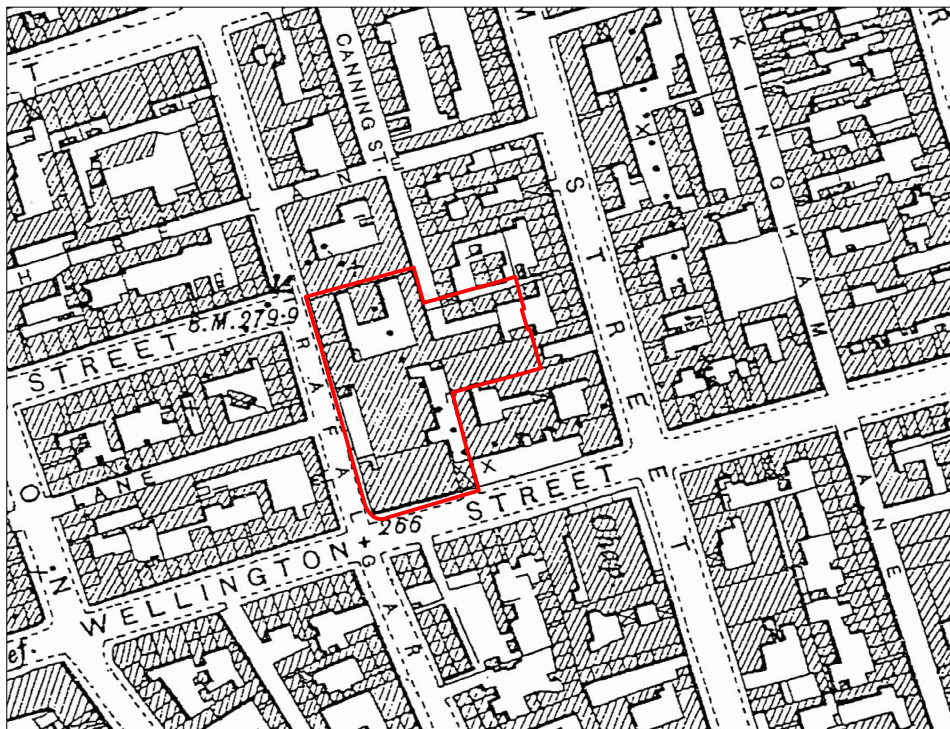
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| Site    | <b>Trafalgar Works</b>  | NGR         | SK 349 871  | Drawn            | CB        |
| Title   | <b>Trafalgar and Kangaroo Works Complex<br/>overlay onto 1889 Ordnance Survey map</b> | Project No. | <b>899e</b> | Illustration No. | <b>6</b>  |



Excerpt from 1894 OS Map



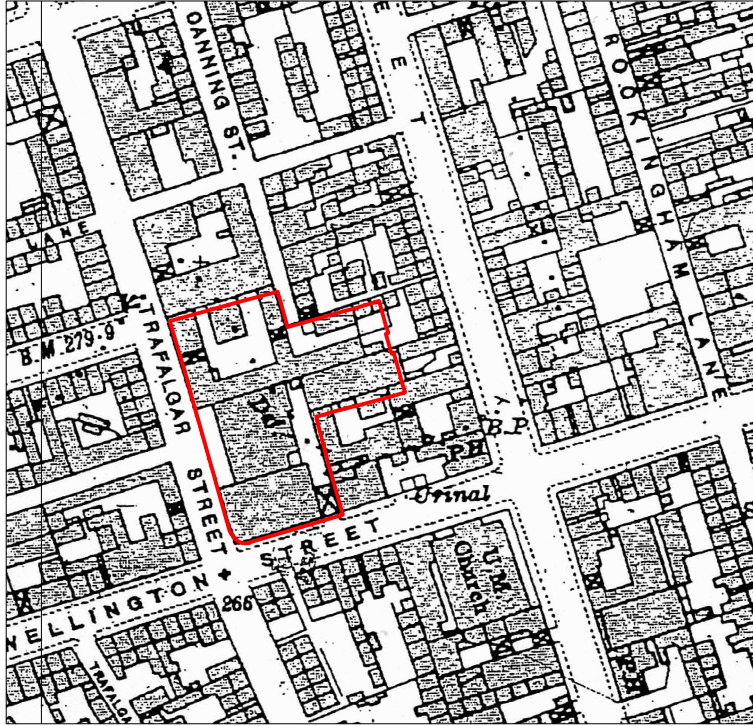
Excerpt from 1903 OS Map



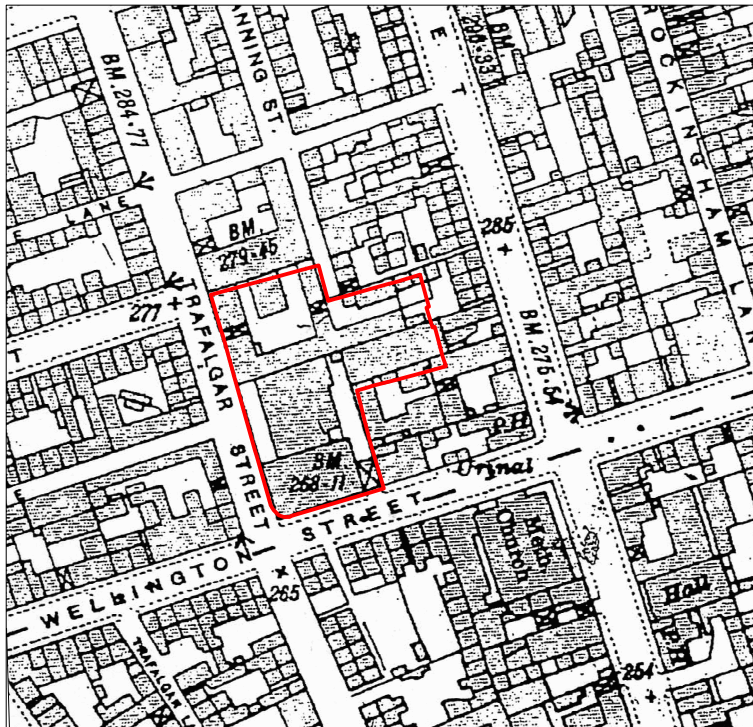
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| Title   | <b>Trafalgar and Kangaroo Works<br/>Complex overlain onto 1894 and 1903<br/>Ordnance Survey maps</b> | Project No. | <b>899e</b> | Illustration No. | <b>7</b>  |



Excerpt from 1923 OS Map



Excerpt from 1955 OS Map



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Excerpt from 1976 OS Map



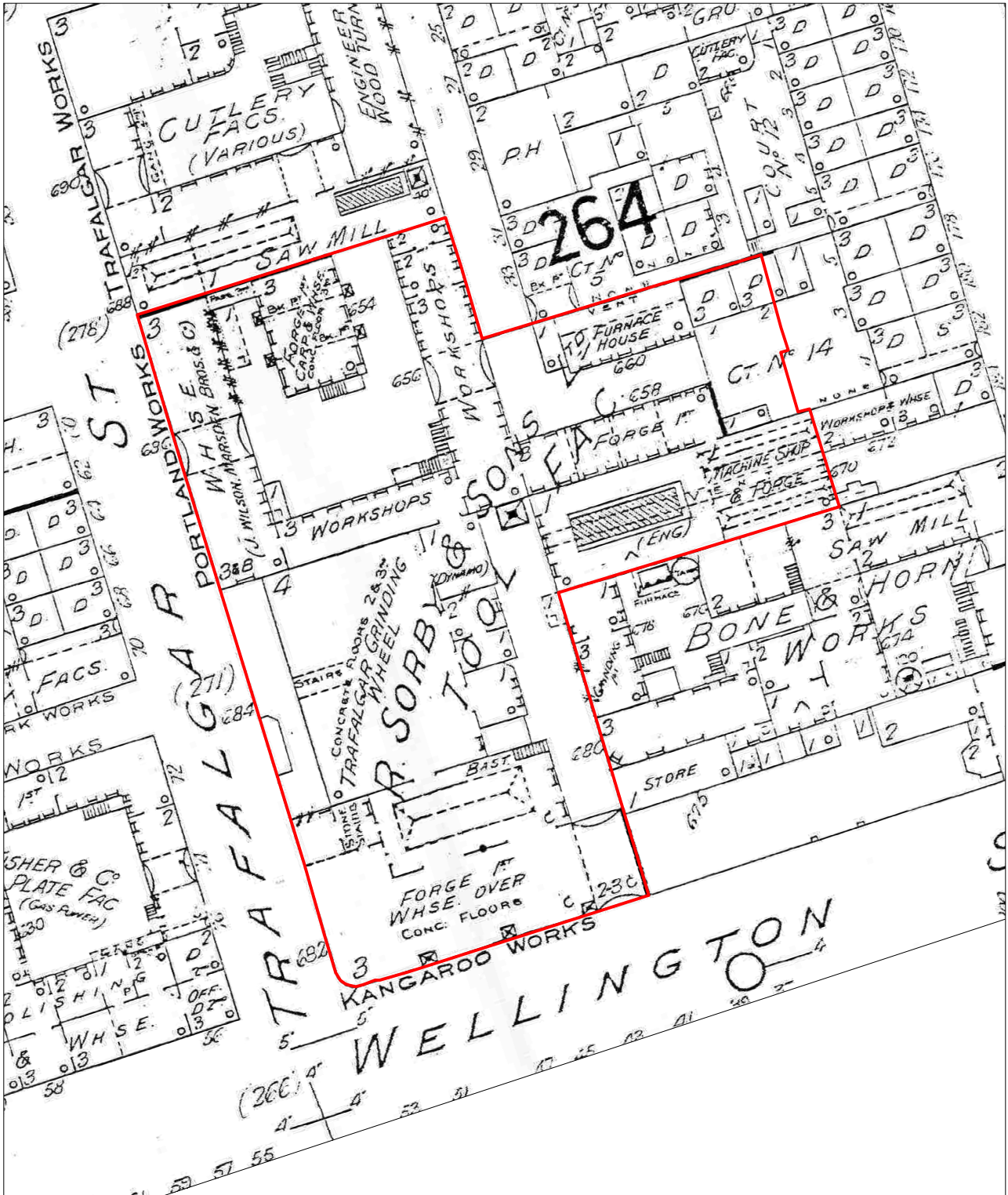
Excerpt from 1984 OS Map



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| Title   | <b>Trafalgar and Kangaroo Works<br/>Complex overlain onto 1976 and 1984<br/>Ordnance Survey maps</b> | Project No. | <b>899e</b> | Illustration No. | <b>9</b>  |



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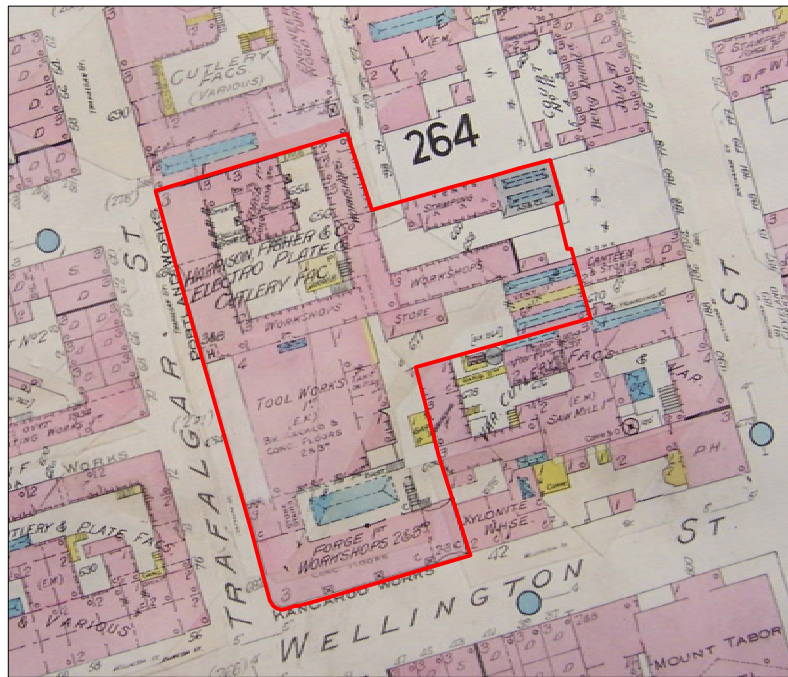


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| Site    | <b>Trafalgar Works</b>  | NGR         | SK 349 871  | Drawn            | CB/JD     |
| Title   | <b>Trafalgar and Kangaroo Works<br/>Complex overlain onto Goad<br/>1896 map</b> | Project No. | <b>899e</b> | Illustration No. | <b>10</b> |





Excerpt from Goad 1937



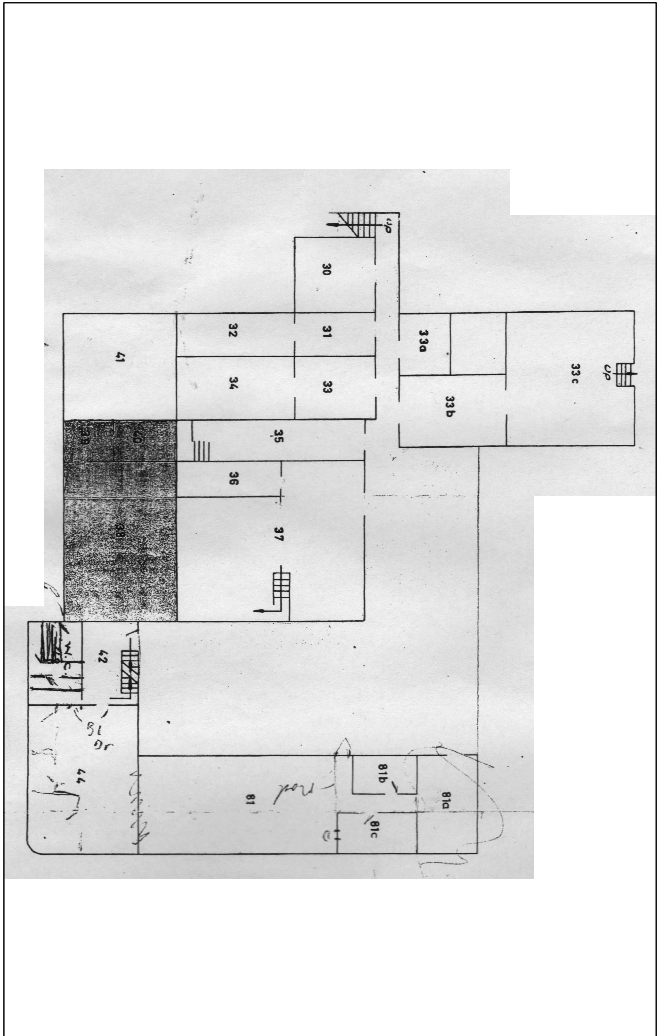
Excerpt from Goad 1959



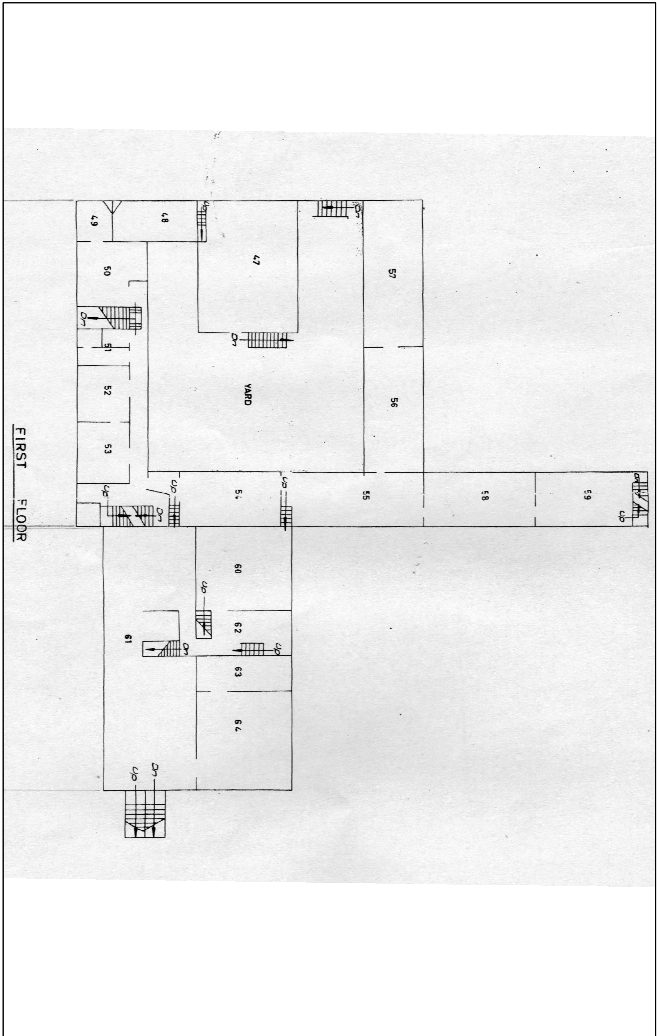
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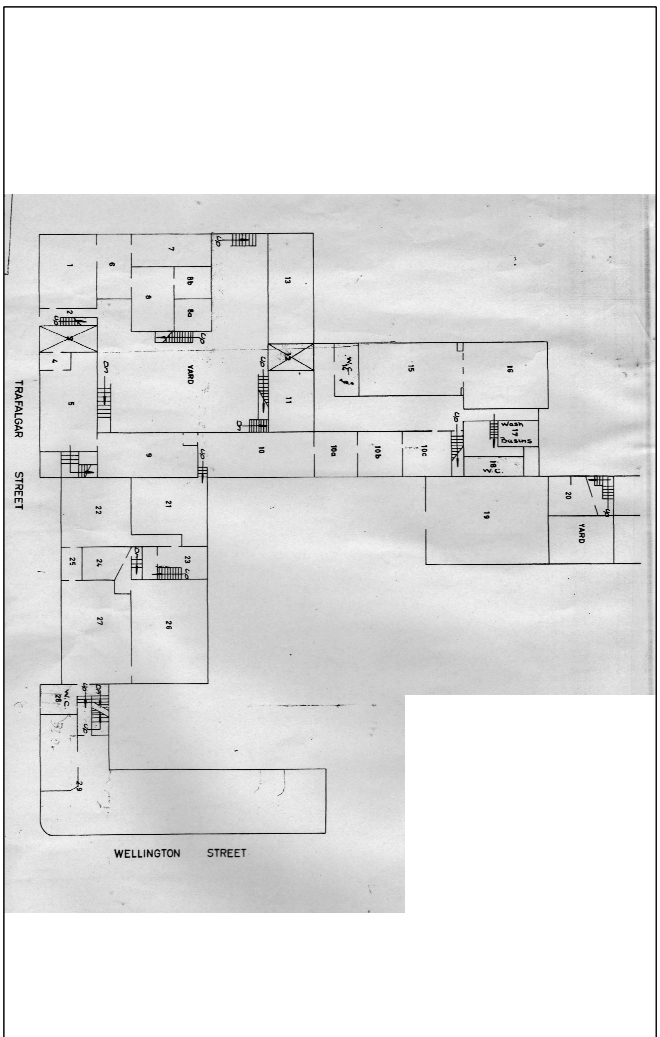
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| Title   | <b>Trafalgar and Kangaroo Works<br/>Complex overlain onto Goad updates<br/>1937 and 1959 maps</b> | Project No. | <b>899e</b> | Illustration No. | <b>11</b> |



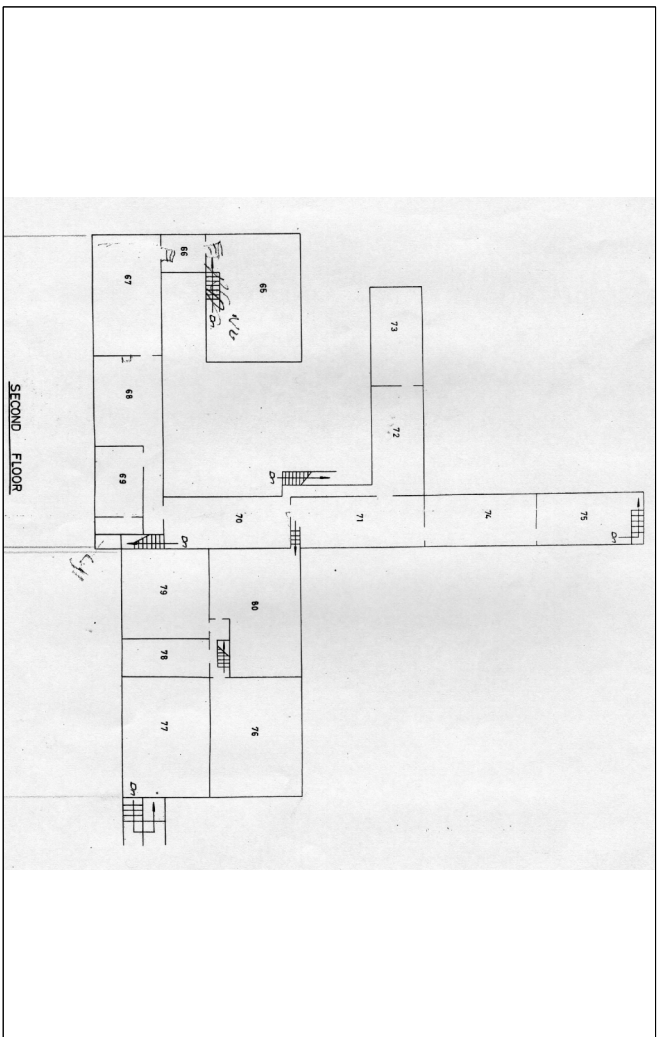
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KW First Floor



TW First Floor  
TGW Second Floor



TW Ground Floor  
TGW First Floor  
KW Second Floor

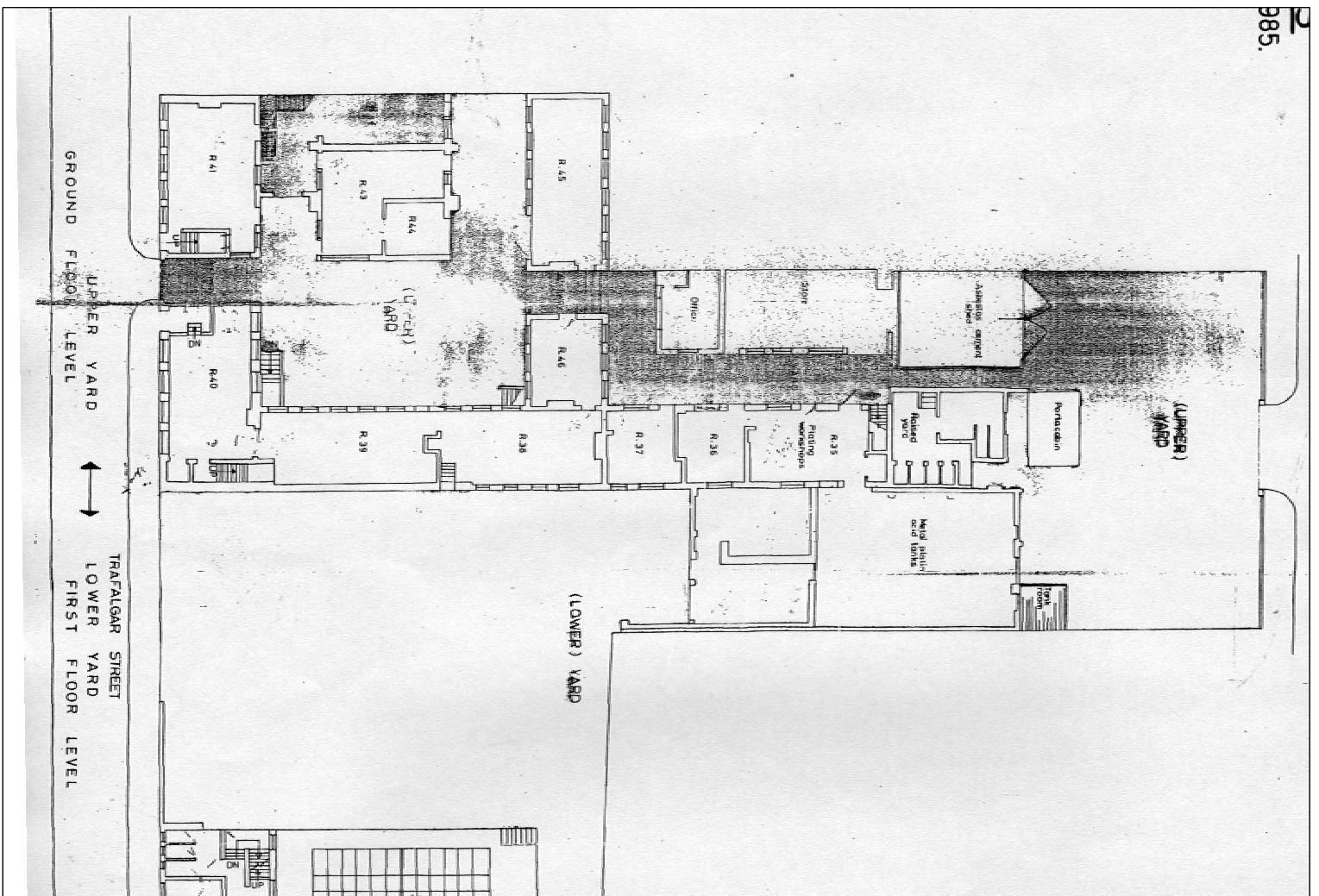


TW Second Floor  
TGW Third Floor

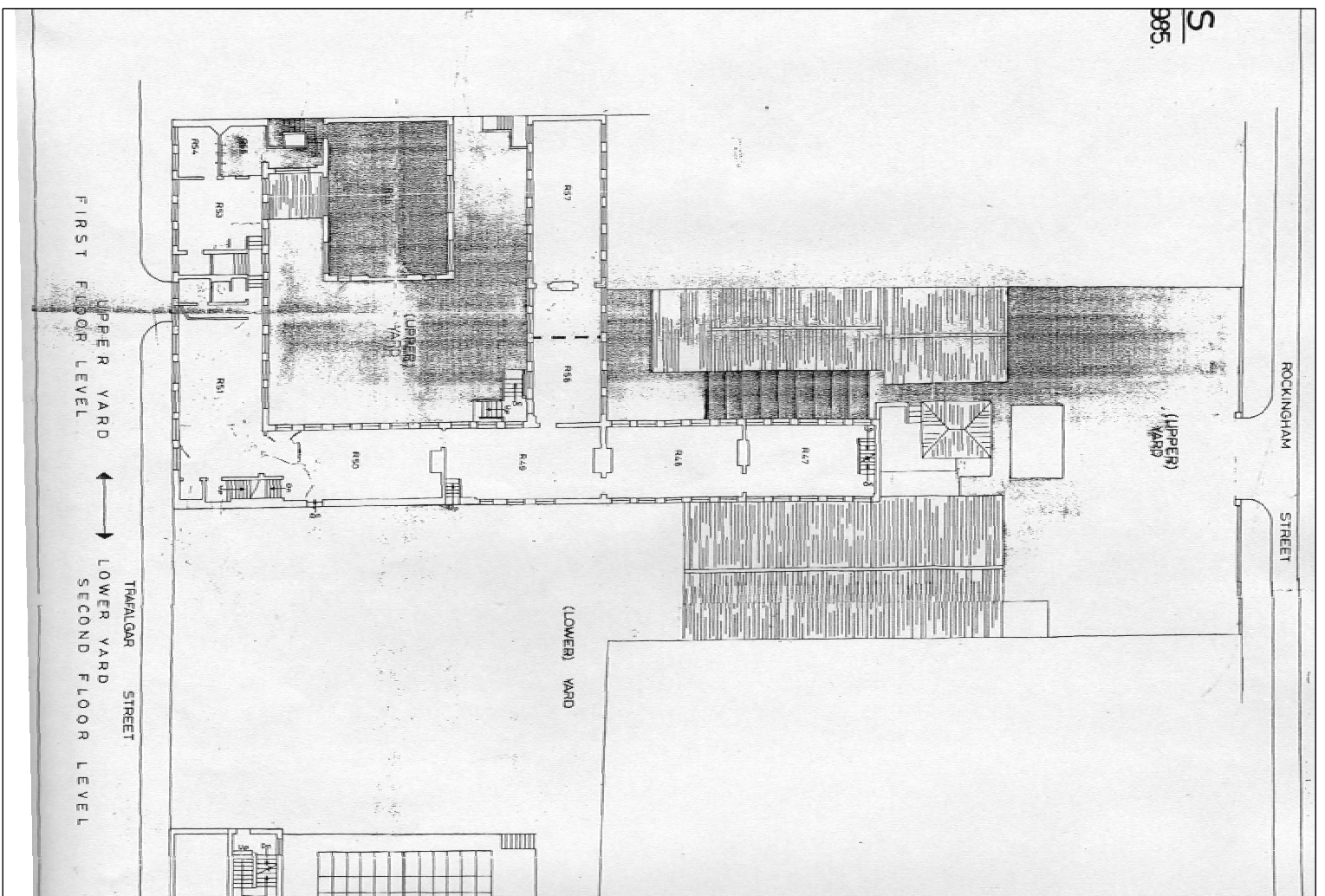


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| Title   | Plans Provided By Client c.1980 | Project No. | 899e       | Illustration No. | 12        |



Ground Floor



First Floor



|         |                                 |             |            |                  |           |
|---------|---------------------------------|-------------|------------|------------------|-----------|
| Project | Sevenstone, Sheffield           | Scale       | n/a        | Date             | July 2009 |
| Site    | Tatfalgar Works                 | NGR         | SK 349 871 | Drawn            | CB        |
| Title   | Plans Provided By Client c.1985 | Project No. | 899e       | Illustration No. | 13        |

Telegraphic Address: -"KANGAROO, SHEFFIELD."

1851.  
Prize Medal,  
London,  
Robt. Sorby & Sons.

1884.  
Highest Award Silver Medal and Diploma, Edinburgh,  
For Forestry Tools, &c.

1884.  
Gold Medal,  
Calcutta.

1851.  
Prize Medal,  
London,  
Marsden Bros. & Co.

ROBT SORBY.



ROBT SORBY.

1887.  
First Order of Merit  
(Without Appeal),  
Adelaide.

1865.  
Diplomas,  
New Zealand.

ROBT SORBY  
& SONS

ROBT TREBOR  
SHEFFIELD  
YARRA-YARRA

1888.  
First Class Award,  
Melbourne.



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... Comprising the Businesses of ...

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JNO. WILSON,  
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WORKS,



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Corner of Wellington Street and Trafalgar Street.

## ILLUSTRATED CATALOGUE OF EDGE TOOLS, ADZES and AXES, AUGERS, SAWS,

JOINERS' ENGINEERS' PLASTERERS' AND IRON MOULDERS' TOOLS,

SCYTHES, HOOKS, and SHEEPSHEARS.

FORESTRY AND SEEDSMEN'S TOOLS.

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Hawley Trust Collection



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Fax: 0114 2224346

|         |   |             |             |                  |           |
|---------|---|-------------|-------------|------------------|-----------|
| Project | <b>Sevenstone, Sheffield</b>                                  | Scale       | n/a         | Date             | 2009      |
| Site    | <b>Trafalgar Works</b>  | NGR         | SK 349 871  | Drawn            | CB        |
| Title   | <b>Cover page from Robert Sorby &amp; Sons 1907 catalogue</b> | Project No. | <b>899e</b> | Illustration No. | <b>14</b> |



Historic photograph showing Trafalgar Works and the adjacent Trafalgar Grinding Wheel c.1960



Historic photograph showing Trafalgar Works c.1966



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|---------|------------------------------|-------------|-------------|------------------|-----------|
| Project | <b>Sevenstone, Sheffield</b> | Scale       | n/a         | Date             | 2009      |
| Site    | <b>Trafalgar Works</b>       | NGR         | SK 349 871  | Drawn            | CB        |
| Title   | <b>Historic photographs</b>  | Project No. | <b>899e</b> | Illustration No. | <b>15</b> |



Historic photograph showing Kangaroo Works, Trafalgar Grinding Wheel and Trafalgar Works from Wellington Street, 1983.

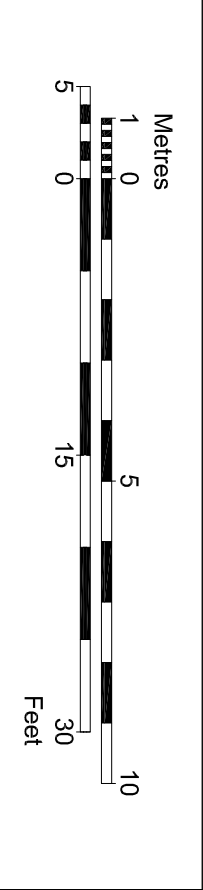


Historic photograph showing Kangaroo Works, Trafalgar Grinding Wheel and Trafalgar Works, 1977.



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|---------|------------------------------|-------------|-------------|------------------|-----------|
| Project | <b>Sevenstone, Sheffield</b> | Scale       | n/a         | Date             | 2009      |
| Site    | <b>Trafalgar Works</b>       | NGR         | SK 349 871  | Drawn            | CB        |
| Title   | <b>Historic Photos</b>       | Project No. | <b>899e</b> | Illustration No. | <b>16</b> |



- Key Building Phases**
- Phase 1 1833 - 1850
  - Phase 2 1889 - 1894
  - Phase 3 1894 - 1896
  - Phase 4 1896 - 1923
  - Phase 5 1923 - 1937
  - Phase 6 1937 - 1959
  - Phase 7 Post 1960



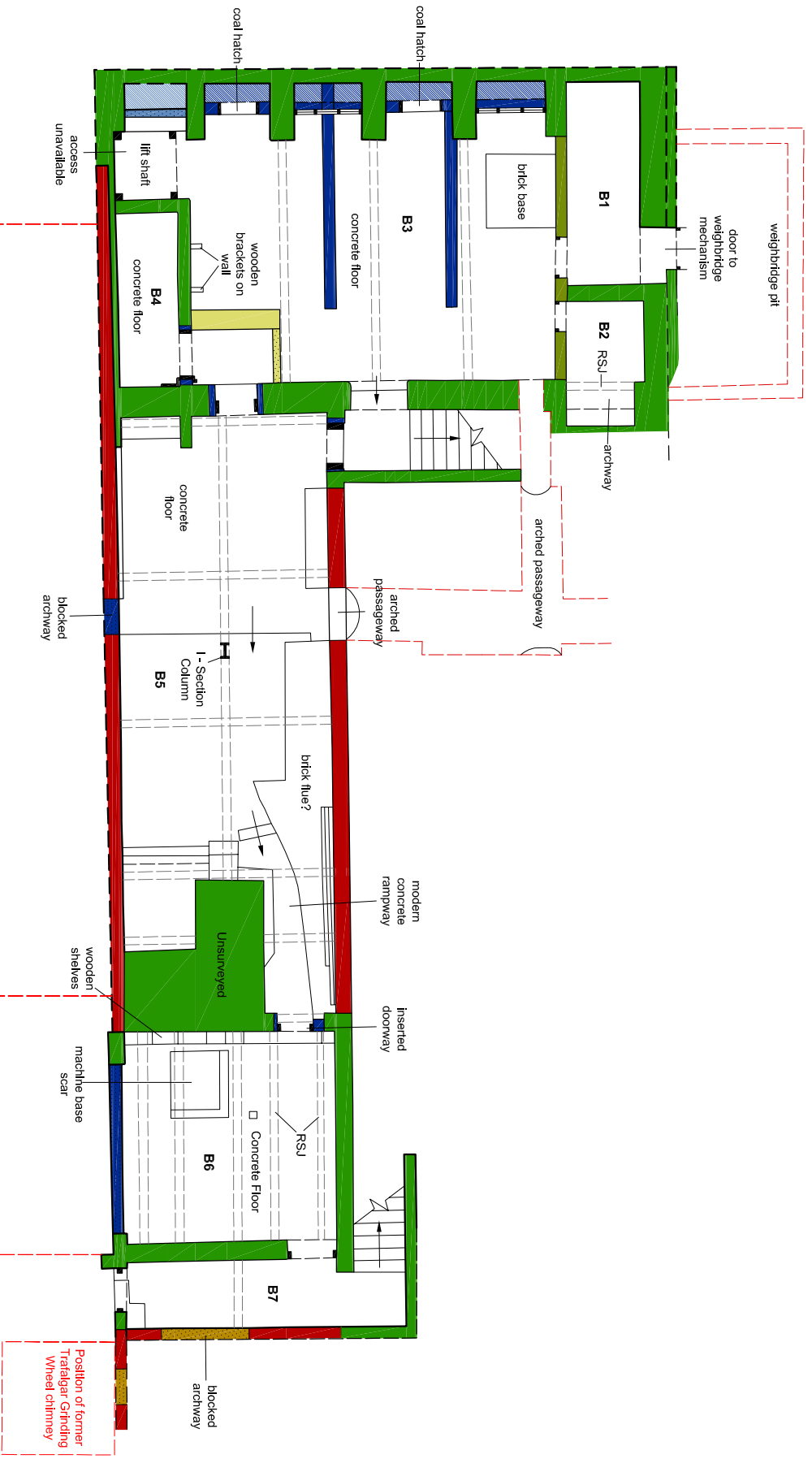
**Project**  
Sevenstone, Sheffield

**Site**  
Trafalgar Works

**Title**  
Basement Plan

Reconstruction

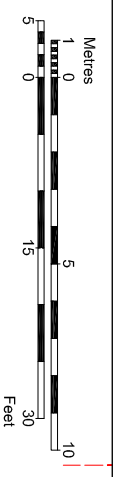
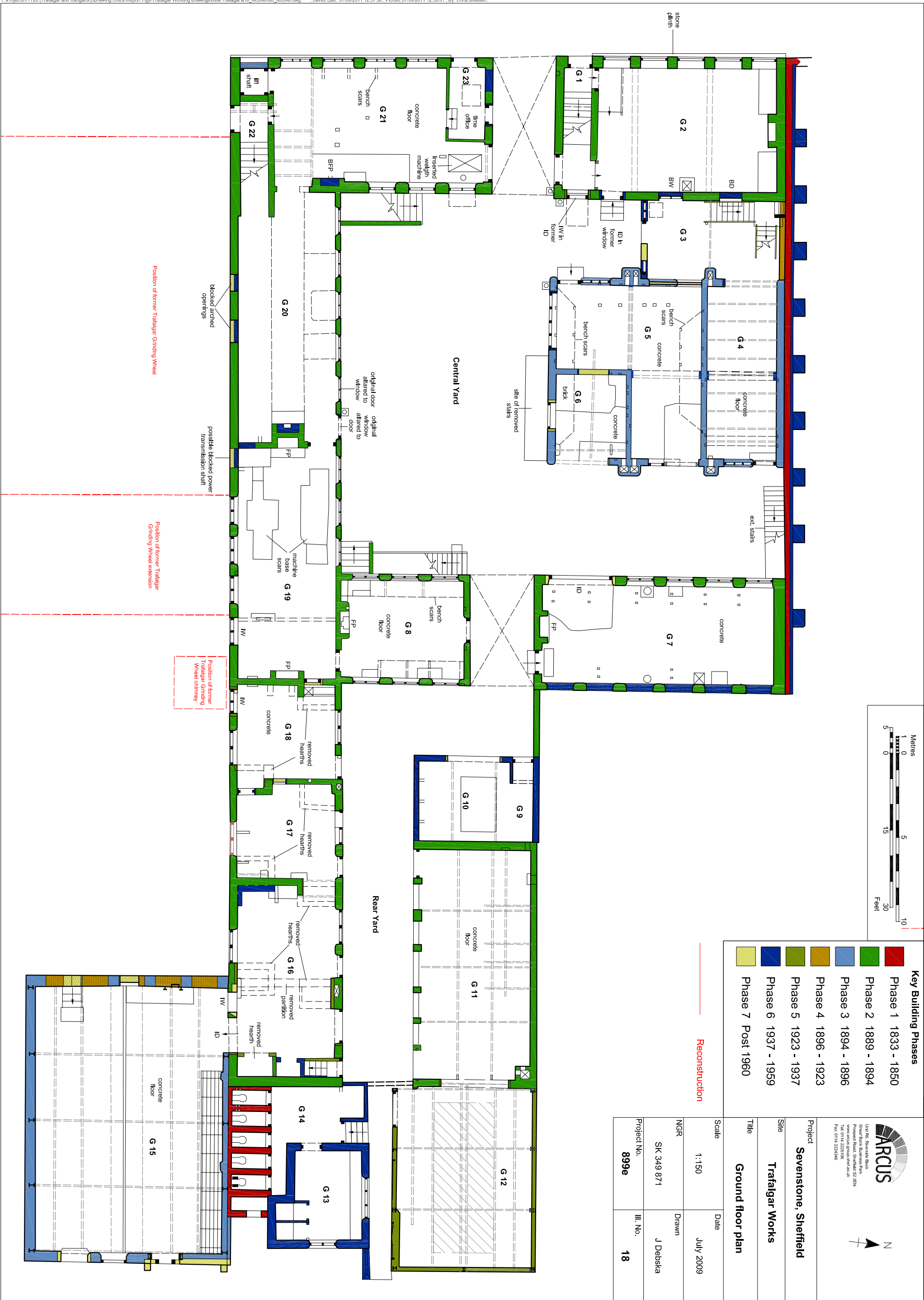
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|-------------|------------|----------|-----------|
| Scale       | 1:125 @ A3 | Date     | July 2009 |
| NGR         | SK 349 871 | Drawn    | J Debska  |
| Project No. | 899e       | Ill. No. | 17        |



Position of former Trafalgar Grinding Wheel

Position of former Trafalgar Grinding Wheel extension

Position of former Trafalgar Grinding Wheel chimney



| Key Building Phases |             |
|---------------------|-------------|
| Phase 1             | 1833 - 1850 |
| Phase 2             | 1889 - 1894 |
| Phase 3             | 1894 - 1896 |
| Phase 4             | 1896 - 1923 |
| Phase 5             | 1923 - 1937 |
| Phase 6             | 1937 - 1959 |
| Phase 7             | Post 1960   |

Reconstruction

|  |             |   |           |
|--|-------------|---|-----------|
| <p>Unit 16, Riverside Block,<br/>Shear Bank Business Park,<br/>Preston Road, Sheffield S2 2EN<br/>www.arcusgroup.co.uk<br/>Tel: 0114 223446<br/>Fax: 0114 223446</p> |             | <p>Project<br/><b>Sevenstone, Sheffield</b></p> |           |
| <p>Site<br/><b>Trafalgar Works</b></p>   |             | <p>Title<br/><b>Ground floor plan</b></p>       |           |
| Scale  | 1:150       | Date  | July 2009 |
| NGR  | SK 349 871  | Drawn   | J Debska  |
| Project No.  | <b>899e</b> | Ill. No.  | <b>18</b> |

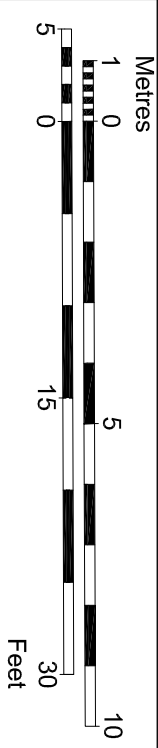
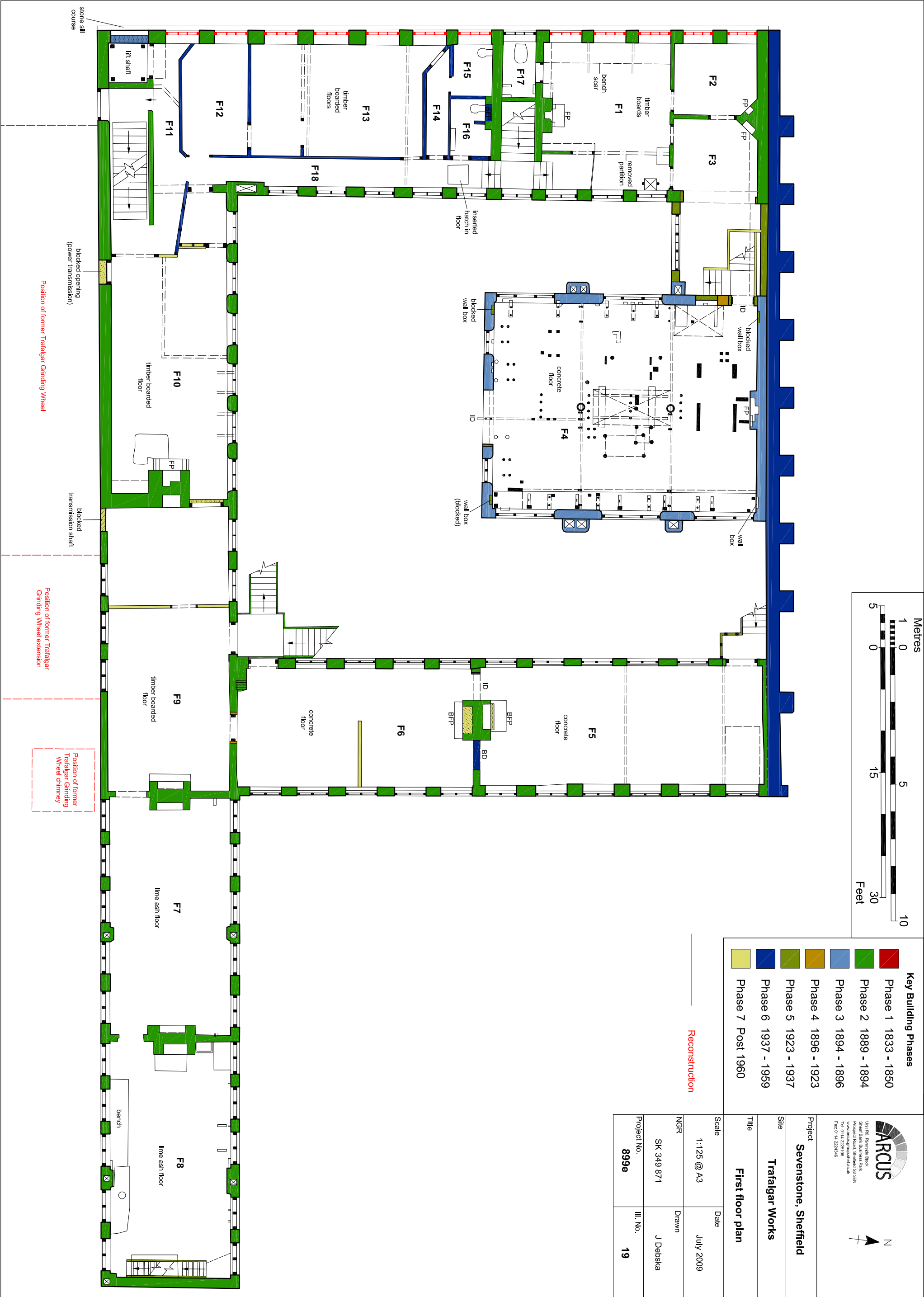


Position of former Trafalgar Grinding Wheel

Position of former Trafalgar Grinding Wheel extension

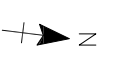
Position of former Trafalgar Grinding Wheel extension

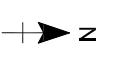
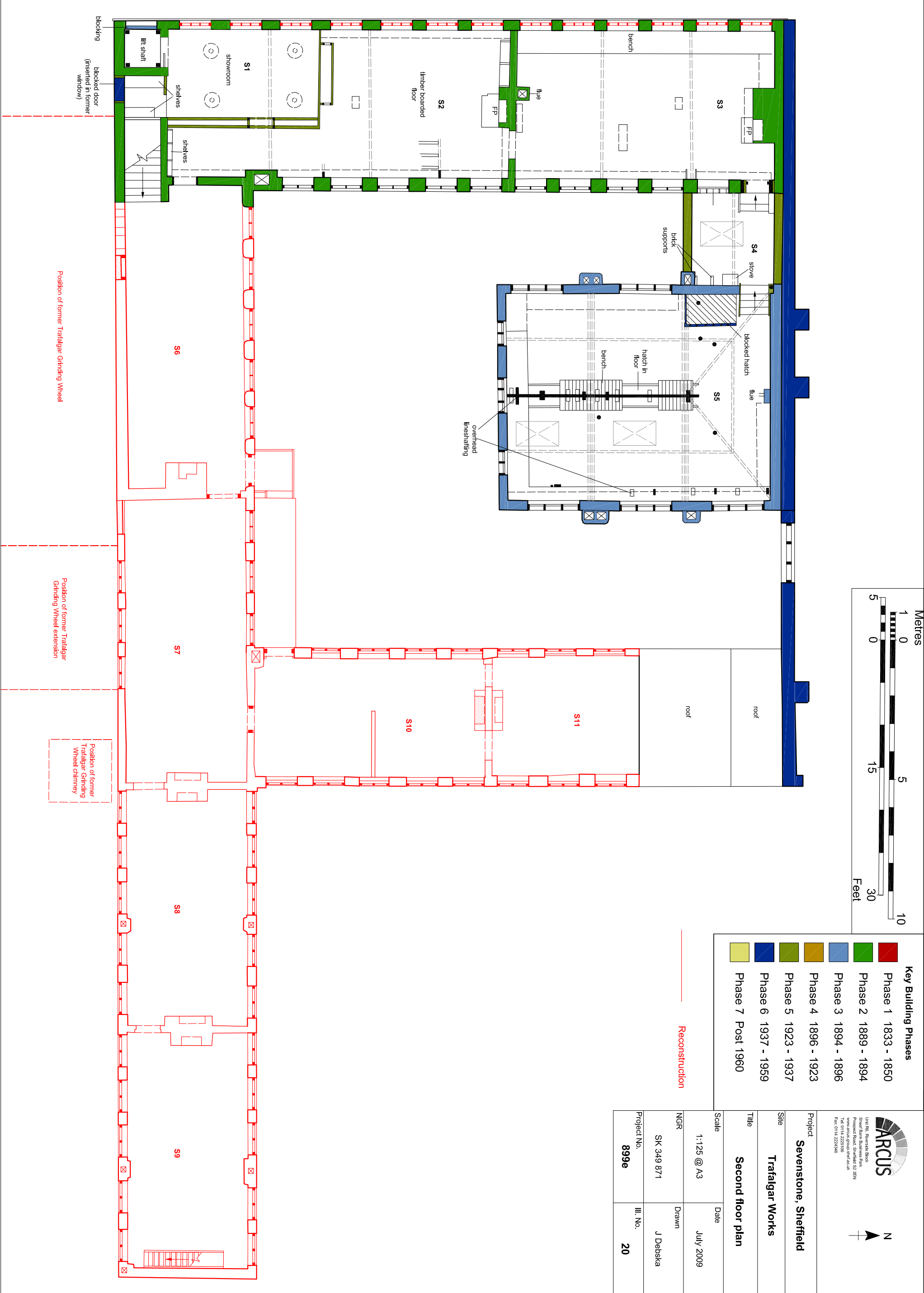


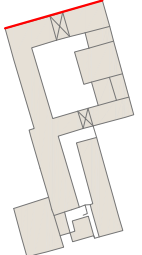
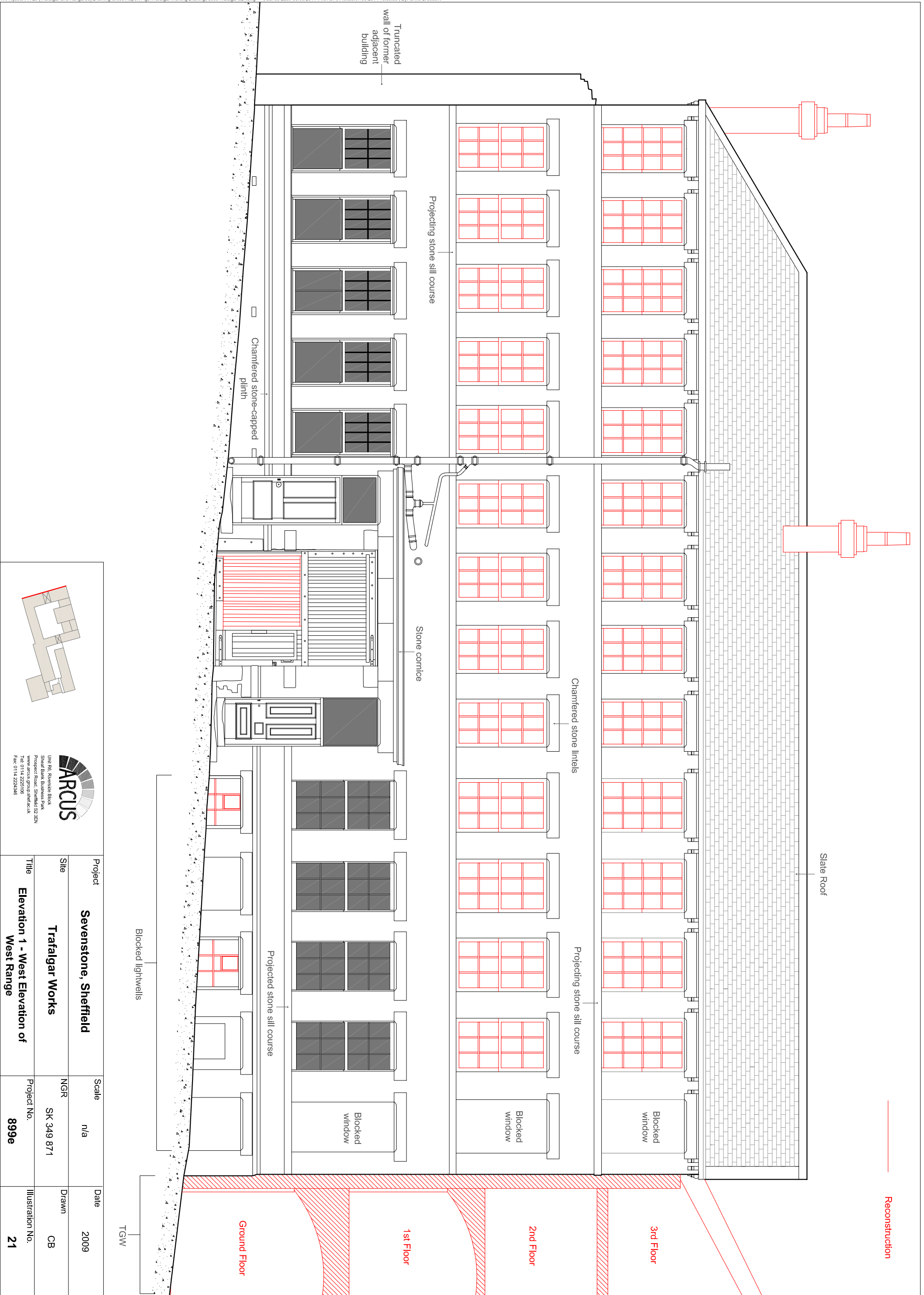


| Key Building Phases                       |                     |
|---|---------------------|
| <span style="color: red;">■</span>        | Phase 1 1833 - 1850 |
| <span style="color: green;">■</span>      | Phase 2 1889 - 1894 |
| <span style="color: blue;">■</span>       | Phase 3 1894 - 1896 |
| <span style="color: orange;">■</span>     | Phase 4 1896 - 1923 |
| <span style="color: lightgreen;">■</span> | Phase 5 1923 - 1937 |
| <span style="color: yellow;">■</span>     | Phase 6 1937 - 1959 |
| <span style="color: lightblue;">■</span>  | Phase 7 Post 1960   |

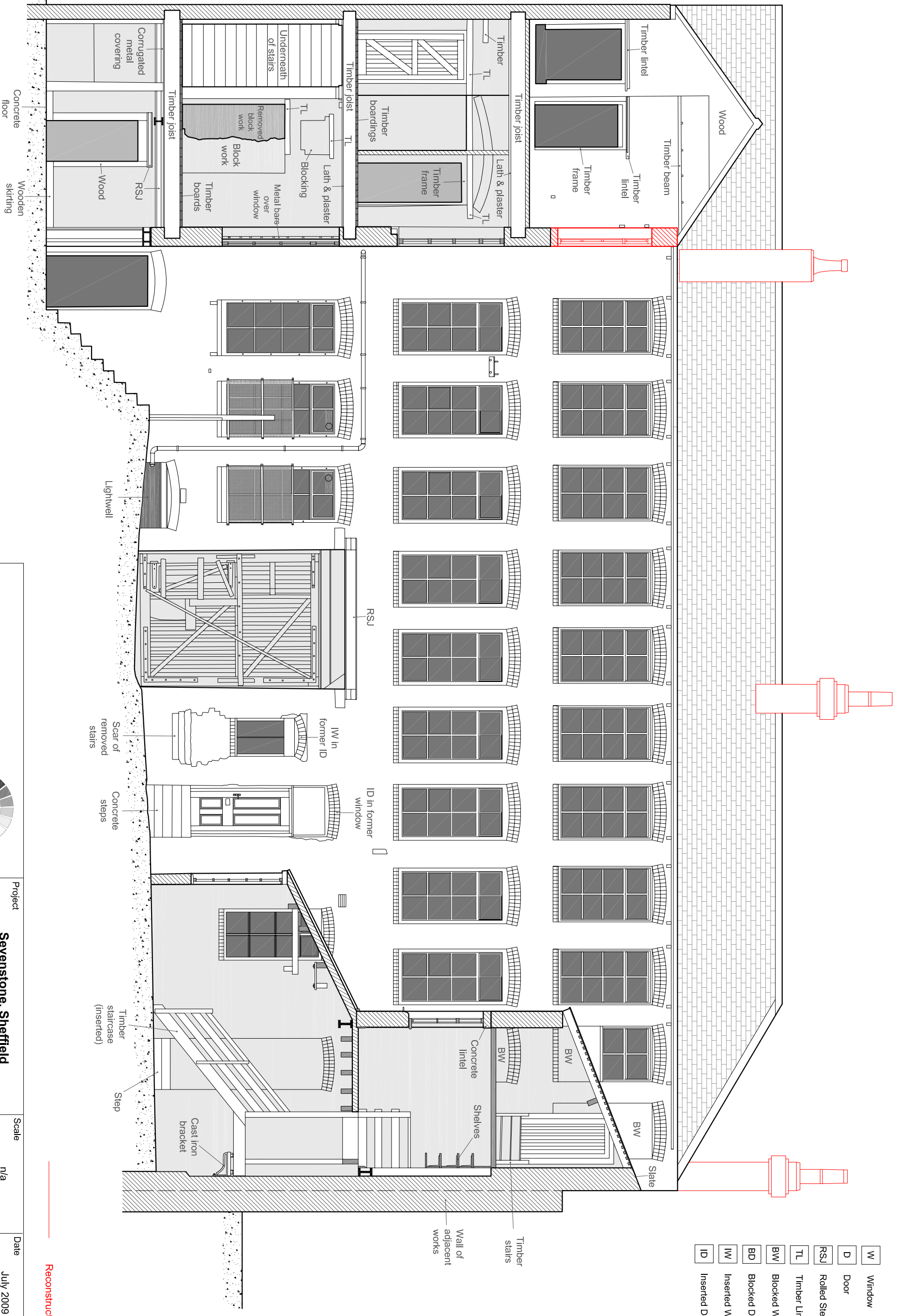
|   |                       |
|---|-----------------------|
| <br>Unit 106, Riverside Block,<br>Shear Bank Business Park,<br>Protected Road, Sheffield S2 2EN<br>www.arcusgroup.co.uk<br>Tel: 0114 222446<br>Fax: 0114 222446 |                       |
| Project   | Sevenstone, Sheffield |
| Site  | Trafalgar Works       |
| Title   | First floor plan      |
| Scale   | 1:125 @ A3            |
| Date  | July 2009             |
| NGR   | SK 349 871            |
| Drawn   | J Debska              |
| Project No.   | 899e                  |
| Ill. No.  | 19                    |







|         |  |             |            |                  |      |
|---------|--|-------------|------------|------------------|------|
| Project | Sevenstone, Sheffield                      | Scale       | n/a        | Date             | 2009 |
| Site    | Trafalgar Works                            | NGR         | SK 349 871 | Drawn            | CB   |
| Title   | Elevation 1 - West Elevation of West Range | Project No. | 899e       | Illustration No. | 21   |

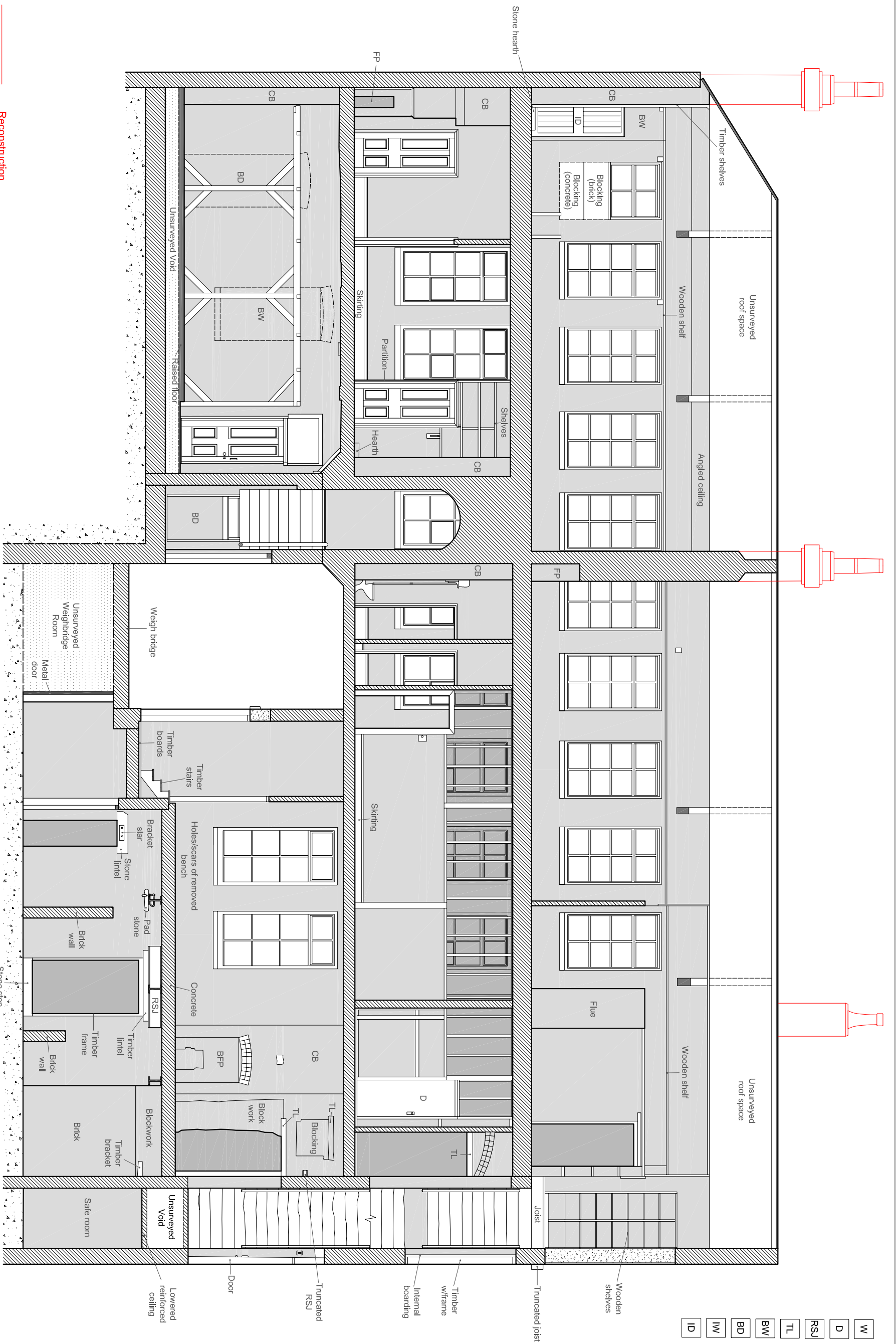


- W Window
- D Door
- RSJ Rolled Steel Joist
- TL Timber Lintel
- BW Blocked Window
- BD Blocked Door
- IW Inserted Window
- ID Inserted Door

Reconstruction

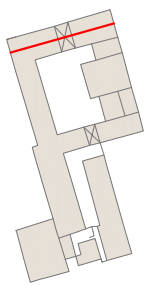
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| Project | Sevenstone, Sheffield                      |     | Date        | July 2009 |                  |    |
| Site    | Trafalgar Works                            | NGR | SK 349 871  | Drawn     | CB               |    |
| Title   | Elevation 5 - East Elevation of West Range |     | Project No. | 899e      | Illustration No. | 22 |

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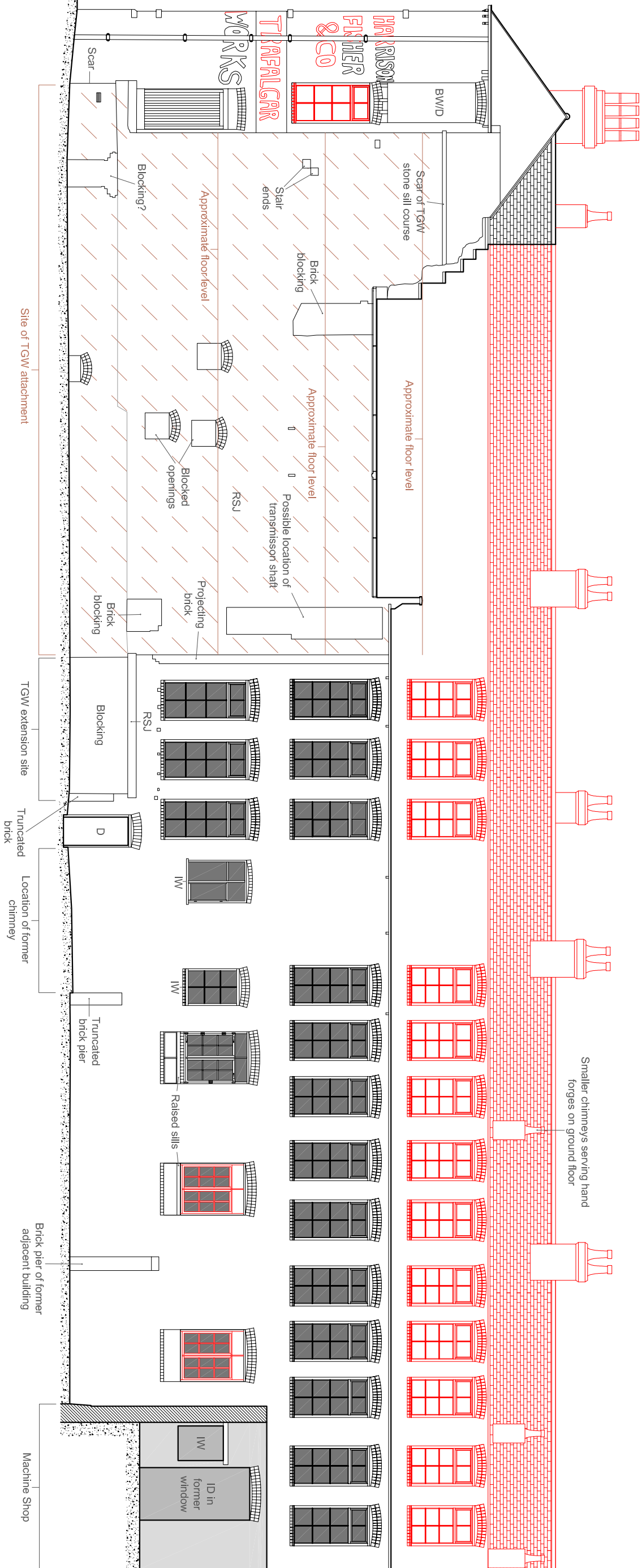
- W Window
- D Door
- RSJ Rolled Steel Joist
- TL Timber Lintel
- BW Blocked Window
- BD Blocked Door
- IW Inserted Window
- ID Inserted Door

Reconstruction




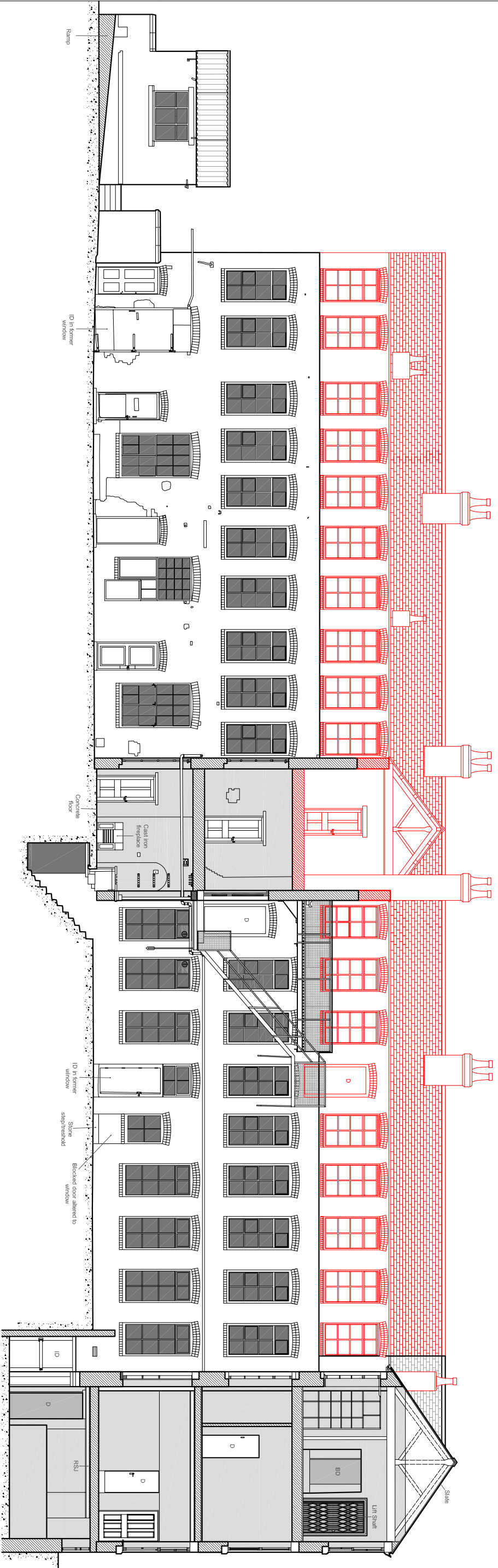
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|         |   |             |            |                  |      |
|---------|---|-------------|------------|------------------|------|
| Project | Sevenstone, Sheffield                               | Scale       | n/a        | Date             | 2009 |
| Site    | Trafalgar Works                                     | NGR         | SK 349 871 | Drawn            | CB   |
| Title   | Section 2 - Longitudinal Section through West Range | Project No. | 899e       | Illustration No. | 23   |



Reconstruction

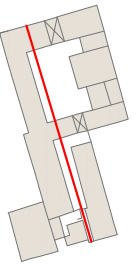
|   |                                |   |                  |                       |
|---|--------------------------------|---|------------------|-----------------------|
|  <p>Useful Arcus Group<br/>Sheaf Bank Business Park<br/>Prospect Road, Sheffield S2 3EN<br/>www.arcusgroup.co.uk<br/>Tel: 0114 225106<br/>Fax: 0114 224946</p> |                                | <p>Project <b>Sevenstone, Sheffield</b></p> | <p>Scale n/a</p> | <p>Date July 2009</p> |
| <p>Site <b>Trafalgar Works</b></p>  | <p>NGR SK 349 871</p>          | <p>Drawn CB</p>                             |                  |                       |
| <p>Title <b>Elevation 2 - South Elevation of South Range</b></p>  | <p>Project No. <b>899e</b></p> | <p>Illustration No. <b>24</b></p>           |                  |                       |



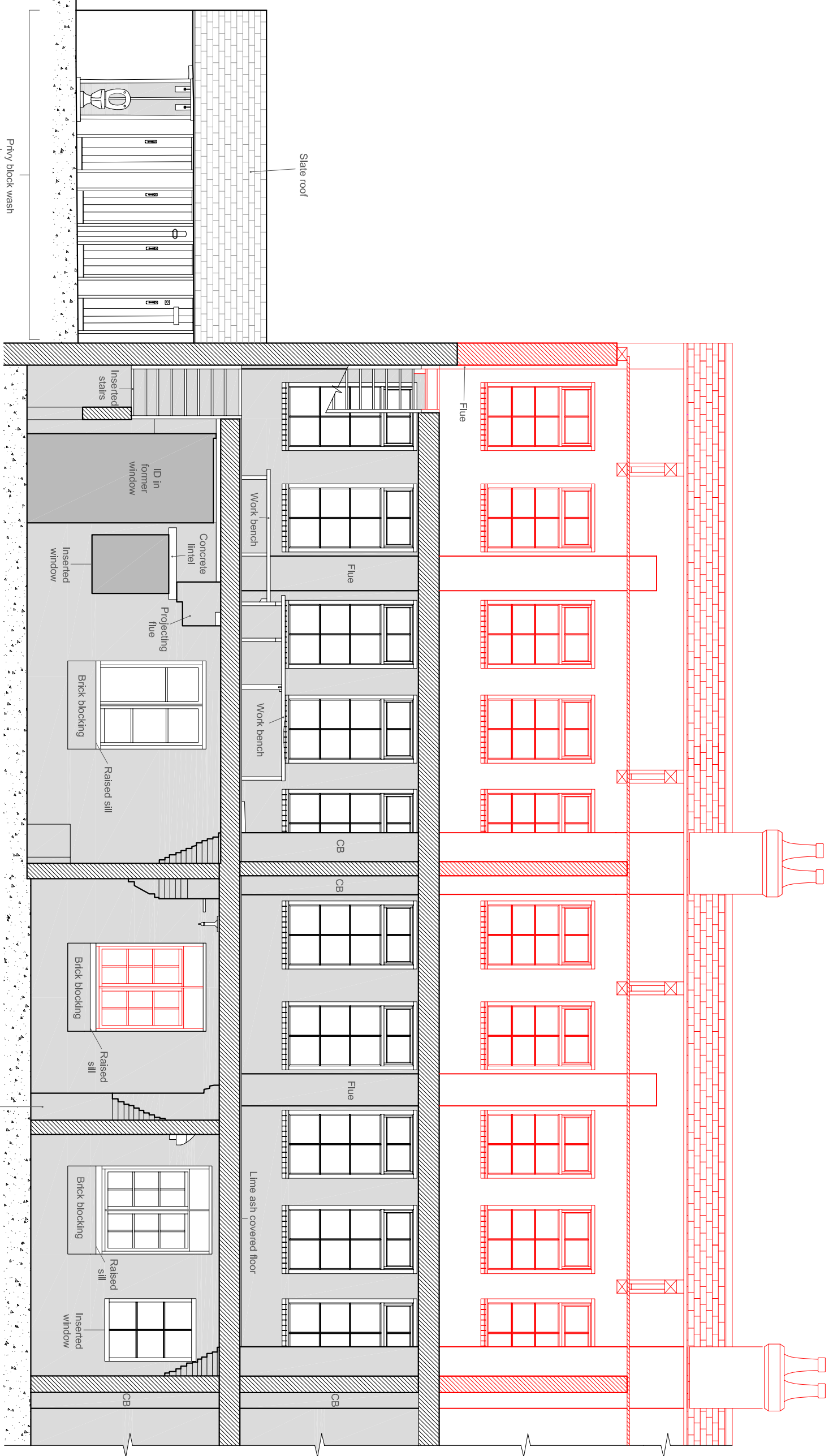
- W Window
- D Door
- RSJ Rolled Steel Joist
- TL Timber Lintel
- BW Blocked Window
- BD Blocked Door
- IW Inserted Window
- ID Inserted Door

Reconstruction

|         |   |             |            |                  |      |
|---------|---|-------------|------------|------------------|------|
| Project | Sevenstone, Sheffield                         | Scale       | n/a        | Date             | 2009 |
| Site    | Trafalgar Works                               | NGR         | SK 349 871 | Drawn            | CB   |
| Title   | Elevation 11 - North Elevation of South Range | Project No. | 899e       | Illustration No. | 25   |



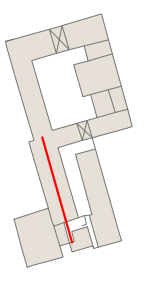
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- W Window
- D Door
- RSJ Rolled Steel Joist
- TL Timber Lintel
- BW Blocked Window
- BD Blocked Door
- IW Inserted Window
- ID Inserted Door

Reconstruction

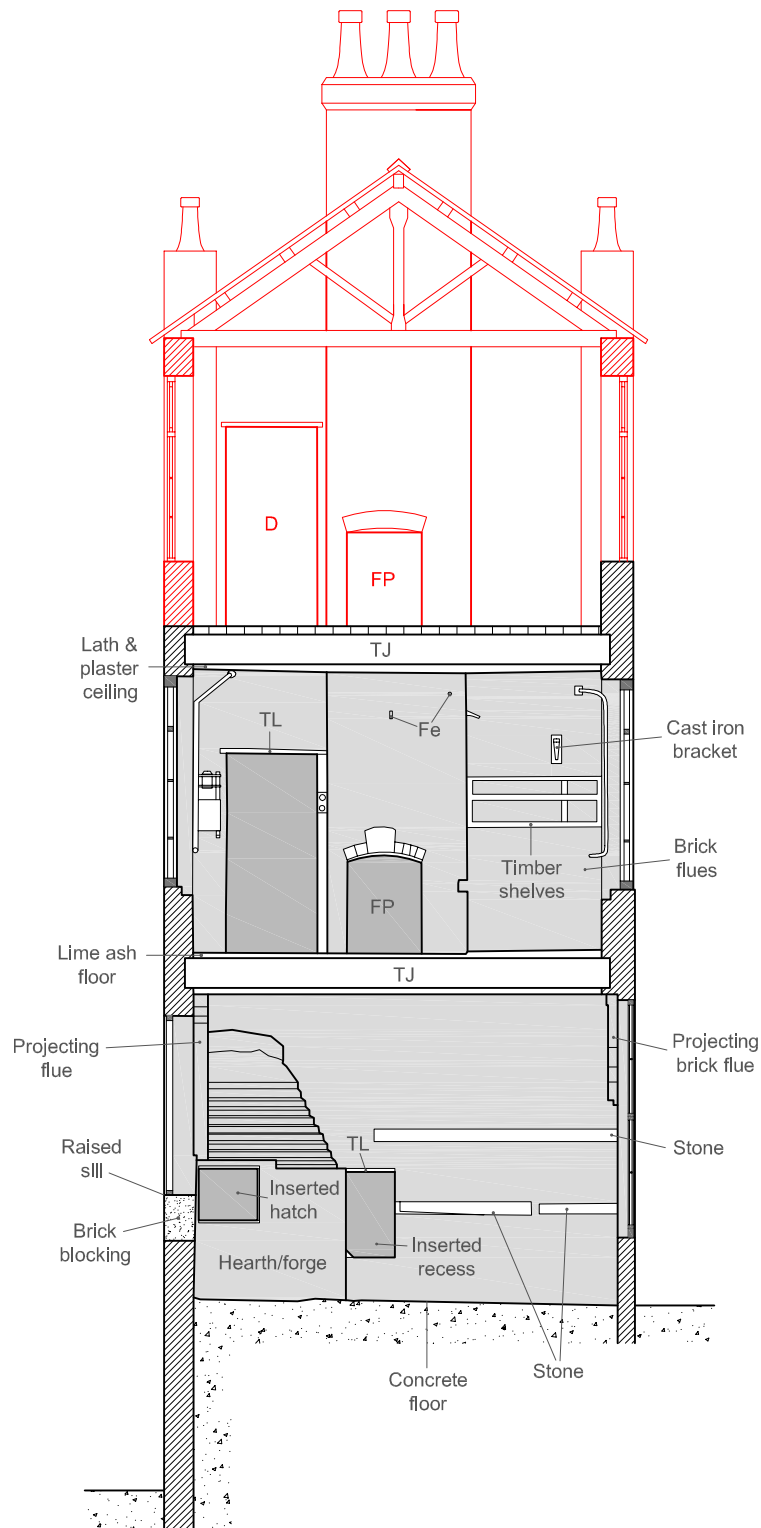
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| Project | Sevenstone, Sheffield   | Scale       | n/a        | Date             | 2009 |
| Site    | Trafalgar Works   | NGR         | SK 349 871 | Drawn            | CB   |
| Title   | Section 4 & Elevation 18. Longitudinal Section through South Range (East End) | Project No. | 899e       | Illustration No. | 26   |



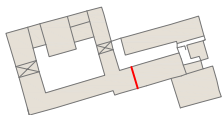
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- W Window
- D Door
- RSJ Rolled Steel Joist
- TL Timber Lintel
- BW Blocked Window
- BD Blocked Door
- IW Inserted Window
- ID Inserted Door

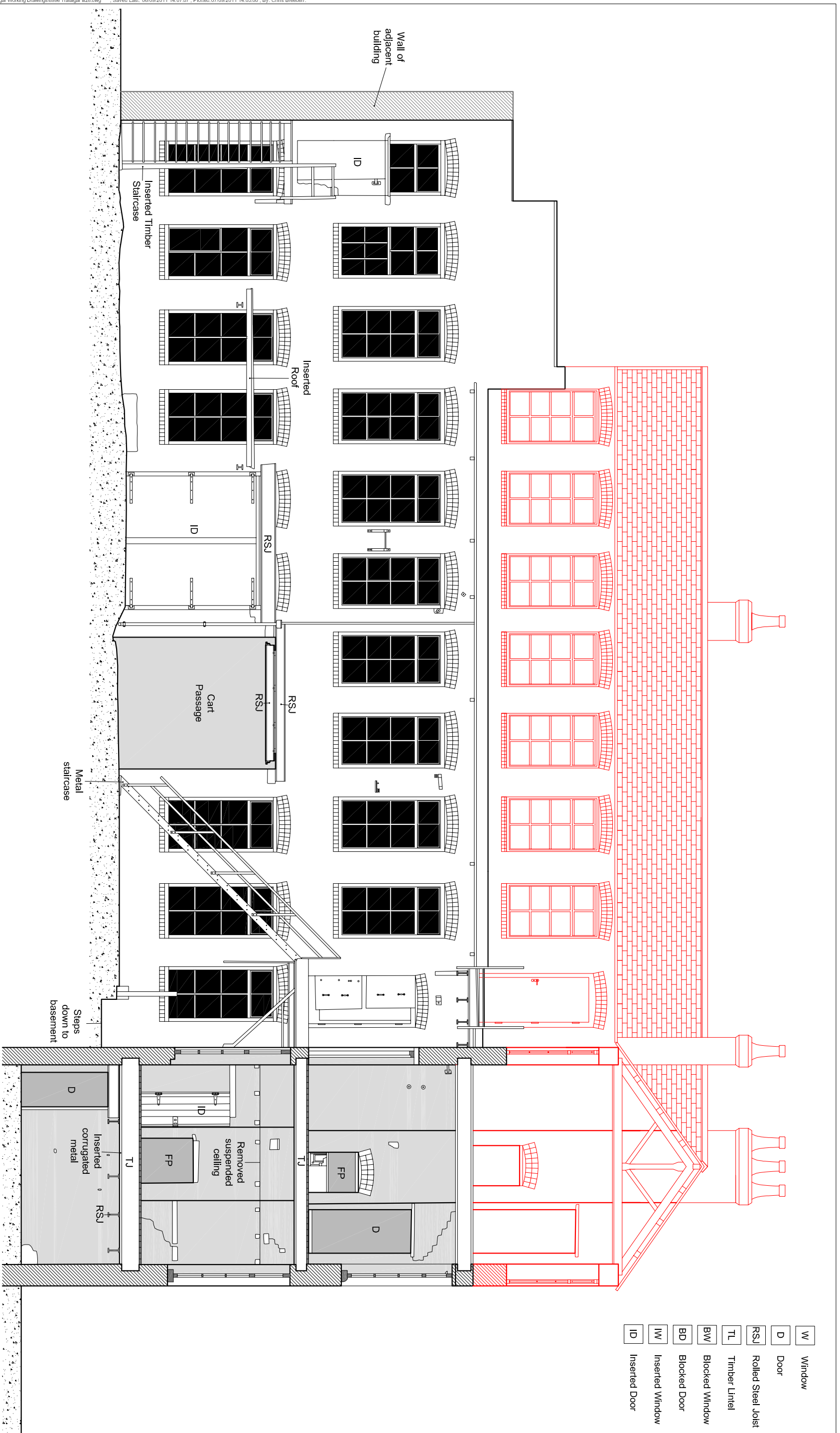


Reconstruction



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|---------|---|-------------|-------------|------------------|-----------|
| Project | <b>Sevenstone, Sheffield</b>                              | Scale       | n/a         | Date             | July 2009 |
| Site    | <b>Trafalgar Works</b>                                    | NGR         | SK 349 871  | Drawn            | CB        |
| Title   | <b>Section 5 - Transverse Section through South Range</b> | Project No. | <b>899e</b> | Illustration No. | <b>27</b> |



- W Window
- D Door
- RSJ Rolled Steel Joist
- TL Timber Lintel
- BW Blocked Window
- BD Blocked Door
- IW Inserted Window
- ID Inserted Door

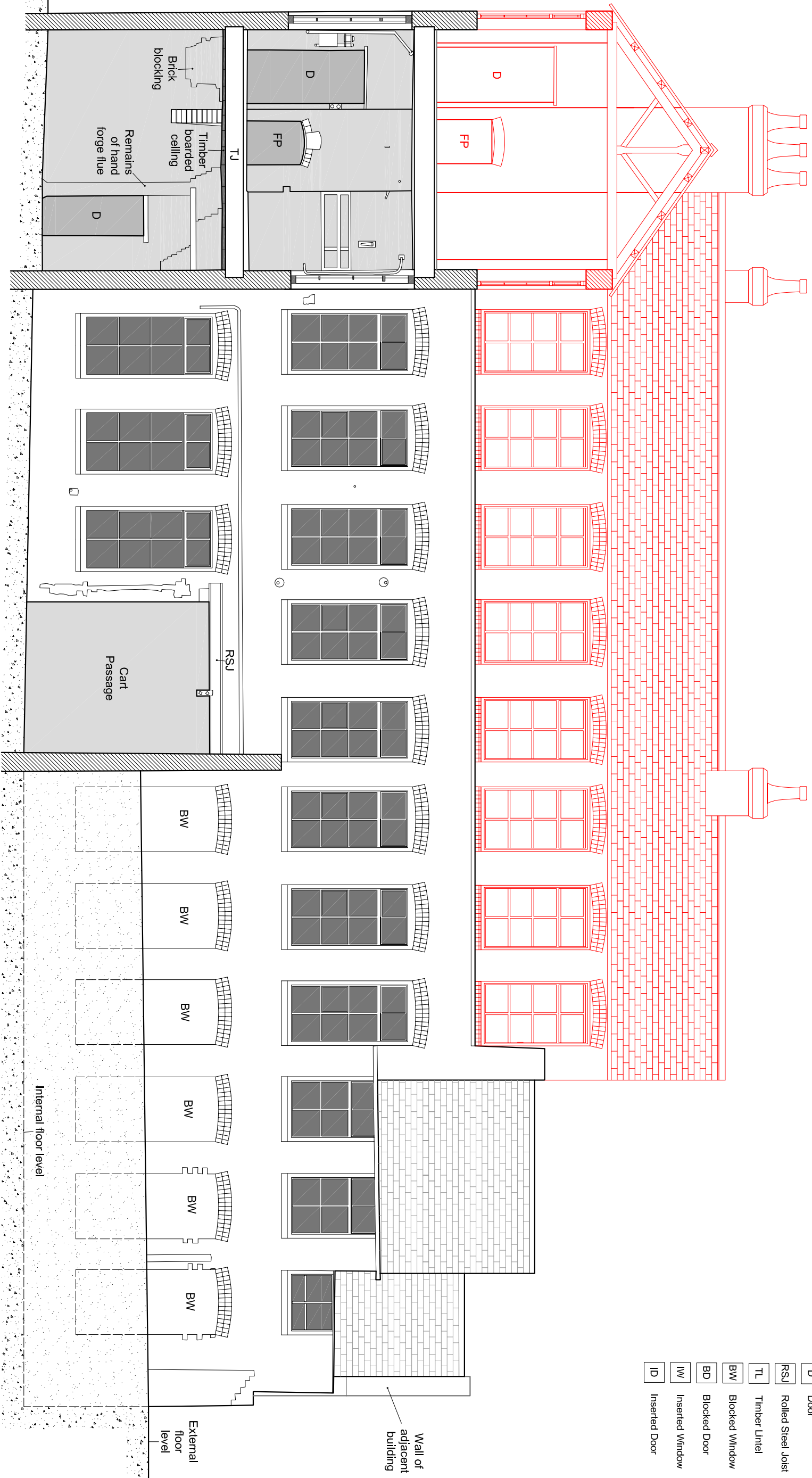
Reconstruction

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|---------|--|-------------|------------|------------------|------|
| Project | Sevenstone, Sheffield                      | Scale       | n/a        | Date             | 2009 |
| Site    | Trafalgar Works                            | NGR         | SK 349 871 | Drawn            | CB   |
| Title   | Elevation 8 - West Elevation of East Range | Project No. | 899e       | Illustration No. | 28   |



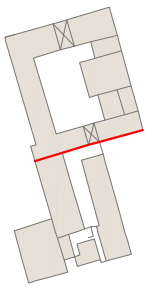
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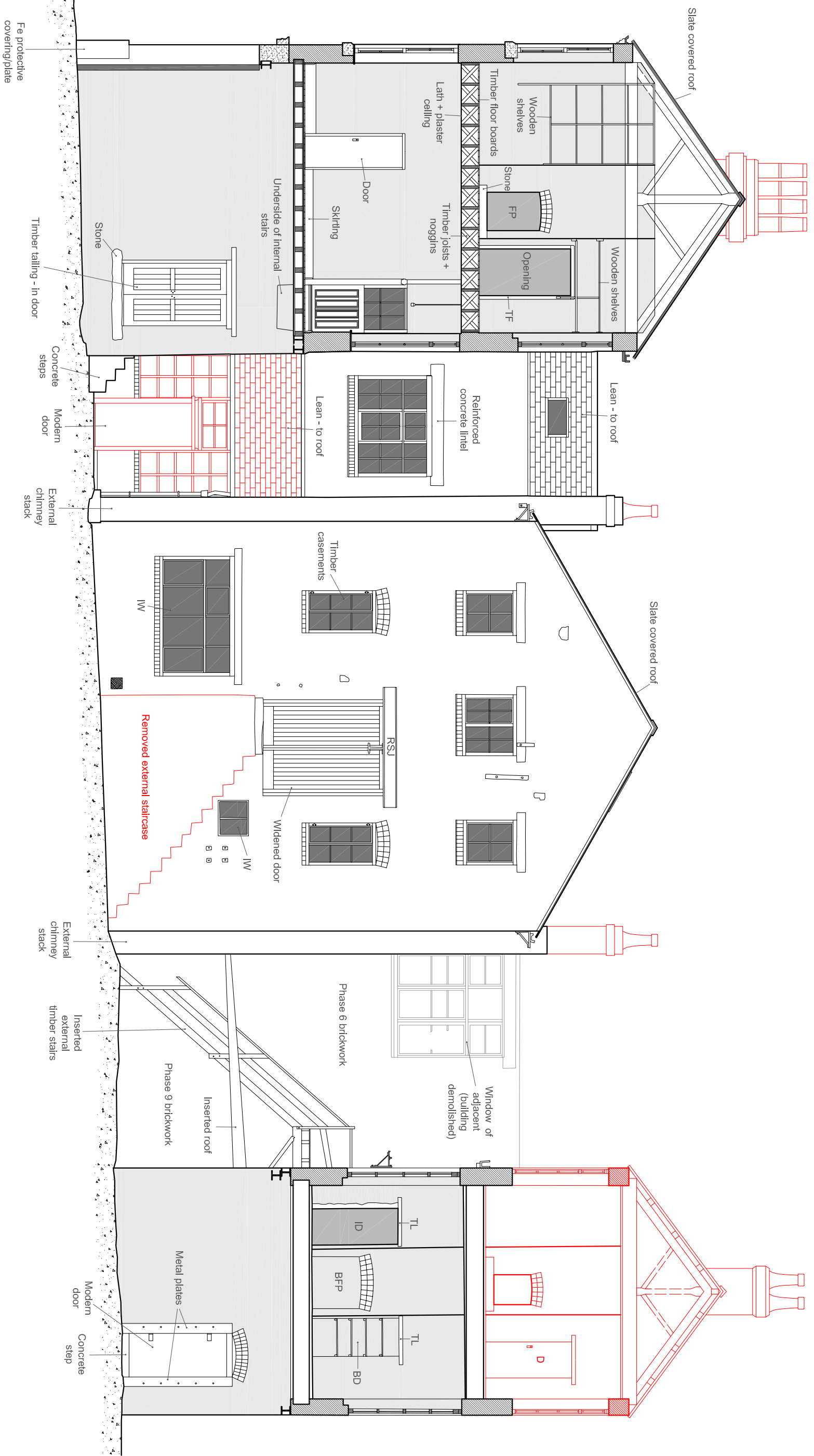


- W Window
- D Door
- RSJ Rolled Steel Joist
- TL Timber Lintel
- BW Blocked Window
- BD Blocked Door
- IW Inserted Window
- ID Inserted Door


Reconstruction

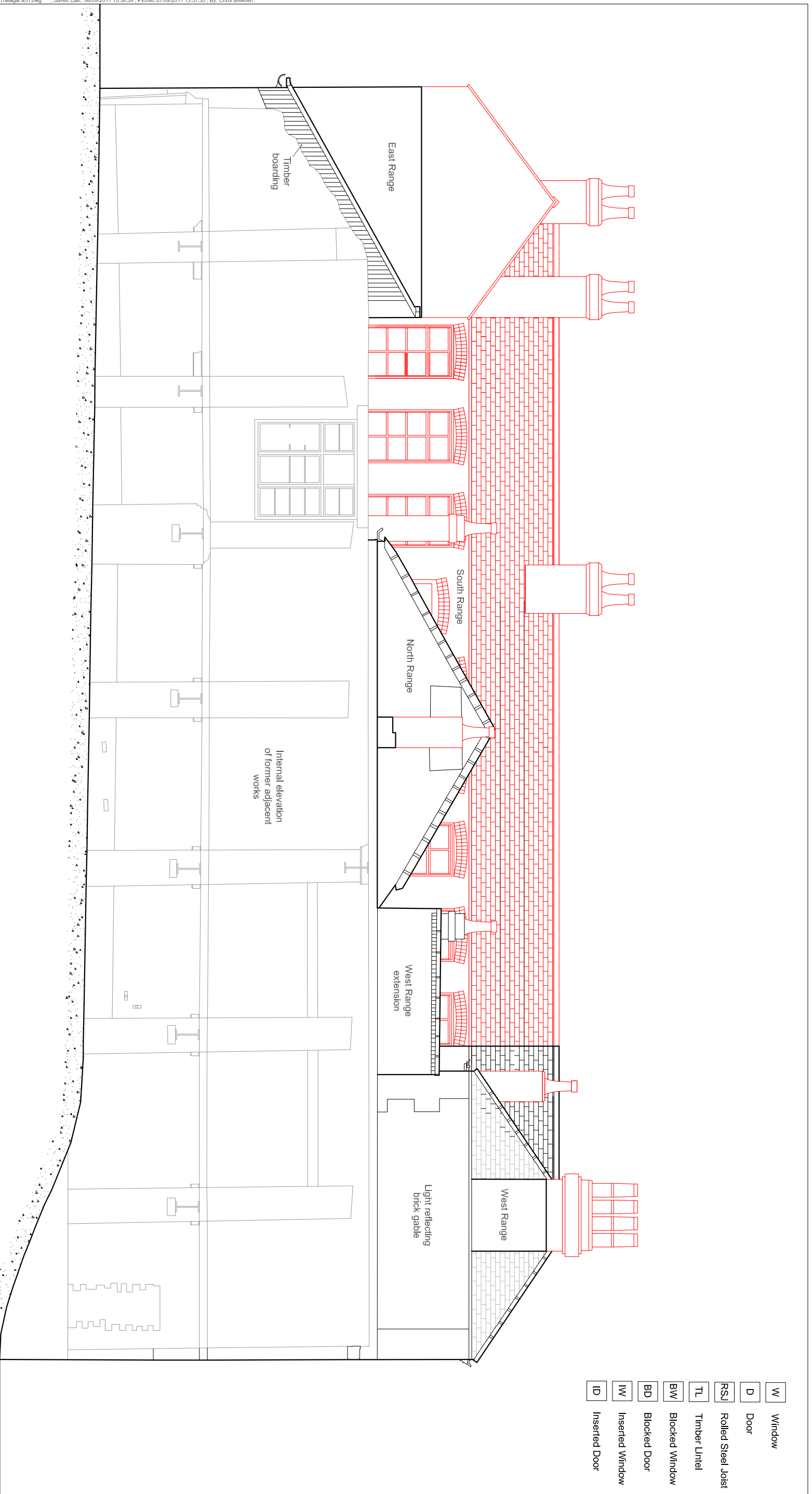


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| Project | Sevenstone, Sheffield                      | Scale       | n/a        | Date             | May 2009 |
| Site    | Trafalgar Works                            | NGR         | SK 349 871 | Drawn            | CB       |
| Title   | Elevation 9 - East Elevation of East Range | Project No. | 899e       | Illustration No. | 29       |



Reconstruction

|  |  |             |            |                  |           |
|--|--|-------------|------------|------------------|-----------|
|  <p>Useful information:<br/>                 Unit 10, Riverside Block,<br/>                 Sheaf Park Business Park,<br/>                 Prospect Road, Sheffield, S2 3EN<br/>                 www.arcusgroup.co.uk<br/>                 Tel: 0114 225106<br/>                 Fax: 0114 224346</p> |  |             |            |                  |           |
| Project  | Sevenstone, Sheffield                        | Scale       | 1:80 @ A3  | Date             | July 2009 |
| Site   | Trafalgar Works                              | NGR         | SK 349 871 | Drawn            | CB        |
| Title  | Elevation 4 - South Elevation of North Range | Project No. | 899e       | Illustration No. | 30        |

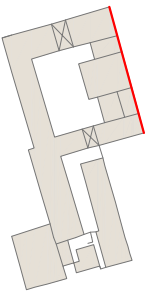


- W Window
- D Door
- RSJ Rolled Steel Joist
- TL Timber Lintel
- BW Blocked Window
- BD Blocked Door
- IW Inserted Window
- ID Inserted Door

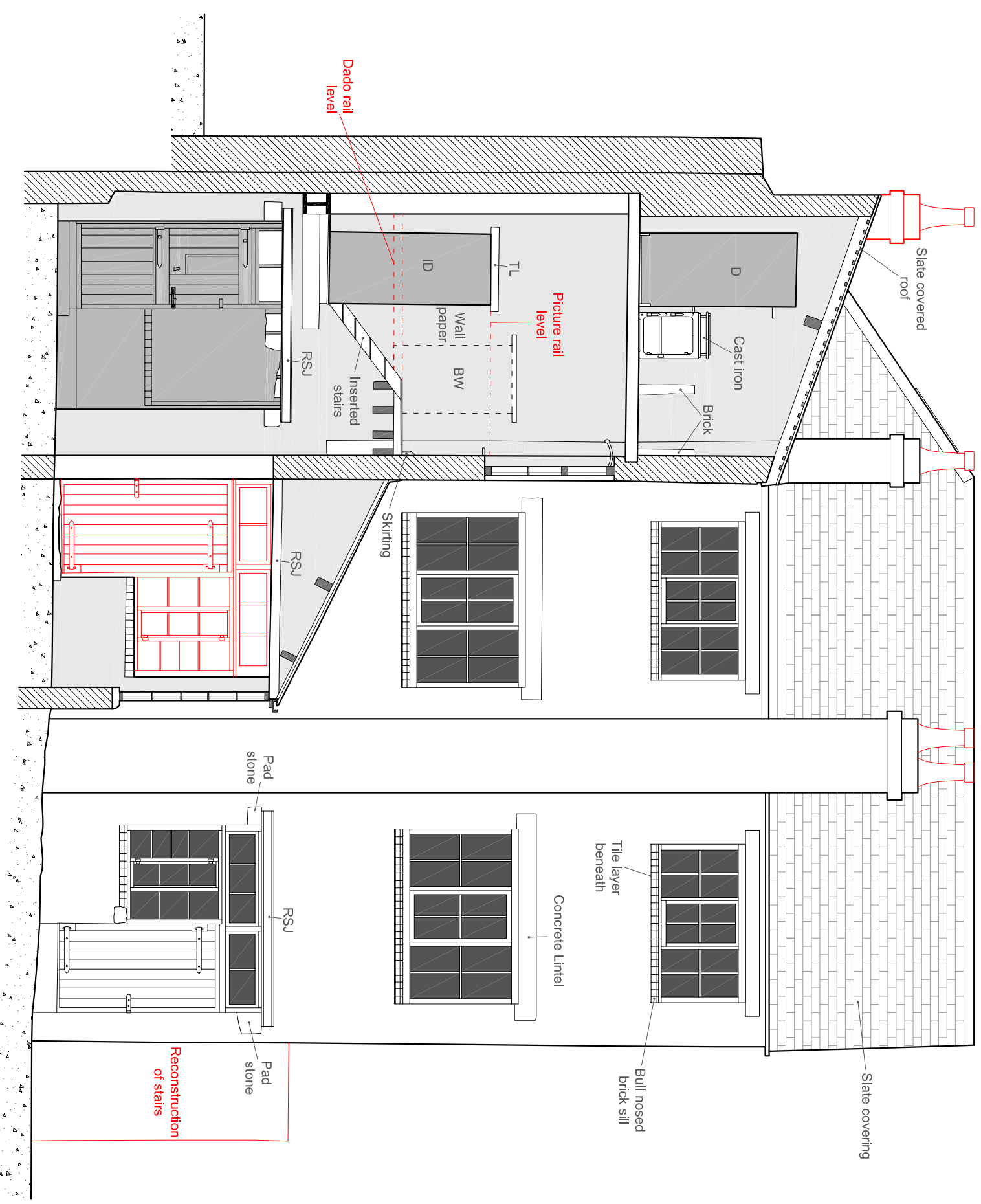
Internal elevation  
of former adjacent  
works

Reconstruction

|                |   |                    |             |                         |           |
|----------------|---|--------------------|-------------|-------------------------|-----------|
| <b>Project</b> | <b>Sevenstone, Sheffield</b>  | <b>Scale</b>       | n/a         | <b>Date</b>             | 2009      |
| <b>Site</b>    | <b>Trafalgar Works</b>  | NGR                | SK 349 871  | <b>Drawn</b>            | CB        |
| <b>Title</b>   | <b>Elevation 3 - North Elevation of West, North and East Ranges</b> | <b>Project No.</b> | <b>899e</b> | <b>Illustration No.</b> | <b>31</b> |



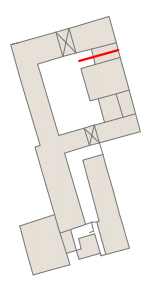
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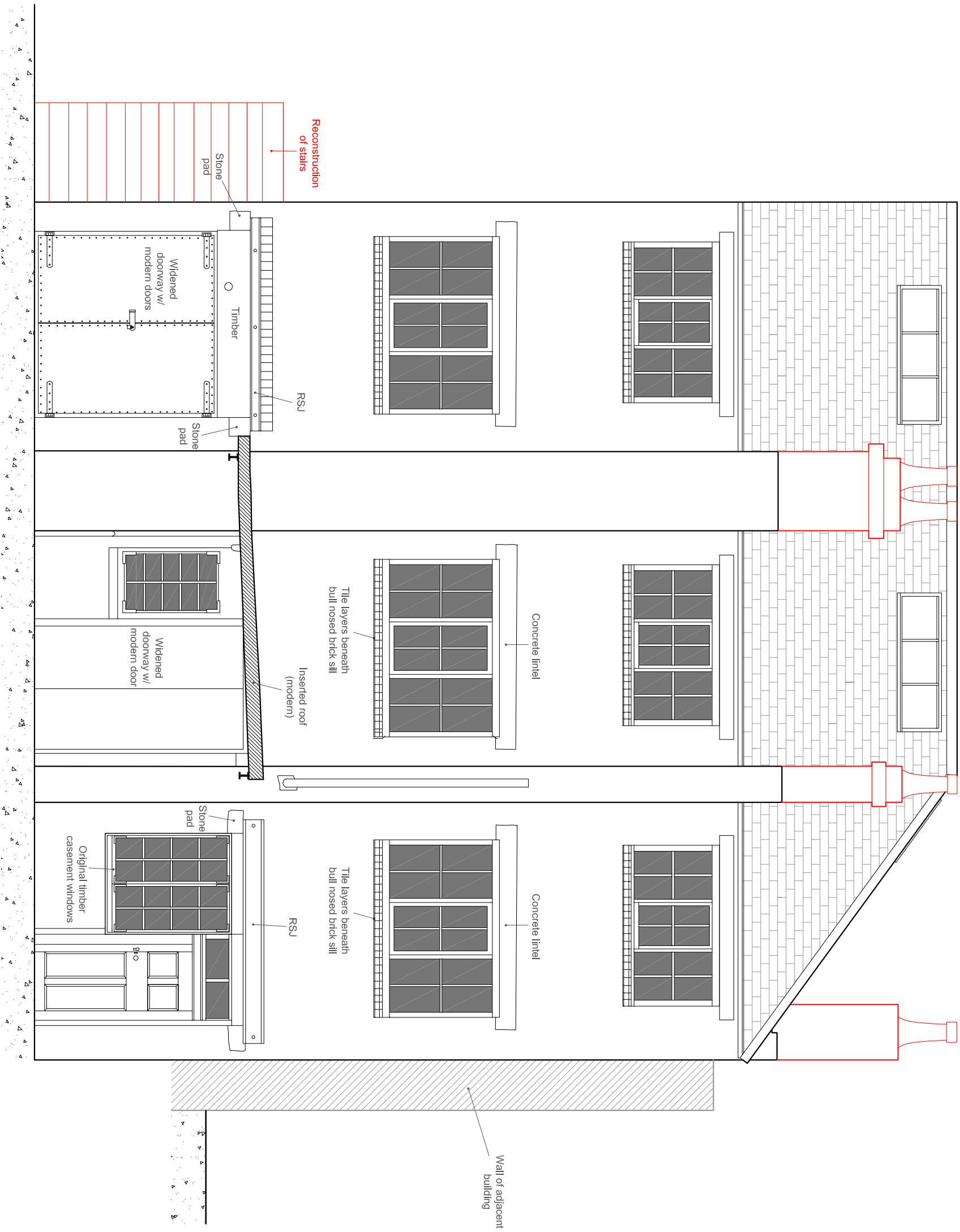
- W Window
- D Door
- RSJ Rolled Steel Joist
- TL Timber Lintel
- BW Blocked Window
- BD Blocked Door
- IW Inserted Window
- ID Inserted Door

Reconstruction

|         |   |             |            |                  |      |
|---------|---|-------------|------------|------------------|------|
| Project | Sevenstone, Sheffield                       | Scale       | n/a        | Date             | 2009 |
| Site    | Trafalgar Works                             | NGR         | SK 349 871 | Drawn            | CB   |
| Title   | Elevation 6 - West Elevation of North Range | Project No. | 899e       | Illustration No. | 32   |



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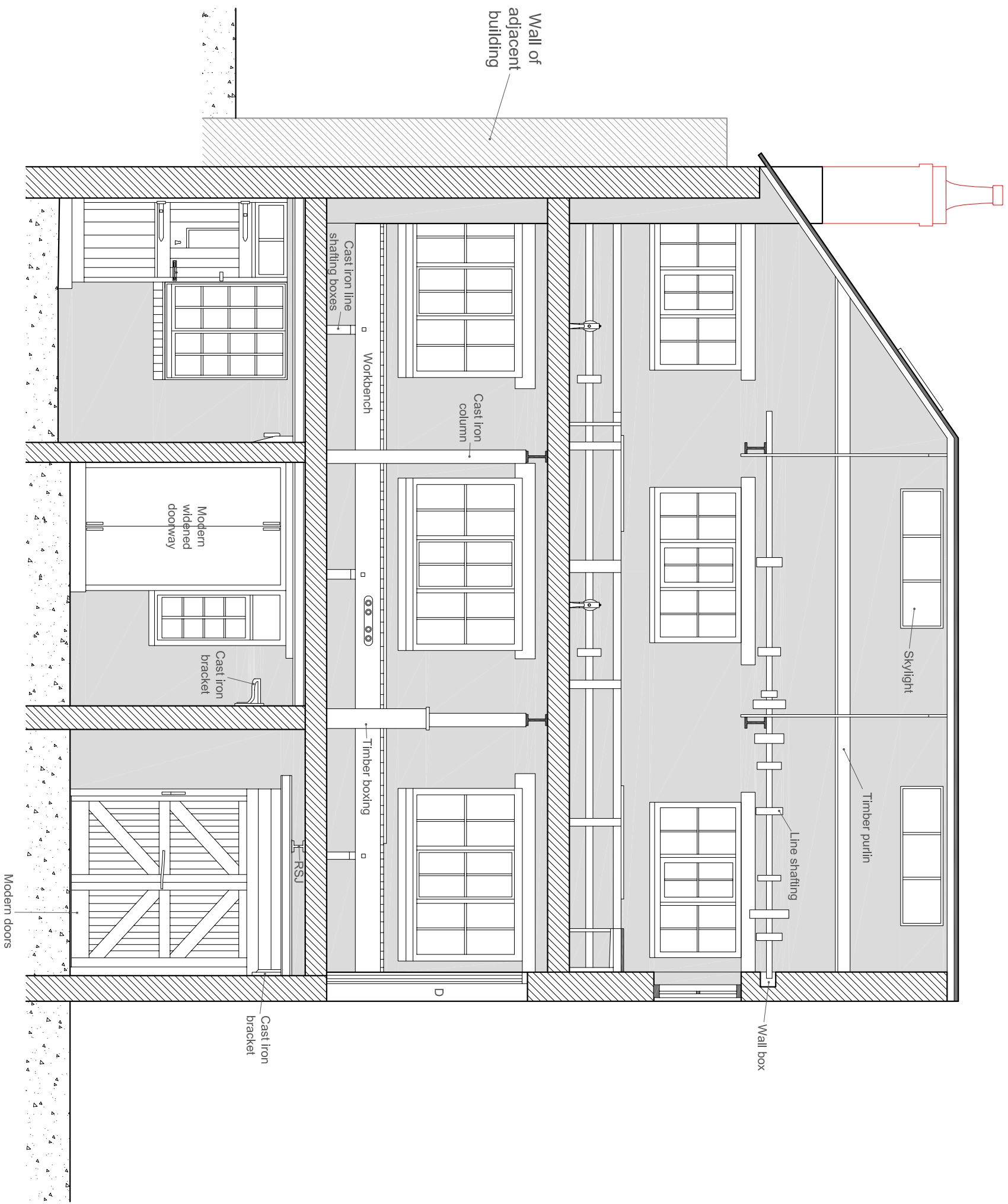


- W Window
- D Door
- RSJ Rolled Steel Joist
- TL Timber Lintel
- BW Blocked Window
- BD Blocked Door
- IW Inserted Window
- ID Inserted Door

Reconstruction

|         |   |  |             |            |                  |      |
|---------|---|--|-------------|------------|------------------|------|
| Project | Sevenstone, Sheffield                       |  | Scale       | n/a        | Date             | 2009 |
| Site    | Trafalgar Works                             |  | NGR         | SK 349 871 | Drawn            | CB   |
| Title   | Elevation 7 - East Elevation of North Range |  | Project No. | 899e       | Illustration No. | 33   |

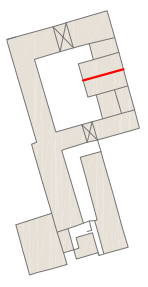
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- W Window
- D Door
- RSJ Rolled Steel Joist
- TL Timber Lintel
- BW Blocked Window
- BD Blocked Door
- IW Inserted Window
- ID Inserted Door

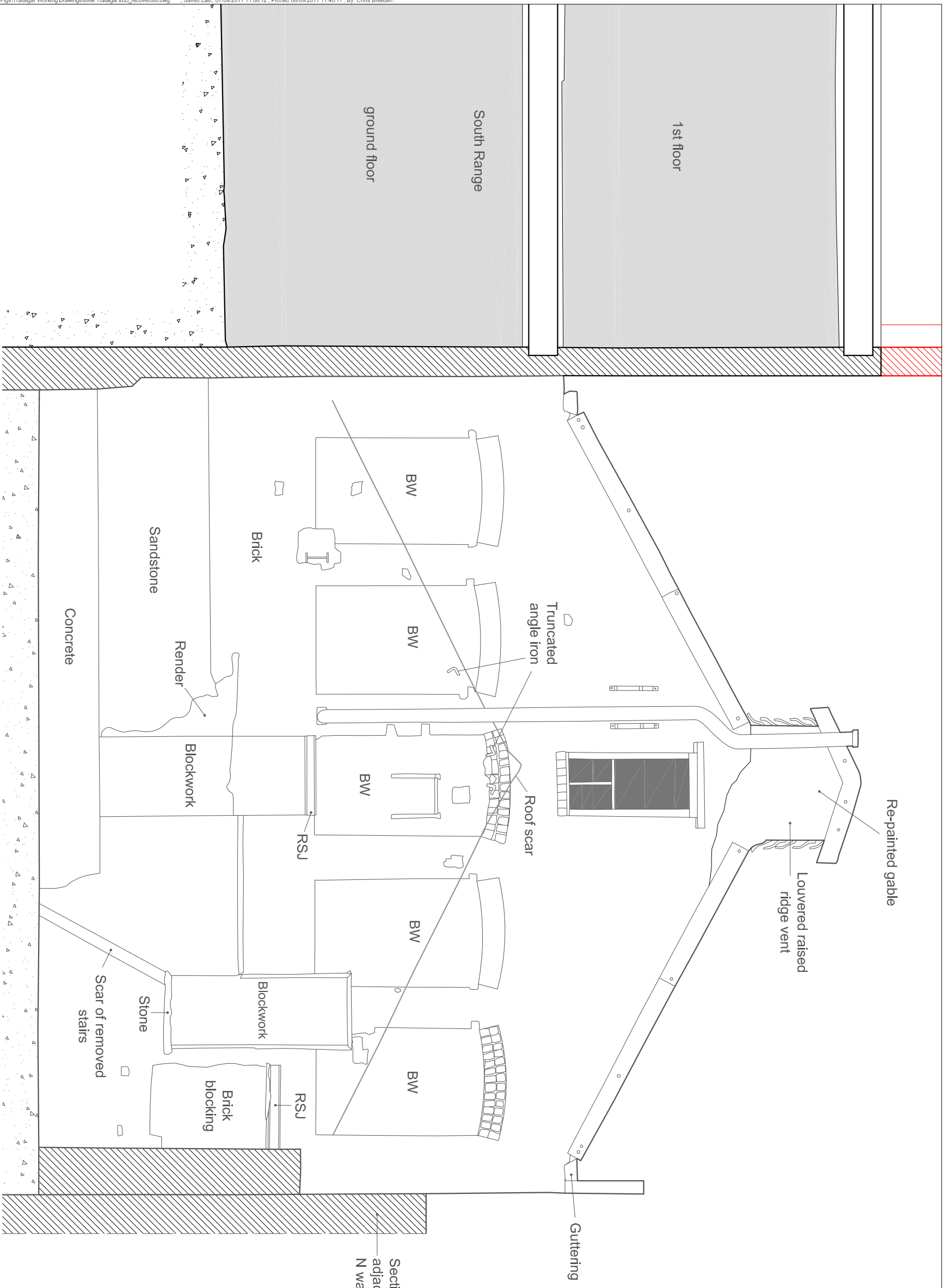
Reconstruction

|   |  |  |
|---|--|--|
| <p><b>Project</b><br/>Sevenstone, Sheffield</p> <p><b>Site</b><br/>Trafalgar Works</p> <p><b>Title</b><br/>Section 3 - Longitudinal Section through North Range</p> | <p><b>Scale</b><br/>n/a</p> <p><b>Project No.</b><br/>899e</p> | <p><b>Date</b><br/>2009</p> <p><b>Drawn</b><br/>CB</p> <p><b>Illustration No.</b><br/>34</p> |
|---|--|--|



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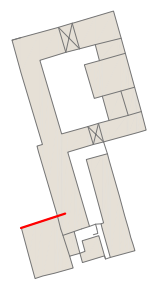




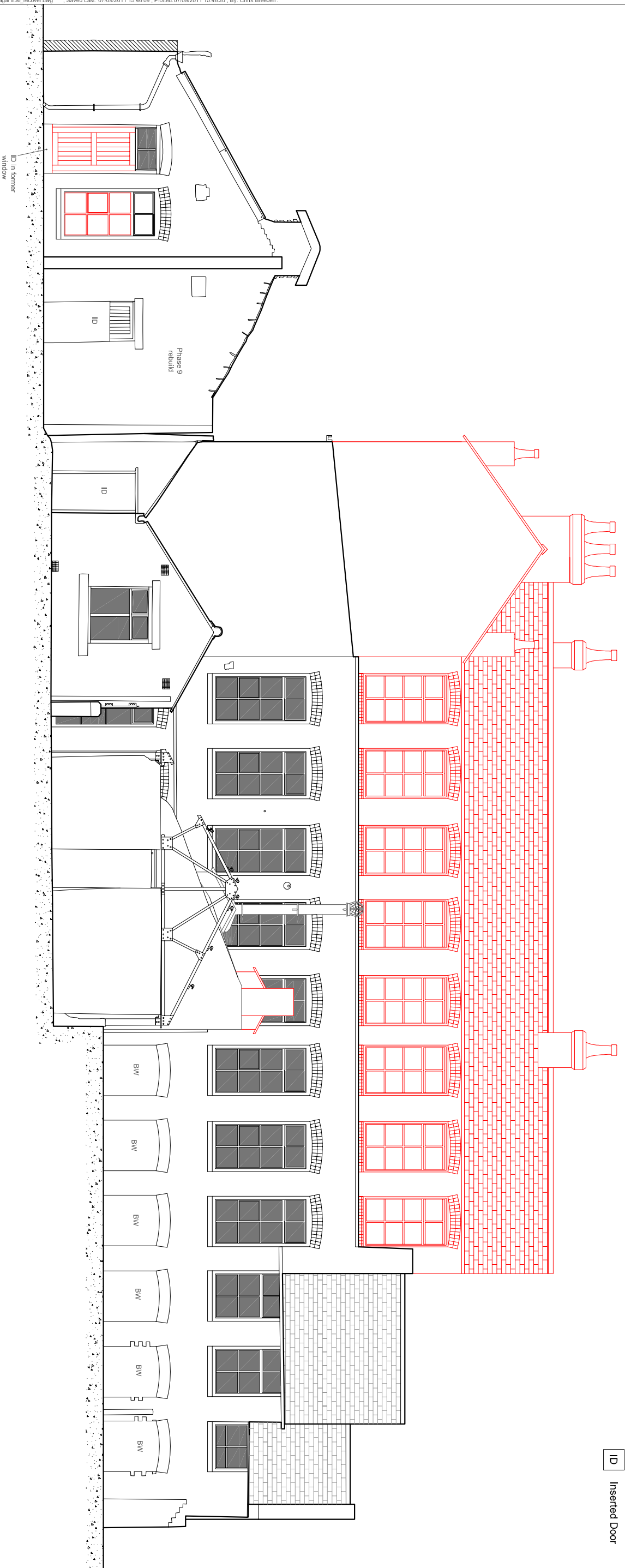
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- D Door
- RSJ Rolled Steel Joist
- TL Timber Lintel
- BW Blocked Window
- BD Blocked Door
- IW Inserted Window
- ID Inserted Door

Reconstruction

|  |  |   |
|--|--|---|
| <p><b>Project</b><br/>Sevenstone, Sheffield</p> <p><b>Site</b><br/>Trafalgar Works</p> <p><b>Title</b><br/>Elevation 12 - West Elevation of Machine Shop</p> | <p><b>Scale</b><br/>n/a</p> <p><b>Project No.</b><br/>899e</p> | <p><b>Date</b><br/>July 2009</p> <p><b>Drawn</b><br/>CB</p> <p><b>Illustration No.</b><br/>35</p> |
|--|--|---|



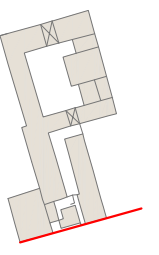
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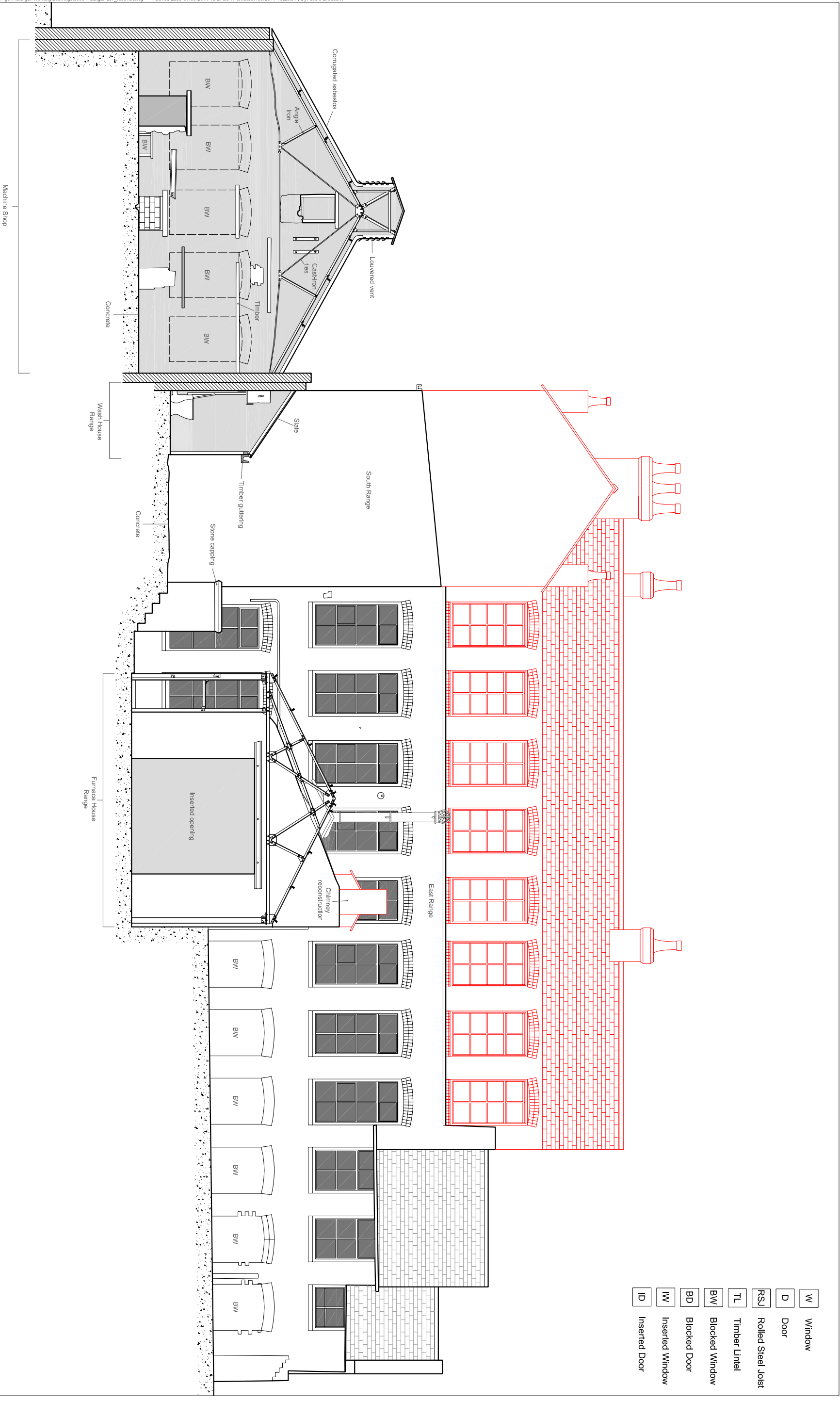
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- D Door
- RSJ Rolled Steel Joist
- TL Timber Lintel
- BW Blocked Window
- BD Blocked Door
- IW Inserted Window
- ID Inserted Door

Reconstruction

|         |   |             |            |                  |      |
|---------|---|-------------|------------|------------------|------|
| Project | Sevenstone, Sheffield   | Scale       | n/a        | Date             | 2009 |
| Site    | Trafalgar Works   | NGR         | SK 349 871 | Drawn            | CB   |
| Title   | Elevation 17 - East Elevation of Machine Shop, Wash House & East End of Furnace House Range | Project No. | 899e       | Illustration No. | 36   |



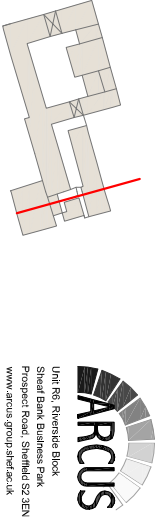
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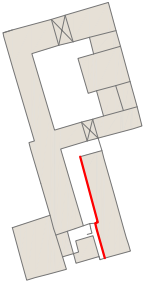
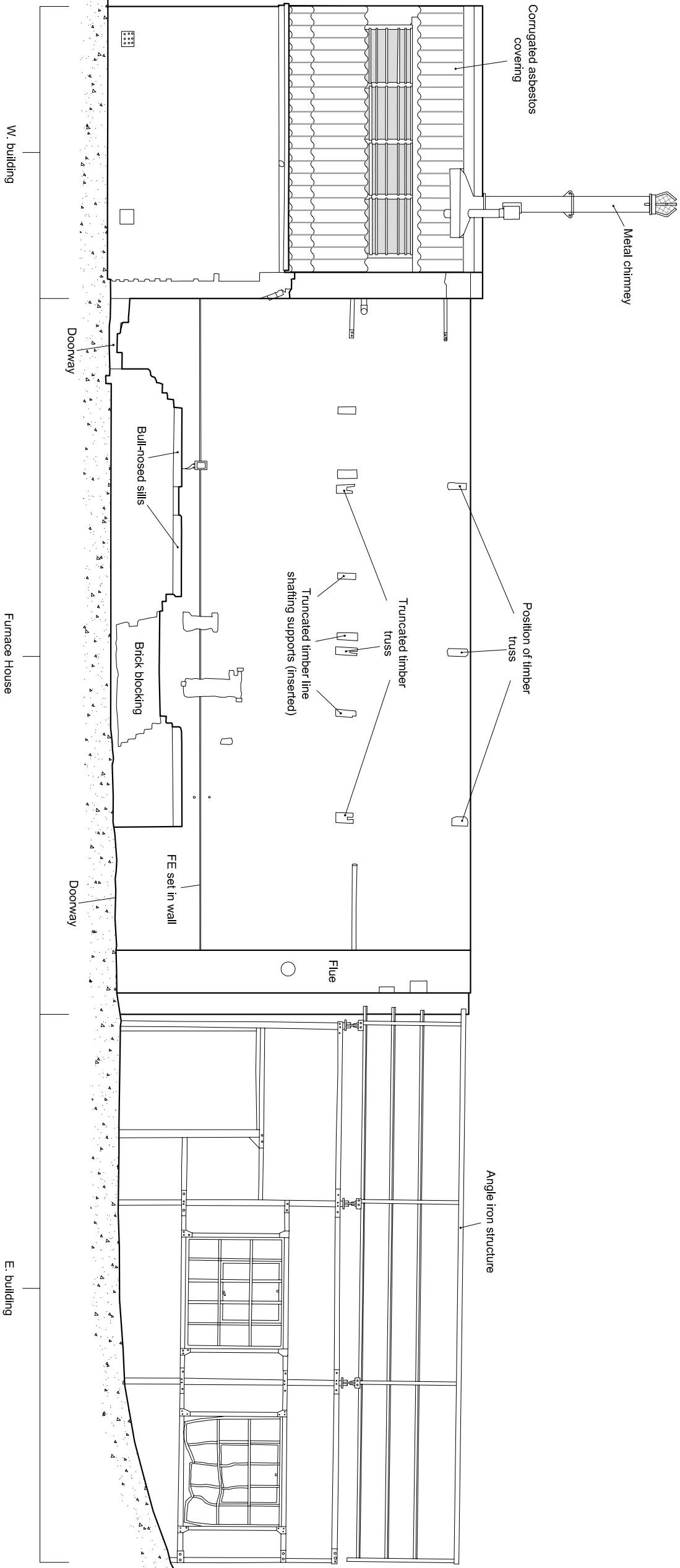


- W Window
- D Door
- RSJ Rolled Steel Joist
- TL Timber Lintel
- BW Blocked Window
- BD Blocked Door
- IW Inserted Window
- ID Inserted Door

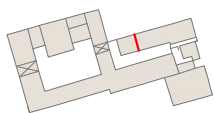
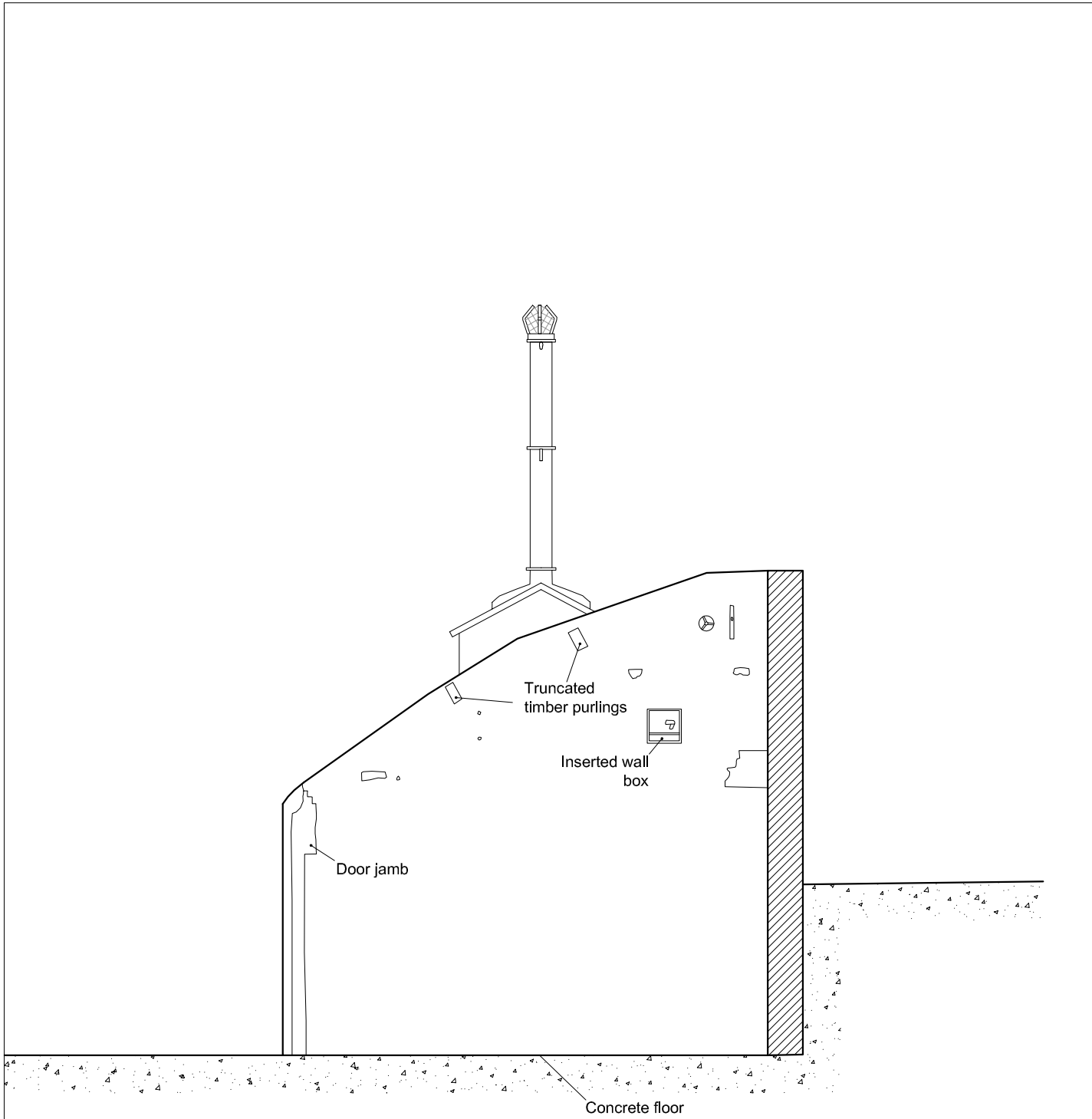
Reconstruction

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|---|------------|------------------|
| Project   | Scale      | Date             |
| <b>Sevenstone, Sheffield</b>  | n/a        | 2009             |
| Site  | NGR        | Drawn            |
| <b>Trafalgar Works</b>  | SK 349 871 | CB               |
| Title Section 1 - Transverse Section through Machine Shop, Wash House & East End of Furnace House Range |            | Illustration No. |
| Project No. <b>899e</b>   |            | <b>37</b>        |



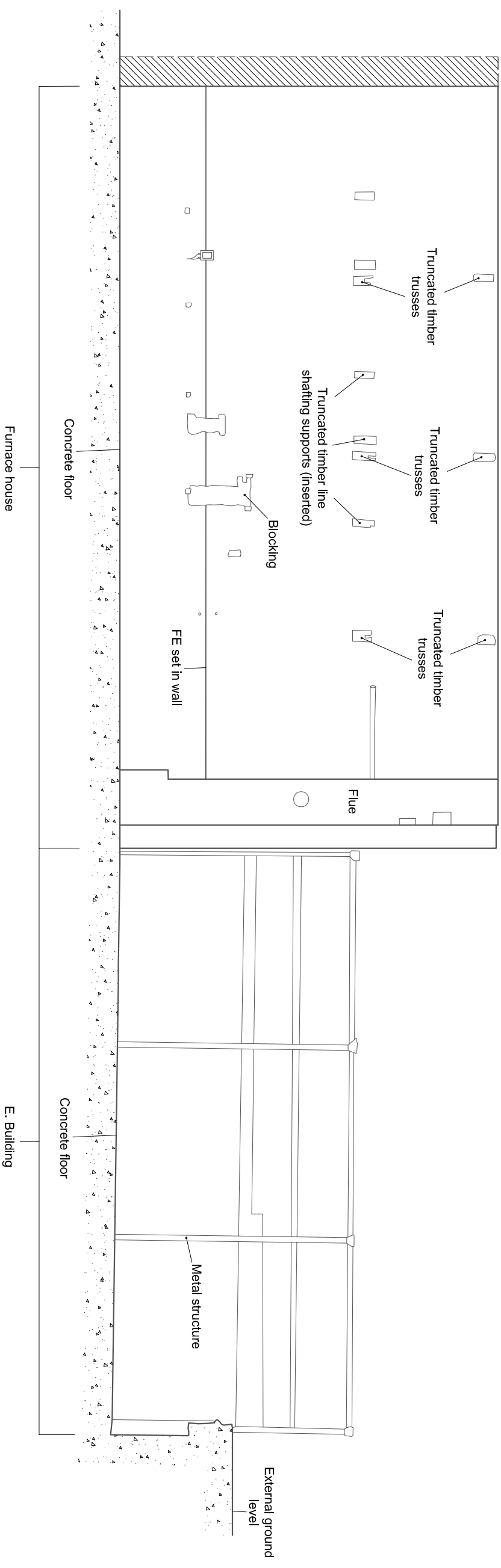


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| Site    | Trafalgar Works                                       | NGR         | SK 349 871 | Drawn            | CB   |
| Title   | Elevation 13 - South Elevation of Furnace House Range | Project No. | 899e       | Illustration No. | 38   |

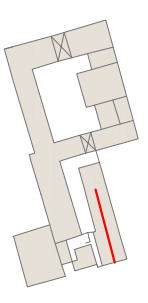


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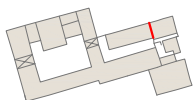
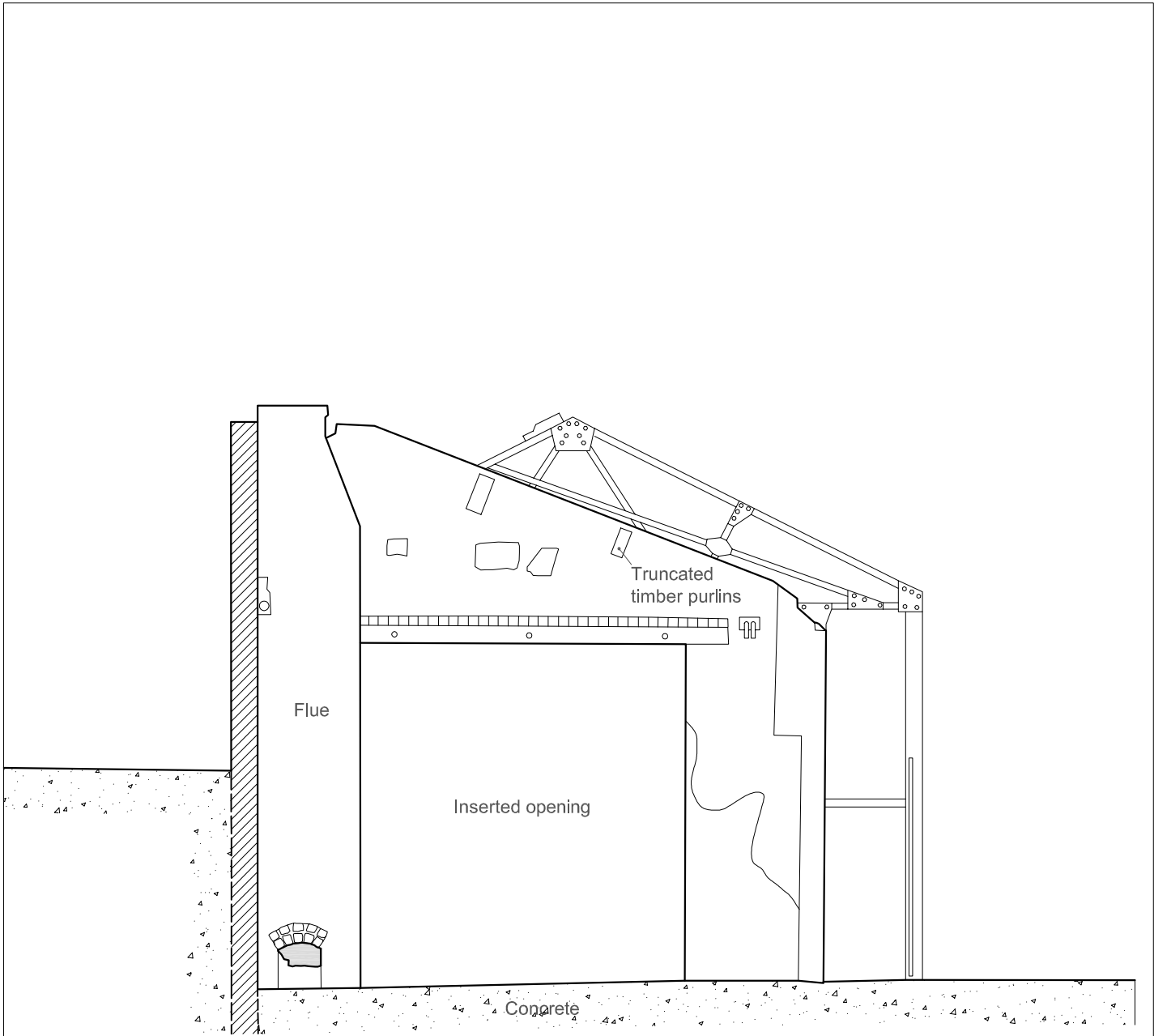
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| Site    | <b>Trafalgar Works</b>   | NGR         | SK 349 871  | Drawn            | CB        |
| Title   | <b>Elevation 14 - Internal Elevation of West Wall of Furnace House</b> | Project No. | <b>899e</b> | Illustration No. | <b>39</b> |



|         |  |             |            |                  |      |
|---------|--|-------------|------------|------------------|------|
| Project | Sevenstone, Sheffield  | Scale       | n/a        | Date             | 2009 |
| Site    | Trafalgar Works  | NGR         | SK 349 871 | Drawn            | CB   |
| Title   | Elevation 15 - Internal Elevation of North Wall of Furnace House | Project No. | 8999e      | Illustration No. | 40   |

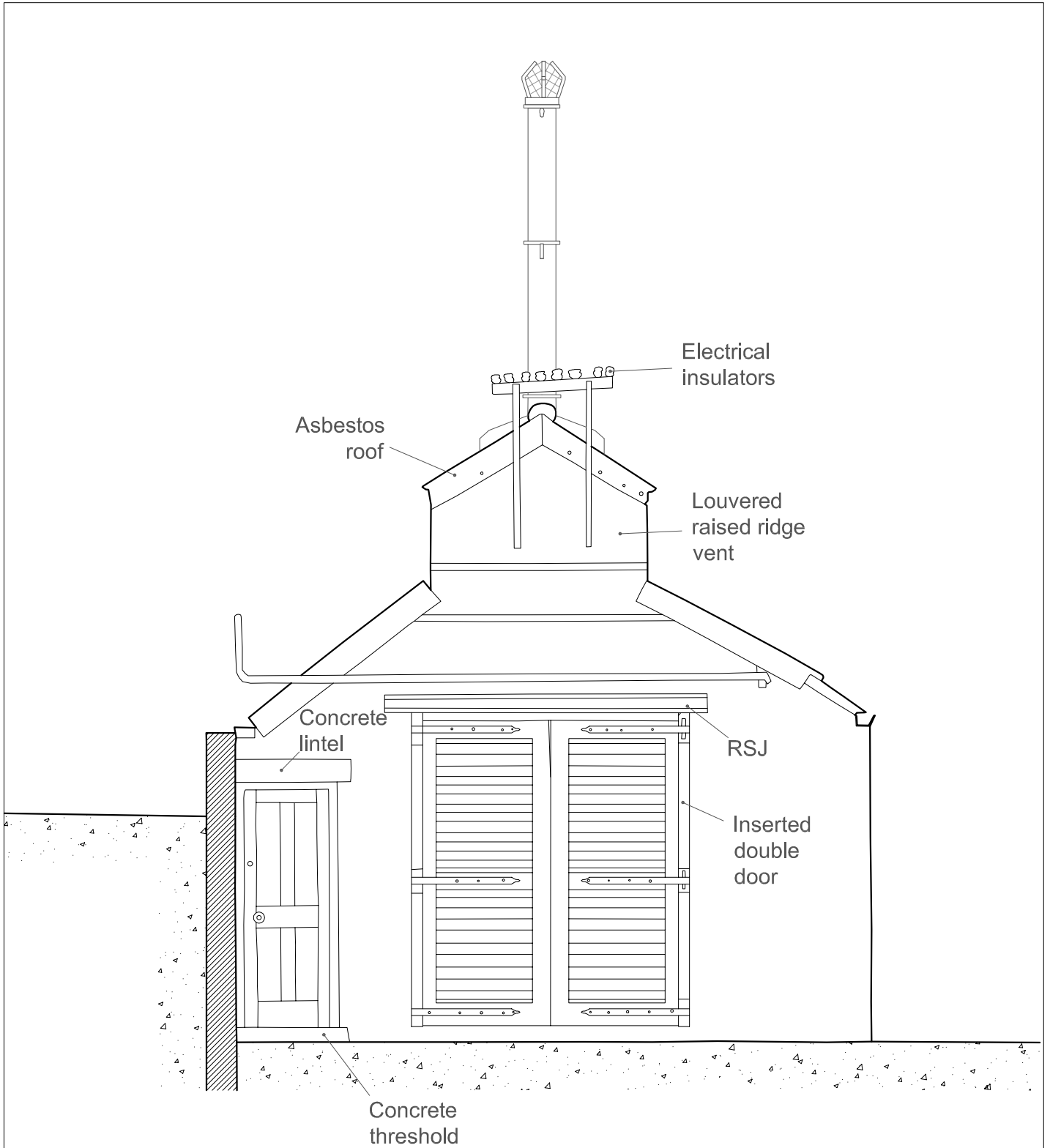



  
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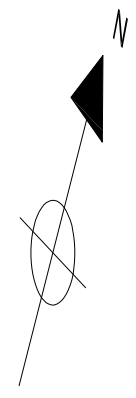
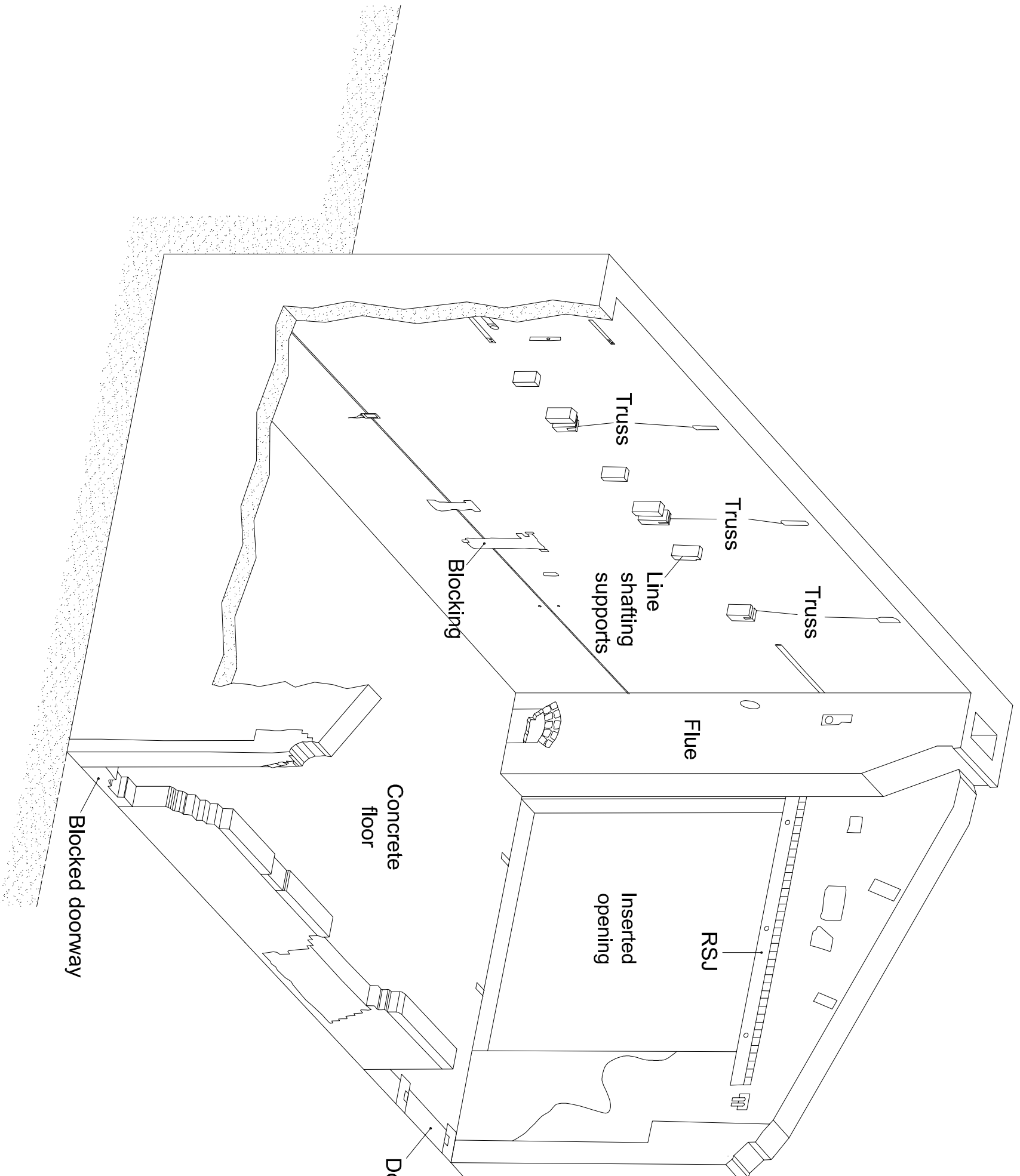

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|---------|--|-------------|-------------|------------------|-----------|
| Project | <b>Sevenstone, Sheffield</b>   | Scale       | n/a         | Date             | 2009      |
| Site    | <b>Trafalgar Works</b>   | NGR         | SK 349 871  | Drawn            | CB        |
| Title   | <b>Elevation 16 - Internal Elevation of East Wall of Furnace House</b> | Project No. | <b>899e</b> | Illustration No. | <b>41</b> |

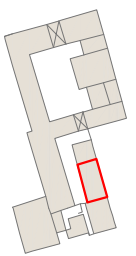


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|---|---------|---|-------------|-------------|------------------|-----------|
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|   | Site    | <b>Trafalgar Works</b>                                      | NGR         | SK 349 871  | Drawn            | CB        |
|   | Title   | <b>Elevation 10 - West Elevation of Furnace House Range</b> | Project No. | <b>899e</b> | Illustration No. | <b>42</b> |

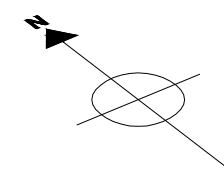
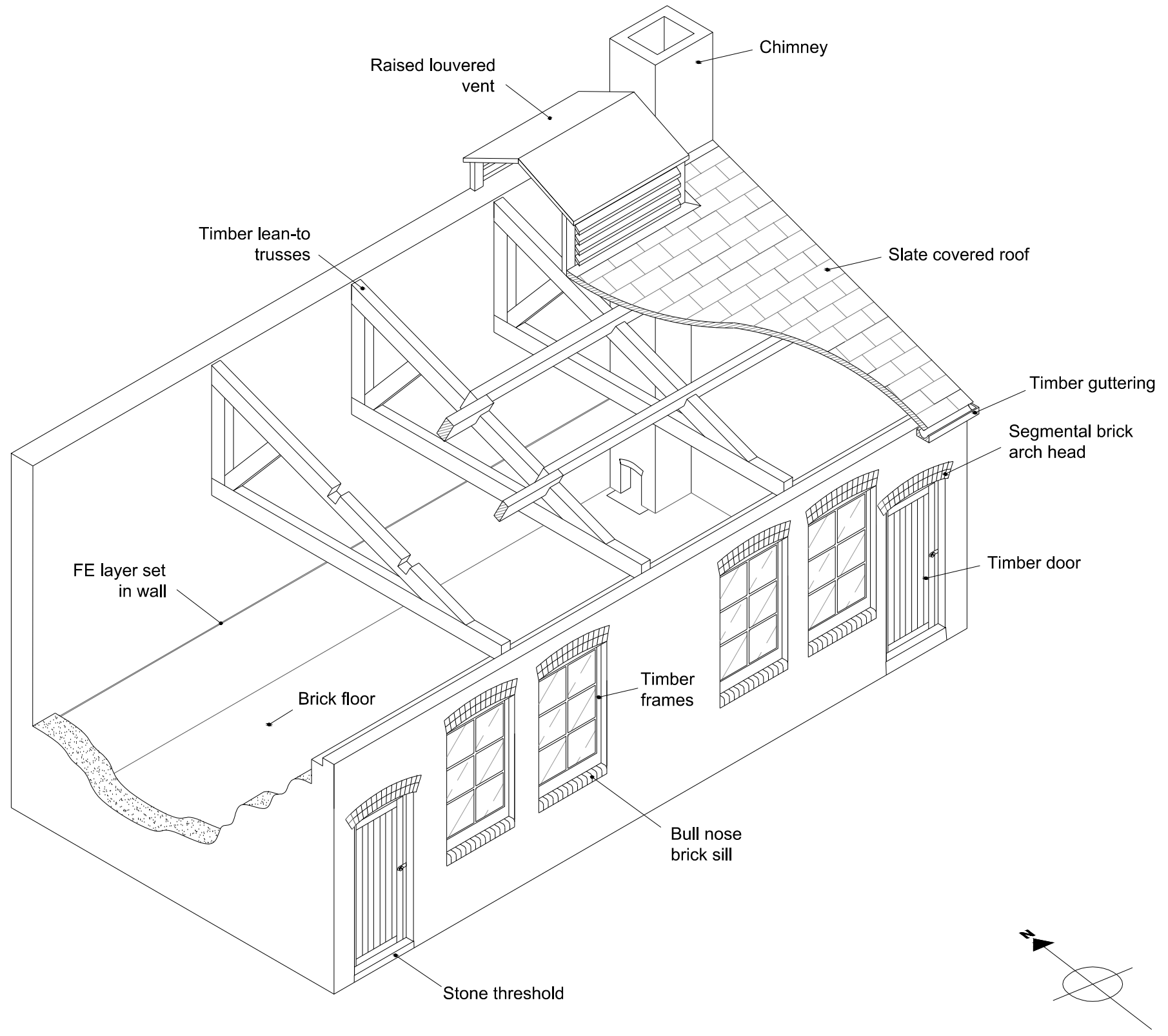


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|---|-------------|------------------|
| Sevenstone, Sheffield                   | n/a         | July 2009        |
| Site                                    | NGR         | Drawn            |
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| Title                                   | Project No. | Illustration No. |
| North-east Facing View of Furnace House | 899e        | 43               |

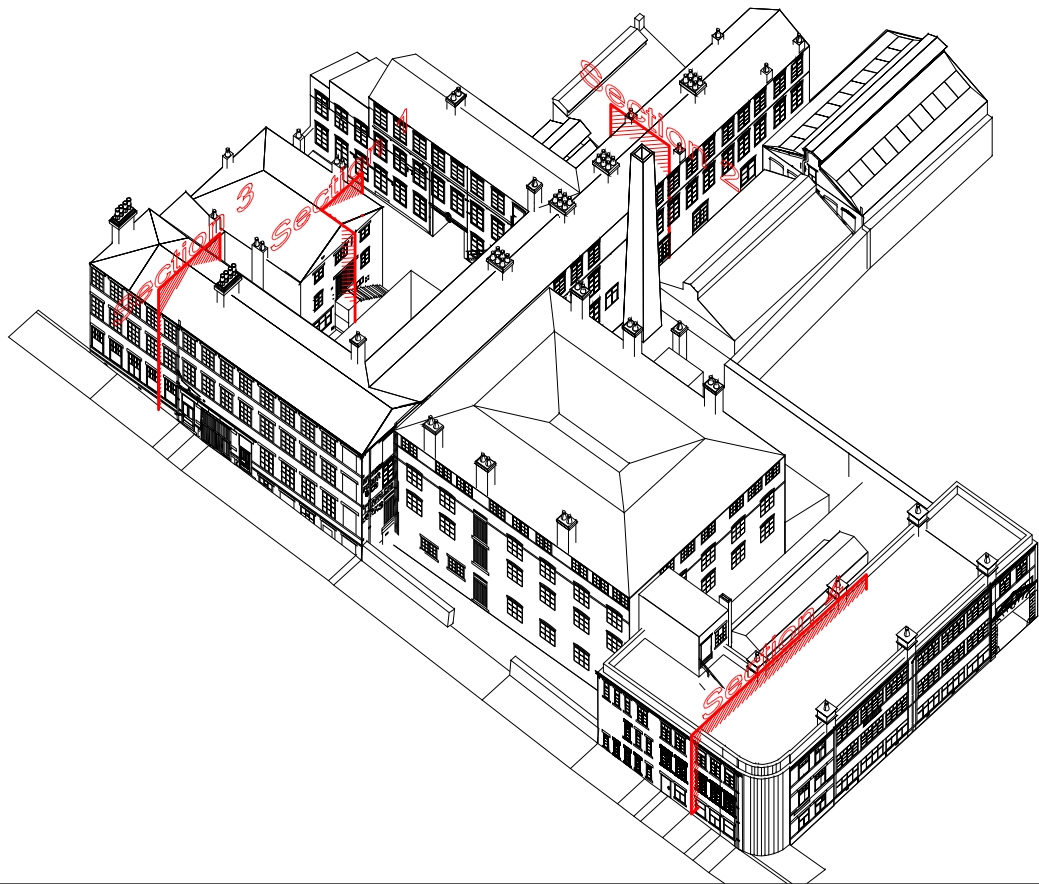


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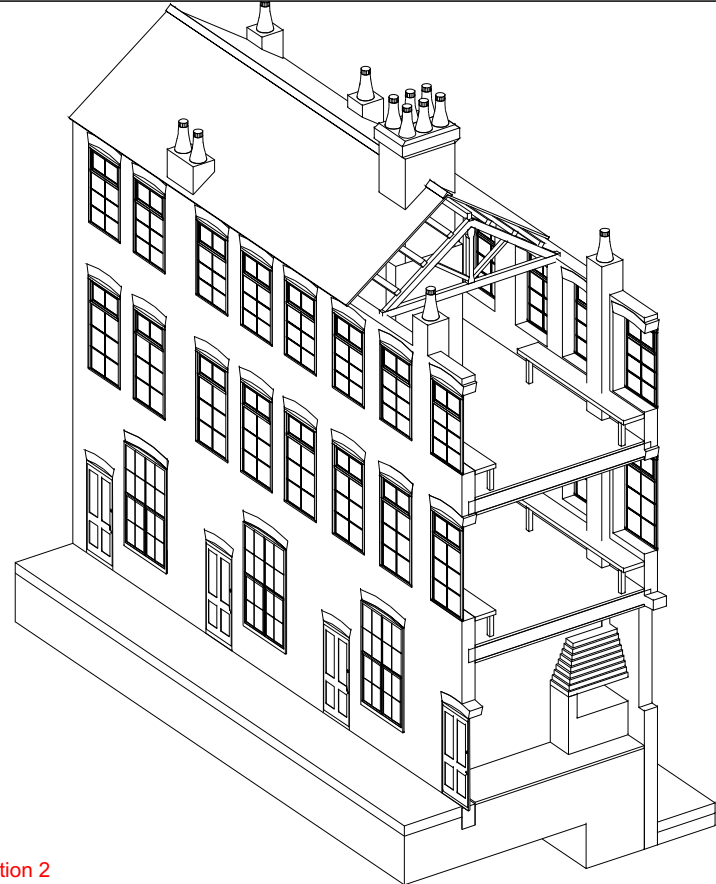
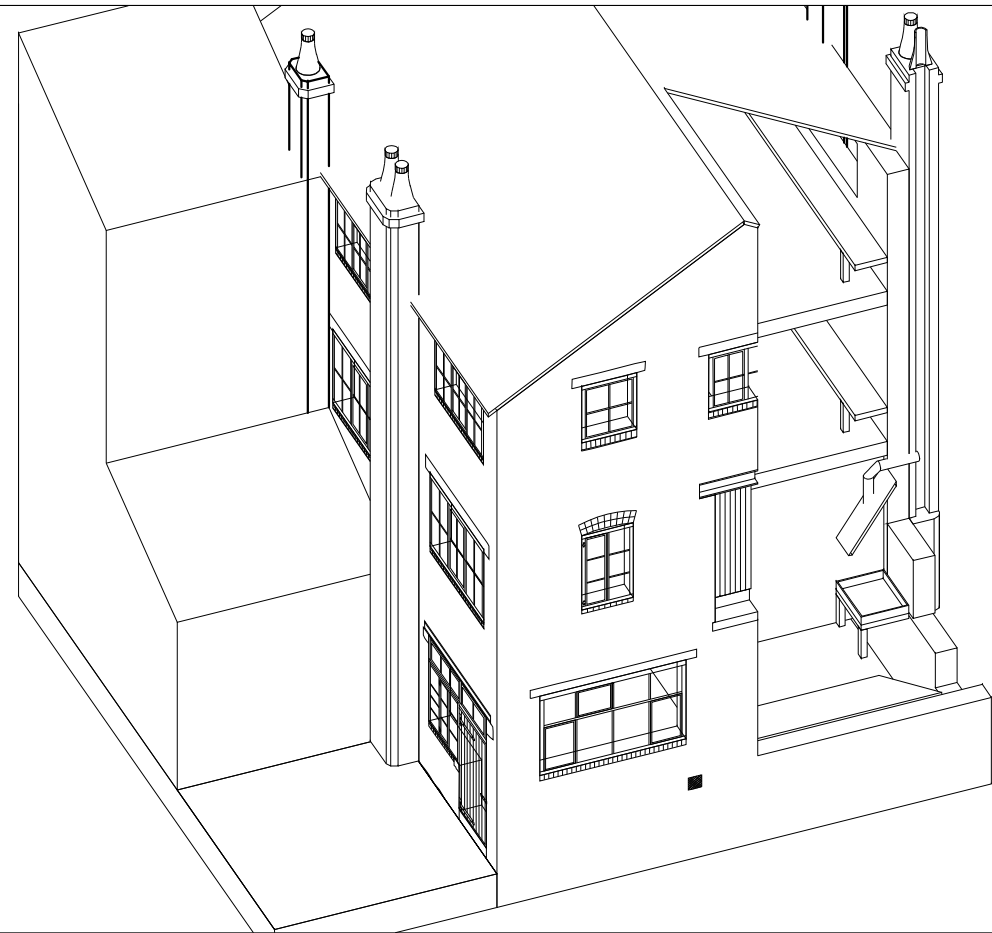


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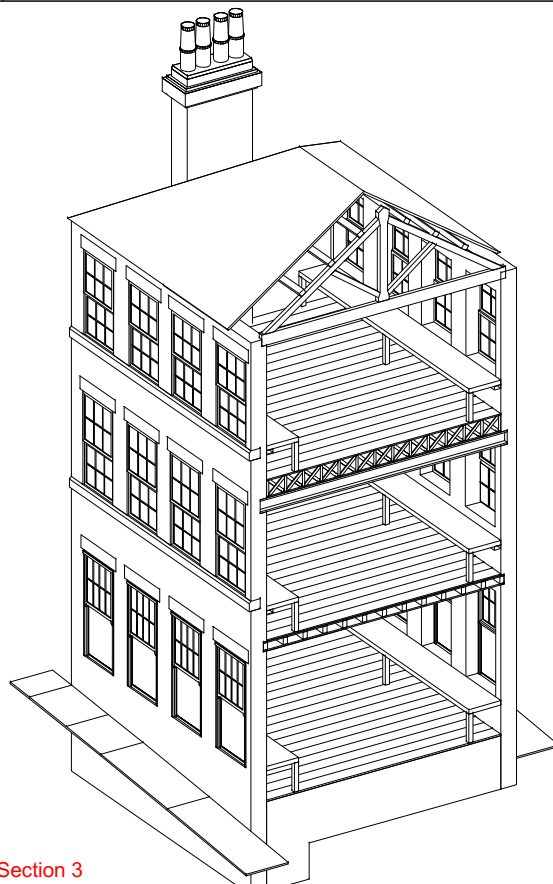
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| Site    | <b>Trafalgar Works</b>                                   | NGR         | SK 349 871  | Drawn            | CB        |
| Title   | <b>North-east Facing Reconstruction of Furnace House</b> | Project No. | <b>899e</b> | Illustration No. | <b>44</b> |



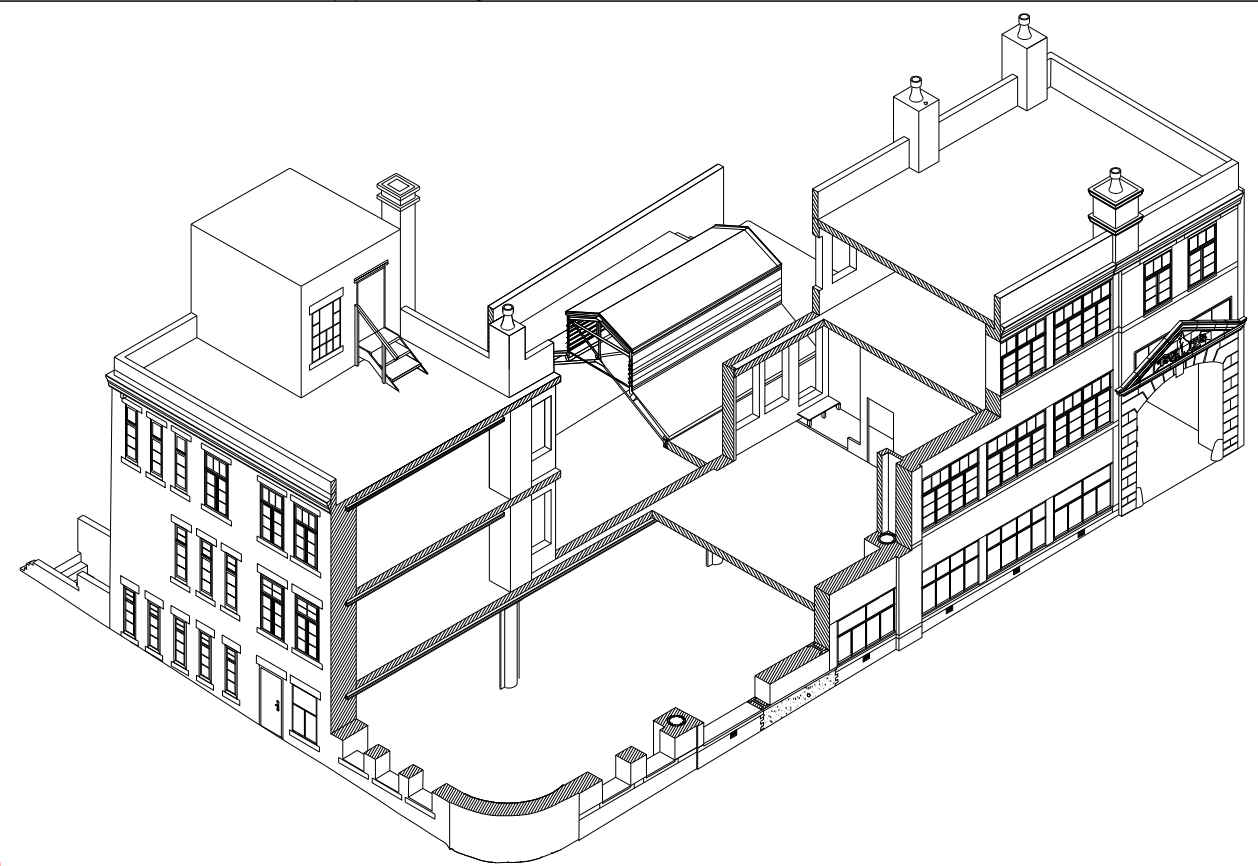
Section 1



Section 2

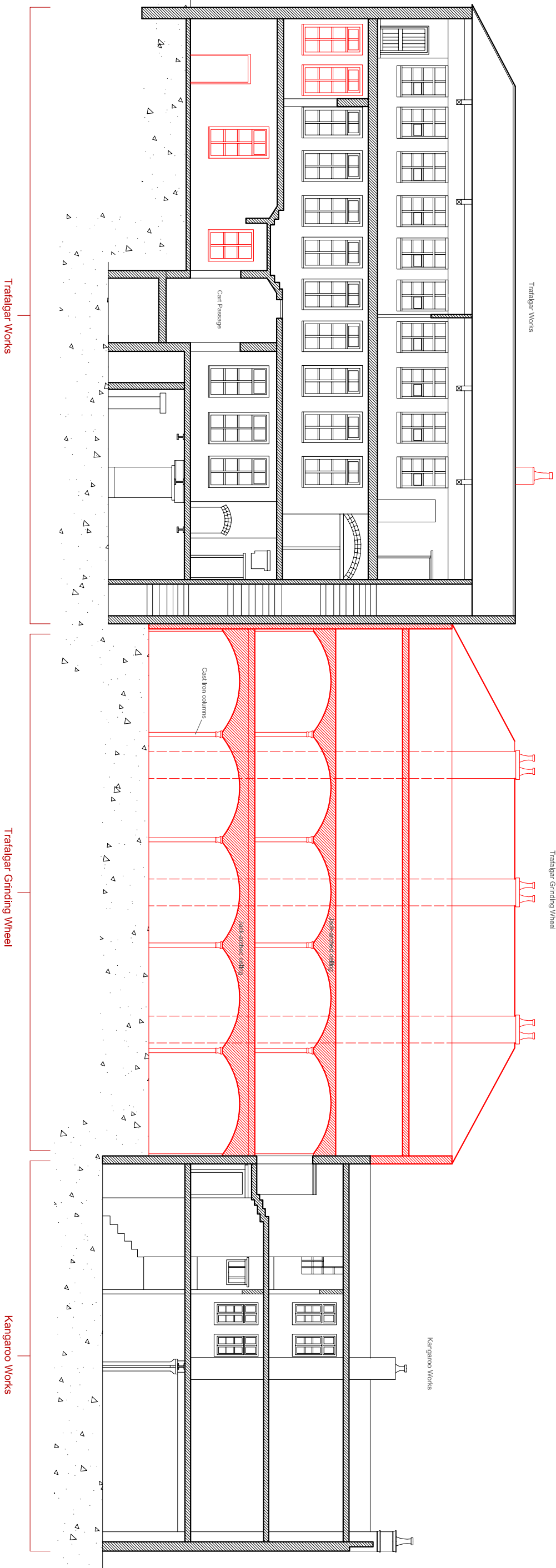



Section 3

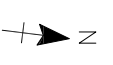


Section 4

|         |  |             |             |                  |              |
|---------|--|-------------|-------------|------------------|--------------|
| Project | <b>Sevenstone, Sheffield</b>                       | Scale       | n/a         | Date             | October 2011 |
| Site    | <b>Trafalgar Works</b>                             | NGR         | SK 349 871  | Drawn            | CB           |
| Title   | 3D cut away of Trafalgar Works<br>(reconstruction) | Project No. | <b>899e</b> | Illustration No. | <b>45</b>    |



|  |                       |                  |           |
|--|-----------------------|------------------|-----------|
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|  | Sevenstone, Sheffield | n/a              | July 2009 |
| Site   | NGR                   | Drawn            |           |
| Trafalgar Works  | SK 349 871            | CB               |           |
| Title  | Project No.           | Illustration No. |           |
| Reconstruction Section through<br>TW, TGW & KW   | 899e                  | 46               |           |



**Project**  
Sevenstone, Sheffield

**Site**  
Trafalgar Works

**Title**  
External plate viewpoint plan

**Scale**  
1:200 @ A3

**Date**  
July 2009

**NGR**  
SK 349 871

**Drawn**  
J Debska

**Project No.**  
899e

**Ill. No.**  
47

**Reconstruction**

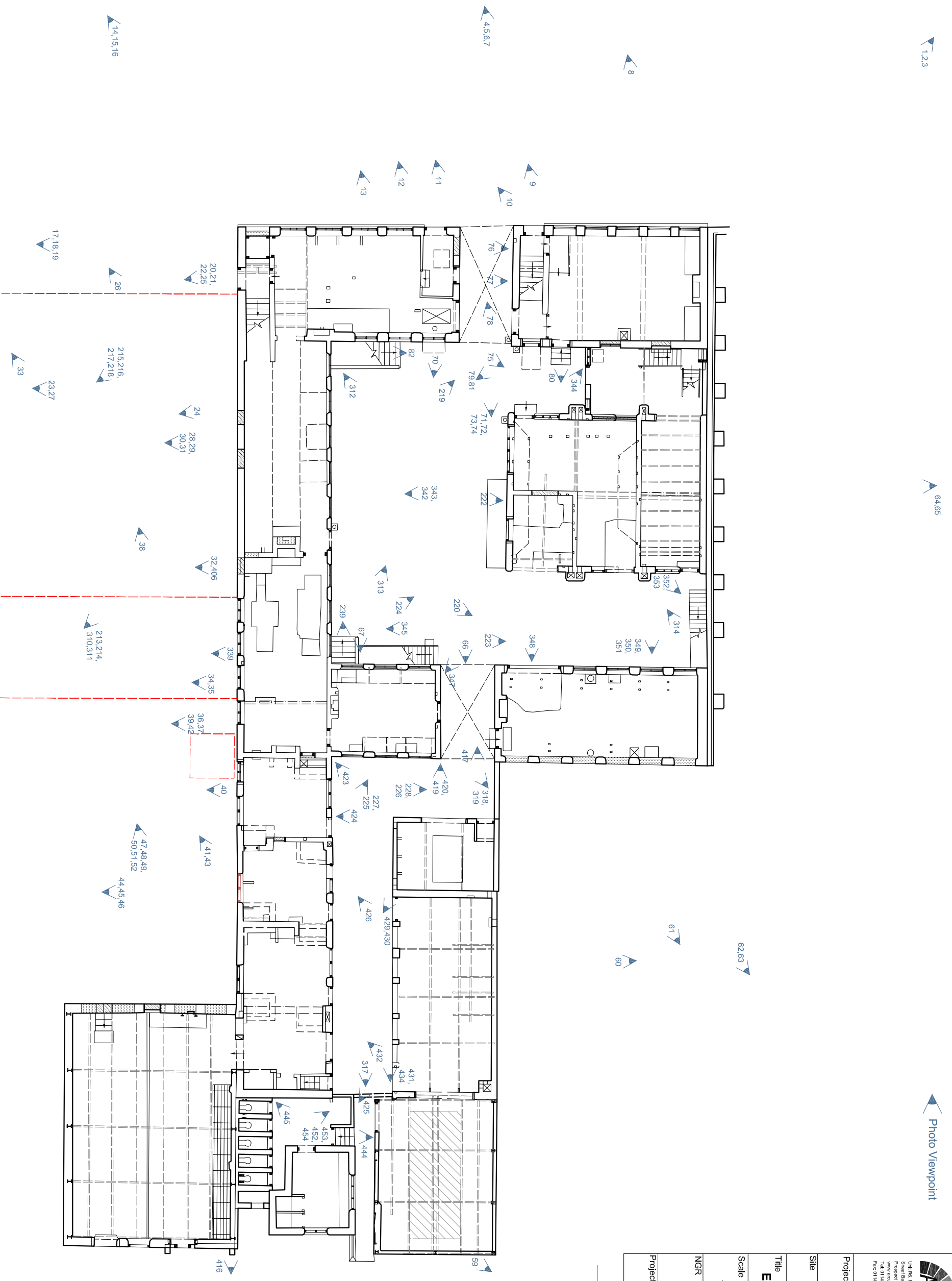
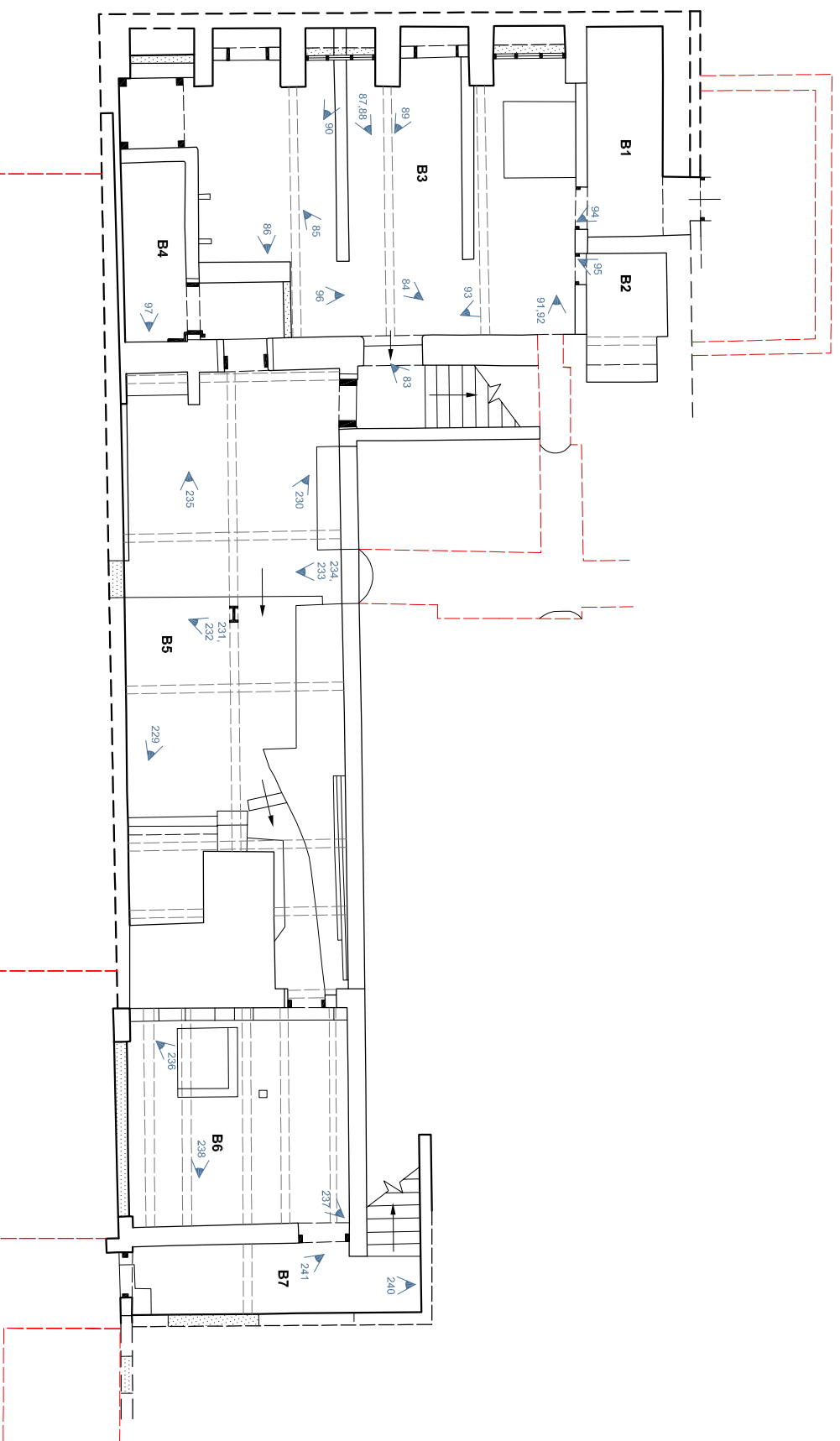
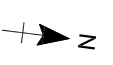


Photo Viewpoint



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Photo Viewpoint



|  |                          |
|--|--------------------------|
| <b>Project</b><br>Sevenstone, Sheffield                |                          |
| <b>Site</b><br>Trafalgar Works                         |                          |
| <b>Title</b><br>Basement Floor Plate<br>Viewpoint Plan |                          |
| <b>Scale</b><br>1:125 @ A3                             | <b>Date</b><br>2009      |
| <b>NGR</b><br>SK 349 871                               | <b>Drawn</b><br>J Debska |
| <b>Project No.</b><br>899e                             | <b>Ill. No.</b><br>48    |

Reconstruction

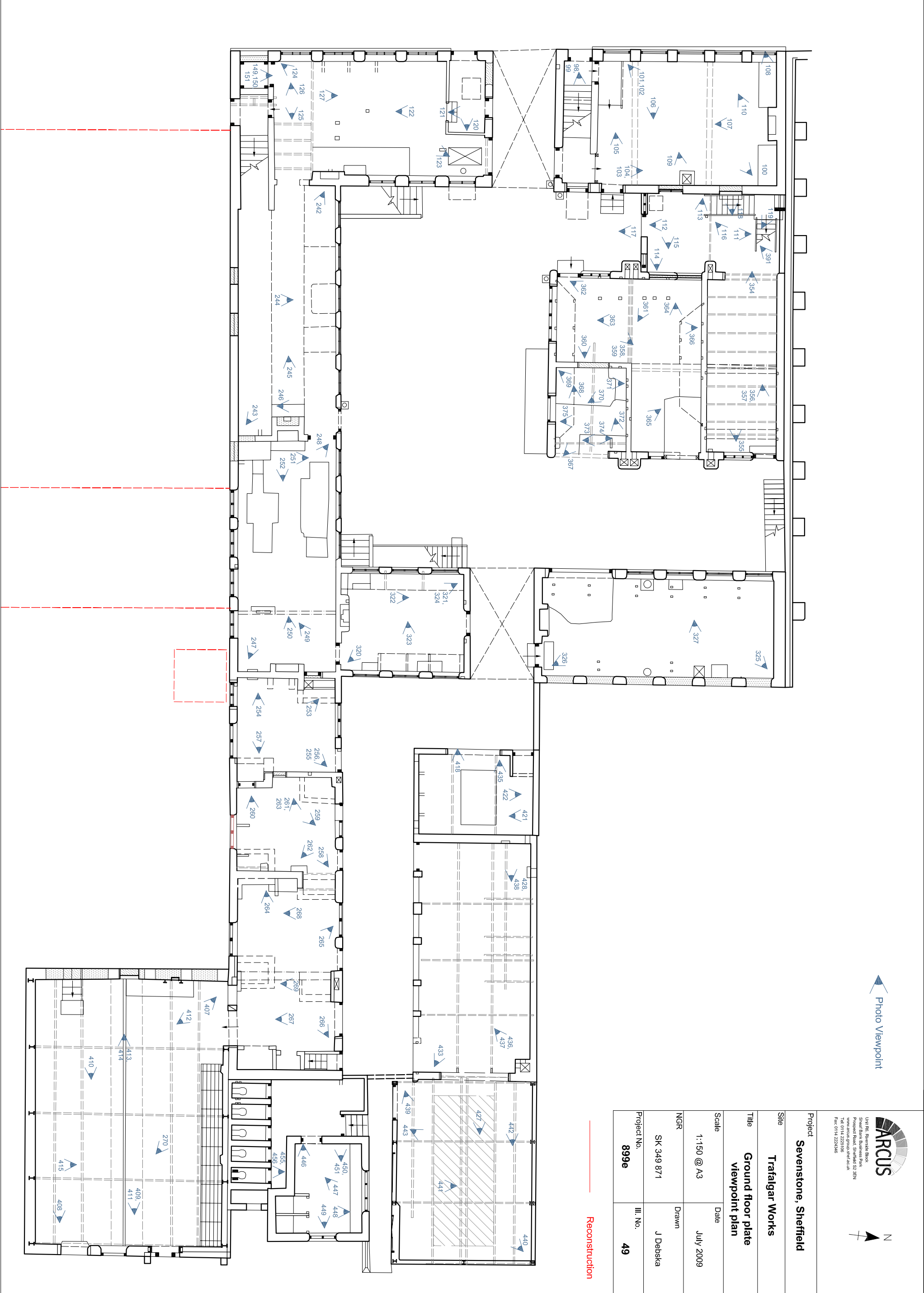
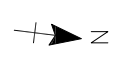


Photo Viewpoint



|             |           |                                     |  |
|-------------|-----------|-------------------------------------|--|
| Project     |           | Sevenstone, Sheffield               |  |
| Site        |           | Trafalgar Works                     |  |
| Title       |           | Ground floor plan<br>viewpoint plan |  |
| Scale       | Date      |                                     |  |
| 1:150 @ A3  | July 2009 |                                     |  |
| NGR         | Drawn     |                                     |  |
| SK 349 871  | J Debaska |                                     |  |
| Project No. | Ill. No.  |                                     |  |
| 899e        | 49        |                                     |  |

Reconstruction

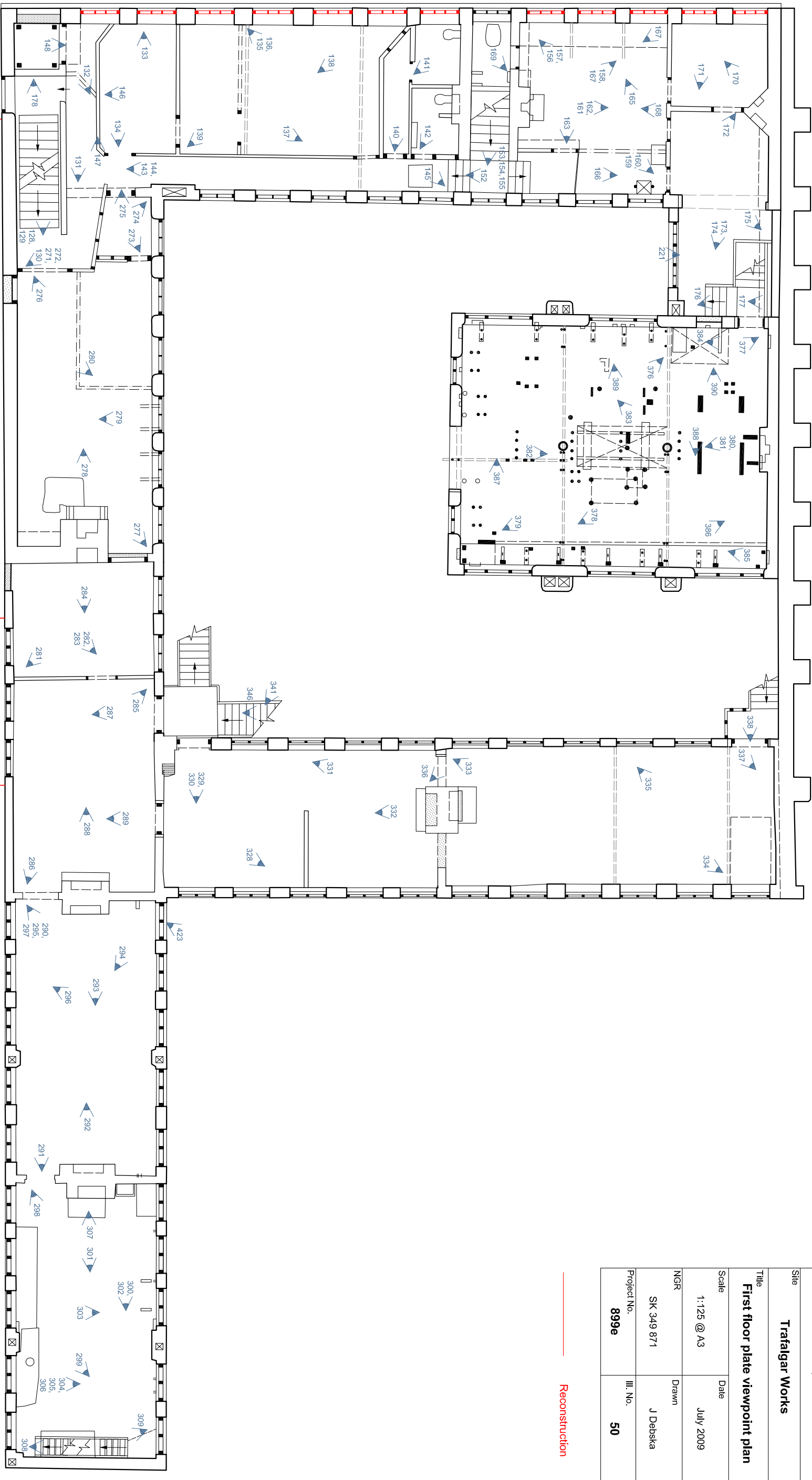
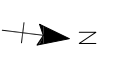


Photo Viewpoint



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Project  
**Sevenstone, Sheffield**

Site  
**Trafalgar Works**

Title  
**First floor plate viewpoint plan**

| Scale      | Date      |
|------------|-----------|
| 1:125 @ A3 | July 2009 |

| NGR        | Drawn     |
|------------|-----------|
| SK 349 871 | J Debaska |

| Project No. | Ill. No.  |
|-------------|-----------|
| <b>899e</b> | <b>50</b> |

Reconstruction



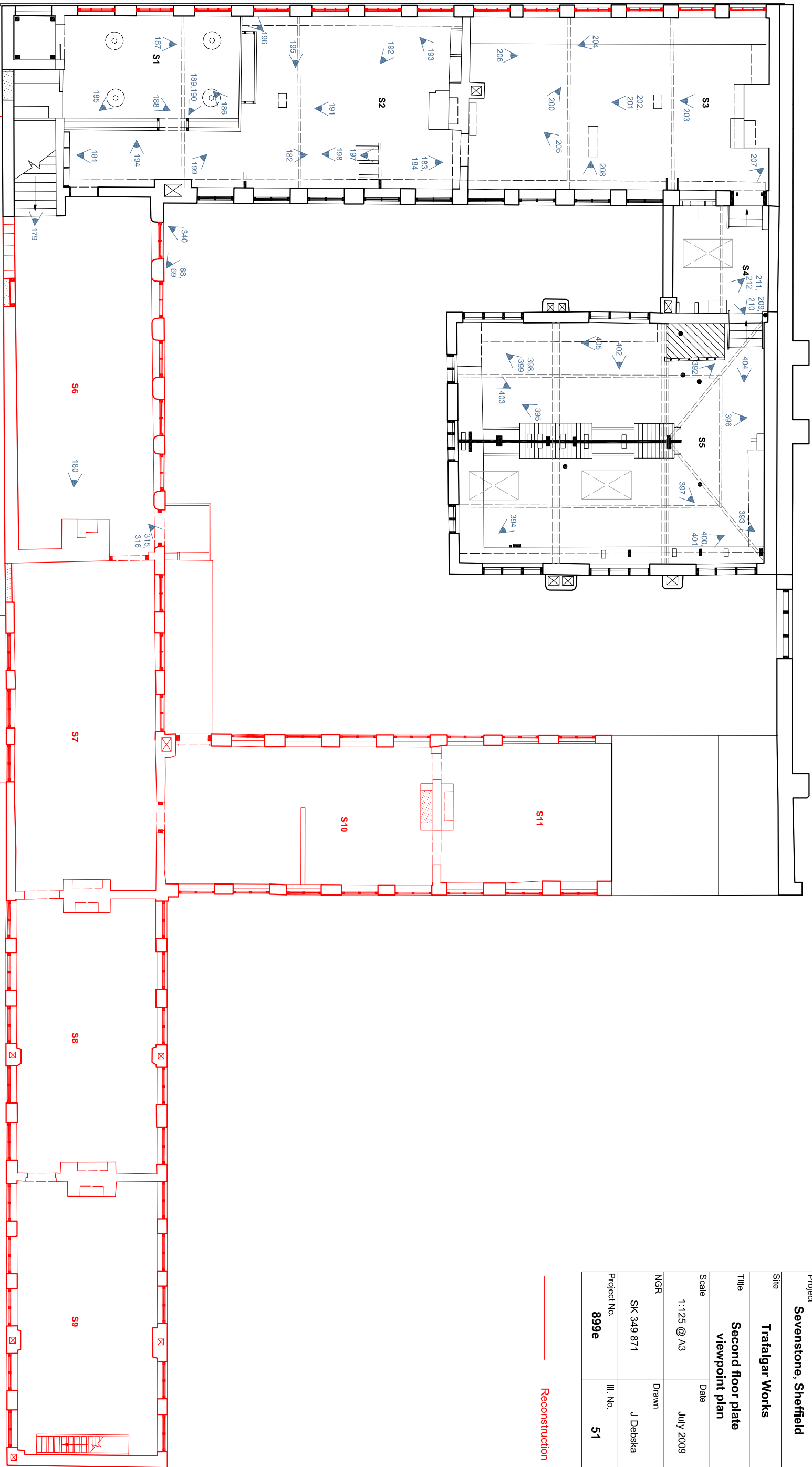
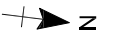


Photo Viewpoint



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|             |                                     |          |           |
|-------------|-------------------------------------|----------|-----------|
| Project     | Sevenstone, Sheffield               |          |           |
| Site        | Trafalgar Works                     |          |           |
| Title       | Second floor plan<br>viewpoint plan |          |           |
| Scale       | 1:125 @ A3                          | Date     | July 2009 |
| NGR         | SK 349 871                          | Drawn    | J Debska  |
| Project No. | 899e                                | Ill. No. | 51        |

Reconstruction

## 13 PLATES



**Plate 1:** View of principal façade of west range of Trafalgar Works (film 4.7)



**Plate 2:** View of principal façade of west range of Trafalgar Works (film 1.34)



**Plate 3:** General view of Trafalgar Works, principal façade fronting Trafalgar Street (film C/S 2.36)



**Plate 4:** Detail of cart passage and flanking pedestrian doors, west elevation of west range (film 4.6)



**Plate 5:** Detail of cart passage and flanking pedestrian doors, west elevation of west range (film 1.27)



**Plate 7:** Detail of cart passage and flanking pedestrian doors, west elevation of west range (film 1.28)



**Plate 6:** Detail of cart passage and flanking pedestrian doors, west elevation of west range (film 4.3)



**Plate 8:** Detail of type 2 window, west elevation of west range (film 1.33)



**Plate 9:** Detail of door leading to G1, west elevation of west range (film 1.31)



**Plate 10:** Detail of corner iron plate, cart passage, west elevation of west range (film 1.24)



**Plate 11:** Detail of door leading from Trafalgar Street to G21 of the west range (film 1.22)





**Plate 12:** Detail of type 1 window, west elevation of west range (film 1.21)



**Plate 13:** Detail of partially blocked and altered lightwell, west elevation of west range (film 1.19)



**Plate 14:** General view of the principal façade (west elevation) and south elevation of Trafalgar Works, fronting Trafalgar Street (film 4.2)



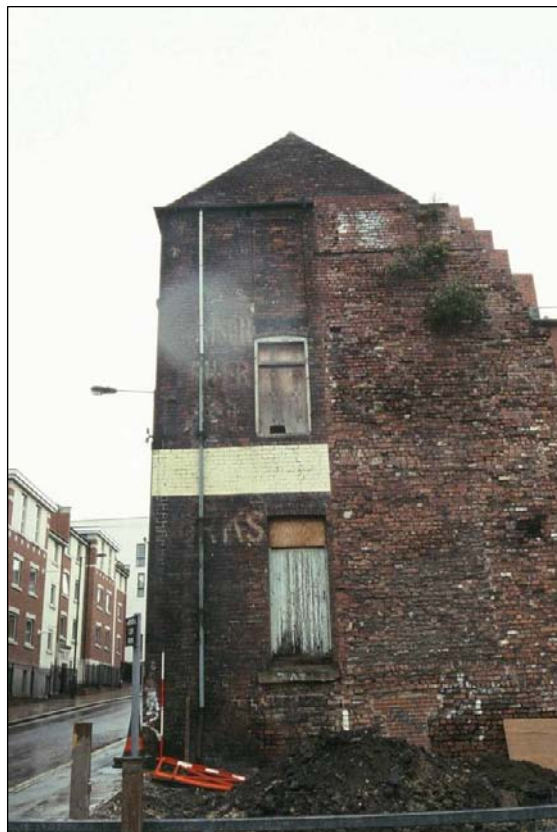
**Plate 15:** General view of the principal façade (west elevation) and south elevation of Trafalgar Works, fronting Trafalgar Street (film C/S 2.35)



**Plate 16:** General view of the principal façade (west elevation) of Trafalgar Works, fronting Trafalgar Street (film 1.17)



**Plate 17:** General view of south elevation of the west range and west end of the south range (film 47.1)



**Plate 18:** View of the south elevation of the west range (film C/S 2.33)



**Plate 19:** View of south elevation of the west range and west end of the south range (film 47.3)



**Plate 20:** Detail of ground floor door and varying brickwork, south elevation of the west range (film 46.34)



**Plate 21:** Detail of painted lettering 'HARRISON FISHER & Co TRAFALGAR WORKS', south elevation of west range (film 46.32)



**Plate 22:** Detail of south gable of the west range showing 2<sup>nd</sup> floor blocked window/door (film 46.31)



**Plate 23:** General view of the south elevation of the south and west ranges (film 47.6)





**Plate 24:** Detail of blocked opening, 1<sup>st</sup> floor of south range, south elevation (film 46.25)



**Plate 25:** Detail of change in brickwork finish and concrete stairends, south elevation of west range (film 46.22)



**Plate 26:** General view of south elevation of south range (film C/S 2.34)



**Plate 27:** View of south elevation of the south range (west end) (film 1.13)



**Plate 28:** Detail of join between older lower section of wall and later upper section of wall and blocked arched openings, south elevation of south range (west end) (film 47.9)



**Plate 29:** Detail of blocked primary openings, south elevation of south range (west end) (film 46.26)



**Plate 30:** Detail of blocked primary opening within early section of wall, south elevation of south range (film 46.29)



**Plate 31:** View of possible blocked power transmission shaft and projecting bricks denoting the eastern extent of the formerly adjacent Trafalgar Grinding Wheel and extensions, south elevation of the south range (film 48.1)



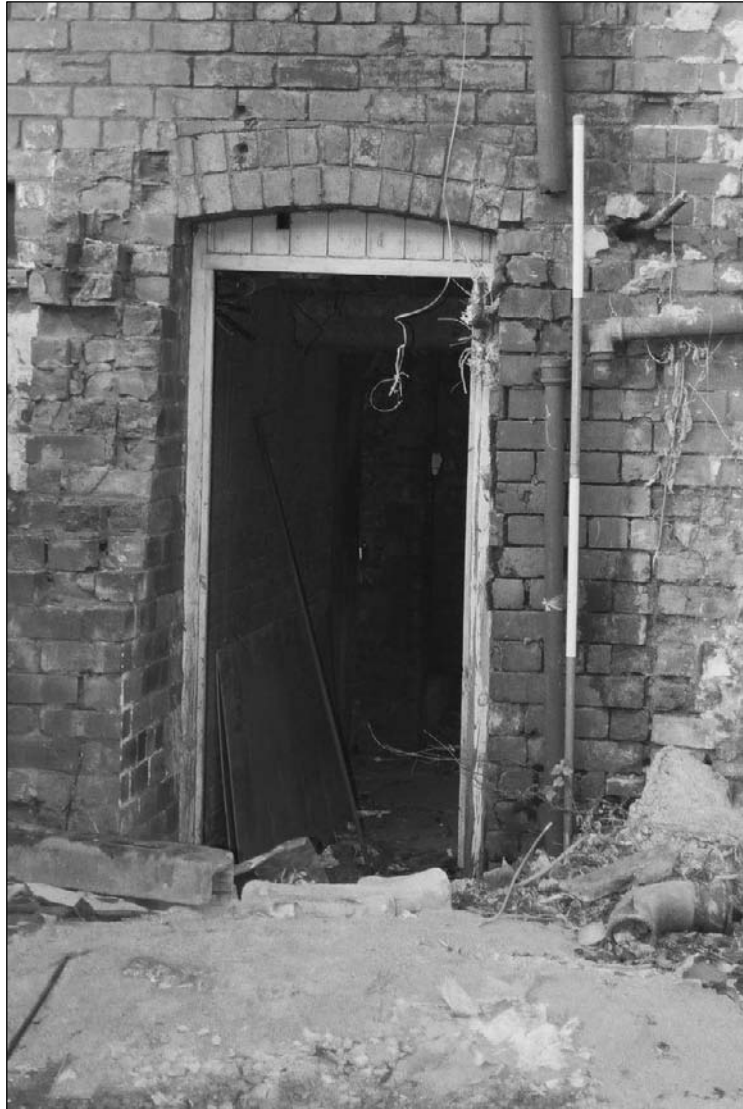
**Plate 32:** View of possible blocked power transmission shaft and projecting bricks denoting the eastern extent of the formerly adjacent Trafalgar Grinding Wheel and extensions, south elevation of the south range (film 46.20)



**Plate 33:** General view of south elevation of south range (east end) (film 47.7)



**Plate 34:** View of doorway leading into basement room B7 (film 48.4)



**Plate 35:** Detail of doorway leading from rear yard of Trafalgar Grinding Wheel to basement B7 of the south range, south elevation (film 46.16)





**Plate 36:** Detail of changes in brickwork, including blockings, paint remains and abut walls of former structures, south elevation of south range (east end) (film 46.15)



**Plate 37:** Detail of former passage B7 to the left and earlier flue to the right, south range (east end) (film 49.10)



**Plate 38:** General view of south elevation of south range (east end) (film 1.10)



**Plate 39:** Detail of windows, south elevation of south range (east end) (film 48.7)



**Plate 40:** Detail of type 8 and 9 windows, south elevation of south range (east end)  
(film 48.6)



**Plate 41:** Detail of bracket and window head, south elevation of south range (east end)  
(film 46.11)



**Plate 43:** Detail of type 9 window with raised sill, south elevation of south range (east end) (film 46.12)



**Plate 42:** Detail of type 4 window and inserted window, south elevation of south range (film 46.19)



**Plate 44:** Detail of lower section of south elevation of south range (east end) (film 49.2)



**Plate 45:** Detail of lower section of south elevation of south range (east end) showing paintwork from former attached structures (film 49.4)



**Plate 46:** Detail of lower section of south elevation of south range (east end) showing paintwork from former attached structures (film 49.5)



**Plate 47:** General view of west elevation of machine shop (film 48.9)



**Plate 48:** View of lower section of west elevation of machine shop showing height of internal floor level (film 49.7)



**Plate 49:** Detail of brick and stone walling of west elevation of machine shop (film 46.2)



**Plate 50:** Detail of blocked door and adjacent blocking, west elevation of machine shop (film 46.5)





**Plate 51:** Detail of blocked primary windows and later roof scar, west elevation of machine shop (film 46.7)



**Plate 52:** Detail of raised ridge louvered roof and upper window, west elevation of machine shop (film 46.8)



**Plate 53:** General view of the east elevations of the machine shop and wash house range (film 5.7)



**Plate 54:** View of east elevation of machine shop showing altered window to door, inserted door and partially re-built northeast corner (film 1.4)



**Plate 55:** View of east elevation of wash house range, with south range beyond (film 5.10)



**Plate 56:** View of east elevation of wash house range, with south range beyond (film 1.6)



**Plate 57:** General view of the east elevation of the machine shop, wash house and furnace house ranges, with the south range beyond (film 1.7)



**Plate 58:** General view of the east elevation of the machine shop, wash house and furnace house ranges, with the south range beyond (film C/S 2.30)



**Plate 59:** View into G12, furnace house range (film 5.5)



**Plate 60:** General view of the north elevation of the furnace house range (film 5.3)



**Plate 61:** General view of the east elevation of the east range (film 1.9)



**Plate 62:** General view of the east and north elevation of the east range (film 5.1)



**Plate 63:** General view of the east and north elevation of the east range (film C/S 2.31)



**Plate 64:** General view of the north elevation of the east, north and west ranges (film 4.10)



**Plate 65:** General view of the north elevation of the east, north and west ranges (film C/S 2.32)





**Plate 66:** General view of the east elevation (south end) of the west range (film 10.5)



**Plate 68:** Detail of a type 4 window, 2<sup>nd</sup> floor, east elevation of west range (film 27.4)



**Plate 67:** General view of the east elevation of the west range (south end) (film 12.1)



**Plate 69:** General view of the east elevation of the west range showing join with extension between the west and north ranges (film 12.3)



**Plate 70:** Detail of lightwell into B2, east elevation of west range (south end) (film 27.11)



**Plate 72:** Detail of cart passage with gate closed, east elevation of west range (film 8.10)



**Plate 71:** Detail of cart passage with gate closed, east elevation of west range (film 2.33)



**Plate 74:** Detail of cart passage with gate open, east elevation of west range (film 2.34)



**Plate 73:** Detail of cart passage with gate closed, east elevation of west range (film C/S 2.29)



**Plate 75:** View of the south side of the cart passage, west range, showing loading door and pedestrian doorway within former window (film 20.9)



**Plate 76:** Detail of blocked door, south side of cart passage, west range (film 1.2)



**Plate 77:** Detail of inserted door within former window, south side of cart passage, west range (film 27.9)



**Plate 78:** Detail of inserted overhead hatch within ceiling of cart passage, west range  
(film 27.7)





**Plate 80:** Detail of door, east elevation of west range (north end) (film 21.9)



**Plate 79:** View of east elevation of west range (north end), showing doorway within former window and window within former doorway (film 2.31)



**Plate 81:** View of the lean-to extension linking the west and north ranges (film 9.1)



**Plate 83:** Detail of external stairs leading from basement (B3) to central yard (film 2.8)



**Plate 82:** Detail of external yard leading to basement, west range, from central yard (south range ahead, west range to right) (film 6.2)



**Plate 84:** General view of room B3, west range – note inserted brick partitions and light reflecting brick piers (film 6.9)



**Plate 85:** General view of room B3, west range – note steel I-section beams supporting the concrete floor above (film 7.2)



**Plate 86:** Detail of glazed brickwork and coal chute and blocked lightwell, B3 west range (film 3.35)



**Plate 87:** Detail of blocked lightwell, B3, west range (film 2.2)



**Plate 88:** Detail of blocked lightwell, B3, west range – note also light reflecting brick work (film C/S 2.27)



**Plate 89:** Detail of altered lightwell to coal chute, B3, west range (film C/S 2.26)



**Plate 90:** Detail of blocked lightwell window, B3, west range (film 2.1)



**Plate 92:** View along P2, northeast corner of B3, west range (film 2.4)



**Plate 91:** View along P2, northeast corner of B3, west range (film 6.7)





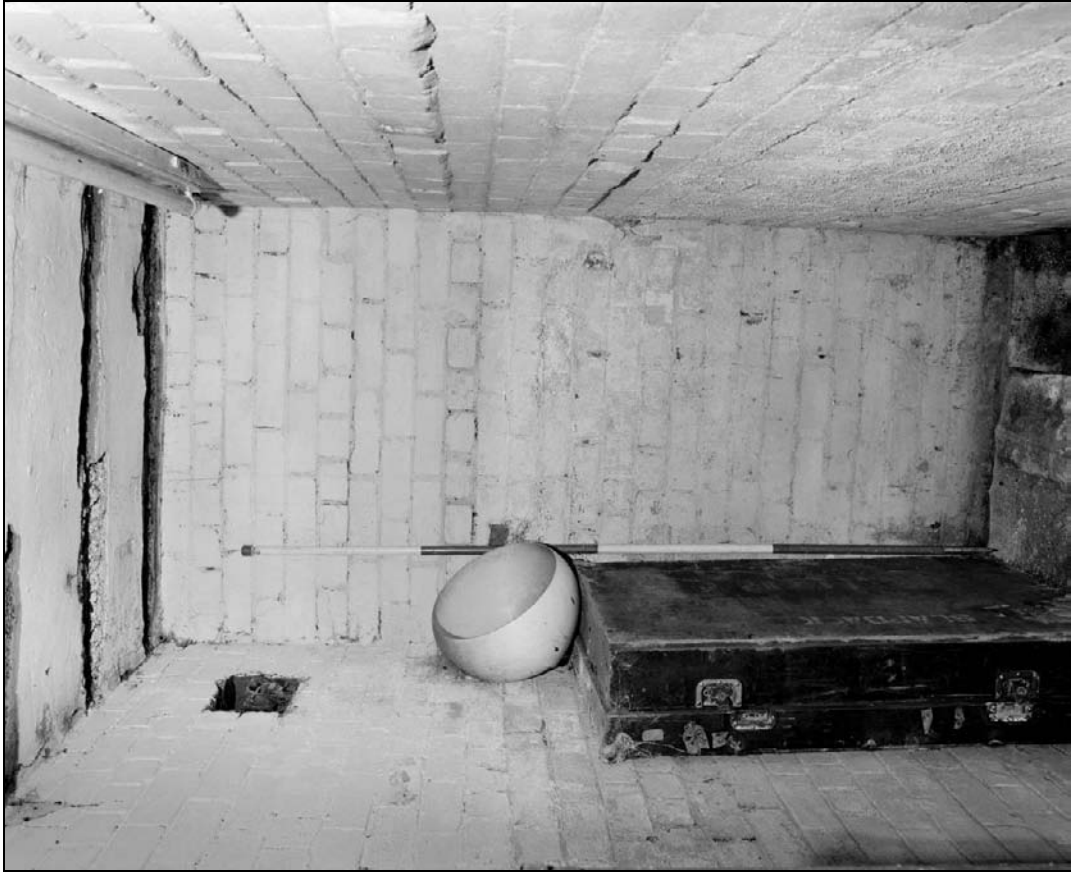
**Plate 93:** Detail of doors leading to B1 and B2, north wall of B3, west range (film 2.7)



**Plate 95:** General view of room B2, west range (film 6.5)



**Plate 94:** General view of B1, west range – note blocked doorway to weighbridge mechanism beneath cart passage (film 6.3)



**Plate 97:** General view of room B4, west range (film 7.3)



**Plate 96:** General view towards room B4 from B3,  
west range (film 3.33)



**Plate 99:** General view of G1, west range, up staircase to F18 (film C/S 2.21)



**Plate 98:** General view of G1, west range, up staircase to F18 (film 13.7)



**Plate 100:** General view of room G2, west range, looking towards G1 (film 13.5)



**Plate 101:** General view of room G2 (film 13.4)



**Plate 102:** General view of room G2 – note blocked doorway in east wall (film C/S 2.20)



**Plate 103:** View of archway leading to loading door beneath staircase, room G2, west range (film C/S 2.19)



**Plate 104:** View of archway with loading door beyond leading to cart passage, room G2, west range (film 22.35)



**Plate 106:** Detail of type 2 window, west wall of room G2, west range (film 22.29)



**Plate 105:** Detail of inserted doorway within former window opening, east wall of G2, west range (film 22.33)





**Plate 108:** View of void beneath floor of room G2, west alcove of north wall, west range (film D.1)



**Plate 107:** Detail of fireplace, north wall of room G2, west range (film 22.31)



**Plate 109:** Detail of inserted hatch within ceiling of room G2, west range (film 22.27)



**Plate 110:** Detail of ceiling, room G2, west range (film C/S 1.4)



**Plate 111:** View of entrance/south wall of G3, west range extension (film 14.3)



**Plate 113:** View of blocked entrance and window to G5, north range, east wall of G3 west range extension (film 14.2)



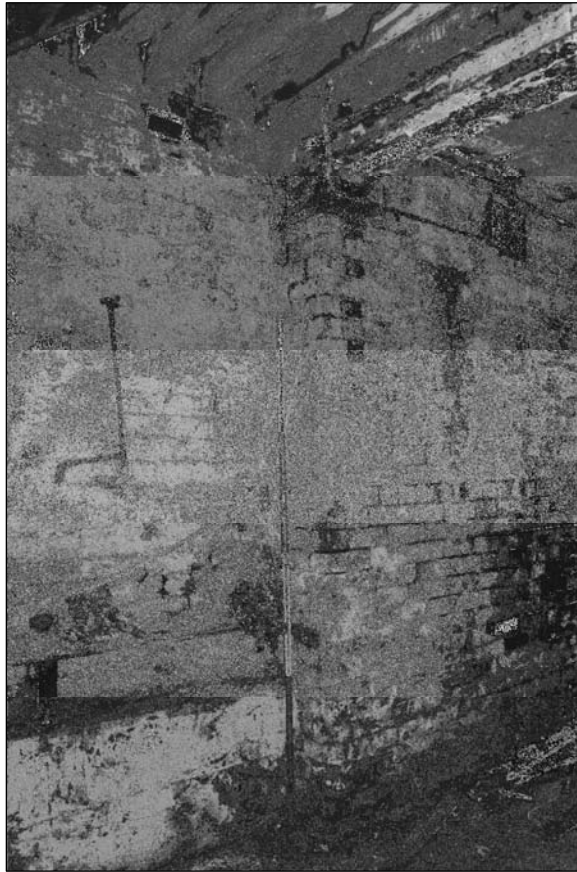
**Plate 112:** General view of G3, west range extension – note inserted staircase (film 13.9)



**Plate 115:** Detail of truncated and blocked window, west wall of G3, west range extension (film C/S 2.22)



**Plate 114:** Detail of truncated and blocked window, west wall of G3, west range extension (film 21.7)



**Plate 116:** View of G3 north wall join with north range (film 21.1)



**Plate 117:** View of north wall of G3, west range extension, showing join with north and west ranges and I-section beam carrying first floor north wall (film D.2)



**Plate 118:** View of blocked doorway truncated by inserted stairs, in west wall of G3, originally leading to G2, west range (film 21.5)



**Plate 119:** Detail of cast iron bracket, north wall of G3, west range extension (film 21.2)



**Plate 121:** Detail of inserted doorway within former window leading from cart passage, G23 west range (film 3.6)



**Plate 120:** Detail of main door leading from Trafalgar Street into G23, west range (film 15.8)





**Plate 122:** View of inserted doorway within north wall of G21, with G23 and cart passage beyond (film 3.9)



**Plate 123:** General view of room G21, west range (film 15.9)



**Plate 124:** General view of room G21, west range (film 16.1)



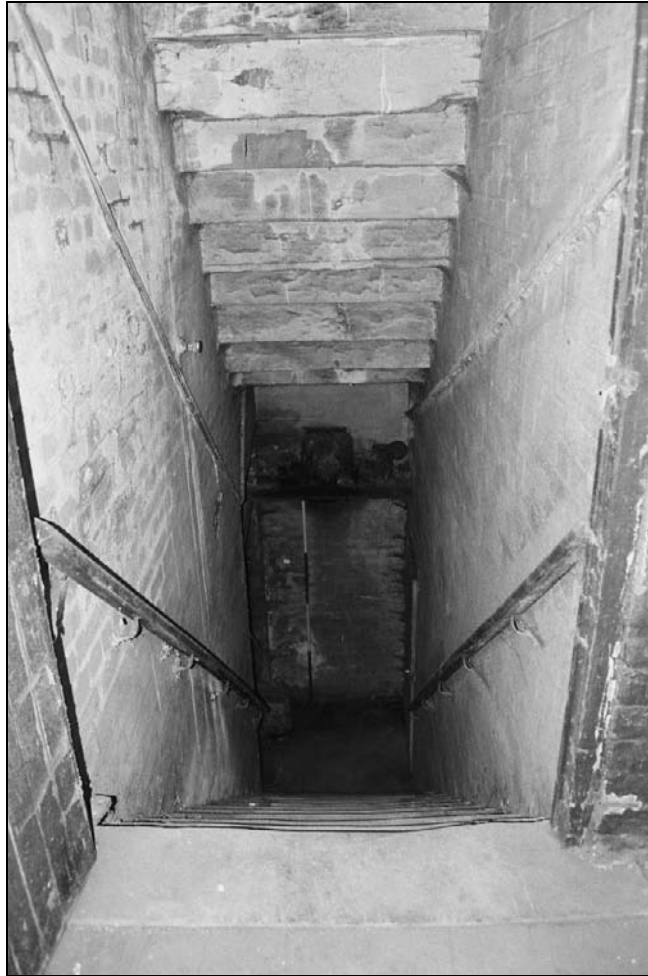
**Plate 125:** Detail of type 1 window, west wall of room G21, west range (film 3.12)



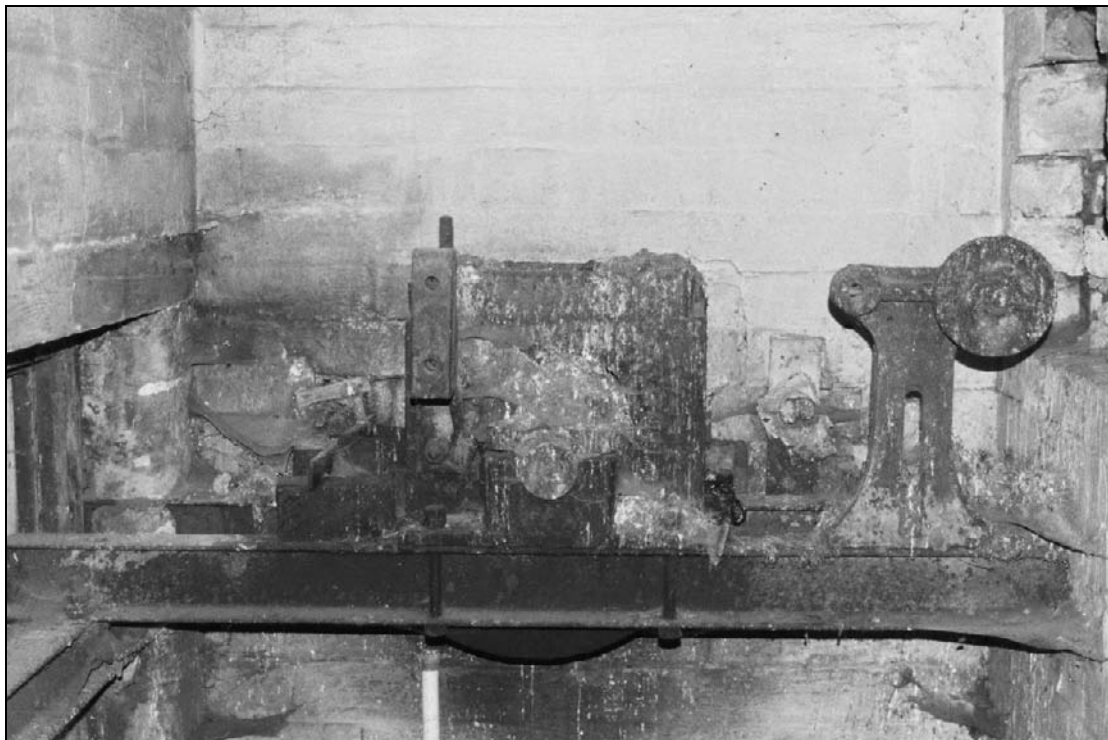
**Plate 126:** Detail of blocked fireplace and blocked doorway, east wall of G21, west range (film 3.19)



**Plate 127:** Detail of stair doorway and adjacent timber panelled lift door, south wall of G21, west range (film 3.14)



**Plate 128:** View down staircase to G22, west range, from F10 south range (film 26.22)



**Plate 129:** Detail of inserted lift mechanism, room G22 (film 26.20)



**Plate 130:** General view of F10 and F11, join between west and south ranges (film 26.30)



**Plate 132:** Detail of lift door, F11, west range (film 26.26)



**Plate 131:** View of F11, west range (film 26.28)



**Plate 134:** General view of room F12 (film 29.10)



**Plate 133:** View of F12 showing upper glazed partitioning (film 25.10)





**Plate 135:** General view of F13 (film 30.6)



**Plate 136:** General view of F13 showing inserted partitioning (film 25.15)



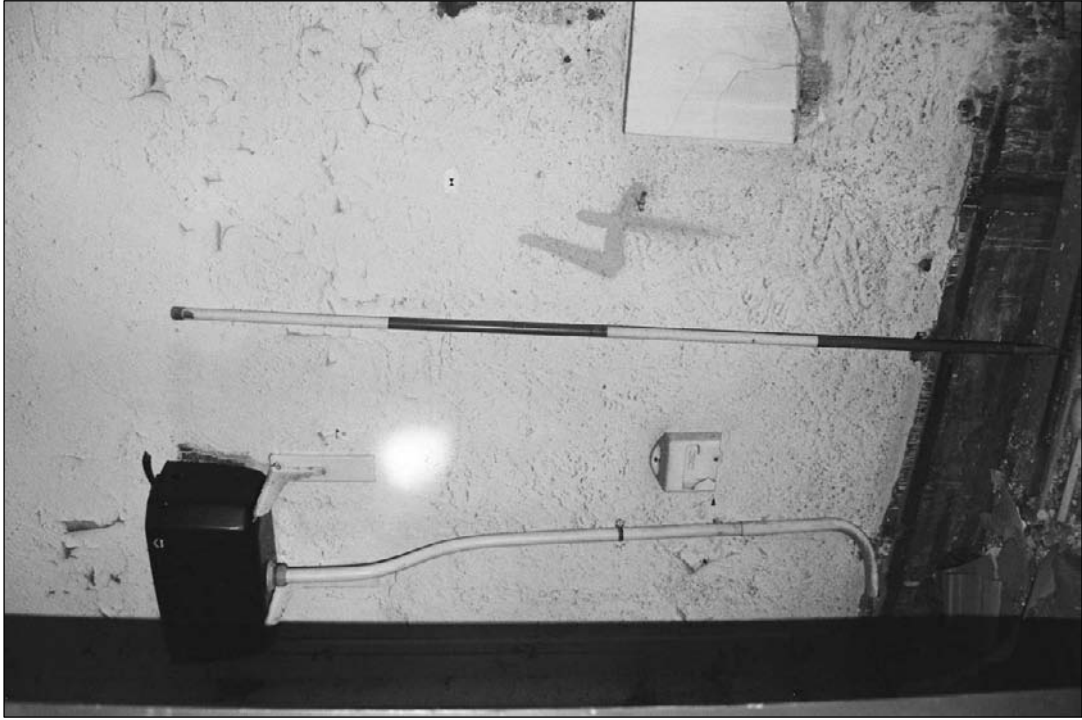
**Plate 137:** General view of F13, showing removed partition (film 30.7)



**Plate 138:** Detail of window within partition, F13, west range (film 25.12)



**Plate 139:** General view of F13 showing original skirting, inserted partitions and colour scheme (film C/S 2.3)



**Plate 141:** General view of room F15 (film 25.16)



**Plate 140:** General view of F14 (film 30.9)



**Plate 143:** General view along corridor F18 (film 30.4)



**Plate 142:** General view of room F16 (film 25.19)



**Plate 144:** General view of corridor F18 showing colour scheme (film C/S 2.2)



**Plate 145:** View of rooms F11-F16 & F18 after removal of partitions (film D.3)



**Plate 146:** View of rooms F11-F16 & F18 after removal of partitions (film D.4)



**Plate 147:** Detail of F11/F18 after removal of partitions, with F10 beyond (film D.5)



**Plate 148:** View of lift shaft (film D.6)





**Plate 149:** View of base of lift shaft with inserted timber platform and basement (B3) below (film D.7)



**Plate 150:** Detail of lift counterweight (film D.8)



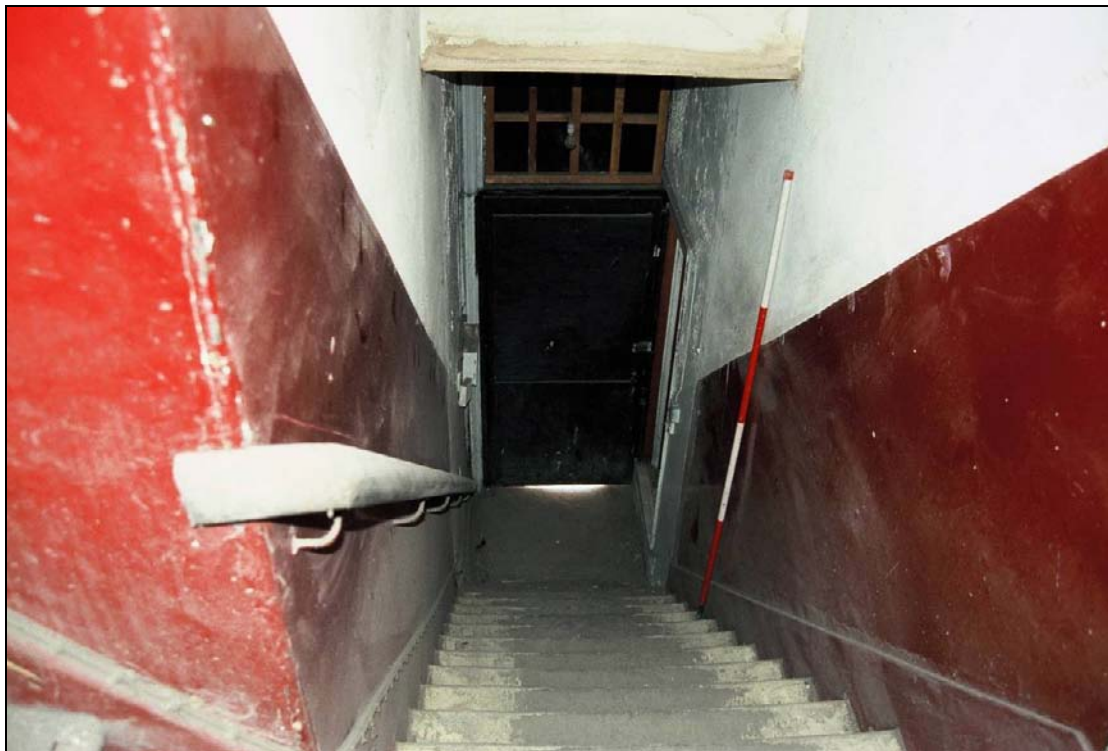
**Plate 152:** View of north end of F18 showing paneled partition and top of staircase (film 25.21)



**Plate 151:** Detail of inserted lift mechanism within lift shaft (film D.9)



**Plate 153:** View from F18 down stairs to G1 (film 31.2)



**Plate 154:** View from F18 down stairs to G1 (film C/S 2.4)



**Plate 155:** View of arch above stairs, F18 (film 31.3)



**Plate 156:** General view of room F1 (film 31.9)



**Plate 157:** General view of room F1 (film C/S 2.5)



**Plate 158:** View of F1 showing fireplace, doorways and shelving (film 32.4)



**Plate 159:** General view of room F1 (film 32.1)



**Plate 160:** General view of room F1 (film C/S 2.6)



**Plate 162:** Detail of fireplace, F1 (film C/S 2.7)



**Plate 161:** Detail of fireplace, F1 (film 25.28)



**Plate 163:** Detail of type 3 windows, west wall of room F1 (film 25.23)



**Plate 164:** Detail of original skirting, room F1 (film 25.35)





**Plate 166:** Detail of paneling, room F1 (film 25.32)



**Plate 165:** Detail of northeast corner of room F1, showing type 5 window (film 25.27)



**Plate 167:** Detail of door and shelving, room F1 (film 25.27)



**Plate 168:** Detail of partition construction with lath and plaster covering, north wall of F1 (film D.10)



**Plate 170:** Detail of fireplace, northeast corner of F2  
(film 24.4)



**Plate 169:** Room F17, detail of toilet and window (film 25.25)



**Plate 171:** Detail of type 3 window, west wall of F2 (film 24.3)



**Plate 172:** General view of F3 showing original doorway from F1, extension with type 25 window and inserted staircase (film 32.8)



**Plate 173:** General view of F3 showing doorway to F2 and shelving along north wall (film 32.10)



**Plate 174:** General view of F3 showing doorway to F2 and shelving along north wall (film 24.10)



**Plate 175:** View of doorways leading to F1 (film 24.7)



**Plate 176:** Detail of wallpaper on north wall of F3 beyond inserted staircase (film 24.14)



**Plate 177:** Detail of embossed wallpaper of F3 (film C/S 1.6)





**Plate 179:** View down staircase to F11 from S6/roof of south range (film 28.26)



**Plate 178:** View up staircase from F11 to S6/roof of south range (film 26.25)



**Plate 180:** Detail of doorways to second floor of west range, from removed second floor of south range (film 12.9)



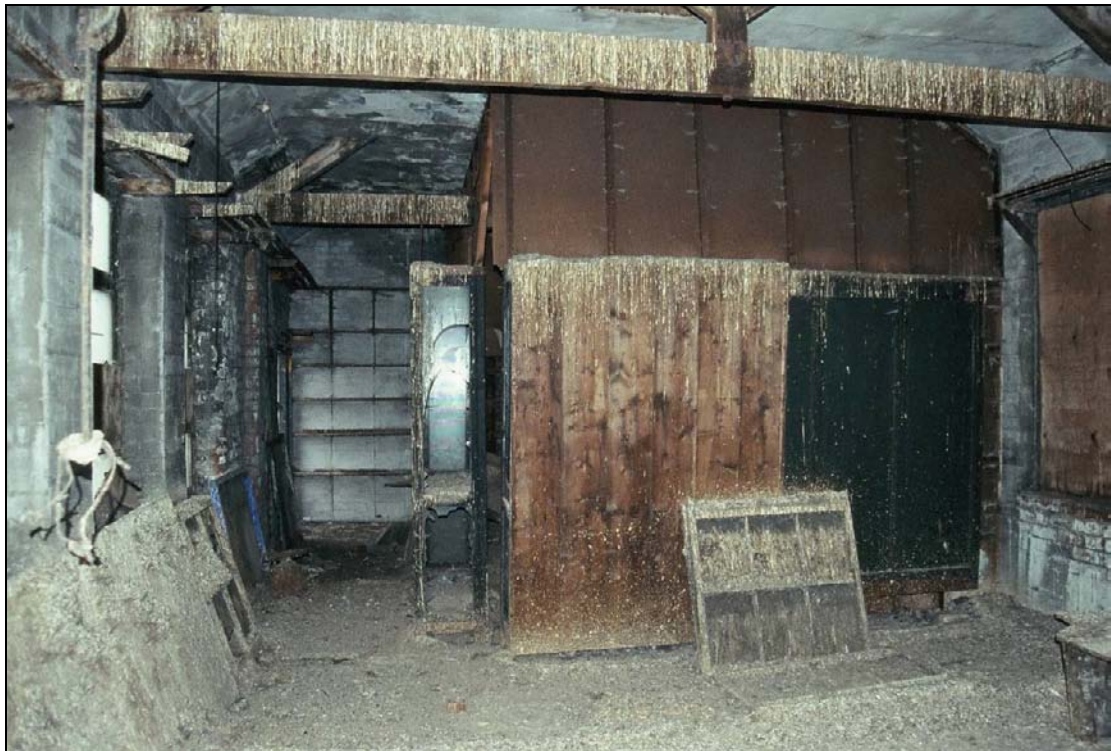
**Plate 182:** View of S2 looking towards entrance, S1 to right – note timber glazed display units of S1 (film 37.2)



**Plate 181:** General view of room S2, S1 to the left (film 37.2)



**Plate 183:** View of S2 showing partitioned S1 within the southwest corner (film 38.6)



**Plate 184:** View of S2 showing partitioned S1 within the southwest corner (film C/S 1.30)



**Plate 185:** General view of S1 (film 37.10)



**Plate 186:** Detail of display cabinets of S1 (film 37.8)



**Plate 187:** View of lift shaft and storage area at south end of S1 (film 37.6)



**Plate 188:** View of lift shaft and storage area at south end of S1 (film C/S 1.23)



**Plate 189:** Detail of lighting within S1 and papered ceiling (film 41.9)



**Plate 190:** Detail of lighting within S1 and papered ceiling (film C/S 1.21)



**Plate 191:** View of fireplace and north end of room S2 (film 38.8)



**Plate 192:** Detail of shelving above windows, west wall of S2 (film 41.18)





**Plate 194:** Detail of removed door, S2 (film 41.5)



**Plate 193:** Detail of shelving, S2 (film 41.23)



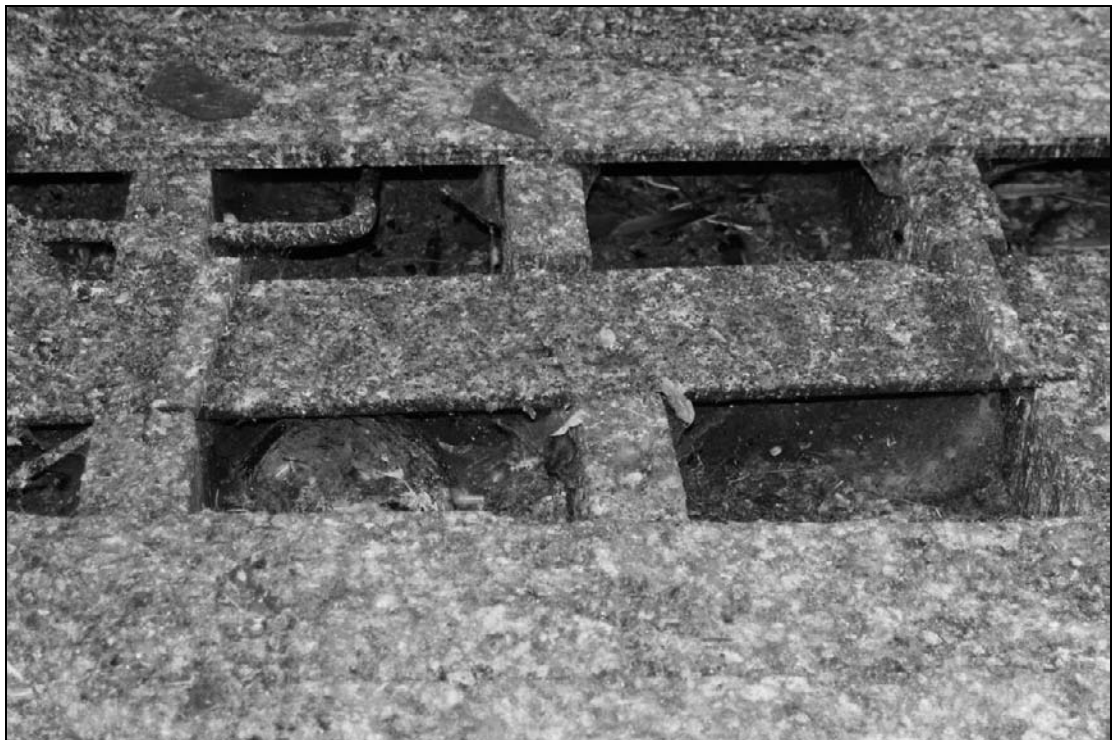
**Plate 196:** Detail of type 1 window frame, west wall of S2 (film 41.15)



**Plate 195:** Detail of removed type 3 window from west wall of S2 (film 41.17)



**Plate 197:** Detail of noggins between timber floor joists, S2 (film 41.24)



**Plate 198:** Detail of timber joist and boarded floor of S2 (film 41.21)



**Plate 199:** Detail of removed wheel/pulley, S2 (film 41.11)



**Plate 200:** View of southeast corner of room S3 showing type 4 windows and primary doorway (film 38.3)



**Plate 201:** General view of S3 – note workbench and shelving (film 38.1)



**Plate 202:** General view of S3 – note workbench and shelving (film C/S 1.36)



**Plate 203:** Detail of fireplace and timber shelving (film 41.33)



**Plate 204:** Detail of workbench along west wall of S3 (film 41.34)



**Plate 205:** Detail of lath and plaster ceiling, trusses and shelves, S3 (film 41.31)



**Plate 206:** Detail of flue and shelves, south wall of S3 (film 41.26)





**Plate 208:** Detail of type 4 window, S3 (film 38.9)



**Plate 207:** Detail of doorway from S3 to S4, east wall of S3 (film 41.28)



**Plate 209:** General view of S4 showing doorway from S3 – note blocked window of F3 below (film 44.21)



**Plate 210:** General view of S4, looking towards S3 (film C/S 4.13)



**Plate 212:** Detail of cast iron stove, S4 (film C/S 4.12)



**Plate 211:** Detail of cast iron stove, S4 (film 44.20)



**Plate 213:** General view of west range showing contemporary join with former south range (film D.11)



**Plate 214:** Detail view of original east wall of lift shaft, west range (film D.12)



**Plate 215:** Detail of timber floor joists, boarding and lath and plaster construction, west range (film D.13)



**Plate 216:** View of west range showing transverse steel I-section beams within which the timber joists were set (film D.14)



**Plate 217:** Detail of roof structure of king-post with diagonal braces, west range (film D.15)



**Plate 218:** Detail of roof structure of king-post without diagonal braces, west range (film D.16)



**Plate 219:** General view of north elevation of the south range (west end) (film 9.3)



**Plate 220:** General view of north elevation of the south range (west end) – note removed 2<sup>nd</sup> floor (film 9.10)



**Plate 221:** View across central yard from F3 towards north elevation of south range (west end) – note external staircase leading to basement (film 24.12)





**Plate 222:** General view of north elevation of south range (west end) – note external staircase leading to 2<sup>nd</sup> floor and inserted door within former window and inserted window in former door at ground floor (film 33.6)



**Plate 223:** View of north elevation of south range (west end) showing join with east range – note external staircase (film 10.1)



**Plate 224:** Detail of external staircase and supporting brackets (film 27.15)



**Plate 225:** General view of north elevation of south range (east end) (film 2.13)



**Plate 226:** Detail of primary doorway and adjacent type 7 window, north elevation of the south range (east end)  
(film 2.15)



**Plate 227:** View of rear yard showing south range (east end) to the right, furnace house range to the left (film 10.7)



**Plate 228:** Detail of electrical transformers positioned on the north elevation of the south range (east end) (film 23.1)



**Plate 229:** General view of room B5, south range (film 7.7)



**Plate 230:** General view of B5 – note inserted ceiling (film 7.6)



**Plate 231:** General view of B5, showing brick flues and passageway leading to B6  
(film 3.24)



**Plate 232:** General view of B5, showing brick flues and passageway leading to B6  
(film C/S 2.25)



**Plate 233:** Detail of arched passage (P1) within north wall of B5 (film 7.9)

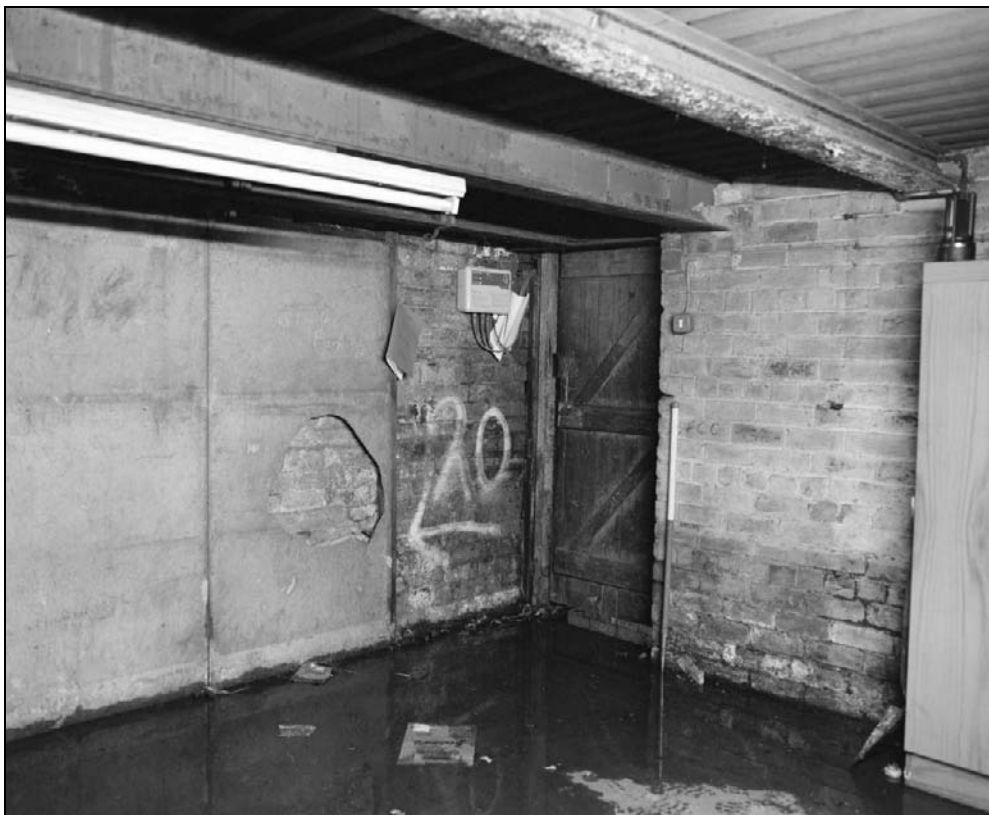


**Plate 234:** Detail of arched passage (P1) within north wall of B5 (film 3.26)





**Plate 235:** Detail view of inserted ceiling (air raid shelter) of B5 (south range) (film 3.28)



**Plate 236:** General view of B6, south range (film 8.4)



**Plate 237:** General view of B6 – note blocked opening and scar in floor (film 8.1)



**Plate 238:** Detail of scar in floor of B6 – machine base (film 3.23)



**Plate 240:** General view along B7 towards doorway leading to former rear yard of Trafalgar Grinding Wheel (film 8.8)



**Plate 239:** View down external staircase from central yard to B7 (film 8.6)



**Plate 241:** Detail of section of phase 1 wall with archway, east wall of B7, south range (film 27.13)



**Plate 242:** General view of G20, south range (west end) (film 16.3)



**Plate 243:** General view of room G20, south range – note partially blocked doorway leading to G21, west range (film 16.5)



**Plate 244:** Detail of blocked arched openings within the south wall of G20, south range (west end) (film 21.35)



**Plate 245:** Detail of altered fireplace, east wall of G20, south range (film 3.2)



**Plate 246:** Detail of window within former doorway and doorway within former window, north wall of G20, south range (film 3.4)



**Plate 247:** General view of room G19, south range (west end) – note scars within floor (film 16.9)

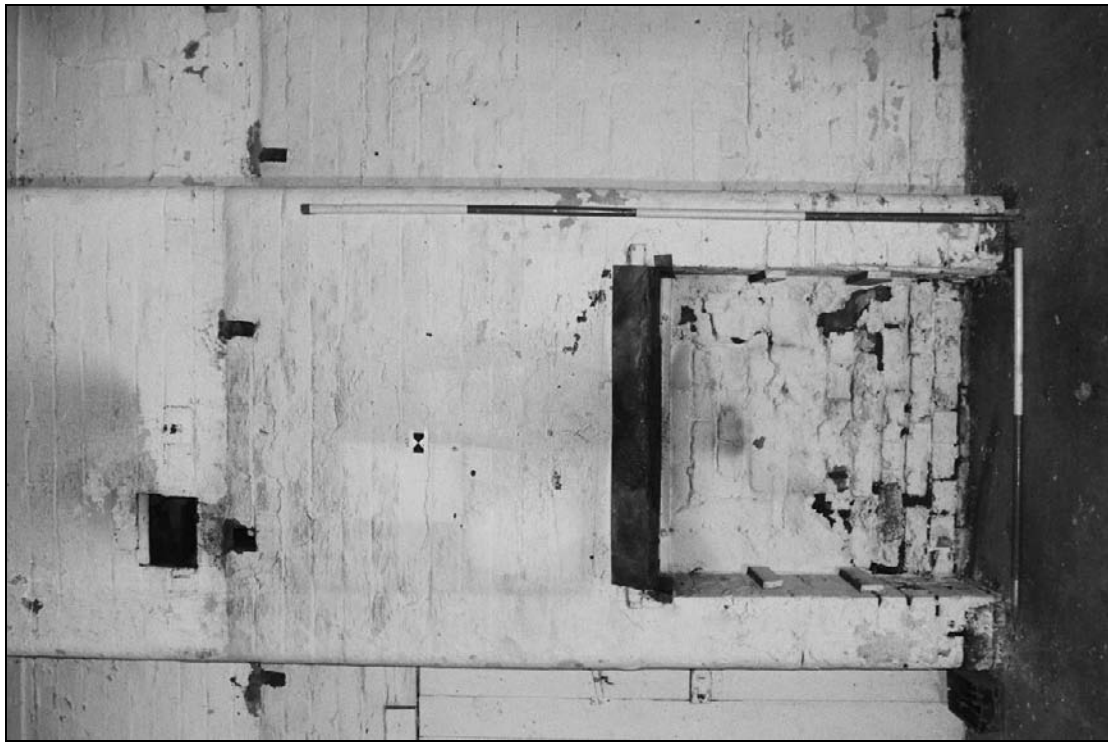


**Plate 248:** General view of G19, south range – note inserted window and raised floor level with sockets in east wall from former partitioned room with suspended ceiling (film 16.7)





**Plate 249:** Detail of doorways, northeast corner of G19, south range – left door is primary leading to G8 (east range) right door is inserted (film 21.27)



**Plate 250:** Detail of fireplace, east wall of G19, south range (film 21.29)



**Plate 252:** Detail of altered fireplace, west wall of G19, south range (film 21.33)



**Plate 251:** Detail of blocked opening southwest corner of G19, south range (film 21.31)



**Plate 254:** Detail of remains of former hand forge, room G18, south range (east end) (film 22.12)



**Plate 253:** General view of southeast corner of room G18 showing remains of hand forge, south range (east end) (film 17.8)



**Plate 255:** General view of southwest corner of G18 showing stepped brick supports for chimney breast and fireplace on floor above (film 17.9)



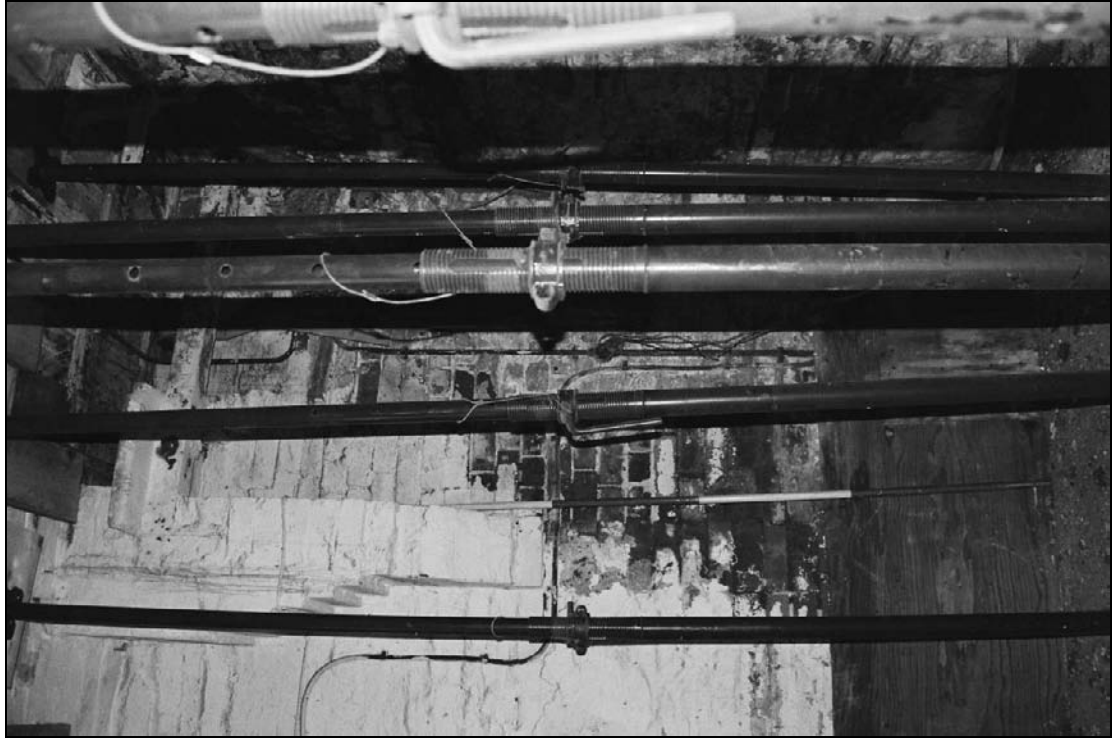
**Plate 256:** View of northwest corner of G18 showing scars from removed hand forge and inserted doorway (film 22.15)



**Plate 257:** Detail of high blocking within west wall of G18, south range (east end)  
(film 22.17)



**Plate 258:** General view of room G17, south range – note remains of hand forge (film 18.1)



**Plate 260:** View of southeast corner of G17 showing scars of removed hand forge and stepped support and flue to floor above (film 22.7)



**Plate 259:** Detail of hand forge and adjacent blocked opening, west wall of G17 south range (film 22.9)



**Plate 262:** Detail of altered type 7 window, north wall of G17 (film 22.11)



**Plate 261:** View of stepped brick supports for the chimney breast and fireplace on floor above, east wall of G17, south range (film 18.3)



**Plate 263:** Detail of ceiling construction, G17 south range (film 22.5)



**Plate 264:** General view of G16 – note inserted door within former window and partitioned inserted staircase with storage space beneath (film 18.6)





**Plate 265:** General view of southeast corner of G16, south range with G15, machine shop beyond – note inserted doorway in former window, inserted window and removed hand forge (film 18.8)



**Plate 266:** General view of southwest corner of G16 showing type 9 window and scars from removed forge (film 18.10)



**Plate 268:** Internal detail of type 7 window, north wall of G16, south range (film 22.3)



**Plate 267:** Detail of door within former window opening, north wall of G16, south range (film 23.35)



**Plate 269:** Detail of brick flue and ceiling of G16, south range (film 22.1)



**Plate 270:** View depicting doorway into G16 from G15 machine shop – showing original type 9 window features, south wall of G16, south range (film D.17)



**Plate 271:** View of south side of timber and glazed partition at west end of F10, south range (west end) leading to F11 (film C/S 3.4)



**Plate 272:** View of south side of timber and glazed partition at west end of F10, south range (west end) leading to F11 (film 29.6)



**Plate 274:** Detail of north side of timber and glazed partition, west end of F10 south range (film 25.6)



**Plate 273:** View of doorway at west end of F10, leading to F11/F18, with timber and glazed partition to left, south range (film 25.5)



**Plate 275:** View of modern studwork partition at west end of F10, south range (film 25.8)



**Plate 276:** General view of F10, south range (west end) (film 29.2)



**Plate 277:** General view of F10 showing modern partitions at west end of room, south range (film 29.3)



**Plate 278:** Detail of fireplace and blocked doorway, east wall of F10, south range (film 25.2)



**Plate 280:** Detail of blocked and boarded opening within south wall of F10, south range (film 26.32)



**Plate 279:** Detail of type 4 window, north wall of F10, south range (film 26.35)





**Plate 281:** View of west end of F9, south range, showing doorway and type 4 window (film 34.3)



**Plate 282:** View of southwest corner of west end of F9 showing blocked opening (film 34.2)



**Plate 284:** Detail of formerly boarded fireplace, west wall of F9, south range (film D.18)



**Plate 283:** Detail of blocked opening, southwest corner of F9, south range (film 26.19)



**Plate 285:** General view of the east end of F9, south range, showing fireplace and doorway to F7 beyond (film 34.5)



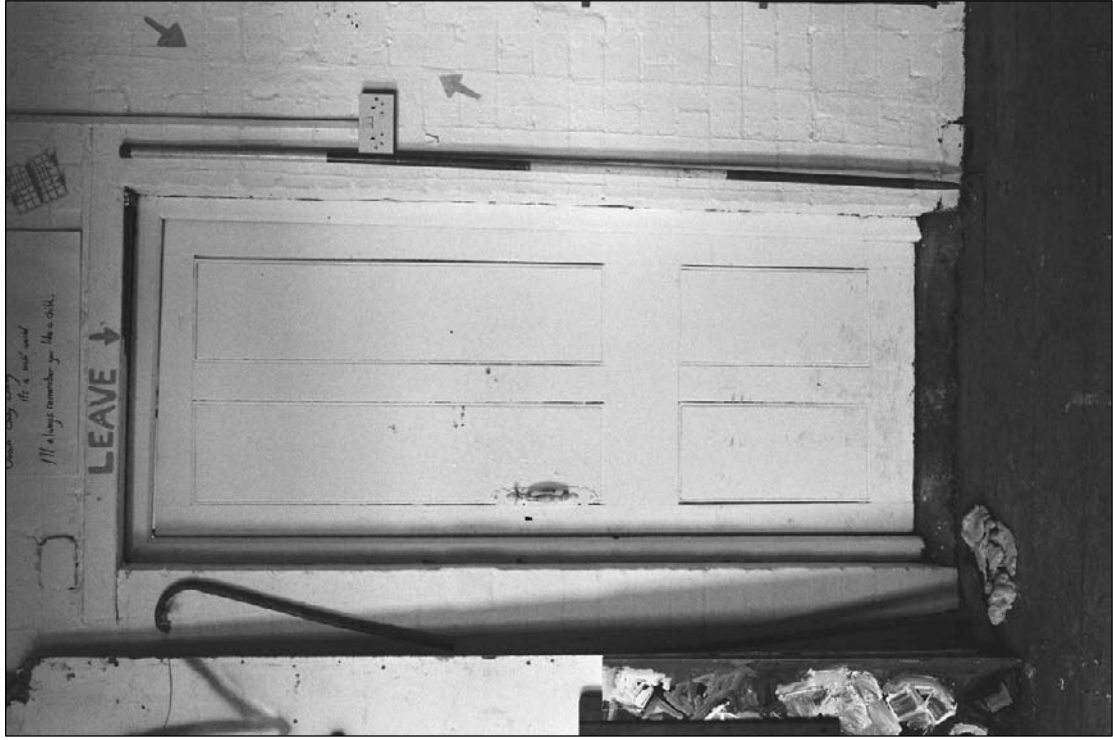
**Plate 286:** General view of east end of F9, south range, showing inserted partition and doorways leading to external staircase and F6, east range (film 34.8)



**Plate 287:** Detail of primary doorway leading to/from external staircase in central yard, north wall of F9, south range (film 26.14)



**Plate 288:** Detail of fireplace, east wall of F9, south range (film 26.16)



**Plate 289:** Detail of timber doorway leading to/from F6 east range, north wall of F9, south range (film 26.12)



**Plate 290:** General view of F7, south range (east end) (film 34.9)



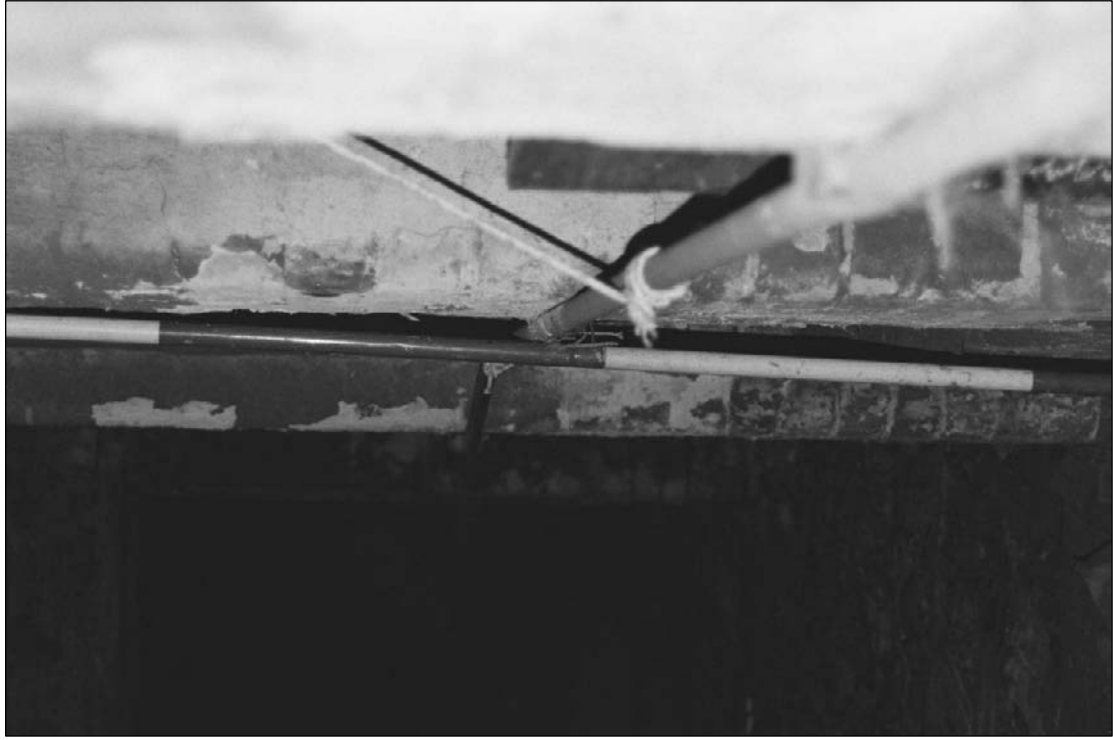
**Plate 291:** General view of F7, south range (east end) – note fireplace and shelving (film 35.2)



**Plate 292:** Detail of fireplace, east wall of F7, south range (film 27.28)



**Plate 293:** Detail of fireplace west wall of F7, south range (film 27.33)



**Plate 295:** Detail of gas pipe along south wal of F7,  
south range (film 27.30)



**Plate 294:** View of northwest corner of F7 showing  
shelving and cast iron bracket (film 27.35)





**Plate 297:** General view of F7 after clearance showing previous colour schemes on ceiling (film D.19)



**Plate 296:** Detail of lamp, F7 south range (east end) (film 26.1)



**Plate 298:** General view of F8, south range (east end) – note inserted staircase (film 35.4)



**Plate 299:** General view of F8, south range (east end) – note workbenches and fireplace (film 35.6)



**Plate 300:** Detail of the northwest corner of F8 showing fireplace, ceramic sink and workbench (film 35.7)



**Plate 301:** Detail of fireplace within west wall of F8, south range (film 27.26)



**Plate 302:** Detail of sink and workbench, northwest corner of F8, south range (film 27.24)



**Plate 303:** Detail of workbench along south wall of F8, south range (film 27.22)



**Plate 304:** Detail of lower workbench along south wall of F8, south range (film 44.5)



**Plate 305:** Detail of wear on workbench, F8, south range (film 44.8)



**Plate 306:** Detail of wear on workbench, south wall of F8, south range (film C/S 4.9)



**Plate 307:** View of inserted staircase at east end of F8 – note brick flue in southeast corner of room (film 27.16)



**Plate 309:** Detail view up inserted staircase, F8, originally to second floor of range (film 27.18)



**Plate 308:** View down inserted staircase, F8, towards doorway from rear yard (film 27.20)





**Plate 310:** Detail of timber floor joists set into south wall of south range (film D.20)



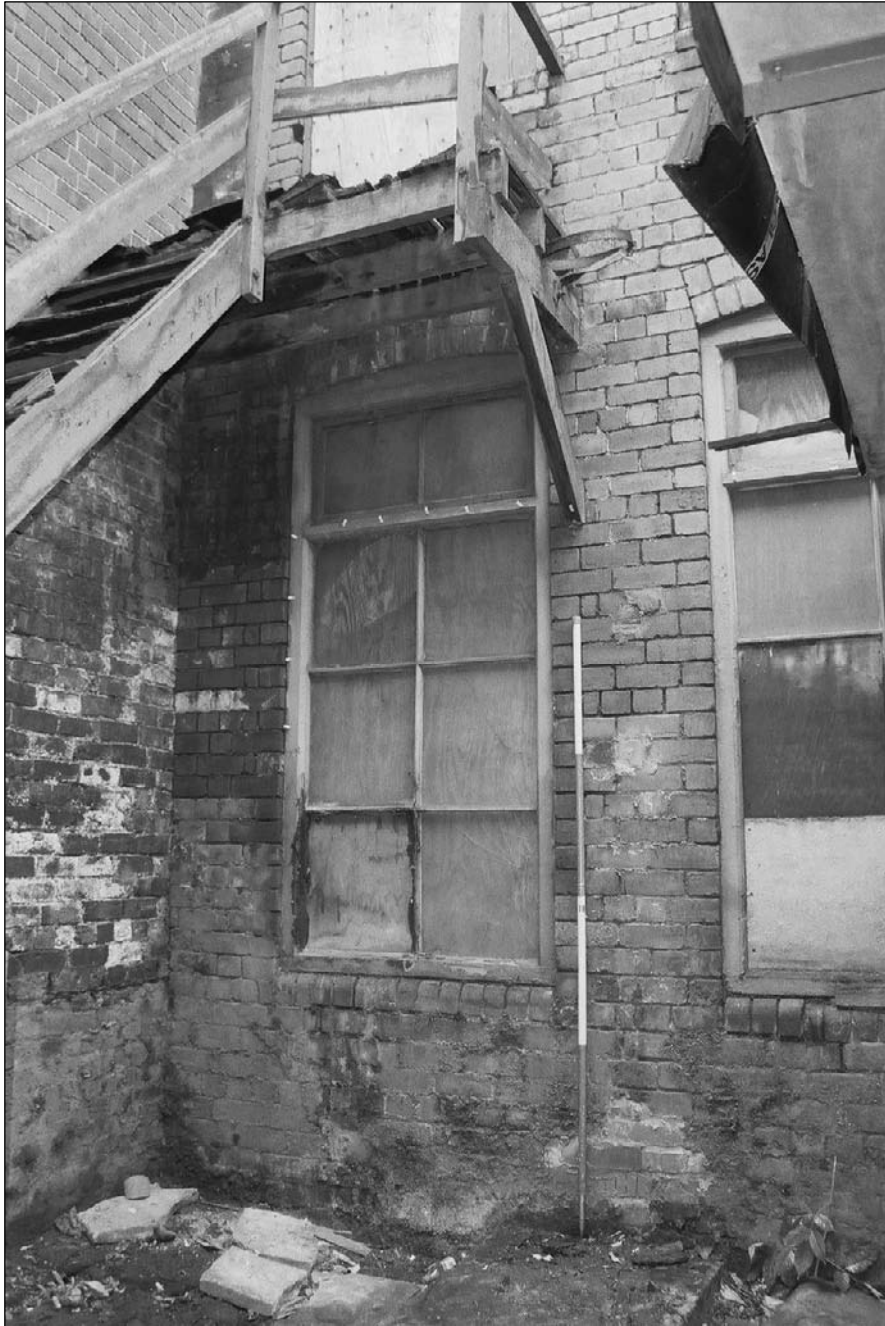
**Plate 311:** Detail of blocked arched opening showing painted reveals, south elevation of south range (film D.21)



**Plate 312:** General view of west elevation of east range – removed second floor with projecting truncated chimney breast (film 9.6)



**Plate 313:** Detail of external staircase and cast iron brackets, west elevation, south end of east range (film 43.10)



**Plate 314:** Detail of type 4 window and secondary timber external staircase, west elevation, north end of east range (film 2.20)



**Plate 315:** View of west elevation of east range showing removed second floor and projecting truncated chimney breast with blocked fireplace (film 12.7)



**Plate 316:** Detail of truncated chimney breast from removed second floor, east range (film 28.32)



**Plate 317:** General view of east elevation of east range (south end) from rear yard (film 11.1)



**Plate 318:** General view of south side of east range cart passage showing doorway leading to G8 (film 2.17)



**Plate 319:** Detail of lath and plaster ceiling of east range cart passage and attached electrical transformers (film 2.18)



**Plate 320:** General view of G8, east range (film 17.4)



**Plate 321:** General view of G8, east range – note fireplace and boarded doorway to G19, south range (film 17.2)



**Plate 322:** Detailed view of fireplace and adjacent arched alcove, G8 – note timber box over external staircase leading to basement (B7)(film 21.25)



**Plate 323:** Detail of type 4 window, east wall of G8, east range (film 21.22)

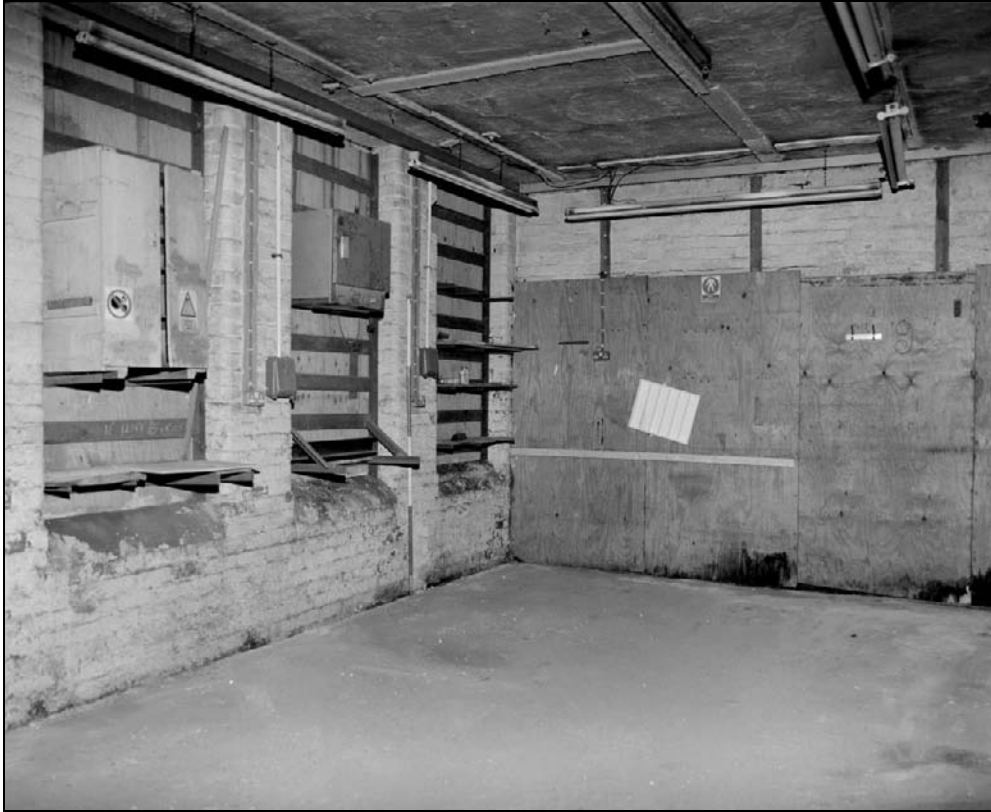




**Plate 324:** Detail of electrical fixings on the ceiling of G8, east range (film 21.21)



**Plate 325:** General view of G7, east range – note inserted double doors (film 36.10)



**Plate 326:** General view of G7, east range – note boarded type 4 windows with modified splayed sills (film 36.8)



**Plate 327:** Detail of blocked type 4 windows within east wall of G7, east range (film D.22)



**Plate 328:** General view of southwest corner of F6, east range, showing doorways leading to F9, south range and the external staircase from the central yard – note brick flue (film 35.10)



**Plate 330:** Detail of primary timber panelled door, west wall of F6, east range (film C/S 3.2)



**Plate 329:** Detail of primary timber panelled door, west wall of F6, east range (film 26.10)



**Plate 331:** View of north wall of F6, east range, showing blocked primary door, inserted door and central blocked fireplace (film 36.1)



**Plate 332:** Detail of blocked fireplace, north wall of F6, east range (film 26.9)



**Plate 333:** General view of F5, east range, showing changes in roof level (film 36.3)



**Plate 334:** General view of F5, east range – note inserted doorway to F6 and blocked fireplace (film 36.6)



**Plate 335:** View of northeast corner of F5 showing differing roof levels and type 10 and 11 windows in the east wall (film 26.4)



**Plate 336:** Detail of type 4 window, west wall of F5, showing open casement (film 26.6)



**Plate 337:** Detail of inserted doorway within former type 4 window, leading to secondary external staircase, F5, east range (film D.23)



**Plate 338:** Detail of inserted secondary external staircase leading from F5, east range to central yard (film D.24)

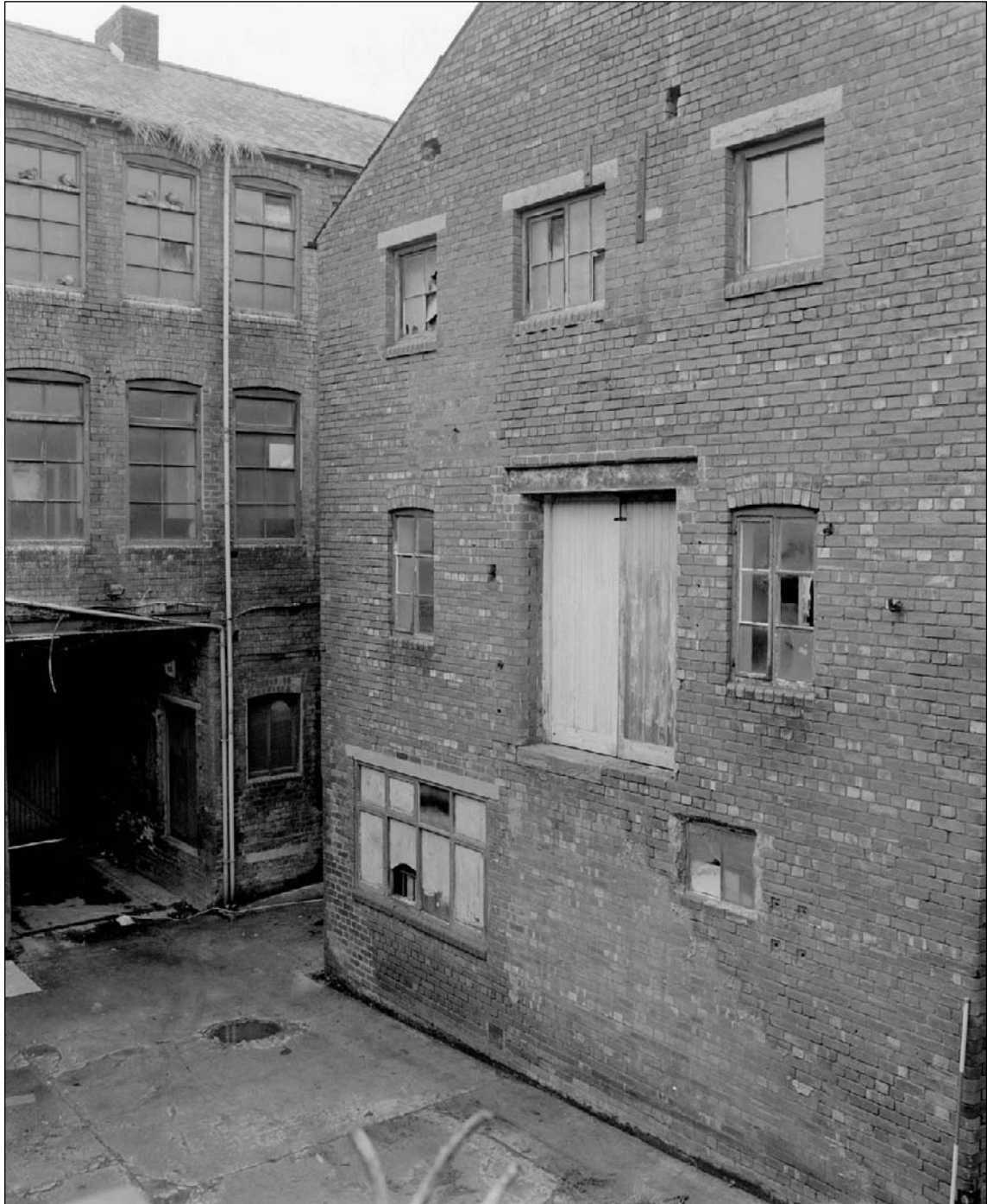




**Plate 339:** General view of east range during demolition showing floor and ceiling construction (film D.25)



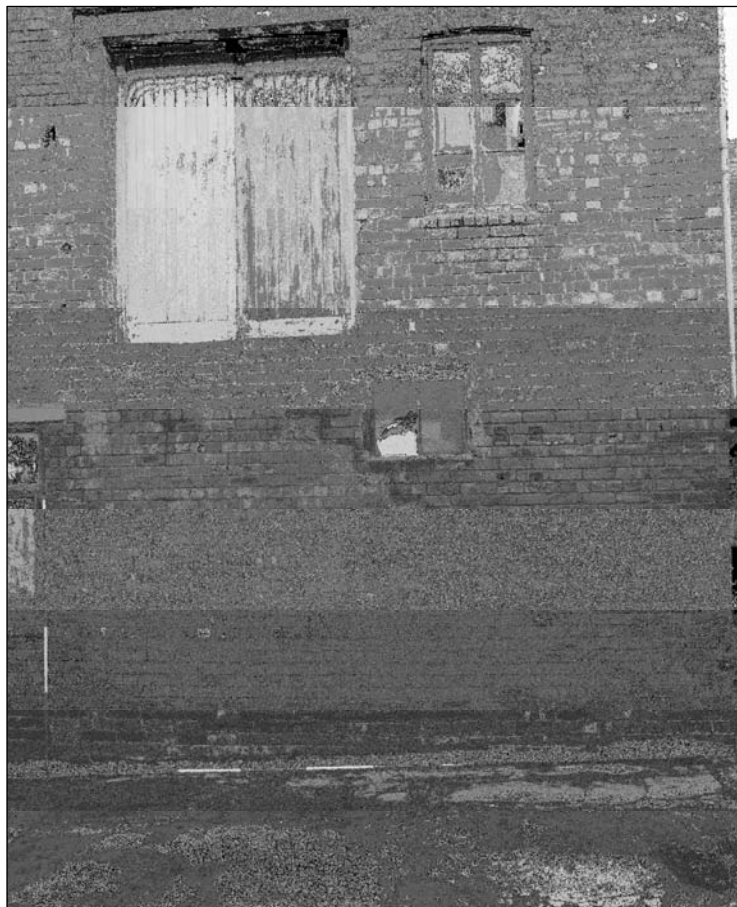
**Plate 340:** General view of the south and west elevation of the north range – note relationship with west range extension (film 12.5)



**Plate 341:** General view of south elevation of north range, west range beyond (film 11.10)



**Plate 342:** Detail of removed external staircase scar, south elevation of north range (film 28.24)



**Plate 343:** Detail of widened first floor door, removed external staircase scar and inserted window, south elevation of north range (film 20.7)



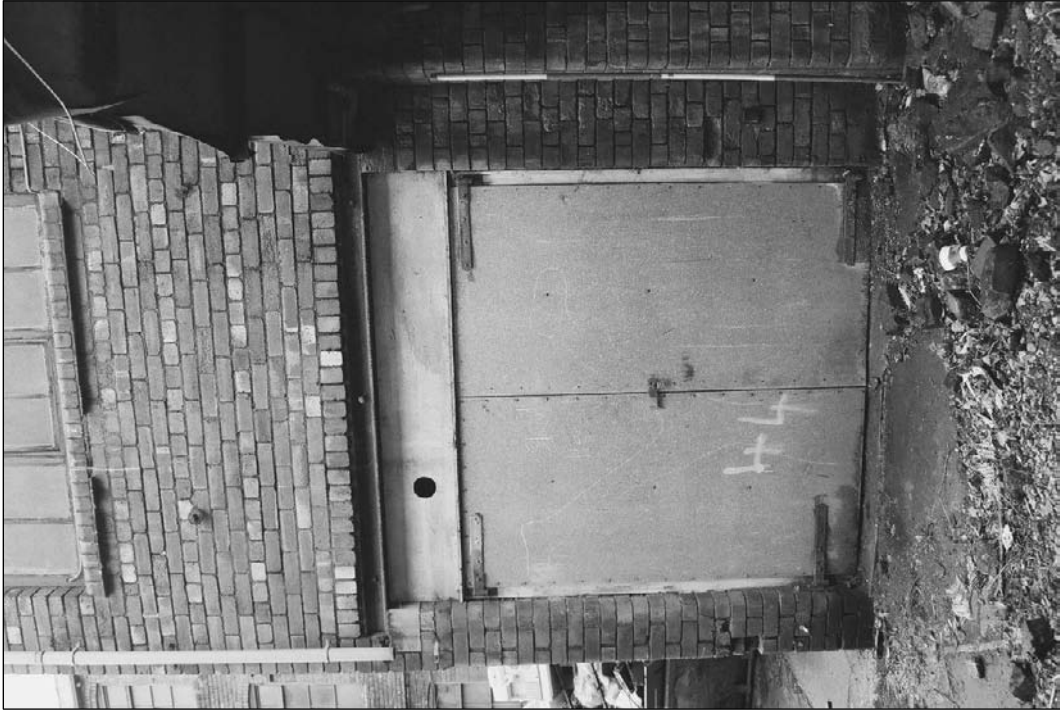
**Plate 344:** Detail of doorway and type 19 window, leading to G5, west elevation of north range (film 2.28)



**Plate 346:** General view of yard between north and east ranges showing inserted modern roof covering, timber staircase and two phased north boundary wall (film 11.8)



**Plate 345:** General view of yard between north and east ranges showing inserted modern roof covering, timber staircase and two phased north boundary wall (film 9.7)



**Plate 348:** Detail of inserted double doors, east elevation of north range (film 2.25)



**Plate 347:** Detail of secondary inserted modern door and type 14 window, southeast corner of north range (film 10.4)



**Plate 349:** Detail of doorway and type 20 window, east elevation of north range (film 43.1)



**Plate 350:** Detail of doorway and type 20 window, east elevation of north range (film C/S 4.32)





**Plate 351:** General view of entrance and window type 20 to G4, east elevation of north range (film 2.23)



**Plate 353:** Detail of type 20 window frame, east elevation of north range (film 42.34)



**Plate 352:** Detail of type 20 window frame, east elevation of north range (film 42.32)



**Plate 354:** General view of G4, north range (film 14.6)



**Plate 355:** General view of G4, north range, looking towards G3, west range extension (film 14.7)



**Plate 357:** Detail of doorway, east wall of G4, north range (film C/S 4.24)



**Plate 356:** Detail of doorway, east wall of G4, north range (film 44.34)



**Plate 358:** General view of southwest corner of G5, north range – note type 17 and 19 windows (film 15.5)



**Plate 359:** General view of southwest corner of G5, north range – note type 17 and 19 windows (film C/S 2.23)



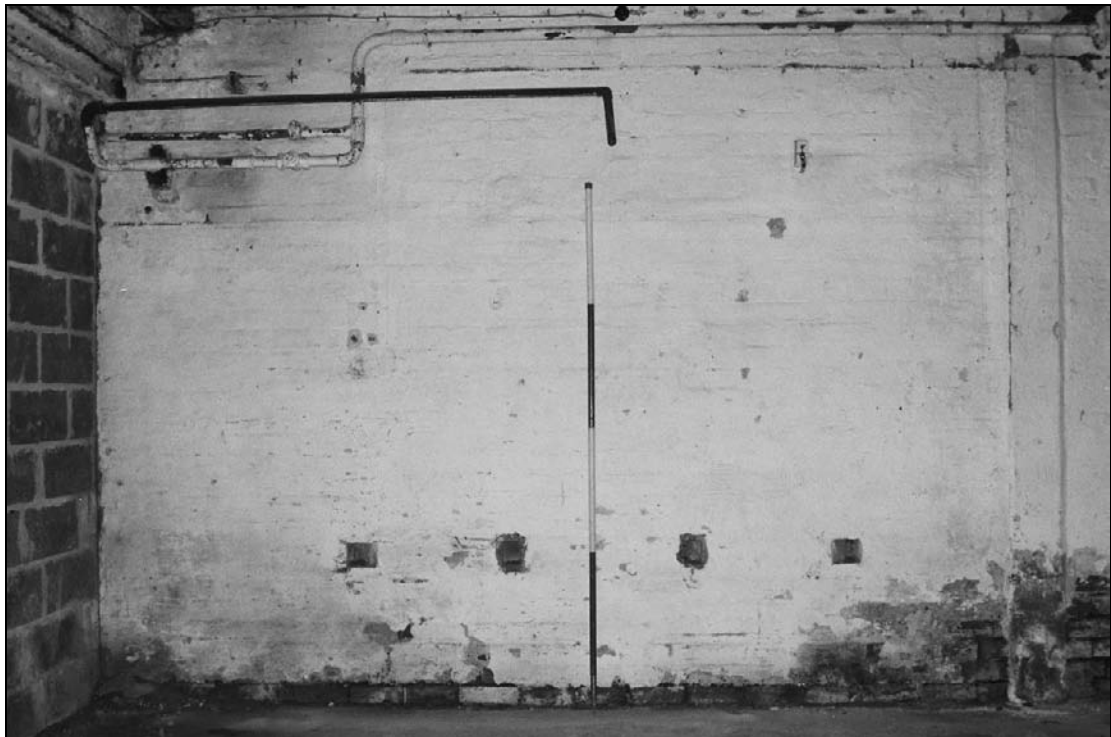
**Plate 360:** Detail of doorway and type 19 window, west wall of G5, north range (film 21.17)



**Plate 361:** Detail of blocked doorway and type 19/20 window, west wall of G5 (film 15.1)



**Plate 362:** General view of G5, north range, showing removed wall scars (film 14.9)



**Plate 363:** Detail of north wall of G5, north range – note sockets in wall indicating removed workbench (film 21.13)



**Plate 364:** General view of northeast corner of G5, north range, showing widened doorway and inserted ramp (film 15.4)



**Plate 365:** Detail of cast iron brackets, south wall of G5, north range (film 21.15)





**Plate 366:** Detail of ceiling of G5 showing steel I-section beam indicating position of removed wall and shuttered concrete ceiling (film 21.11)



**Plate 367:** General view of G6, north range (film 43.3)



**Plate 368:** View of modern doors looking into yard, east wall of G6, north range (film 43.8)



**Plate 369:** Detail of northeast corner of G6 showing former position of hand forge – note flue in east wall (film 43.5)



**Plate 370:** Detail of sockets in north wall of G6, north range (film 42.29)



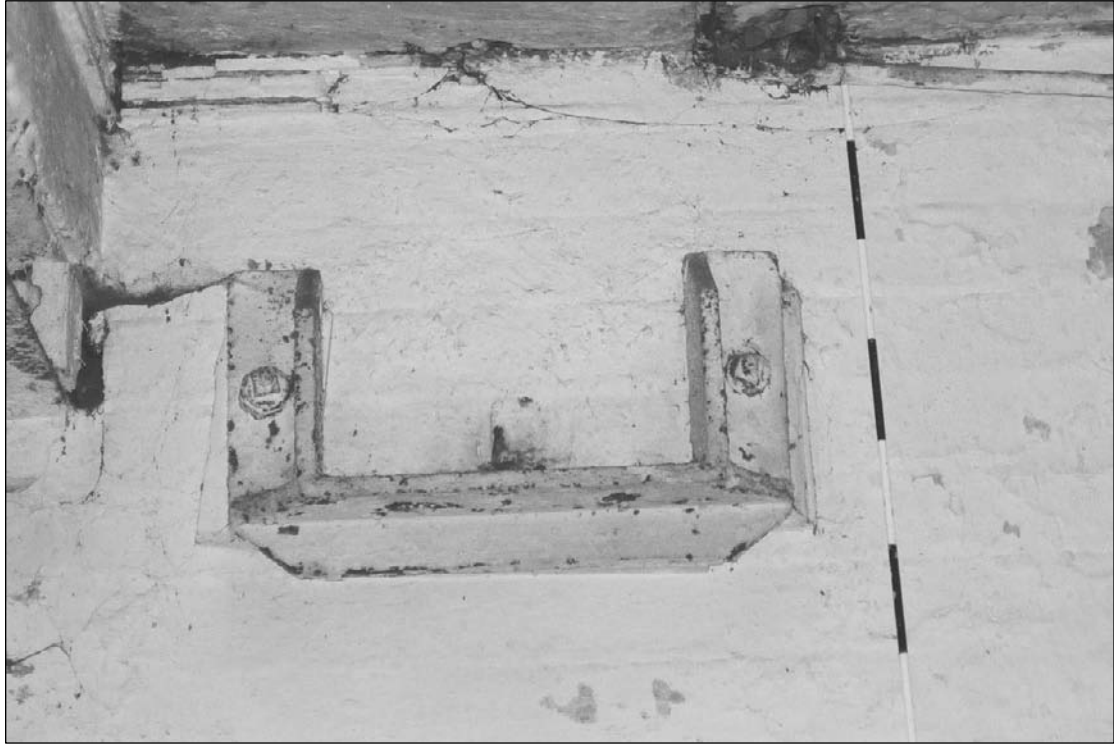
**Plate 371:** Detail of original brick floor of G6, north range (film 42.30)



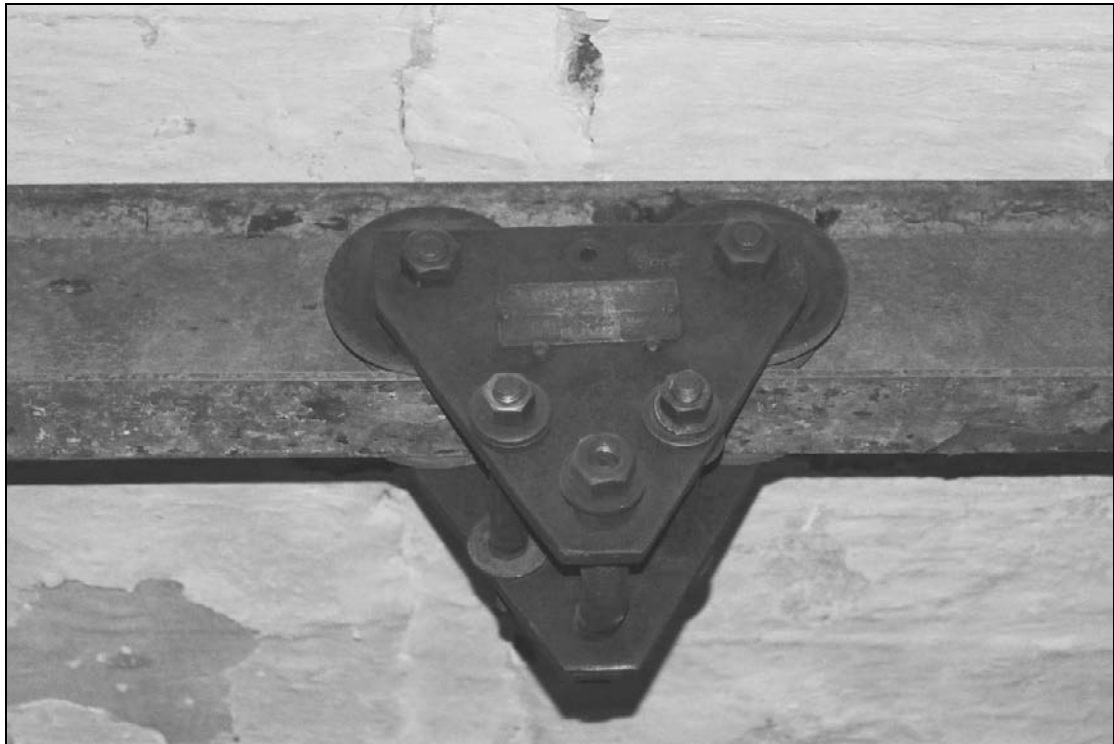
**Plate 372:** Detail of flue, northeast corner of G6, north range (film 42.27)



**Plate 373:** Detail of hole and fixings in north wall of G6 (film 42.21)



**Plate 374:** Detail of cast iron fitting, south wall of G6 (film 42.24)



**Plate 375:** Detail of inserted hoist, G6, north range (film 42.23)



**Plate 376:** General view of F4, north range – note workbench, column and loading door (film 33.2)



**Plate 377:** General view of F4, north range – note workbench, column and loading door (film C/S 2.9)



**Plate 378:** General view of F4, north range – note blocked window and stair scar (film 33.4)



**Plate 379:** General view of F4, north range – note blocked window, stair scar and fireplace (film C/S 2.10)



**Plate 381:** Detail of fireplace, north wall of F4, north range (film 24.29)



**Plate 380:** Detail of fireplace, north wall of F4, north range (film 33.10)





**Plate 383:** Detail of cast iron column, F4, north range (film 24.20)



**Plate 382:** Detail of inserted loading door, south wall of F4, north range (film 33.7)



**Plate 385:** Detail of wall box, north wall of F4, north range (film 24.26)



**Plate 384:** Detail of blocked wall box, north wall of F4, north range (film 24.34)



**Plate 386:** Detail of line shafting supports of workbench along east wall of F4, north range (film 24.25)



**Plate 387:** Detail of type 14 window, F4, north range (film 24.22)



**Plate 388:** Detail of blocked window, stair scar and hatch in ceiling, west wall of F4, north range (film 24.32)



**Plate 389:** Detail of hatch/opening in ceiling of F4, leading to S5, north range (film 24.18)



**Plate 390:** Detail of scars within concrete floor of F4, north range (film 24.30)



**Plate 391:** Detail of bull nosed brick jamb, north wall of former F4 – also note modern brickwork below (film D. 26)



**Plate 392:** General view of S5, north range – note workbenches and overhead line shafting (film 45.6)



**Plate 393:** General view of S5, north range – note workbenches and overhead line shafting (film 45.4)



**Plate 394:** General view of S5, north range – note doorway from S4, workbenches and line shafting (film 45.1)



**Plate 395:** Detail of roof structure and line shafting, S5, north range (film 45.10)





**Plate 396:** Detail of roof structure and line shafting, S5, north range (film 44.11)



**Plate 397:** Detail of roof structure and line shafting, S5, north range (film 44.17)



**Plate 399:** Detail of workbench and line shafting, south wall of S5 (film 44.29)



**Plate 398:** View showing overhead and below line shafting and central workbench (film 44.27)



**Plate 400:** Detail of below line shafting, along east wall of S5 (film 44.15)



**Plate 401:** Detail of line shafting, S5 (film 44.13)



**Plate 402:** Detail of type 14 window, S5, north range (film 44.26)



**Plate 403:** Detail of motor, S5, north range (film 44.10)



**Plate 405:** Detail of hatch in floor, leading to F4 below, room S5 (film 44.32)



**Plate 404:** Detail of timber stairs leading to/from S4, northwest corner of S5 (film 44.23)



**Plate 406:** Detail of section through external chimney stack of north range (film D.27)



**Plate 407:** General view of room G15, machine shop – note inserted doorways (film 19.2)



**Plate 408:** General view of G15, machine shop – note inserted doorway from G16, south range (film 19.7)



**Plate 409:** Detail of west wall of G15, machine shop, showing blocked openings and upper gable boarded window (film 19.6)

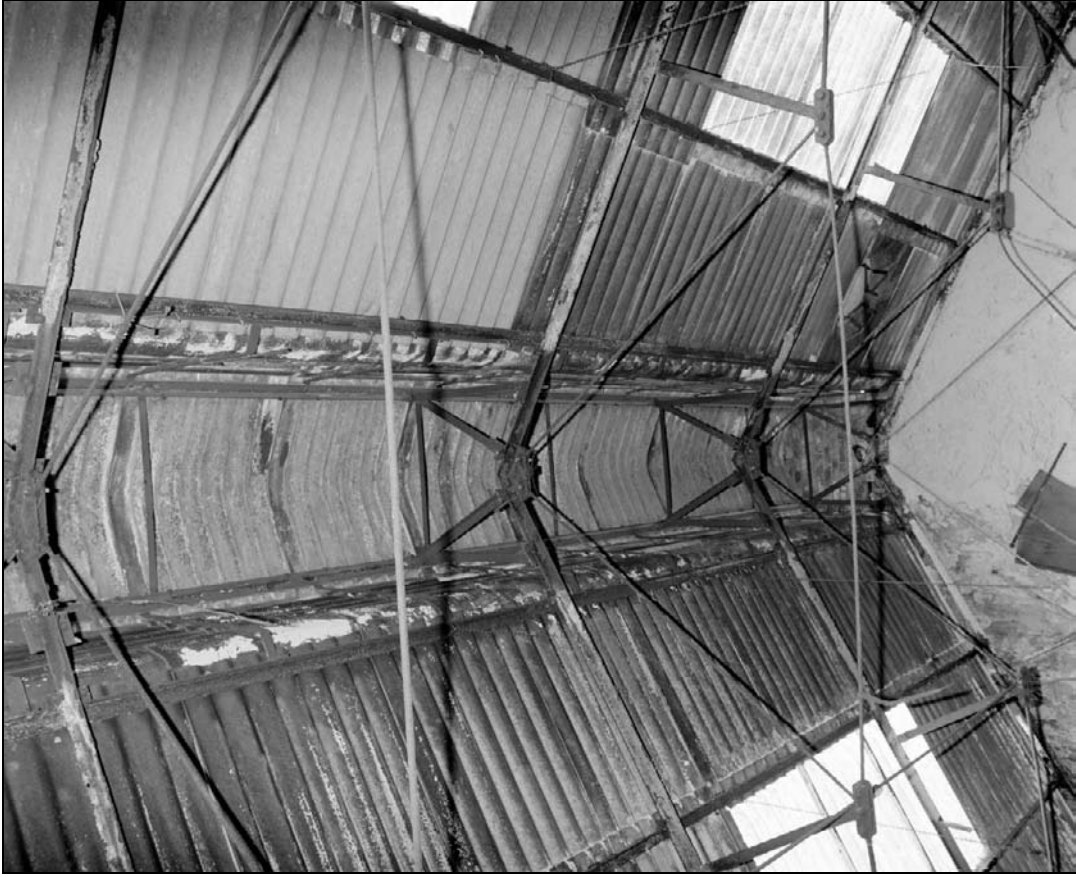


**Plate 410:** Detail of inserted doorways, blocked with blockwork, west wall of G15, machine shop (film 23.31)





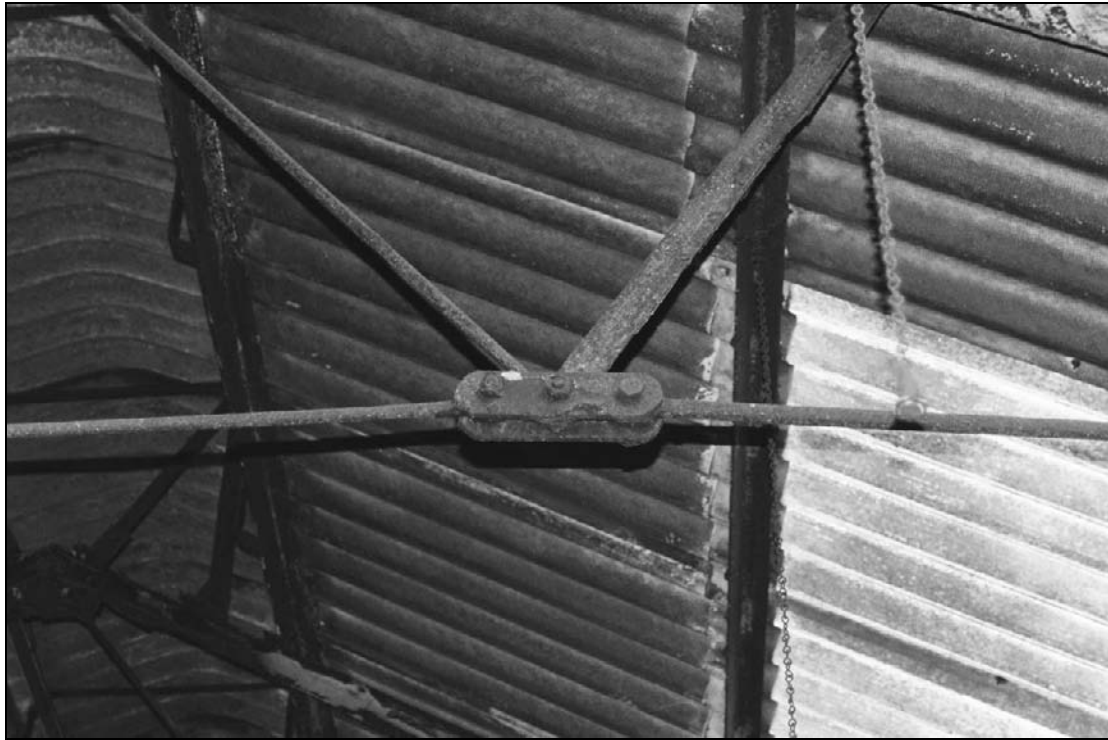
**Plate 411:** Detail of boarded primary window in gable of west wall, G15, machine shop (film 23.29)



**Plate 413:** Detail of raised ridge with louvered vents roof structure, G15, machine shop (film 19.3)



**Plate 412:** Detail of inserted window, northwest corner of G15, machine shop (film 23.33)



**Plate 414:** Detail bolted angle iron and rod roof truss structure, G15, machine shop (film 23.27)



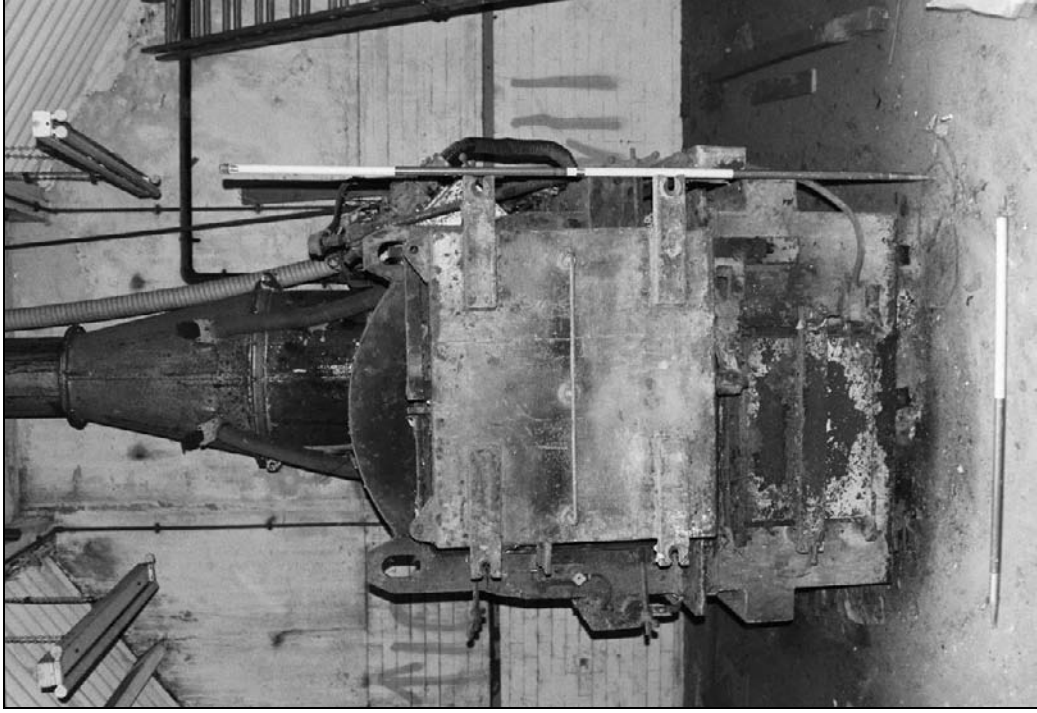
**Plate 415:** Detail of former paint scheme, G15, machine shop - dark grey/blue lower half and a light brown/beige upper half divided by a black band (film 23.24)



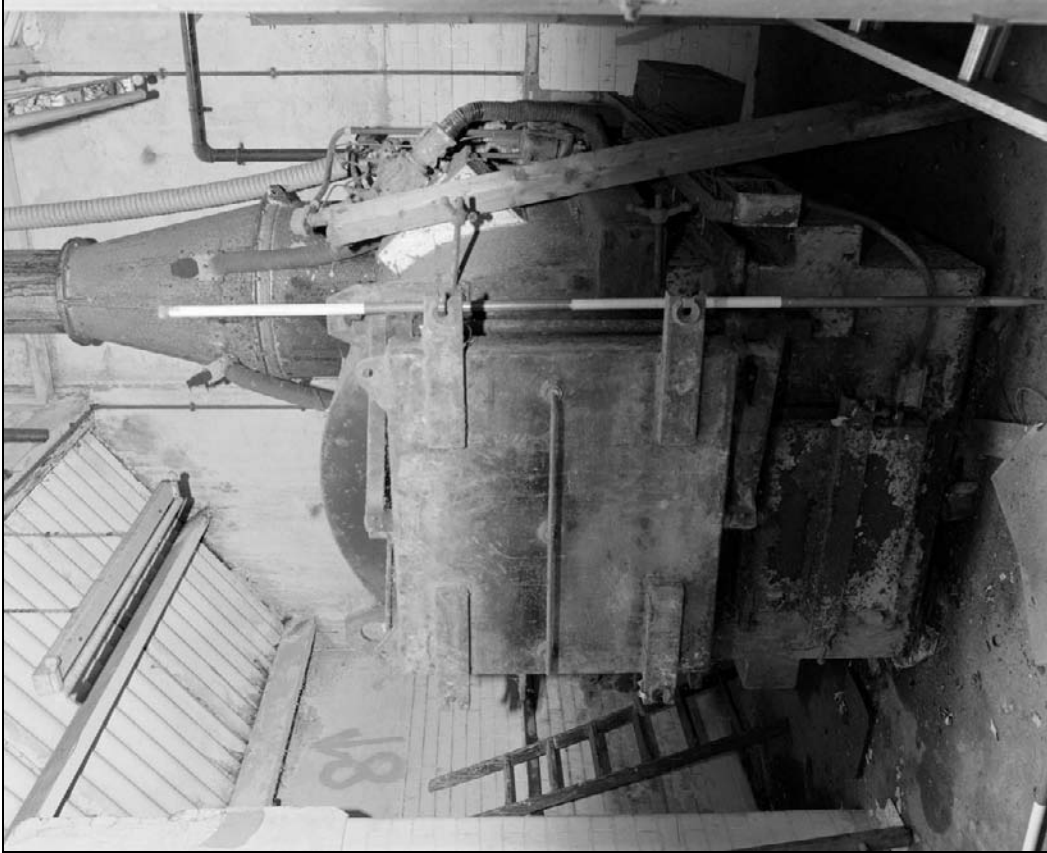
**Plate 416:** View showing detail of steel structure of machine shop and relationship with earlier privy block to the north (right) (film D.28)



**Plate 417:** Detail of original doorway to G9 and G10, west elevation of furnace house range, west building (film 22.25)



**Plate 419:** General view of G10, furnace house range, west building, showing inserted incinerator (film 22.21)



**Plate 418:** General view of G9 and G10, furnace house range, west building, showing inserted incinerator (film 17.6)



**Plate 420:** General view of G10, furnace house range, west building showing inserted incinerator (film C/S 3.1)



**Plate 421:** Detail of electrical panel associated with inserted incinerator in G10, furnace house range, west building (film 22.23)



**Plate 422:** Detail of louvered roof of G9 and G10, furnace house range, west building (film 22.19)



**Plate 423:** General view of G10 and G9, furnace house range, west building after removal of roof (film D.29)





**Plate 424:** View of north wall of G9, west building of furnace house range, showing vertical joints to east and west (film D.30)



**Plate 425:** General view of furnace house range showing west and central buildings (film 20.5)



**Plate 426:** General view of central building/furnace house – showing truncated roof trusses in north wall and chimney stack in northeast corner (film 10.10)



**Plate 427:** View of furnace house/central building of furnace house range, G11, from east building – showing inserted opening and west wall beyond (film 20.3)



**Plate 428:** Detail of blocked wall box, west wall of G11, furnace house (film 23.9)



**Plate 429:** Detail of southwest corner of furnace house showing join with west building of the range and remains of spring of segmental brick arched head of former doorway in south elevation (film 23.3)



**Plate 430:** Detail of blocked door opening, south elevation of furnace house, G11, west end (film D.31)



**Plate 431:** General view of remains of south elevation of furnace house (film D.32)



**Plate 432:** Detail of southeast corner of south elevation of furnace house showing remains of spring of segmental brick arched head of former doorway (film D.33)



**Plate 433:** General view of truncated trusses, north wall of G11, furnace house (film 23.4)



**Plate 434:** General view of lower section of north wall of furnace house (film 51.4)



**Plate 435:** General view of lower section of north wall of furnace house (film 51.9)



**Plate 436:** Detail of lower section of chimney stack, northeast corner of furnace house – note blocked arched opening (film 51.6)



**Plate 437:** Detail of upper section of chimney stack, northeast corner of G11, furnace house – showing inserted pipes (film 23.7)



**Plate 438:** Detail of base scar within secondary concrete floor, northwest corner of G11, furnace house (film 51.8)



**Plate 439:** General view of G12, east building of furnace house range (film 19.9)





**Plate 440:** General view of G12, east building of furnace house range showing west wall (film 20.1)



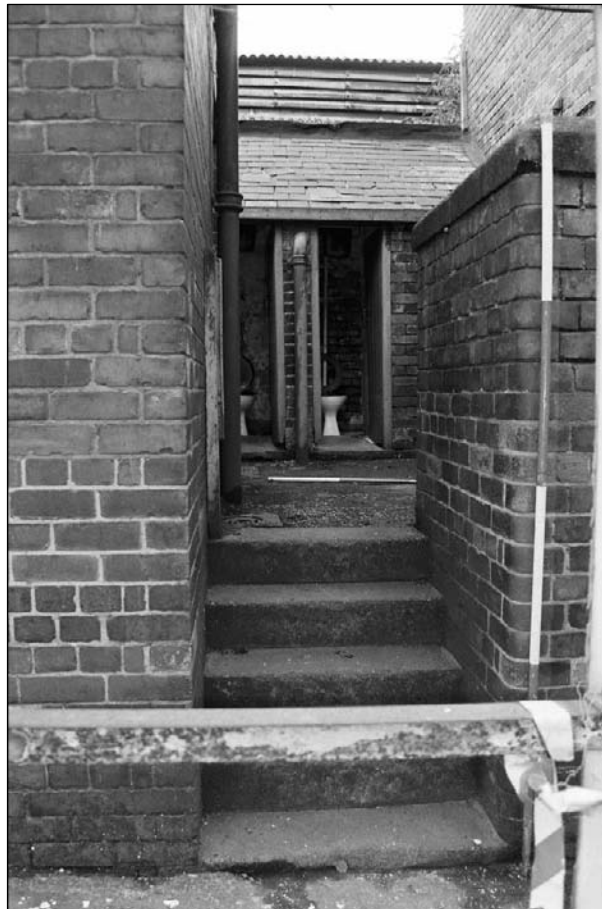
**Plate 441:** Detail of metal framed type 24 window and steel framed structure, south wall of G12, east building of furnace house range – note north elevation of G13, wash house beyond (film 23.13)



**Plate 442:** Detail of northwest corner of G12, east building of furnace house range  
(film 23.11)



**Plate 443:** General view of bolted angle iron roof structure of G12, east building of furnace house (film 23.15)



**Plate 444:** View from G12 towards small yard G14 and privy block, wash house range with G13 wash house to the left (film 23.21)



**Plate 445:** General view of west elevation of wash house (G13) (film 23.17)



**Plate 447:** General view of G13, wash house (film C/S 4.4)



**Plate 446:** General view of G13, wash house (film 44.4)



**Plate 449:** General view of G13 towards doorway in west wall (film 44.2)



**Plate 448:** General view of shower cubicles, G13, wash house (film 44.3)



**Plate 450:** Detail of tiling, G13, wash house (film 44.1)



**Plate 451:** Detail of black and white tiles, G13, wash house (film C/S 4.6)



**Plate 452:** General view of privies, wash house range from yard area G14 (film 11.4)



**Plate 453:** General view of privies, wash house range from yard area G14 (film C/S 2.13)

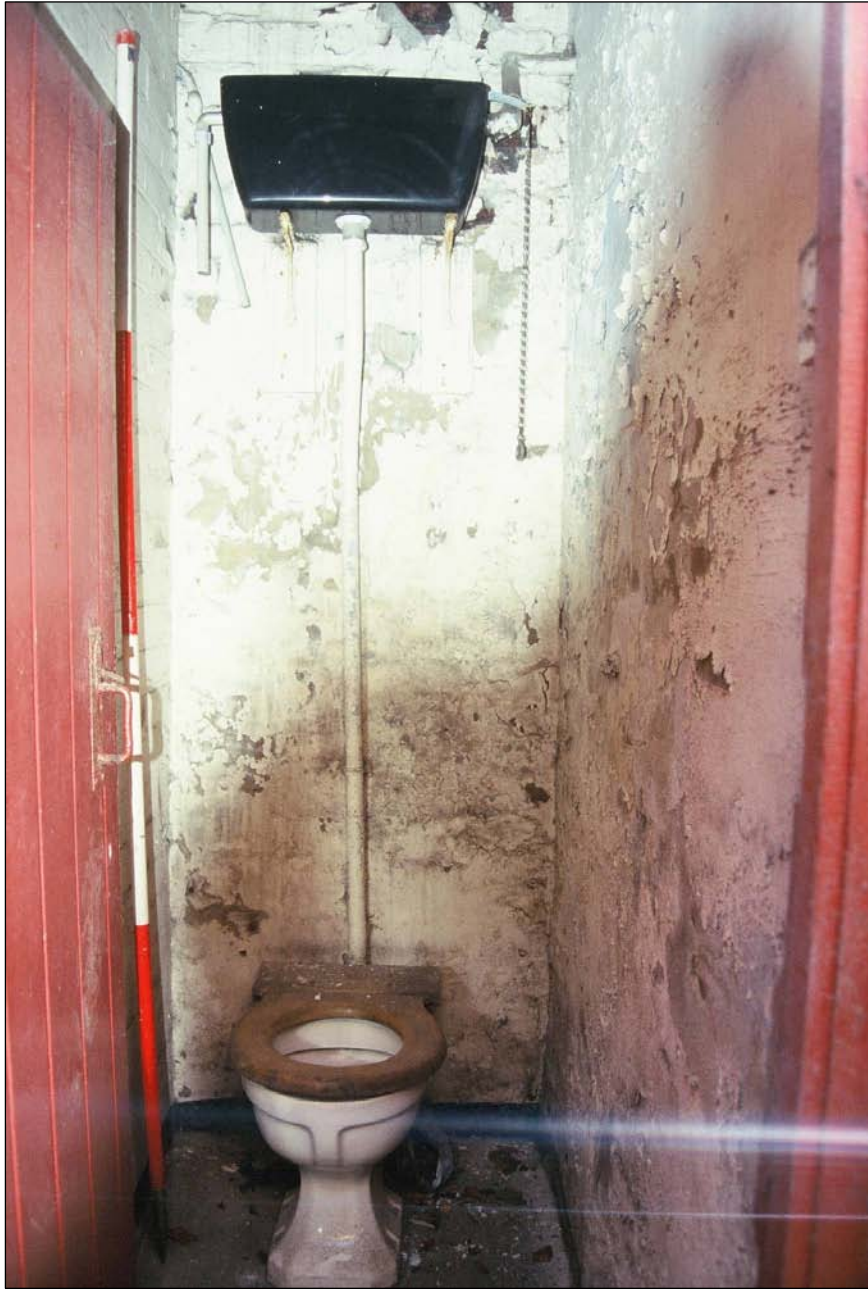




**Plate 454:** Detail of timber planked door, G14 privies, wash house range (film 23.19)



**Plate 455:** Detail of old toilet, G14 privies, wash house range (film 11.5)



**Plate 456:** Detail of toilet cubicle and old toilet, G14 privies, wash house range (film C/S 2.12)

## 14 PHOTOGRAPHIC REGISTERS

**Film 01**

| Format       | 35mm         | Type  | Black and White | Photographer | L. Dawson |
|--------------|--------------|---|-----------------|--------------|-----------|
| Film & frame | Report Plate | Description   | Direction       | Date         |           |
| 1.1          |              | Detail of blocked door, south side of cart passage, west range  | S               | 21/09/07     |           |
| 1.2          | 76           | Detail of blocked door, south side of cart passage, west range  | S               | 21/09/07     |           |
| 1.3          |              | View of east elevation of machine shop  | W               | 21/09/07     |           |
| 1.4          | 54           | View of east elevation of machine shop  | W               | 21/09/07     |           |
| 1.5          |              | View of east elevation of wash house range  | W               | 21/09/07     |           |
| 1.6          | 56           | View of east elevation of wash house range  | W               | 21/09/07     |           |
| 1.7          | 57           | General view of east elevation of the machine shop, wash house and furnace house ranges with south range beyond | SW              | 21/09/07     |           |
| 1.8          |              | View of east elevation of east range  | W               | 21/09/07     |           |
| 1.9          | 61           | View of east elevation of east range  | W               | 21/09/07     |           |
| 1.10         | 38           | General view of south elevation of south range (east end)   | NE              | 21/09/07     |           |
| 1.11         |              | General view of south elevation of south range (east end)   | NE              | 21/09/07     |           |
| 1.12         |              | View of blockings, south elevation of south range   | N               | 21/09/07     |           |
| 1.13         | 27           | View of blockings, south elevation of south range   | N               | 21/09/07     |           |
| 1.14         |              | Detail of painted lettering, south elevation of west range  | N               | 21/09/07     |           |
| 1.15         |              | Detail of painted lettering, south elevation of west range  | N               | 21/09/07     |           |
| 1.16         |              | General view of west elevation of principal façade/west elevation of west range                                 | NE              | 21/09/07     |           |
| 1.17         | 16           | General view of west elevation of principal façade/west elevation of west range                                 | NE              | 21/09/07     |           |
| 1.18         |              | Detail of partially blocked /altered lightwell, west elevation of west range                                    | E               | 21/09/07     |           |
| 1.19         | 13           | Detail of partially blocked /altered lightwell, west elevation of west range                                    | E               | 21/09/07     |           |
| 1.20         |              | Detail of type 1 window west elevation of west range  | E               | 21/09/07     |           |
| 1.21         | 12           | Detail of type 1 window, west elevation of west range   | E               | 21/09/07     |           |
| 1.22         | 11           | Detail of door leading from Trafalgar Street to G21 of west range   | E               | 21/09/07     |           |
| 1.23         |              | Detail of door leading from Trafalgar Street to G21 of west range   | E               | 21/09/07     |           |
| 1.24         | 10           | Detail of corner iron plate, cart passage, west elevation of west range   | NE              | 21/09/07     |           |
| 1.25         |              | Detail of corner iron plate, cart passage, west elevation of west range   | NE              | 21/09/07     |           |
| 1.26         |              | View of cart passage with gate open, west elevation of west range   | E               | 21/09/07     |           |
| 1.27         | 5            | View of cart passage with gate open, west elevation of west range   | E               | 21/09/07     |           |
| 1.28         | 7            | View of cart passage with gate closed, west elevation of west range   | E               | 21/09/07     |           |
| 1.29         |              | View of cart passage with gate closed, west elevation of west range   | E               | 21/09/07     |           |
| 1.30         |              | Detail of door leading to G1, west elevation of west range  | E               | 21/09/07     |           |
| 1.31         | 9            | Detail of door leading to G1, west elevation of west range  | E               | 21/09/07     |           |
| 1.32         |              | Detail of type 2 window, west elevation of west range   | E               | 21/09/07     |           |
| 1.33         | 8            | Detail of type 2 window, west elevation of west range   | E               | 21/09/07     |           |
| 1.34         | 2            | General view of the principal façade, west elevation of west range  | SE              | 21/09/07     |           |
| 1.35         |              | General view of the principal façade, west elevation of west range  | SE              | 21/09/07     |           |
| 1.36         |              | I.D Shot  | -               | 21/09/07     |           |

## Film 02

| Format       | 35mm         | Type   | Black and White | Photographer | L. Dawson |
|--------------|--------------|--|-----------------|--------------|-----------|
| Film & frame | Report Plate | Description  | Direction       | Date         |           |
| 2.1          | 90           | Detail of blocked lightwell, B3, west range  | W               | 21/09/07     |           |
| 2.2          | 87           | Detail of blocked lightwell, B3, west range  | W               | 21/09/07     |           |
| 2.3          |              | Detail of blocked lightwell, B3, west range  | W               | 21/09/07     |           |
| 2.4          | 92           | View along P2, northeast corner of B3, west range  | E               | 21/09/07     |           |
| 2.5          |              | View along P2, northeast corner of B3, west range  | E               | 21/09/07     |           |
| 2.6          |              | Detail of doors leading to B1 & B2, north wall of B3, west range   | NW              | 21/09/07     |           |
| 2.7          | 93           | Detail of doors leading to B1 & B2, north wall of B3, west range   | NW              | 21/09/07     |           |
| 2.8          | 83           | Detail of external stairs leading from basement of west range to central yard                              | N               | 21/09/07     |           |
| 2.9          |              | Detail of external stairs leading from basement of west range to central yard                              | N               | 21/09/07     |           |
| 2.10         |              | General view of furnace house range (G11 and G12) and rear yard  | NE              | 21/09/07     |           |
| 2.11         |              | General view of furnace house range (G11 and G12) and rear yard  | NE              | 21/09/07     |           |
| 2.12         |              | General view of north elevation of south range (east end)  | SE              | 21/09/07     |           |
| 2.13         | 225          | General view of north elevation of south range (east end)  | SE              | 21/09/07     |           |
| 2.14         |              | Detail of door and type 7 window, north elevation of south range   | S               | 21/09/07     |           |
| 2.15         | 226          | Detail of door and type 7 window, north elevation of south range   | S               | 21/09/07     |           |
| 2.16         |              | View of south side of east range cart passage showing doorway to G8  | SW              | 21/09/07     |           |
| 2.17         | 318          | View of south side of east range cart passage showing doorway to G8  | SW              | 21/09/07     |           |
| 2.18         | 319          | Detail of lath and plaster ceiling of east range cart passage  | NE              | 21/09/07     |           |
| 2.19         |              | Detail of lath and plaster ceiling of east range cart passage  | NE              | 21/09/07     |           |
| 2.20         | 314          | Detail of type 4 window & external staircase, west elevation of east range                                 | E               | 21/09/07     |           |
| 2.21         |              | Detail of type 4 window & external staircase, west elevation of east range                                 | E               | 21/09/07     |           |
| 2.22         |              | General view of entrance & window type 20 to G4, east elevation of north range                             | NW              | 21/09/07     |           |
| 2.23         | 351          | General view of entrance & window type 20 to G4, east elevation of north range                             | NW              | 21/09/07     |           |
| 2.24         |              | Detail of inserted double doors, east elevation of north range   | W               | 21/09/07     |           |
| 2.25         | 348          | Detail of inserted double doors, east elevation of north range   | E               | 21/09/07     |           |
| 2.26         |              | General view of yard between north and east ranges   | N               | 21/09/07     |           |
| 2.27         |              | General view of yard between north and east ranges   | N               | 21/09/07     |           |
| 2.28         | 344          | Detail of doorway and type 19 window, leading to G5, west elevation of north range                         | SW              | 21/09/07     |           |
| 2.29         |              | Detail of doorway and type 19 window, leading to G5, west elevation of north range                         | SW              | 21/09/07     |           |
| 2.30         |              | View of east elevation of west range showing doorway within former window and window within firmer doorway | NW              | 21/09/07     |           |
| 2.31         | 79           | View of east elevation of west range showing doorway within former window and window within firmer doorway | NW              | 21/09/07     |           |
| 2.32         |              | Detail of cart passage with gate closed, east elevation of west range                                      | W               | 21/09/07     |           |
| 2.33         | 71           | Detail of cart passage with gate closed, east elevation of west range                                      | W               | 21/09/07     |           |
| 2.34         | 74           | Detail of cart passage with gate open, east elevation of west range  | W               | 21/09/07     |           |
| 2.35         |              | Detail of cart passage with gate open, east elevation of west range  | W               | 21/09/07     |           |
| 2.36         |              | I.D Shot   | -               | 21/09/07     |           |

## Film 03

| Format       | 35mm         | Type  | Black and White | Photographer | I. Kendall & L. Dawson |
|--------------|--------------|---|-----------------|--------------|------------------------|
| Film & frame | Report Plate | Description   | Direction       | Date         |                        |
| 3.1          |              | VOID  |                 | 25/09/07     |                        |
| 3.2          | 245          | Detail of altered fireplace , east wall of G20, south range   | E               | 25/09/07     |                        |
| 3.3          |              | Detail of window within former doorway & doorway within former window, north wall of G20, south range | N               | 25/09/07     |                        |
| 3.4          | 246          | Detail of window within former doorway & doorway within former window, north wall of G20, south range | N               | 25/09/07     |                        |
| 3.5          |              | Detail of inserted doorway within former window, north wall of G23, west range                        | N               | 25/09/07     |                        |
| 3.6          | 121          | Detail of inserted doorway within former window, north wall of G23, west range                        | N               | 25/09/07     |                        |
| 3.7          |              | VOID  | -               | 25/09/07     |                        |
| 3.8          |              | VOID  | -               | 25/09/07     |                        |
| 3.9          | 122          | View of inserted doorway within north wall of G21, with G23 & cart passage beyond                     | N               | 25/09/07     |                        |
| 3.10         |              | Detail of type 1 window, west wall of G21, west range   | W               | 25/09/07     |                        |
| 3.11         |              | Detail of type 1 window, west wall of G21, west range   | W               | 25/09/07     |                        |
| 3.12         | 125          | Detail of type 1 window, west wall of G21, west range   | W               | 25/09/07     |                        |
| 3.13         |              | Detail of stair doorway and panelled lift shaft door, south wall of G21, west range                   | S               | 25/09/07     |                        |
| 3.14         | 127          | Detail of stair doorway and panelled lift shaft door, south wall of G21, west range                   | S               | 25/09/07     |                        |
| 3.15         |              | Detail of blocked fireplace & blocked doorway, east wall of G21, west range                           | E               | 25/09/07     |                        |
| 3.16         |              | VOID  | -               | 25/09/07     |                        |
| 3.17         |              | VOID  | -               | 25/09/07     |                        |
| 3.18         |              | VOID  | -               | 25/09/07     |                        |
| 3.19         | 126          | Detail of blocked fireplace & blocked doorway, east wall of G21, west range                           | E               | 25/09/07     |                        |
| 3.20         |              | General view of B6, south range, showing shelving & blocked opening                                   | SW              | 21/09/07     |                        |
| 3.21         |              | General view of B6, south range, showing shelving & blocked opening                                   | SW              | 21/09/07     |                        |
| 3.22         |              | Detail of machine base scar in floor of B6, south range   | W               | 21/09/07     |                        |
| 3.23         | 238          | Detail of machine base scar in floor of B6, south range   | W               | 21/09/07     |                        |
| 3.24         | 231          | General view of B5 showing brick flues & passageway leading to B6                                     | NE              | 21/09/07     |                        |
| 3.25         |              | General view of B5 showing brick flues & passageway leading to B6                                     | NE              | 21/09/07     |                        |
| 3.26         | 234          | Detail of arched passageway (P1) within north wall of B5  | N               | 21/09/07     |                        |
| 3.27         |              | Detail of arched passageway (P1) within north wall of B5  | N               | 21/09/07     |                        |
| 3.28         | 235          | Room B5, detail of reinforced ceiling   | E               | 21/09/07     |                        |
| 3.29         |              | Room B5, detail of reinforced ceiling   | E               | 21/09/07     |                        |
| 3.30         |              | General view of room B4, west range   | W               | 21/09/07     |                        |
| 3.31         |              | General view of room B4, west range   | W               | 21/09/07     |                        |
| 3.32         |              | General view towards B4 from B3, west range   | S               | 21/09/07     |                        |
| 3.33         | 96           | General view towards B4 from B3, west range   | S               | 21/09/07     |                        |
| 3.34         |              | Detail of glazed brickwork & coal chute & blocked lightwell, B3, west range                           | W               | 21/09/07     |                        |
| 3.35         | 86           | Detail of glazed brickwork & coal chute & blocked lightwell, B3, west range                           | W               | 21/09/07     |                        |
| 3.36         |              | I.D Shot  | -               | 21/09/07     |                        |

**Film 04**

| Format       | 400 speed    | Type  | Medium format | Photographer | Simon Jessop |
|--------------|--------------|---|---------------|--------------|--------------|
| Film & frame | Report Plate | Description   | Direction     | Date         |              |
| 4.1          |              | General view of Trafalgar Street façade, west range                                   | NE            | 24/09/07     |              |
| 4.2          | 14           | General view of Trafalgar Street façade, west range                                   | NE            | 24/09/07     |              |
| 4.3          | 6            | Detail view of entrance way/cart passage, west elevation of west range                | E             | 24/09/07     |              |
| 4.4          |              | Detail view of entrance way/cart passage, west elevation of west range                | E             | 24/09/07     |              |
| 4.5          |              | Detail view of entrance way/cart passage, west elevation of west range with door open | E             | 24/09/07     |              |
| 4.6          | 4            | Detail view of entrance way/cart passage, west elevation of west range with door open | E             | 24/09/07     |              |
| 4.7          | 1            | General view of Trafalgar Street façade, west range                                   | SE            | 24/09/07     |              |
| 4.8          |              | General view of Trafalgar Street façade, west range                                   | SE            | 24/09/07     |              |
| 4.9          |              | General view of north elevation of the east, north and west ranges                    | S             | 24/09/07     |              |
| 4.10         | 64           | General view of north elevation of the east, north and west ranges                    | S             | 24/09/07     |              |

**Film 05**

| Format       | 400 speed    | Type   | Medium format | Photographer | Simon Jessop |
|--------------|--------------|--|---------------|--------------|--------------|
| Film & frame | Report Plate | Description  | Direction     | Date         |              |
| 5.1          | 62           | General view of east elevation of east range                                 | SW            | 24/09/07     |              |
| 5.2          |              | General view of east elevation of east range                                 | SW            | 24/09/07     |              |
| 5.3          | 60           | View of north elevation of furnace house range                               | S             | 24/09/07     |              |
| 5.4          |              | View of north elevation of furnace house range                               | S             | 24/09/07     |              |
| 5.5          | 59           | View into G12, furnace house range   | SW            | 24/09/07     |              |
| 5.6          |              | View into G12, furnace house range   | SW            | 24/09/07     |              |
| 5.7          | 53           | General view of the east elevations of the machine shop and wash house range | W             | 24/09/07     |              |
| 5.8          |              | General view of the east elevations of the machine shop and wash house range | W             | 24/09/07     |              |
| 5.9          |              | View of east elevation of wash house range, with south range beyond          | W             | 24/09/07     |              |
| 5.10         | 55           | View of east elevation of wash house range, with south range beyond          | W             | 24/09/07     |              |

**Film 06**

| Format       | 400 speed    | Type  | Medium format | Photographer | Simon Jessop |
|--------------|--------------|---|---------------|--------------|--------------|
| Film & frame | Report Plate | Description   | Direction     | Date         |              |
| 6.1          |              | Detail of external stairs leading to basement, west range from central yard         | S             | 24/09/07     |              |
| 6.2          | 82           | Detail of external stairs leading to basement, west range from central yard         | S             | 24/09/07     |              |
| 6.3          | 94           | General view of B1, west range  | NW            | 24/09/07     |              |
| 6.4          |              | General view of B1, west range  | NW            | 24/09/07     |              |
| 6.5          | 95           | General view of B2, west range  | NE            | 24/09/07     |              |
| 6.6          |              | General view of B2, west range  | NE            | 24/09/07     |              |
| 6.7          | 91           | View along P2, northeast corner of B3, west range                                   | E             | 24/09/07     |              |
| 6.8          |              | View along P2, northeast corner of B3, west range                                   | E             | 24/09/07     |              |
| 6.9          | 84           | General view of B3, west range – note inserted partitions & light reflecting bricks | SW            | 24/09/07     |              |
| 6.10         |              | General view of B3, west range – note inserted partitions & light reflecting bricks | SW            | 24/09/07     |              |

**Film 07**

| Format       | 400 speed    | Type  | Medium format | Photographer | Simon Jessop |
|--------------|--------------|---|---------------|--------------|--------------|
| Film & frame | Report Plate | Description   | Direction     | Date         |              |
| 7.1          |              | General view of B3, west range – note steel I-section beams supporting concrete floor above | NE            | 24/09/07     |              |
| 7.2          | 85           | General view of B3, west range – note steel I-section beams supporting concrete floor above | NE            | 24/09/07     |              |
| 7.3          | 97           | General view of B4, west range  | W             | 24/09/07     |              |
| 7.4          |              | General view of B4, west range  | W             | 24/09/07     |              |
| 7.5          |              | General view of B5, south range (VOID)  | SE            | 24/09/07     |              |
| 7.6          | 230          | General view of B5, south range   | SE            | 24/09/07     |              |
| 7.7          | 229          | General view of B5, south range   | NW            | 24/09/07     |              |
| 7.8          |              | General view of B5, south range   | NW            | 24/09/07     |              |
| 7.9          | 233          | Detail of arched passage (P1) within north wall of B5, south range                          | N             | 24/09/07     |              |
| 7.10         |              | Detail of arched passage (P1) within north wall of B5, south range                          | N             | 24/09/07     |              |



**Film 08**

| Format       | 400 speed    | Type  | Medium format | Photographer | Simon Jessop |          |  |
|--------------|--------------|---|---------------|--------------|--------------|----------|--|
| Film & frame | Report Plate | Description   |               |              | Direction    | Date     |  |
| 8.1          | 237          | General view of B6, south range   |               |              | SW           | 24/09/07 |  |
| 8.2          |              | General view of B6, south range   |               |              | SW           | 24/09/07 |  |
| 8.3          |              | General view of B6, south range   |               |              | NE           | 24/09/07 |  |
| 8.4          | 236          | General view of B6, south range   |               |              | NE           | 24/09/07 |  |
| 8.5          |              | View down external staircase from central yard to B7, south range         |               |              | E            | 24/09/07 |  |
| 8.6          | 239          | View down external staircase from central yard to B7, south range         |               |              | E            | 24/09/07 |  |
| 8.7          |              | General view along B7, south range, towards doorway leading to former TGW |               |              | S            | 24/09/07 |  |
| 8.8          | 240          | General view along B7, south range, towards doorway leading to former TGW |               |              | S            | 24/09/07 |  |
| 8.9          |              | Detail of cart passage with gate closed, east elevation of west range     |               |              | W            | 24/09/07 |  |
| 8.10         | 72           | Detail of cart passage with gate closed, east elevation of west range     |               |              | W            | 24/09/07 |  |

**Film 09**

| Format       | 400 speed    | Type   | Medium format | Photographer | Simon Jessop |          |  |
|--------------|--------------|--|---------------|--------------|--------------|----------|--|
| Film & frame | Report Plate | Description  |               |              | Direction    | Date     |  |
| 9.1          | 81           | View of the lean-to extension linking the west and north ranges  |               |              | N            | 24/09/07 |  |
| 9.2          |              | View of the lean-to extension linking the west and north ranges  |               |              | N            | 24/09/07 |  |
| 9.3          | 219          | General view of north elevation of south range (west end)  |               |              | SE           | 24/09/07 |  |
| 9.4          |              | General view of north elevation of south range (west end)  |               |              | SE           | 24/09/07 |  |
| 9.5          |              | General view of west elevation of east range – note removed 2nd floor with truncated chimney breast                                |               |              | NE           | 24/09/07 |  |
| 9.6          | 312          | General view of west elevation of east range – note removed 2nd floor with truncated chimney breast                                |               |              | NE           | 24/09/07 |  |
| 9.7          | 345          | General view of yard between north and east ranges showing inserted roof and external staircase and two phased north boundary wall |               |              | N            | 24/09/07 |  |
| 9.8          |              | General view of yard between north and east ranges showing inserted roof and external staircase and two phased north boundary wall |               |              | N            | 24/09/07 |  |
| 9.9          |              | General view of north elevation of south range (west end) – note removed 2nd floor   |               |              | S            | 24/09/07 |  |
| 9.10         | 220          | General view of north elevation of south range (west end) – note removed 2nd floor   |               |              | S            | 24/09/07 |  |

| <b>Film 10</b> |              |  |               |              |              |
|----------------|--------------|--|---------------|--------------|--------------|
| Format         | 400 speed    | Type   | Medium format | Photographer | Simon Jessop |
| Film & frame   | Report Plate | Description  | Direction     | Date         |              |
| 10.1           | 223          | View of north elevation of south range (west end) showing join with east range – note external staircase           | S             | 24/09/07     |              |
| 10.2           |              | View of north elevation of south range (west end) showing join with east range – note external staircase           | S             | 24/09/07     |              |
| 10.3           |              | Detail of secondary inserted modern door and type 14 window, southeast corner of north range                       | NW            | 24/09/07     |              |
| 10.4           | 347          | Detail of secondary inserted modern door and type 14 window, southeast corner of north range                       | NW            | 24/09/07     |              |
| 10.5           | 66           | General view of east elevation (south end) of west range   | W             | 24/09/07     |              |
| 10.6           |              | General view of east elevation (south end) of west range   | W             | 24/09/07     |              |
| 10.7           | 227          | View of rear yard showing south range (east end) and furnace house range   | E             | 24/09/07     |              |
| 10.8           |              | View of rear yard showing south range (east end) and furnace house range   | E             | 24/09/07     |              |
| 10.9           |              | General view of furnace house – showing truncated roof trussed in north wall and chimney stack in northeast corner | NE            | 24/09/07     |              |
| 10.10          | 426          | General view of furnace house – showing truncated roof trussed in north wall and chimney stack in northeast corner | NE            | 24/09/07     |              |

| <b>Film 11</b> |              |  |               |              |              |
|----------------|--------------|--|---------------|--------------|--------------|
| Format         | 400 speed    | Type   | Medium format | Photographer | Simon Jessop |
| Film & frame   | Report Plate | Description  | Direction     | Date         |              |
| 11.1           | 317          | General view of rear yard and east elevation of east range (south end)   | W             | 24/09/07     |              |
| 11.2           |              | General view of rear yard and east elevation of east range (south end)   | W             | 24/09/07     |              |
| 11.3           |              | General view of north elevation of privies, wash house range   | SE            | 24/09/07     |              |
| 11.4           | 452          | General view of north elevation of privies, wash house range   | SE            | 24/09/07     |              |
| 11.5           | 455          | Detail of toilet, G14 privies, wash house range  | S             | 24/09/07     |              |
| 11.6           |              | Detail of toilet, G14 privies, wash house range  | S             | 24/09/07     |              |
| 11.7           |              | General view of yard between north and east ranges showing inserted roof, staircase and two phased north boundary wall | N             | 24/09/07     |              |
| 11.8           | 346          | General view of yard between north and east ranges showing inserted roof, staircase and two phased north boundary wall | N             | 24/09/07     |              |
| 11.9           |              | General view of south elevation of north range, west range beyond  | NW            | 24/09/07     |              |
| 11.10          | 341          | General view of south elevation of north range, west range beyond  | NW            | 24/09/07     |              |

| <b>Film 12</b>          |                     |   |                  |                     |              |
|-------------------------|---------------------|---|------------------|---------------------|--------------|
| <b>Format</b>           | 400 speed           | <b>Type</b>   | Medium format    | <b>Photographer</b> | Simon Jessop |
| <b>Film &amp; frame</b> | <b>Report Plate</b> | <b>Description</b>  | <b>Direction</b> | <b>Date</b>         |              |
| 12.1                    | 67                  | General view of east elevation of west range (south end)  | W                | 24/09/07            |              |
| 12.2                    |                     | General view of east elevation of west range (south end)  | W                | 24/09/07            |              |
| 12.3                    | 69                  | General view of east elevation of west range showing join with extension between west and north ranges                        | NW               | 24/09/07            |              |
| 12.4                    |                     | General view of east elevation of west range showing join with extension between west and north ranges                        | NW               | 24/09/07            |              |
| 12.5                    | 340                 | General view of the south and west elevation of the north range – note relationship with west range extension                 | N                | 24/09/07            |              |
| 12.6                    |                     | General view of the south and west elevation of the north range – note relationship with west range extension                 | N                | 24/09/07            |              |
| 12.7                    | 315                 | View of west elevation of east range showing removed 2nd floor and projecting truncated chimney breast with blocked fireplace | NE               | 24/09/07            |              |
| 12.8                    |                     | View of west elevation of east range showing removed 2nd floor and projecting truncated chimney breast with blocked fireplace | NE               | 24/09/07            |              |
| 12.9                    | 180                 | Detail of doorways to 2nd floor of west range, from removed 2nd floor of south range  | W                | 24/09/07            |              |
| 12.10                   |                     | Detail of doorways to 2nd floor of west range, from removed 2nd floor of south range  | W                | 24/09/07            |              |

| <b>Film 13</b>          |                     |  |                  |                     |              |
|-------------------------|---------------------|--|------------------|---------------------|--------------|
| <b>Format</b>           | 400 speed           | <b>Type</b>  | Medium format    | <b>Photographer</b> | Simon Jessop |
| <b>Film &amp; frame</b> | <b>Report Plate</b> | <b>Description</b>   | <b>Direction</b> | <b>Date</b>         |              |
| 13.1                    |                     | View across removed 2nd floor of south range towards machine shop  | SE               | 24/09/07            |              |
| 13.2                    |                     | View across removed 2nd floor of south range towards machine shop  | SE               | 24/09/07            |              |
| 13.3                    |                     | General view of G2, west range                                     | NE               | 24/09/07            |              |
| 13.4                    | 101                 | General view of G2, west range                                     | NE               | 24/09/07            |              |
| 13.5                    | 100                 | General view of G2, west range, looking towards G1                 | SW               | 24/09/07            |              |
| 13.6                    |                     | General view of G2, west range, looking towards G1                 | SW               | 24/09/07            |              |
| 13.7                    | 98                  | View of G1, west range, up staircase to F18                        | E                | 24/09/07            |              |
| 13.8                    |                     | View of G1, west range, up staircase to F18                        | E                | 24/09/07            |              |
| 13.9                    | 112                 | General view of G3, west range extension – note inserted staircase | N                | 24/09/07            |              |
| 13.10                   |                     | General view of G3, west range extension – note inserted staircase | N                | 24/09/07            |              |

**Film 14**

| Format       | 400 speed    | Type   | Medium format | Photographer | Simon Jessop |  |  |
|--------------|--------------|--|---------------|--------------|--------------|--|--|
| Film & frame | Report Plate | Description  | Direction     | Date         |              |  |  |
| 14.1         |              | View of blocked entrance and window to G5, north range, east wall of G3 west range extension | E             | 24/09/07     |              |  |  |
| 14.2         | 113          | View of blocked entrance and window to G5, north range, east wall of G3 west range extension | E             | 24/09/07     |              |  |  |
| 14.3         | 111          | View of entrance/south wall of G3, west range extension                                      | S             | 24/09/07     |              |  |  |
| 14.4         |              | View of entrance/south wall of G3, west range extension                                      | S             | 24/09/07     |              |  |  |
| 14.5         |              | General view of G4, north range  | E             | 24/09/07     |              |  |  |
| 14.6         | 354          | General view of G4, north range  | E             | 24/09/07     |              |  |  |
| 14.7         | 355          | General view of G4, north range, looking towards G3, west range extension                    | W             | 24/09/07     |              |  |  |
| 14.8         |              | General view of G4, north range, looking towards G3, west range extension                    | W             | 24/09/07     |              |  |  |
| 14.9         | 362          | General view of G5, north range, showing removed wall scars                                  | NE            | 24/09/07     |              |  |  |
| 14.10        |              | General view of G5, north range, showing removed wall scars                                  | NE            | 24/09/07     |              |  |  |

**Film 15**

| Format       | 400 speed    | Type   | Medium format | Photographer | Simon Jessop |  |  |
|--------------|--------------|--|---------------|--------------|--------------|--|--|
| Film & frame | Report Plate | Description  | Direction     | Date         |              |  |  |
| 15.1         | 361          | Detail of blocked doorway and type 19/20 window, west wall of G5, north range                  | NW            | 24/09/07     |              |  |  |
| 15.2         |              | Detail of blocked doorway and type 19/20 window, west wall of G5, north range                  | NW            | 24/09/07     |              |  |  |
| 15.3         |              | General view of northeast corner of G5, north range, showing widened doorway and inserted ramp | E             | 24/09/07     |              |  |  |
| 15.4         | 364          | General view of northeast corner of G5, north range, showing widened doorway and inserted ramp | E             | 24/09/07     |              |  |  |
| 15.5         | 358          | General view of southwest corner of G5, north range – note type 17 and 19 windows              | SW            | 24/09/07     |              |  |  |
| 15.6         |              | General view of southwest corner of G5, north range – note type 17 and 19 windows              | SW            | 24/09/07     |              |  |  |
| 15.7         |              | Detail of main door leading from Trafalgar Street into G23, west range                         | W             | 24/09/07     |              |  |  |
| 15.8         | 120          | Detail of main door leading from Trafalgar Street into G23, west range                         | W             | 24/09/07     |              |  |  |
| 15.9         | 123          | General view of G21, west range  | SW            | 24/09/07     |              |  |  |
| 15.10        |              | General view of G21, west range  | SW            | 24/09/07     |              |  |  |

| <b>Film 16</b>          |                     |  |                  |                     |              |
|-------------------------|---------------------|--|------------------|---------------------|--------------|
| <b>Format</b>           | 400 speed           | <b>Type</b>  | Medium format    | <b>Photographer</b> | Simon Jessop |
| <b>Film &amp; frame</b> | <b>Report Plate</b> | <b>Description</b>   | <b>Direction</b> | <b>Date</b>         |              |
| 16.1                    | 124                 | General view of room G21, west range   | N                | 24/09/07            |              |
| 16.2                    |                     | General view of room G21, west range   | N                | 24/09/07            |              |
| 16.3                    | 242                 | General view of G20, south range   | SE               | 24/09/07            |              |
| 16.4                    |                     | General view of G20, south range   | SE               | 24/09/07            |              |
| 16.5                    | 243                 | General view of G20, south range – note partially blocked doorway leading to G21, west range | NW               | 24/09/07            |              |
| 16.6                    |                     | General view of G20, south range – note partially blocked doorway leading to G21, west range | NW               | 24/09/07            |              |
| 16.7                    | 248                 | General view of G19, south range – note inserted window and raised floor level               | SE               | 24/09/07            |              |
| 16.8                    |                     | General view of G19, south range – note inserted window and raised floor level               | SE               | 24/09/07            |              |
| 16.9                    | 247                 | General view of G19, south range – note scars in floor                                       | NW               | 24/09/07            |              |
| 16.10                   |                     | General view of G19, south range – note scars in floor                                       | NW               | 24/09/07            |              |

| <b>Film 17</b>          |                     |  |                  |                     |              |
|-------------------------|---------------------|--|------------------|---------------------|--------------|
| <b>Format</b>           | 400 speed           | <b>Type</b>  | Medium format    | <b>Photographer</b> | Simon Jessop |
| <b>Film &amp; frame</b> | <b>Report Plate</b> | <b>Description</b>   | <b>Direction</b> | <b>Date</b>         |              |
| 17.1                    |                     | View of G8, east range – showing fire place and blocked door   | SE               | 24/09/07            |              |
| 17.2                    | 321                 | View of G8, east range – showing fire place and blocked door   | SE               | 24/09/07            |              |
| 17.3                    |                     | View of G8, east range – showing windows/door  | NW               | 24/09/07            |              |
| 17.4                    | 320                 | View of G8, east range – showing windows/door  | NW               | 24/09/07            |              |
| 17.5                    |                     | Detail of incinerator, G9 and G10, furnace house range   | NE               | 24/09/07            |              |
| 17.6                    | 418                 | Detail of incinerator, G9 and G10, furnace house range   | NE               | 24/09/07            |              |
| 17.7                    |                     | View of southeast corner of G18 – showing remains of hand forge, south range                                 | SE               | 24/09/07            |              |
| 17.8                    | 253                 | View of southeast corner of G18 – showing remains of hand forge, south range                                 | SE               | 24/09/07            |              |
| 17.9                    | 255                 | General view of southwest corner of G18 showing stepped brick supports for chimney breast above, south range | SW               | 24/09/07            |              |
| 17.10                   |                     | General view of southwest corner of G18 showing stepped brick supports for chimney breast above, south range | SW               | 24/09/07            |              |

| <b>Film 18</b>          |                     |  |                  |                     |              |
|-------------------------|---------------------|--|------------------|---------------------|--------------|
| <b>Format</b>           | 400 speed           | <b>Type</b>  | Medium format    | <b>Photographer</b> | Simon Jessop |
| <b>Film &amp; frame</b> | <b>Report Plate</b> | <b>Description</b>   | <b>Direction</b> | <b>Date</b>         |              |
| 18.1                    | 258                 | General view of G17, south range – note remains of hand forge  | SW               | 24/09/07            |              |
| 18.2                    |                     | General view of G17, south range – note remains of hand forge  | SW               | 24/09/07            |              |
| 18.3                    | 261                 | View of stepped brick supports for chimney breast above, east wall of G17, south range   | E                | 24/09/07            |              |
| 18.4                    |                     | View of stepped brick supports for chimney breast above, east wall of G17, south range   | E                | 24/09/07            |              |
| 18.5                    |                     | General view of G16, south range – note inserted door and partitioned inserted staircase   | E                | 24/09/07            |              |
| 18.6                    | 264                 | General view of G16, south range – note inserted door and partitioned inserted staircase   | E                | 24/09/07            |              |
| 18.7                    |                     | General view of southeast corner of G16, south range, with G15 machine shop beyond – note inserted doorway and window and removed hand forge | SE               | 24/09/07            |              |
| 18.8                    | 265                 | General view of southeast corner of G16, south range, with G15 machine shop beyond – note inserted doorway and window and removed hand forge | SE               | 24/09/07            |              |
| 18.9                    |                     | General view of southwest corner G16 showing type 9 window and scars from removed hand forge, south range                                    | SW               | 24/09/07            |              |
| 18.10                   | 266                 | General view of southwest corner G16 showing type 9 window and scars from removed hand forge, south range                                    | SW               | 24/09/07            |              |

| <b>Film 19</b>          |                     |   |                  |                     |              |
|-------------------------|---------------------|---|------------------|---------------------|--------------|
| <b>Format</b>           | 400 speed           | <b>Type</b>   | Medium format    | <b>Photographer</b> | Simon Jessop |
| <b>Film &amp; frame</b> | <b>Report Plate</b> | <b>Description</b>  | <b>Direction</b> | <b>Date</b>         |              |
| 19.1                    |                     | General view of G15, machine shop – note inserted doorways  | SE               | 24/09/07            |              |
| 19.2                    | 407                 | General view of G15, machine shop – note inserted doorways  | SE               | 24/09/07            |              |
| 19.3                    | 413                 | Detail of raised ridge with louvered vents roof structure, G15, machine shop                      | E                | 24/09/07            |              |
| 19.4                    |                     | Detail of raised ridge with louvered vents roof structure, G15, machine shop                      | E                | 24/09/07            |              |
| 19.5                    |                     | Detail of west wall of G15. machine shop, showing blocked openings and upper gable boarded window | W                | 24/09/07            |              |
| 19.6                    | 409                 | Detail of west wall of G15. machine shop, showing blocked openings and upper gable boarded window | W                | 24/09/07            |              |
| 19.7                    | 408                 | General view of G15, machine shop – note inserted doorway from G16, south range                   | NW               | 24/09/07            |              |
| 19.8                    |                     | General view of G15, machine shop – note inserted doorway from G16, south range                   | NW               | 24/09/07            |              |
| 19.9                    | 439                 | General view of G12, east building of furnace house range   | NE               | 24/09/07            |              |
| 19.10                   |                     | General view of G12, east building of furnace house range   | NE               | 24/09/07            |              |

**Film 20**

| <b>Format</b>           | 400 speed           | <b>Type</b>  | Medium format | <b>Photographer</b> | Simon Jessop     |             |  |
|-------------------------|---------------------|--|---------------|---------------------|------------------|-------------|--|
| <b>Film &amp; frame</b> | <b>Report Plate</b> | <b>Description</b>   |               |                     | <b>Direction</b> | <b>Date</b> |  |
| 20.1                    | 440                 | General view of G12, east building of furnace house range, showing west wall   |               |                     | SW               | 24/09/07    |  |
| 20.2                    |                     | General view of G12, east building of furnace house range, showing west wall   |               |                     | SW               | 24/09/07    |  |
| 20.3                    | 427                 | View of furnace house/central building of furnace house range, G11, from east building – showing inserted opening and west wall beyond |               |                     | W                | 24/09/07    |  |
| 20.4                    |                     | View of furnace house/central building of furnace house range, G11, from east building – showing inserted opening and west wall beyond |               |                     | W                | 24/09/07    |  |
| 20.5                    | 425                 | General view of furnace house range showing west and central buildings   |               |                     | NW               | 24/09/07    |  |
| 20.6                    |                     | General view of furnace house range showing west and central buildings   |               |                     | NW               | 24/09/07    |  |
| 20.7                    | 343                 | View of south elevation of north range- showing stairway scar and altered taking in door   |               |                     | N                | 24/09/07    |  |
| 20.8                    |                     | View of south elevation of north range- showing stairway scar and altered taking in door   |               |                     | N                | 24/09/07    |  |
| 20.9                    | 75                  | View of south side of cart passage, west range, showing loading door and inserted pedestrian door                                      |               |                     | SW               | 24/09/07    |  |
| 20.10                   |                     | View of south side of cart passage, west range, showing loading door and inserted pedestrian door                                      |               |                     | SW               | 24/09/07    |  |

| <b>Film 21</b>          |                     |   |                  |                     |            |
|-------------------------|---------------------|---|------------------|---------------------|------------|
| <b>Format</b>           | 35mm                | <b>Type</b>   | Black and White  | <b>Photographer</b> | I. Kendall |
| <b>Film &amp; frame</b> | <b>Report Plate</b> | <b>Description</b>  | <b>Direction</b> | <b>Date</b>         |            |
| 21.1                    | 116                 | View of G3, north wall, join with north range   | NE               | 25/09/07            |            |
| 21.2                    | 119                 | Detail of cast iron bracket, north wall of G3, west range extension   | NW               | 25/09/07            |            |
| 21.3                    |                     | VOID  | -                | 25/09/07            |            |
| 21.4                    |                     | VOID  | -                | 25/09/07            |            |
| 21.5                    | 118                 | View of blocked doorway truncated by inserted stairs in west wall of G3, originally leading to G2, west range extension | W                | 25/09/07            |            |
| 21.6                    |                     | VOID  | -                | 25/09/07            |            |
| 21.7                    | 114                 | Detail of truncated & blocked window, west wall of west range extension   | W                | 25/09/07            |            |
| 21.8                    |                     | VOID  | -                | 25/09/07            |            |
| 21.9                    | 80                  | Detail of door, east elevation of west range  | W                | 25/09/07            |            |
| 21.10                   |                     | VOID  | -                | 25/09/07            |            |
| 21.11                   | 366                 | Detail of shuttered concrete ceiling of G5, also showing steel I-section beam indicating position of removed wall       | S                | 25/09/07            |            |
| 21.12                   |                     | VOID  | -                | 25/09/07            |            |
| 21.13                   | 363                 | Detail of north wall of G5, north range – showing sockets in wall from removed workbench                                | N                | 25/09/07            |            |
| 21.14                   |                     | VOID  | -                | 25/09/07            |            |
| 21.15                   | 365                 | Detail of cast iron brackets, south wall of G5, north range   | SE               | 25/09/07            |            |
| 21.16                   |                     | VOID  | -                | 25/09/07            |            |
| 21.17                   | 360                 | Detail of doorway and type 19 window, west wall of G5, north range  | W                | 25/09/07            |            |
| 21.18                   |                     | VOID  | -                | 25/09/07            |            |
| 21.19                   |                     | Detail of electrical fixings on the ceiling of G8, east range   | S                | 25/09/07            |            |
| 21.20                   |                     | VOID  | -                | 25/09/07            |            |
| 21.21                   | 324                 | Detail of electrical fixings on the ceiling of G8, east range   | S                | 25/09/07            |            |
| 21.22                   | 323                 | Detail of type 4 window, east wall of G8, east range  | E                | 25/09/07            |            |
| 21.23                   |                     | VOID  | -                | 25/09/07            |            |
| 21.24                   |                     | VOID  | -                | 25/09/07            |            |
| 21.25                   | 322                 | Detailed view of fireplace & arched alcove, south wall of G8, east range  | S                | 25/09/07            |            |
| 21.26                   |                     | VOID  | -                | 25/09/07            |            |
| 21.27                   | 249                 | Detail of doorways, northeast corner of G19, south range  | NE               | 25/09/07            |            |
| 21.28                   |                     | VOID  | -                | 25/09/07            |            |
| 21.29                   | 250                 | Detail of fireplace, east wall of G19, south range  | E                | 25/09/07            |            |
| 21.30                   |                     | VOID  | -                | 25/09/07            |            |
| 21.31                   | 251                 | Detail of blocked opening, southwest corner of G19, south range   | S                | 25/09/07            |            |
| 21.32                   |                     | VOID  | -                | 25/09/07            |            |
| 21.33                   | 252                 | Detail of altered fireplace, west wall of G19, south range  | W                | 25/09/07            |            |
| 21.34                   |                     | VOID  | -                | 25/09/07            |            |
| 21.35                   | 244                 | Detail of blocked arched openings within south wall of G20, south range   | S                | 25/09/07            |            |
| 21.36                   |                     | ID Shot   |                  | 25/09/07            |            |



## Film 22

| Format       | 35mm         | Type   | Black and White | Photographer | I.Kendall |
|--------------|--------------|--|-----------------|--------------|-----------|
| Film & frame | Report Plate | Description  | Direction       | Date         |           |
| 22.1         | 269          | Detail of brick flue and ceiling of G16, south range   | N               | 25/09/07     |           |
| 22.2         |              | VOID   |                 | 25/09/07     |           |
| 22.3         | 268          | Internal detail of type 7 window, north wall of G16, south range   | N               | 25/09/07     |           |
| 22.4         |              | VOID   |                 | 25/09/07     |           |
| 22.5         | 263          | Detail of ceiling construction, G17 south range  | N               | 25/09/07     |           |
| 22.6         |              | VOID   |                 | 25/09/07     |           |
| 22.7         | 260          | View of southeast corner of G17 showing scars of removed hand forge & stepped brick support                    | SE              | 25/09/07     |           |
| 22.8         |              | VOID   |                 | 25/09/07     |           |
| 22.9         | 259          | Detail of hand forge & blocked opening, west wall of G17, south range  | SW              | 25/09/07     |           |
| 22.10        |              | VOID   |                 | 25/09/07     |           |
| 22.11        | 262          | Detail of altered type 7 window, north wall of G17   | NW              | 25/09/07     |           |
| 22.12        | 254          | Detail of remains of former hand forge, G18, south range   | E               | 25/09/07     |           |
| 22.13        |              | VOID   |                 | 25/09/07     |           |
| 22.14        |              | VOID   |                 | 25/09/07     |           |
| 22.15        | 256          | View of northwest corner of G18 showing scars from removed hand forge & inserted doorway                       | W               | 25/09/07     |           |
| 22.16        |              | VOID   |                 | 25/09/07     |           |
| 22.17        | 257          | Detail of high blocking within west wall of G18, south range   | W               | 25/09/07     |           |
| 22.18        |              | VOID   |                 | 25/09/07     |           |
| 22.19        | 422          | Detail of louvered roof G9 & G10, furnace house range, west building   | S               | 25/09/07     |           |
| 22.20        |              | VOID   |                 | 25/09/07     |           |
| 22.21        | 419          | General view of G10, furnace house range, west building  | E               | 25/09/07     |           |
| 22.22        |              | VOID   |                 | 25/09/07     |           |
| 22.23        | 421          | Detail of electrical panel associated with inserted incinerator/boiler G10, furnace house range, west building | N               | 25/09/07     |           |
| 22.24        |              | VOID   | -               | 25/09/07     |           |
| 22.25        | 417          | Detail of original doorway to G9 & G10, west elevation of furnace house range, west building                   | E               | 25/09/07     |           |
| 22.26        |              | VOID   | -               | 25/09/07     |           |
| 22.27        | 109          | Detail of inserted hatch in ceiling of G2, west range  | NE              | 25/09/07     |           |
| 22.28        |              | VOID   |                 | 25/09/07     |           |
| 22.29        | 106          | Detail of type 2 window, west wall of G2, west range   | W               | 25/09/07     |           |
| 22.30        |              | VOID   | -               | 25/09/07     |           |
| 22.31        | 107          | Detail of fireplace, north wall of G2, west range  | N               | 25/09/07     |           |
| 22.32        |              | VOID   | -               | 25/09/07     |           |
| 22.33        | 105          | Detail of inserted doorway within former window opening, east wall of G2 west range                            | E               | 25/09/07     |           |
| 22.34        |              | VOID   | -               | 25/09/07     |           |
| 22.35        | 104          | View of archway with loading door beyond leading to cart passage, G2, west range                               | S               | 25/09/07     |           |
| 22.36        |              | ID Shot  | -               | 25/09/07     |           |

## Film 23

| Format       | 35mm         | Type   | Black and White | Photographer | I. Kendall |
|--------------|--------------|--|-----------------|--------------|------------|
| Film & frame | Report Plate | Description  | Direction       | Date         |            |
| 23.1         | 228          | Detail of electrical transformers positioned on the north elevation of south range   | S               | 25/09/07     |            |
| 23.2         |              | VOID   |                 | 25/09/07     |            |
| 23.3         | 429          | Detail of southwest corner of furnace showing join with west building and spring of former arched head of doorway in south elevation | NW              | 25/09/07     |            |
| 23.4         | 433          | General view of truncated trusses, north wall of G11, furnace house  | NW              | 25/09/07     |            |
| 23.5         |              | VOID   |                 | 25/09/07     |            |
| 23.6         |              | VOID   |                 | 25/09/07     |            |
| 23.7         | 437          | Detail of upper section of chimney stack, northeast corner of G11, furnace house   | NE              | 25/09/07     |            |
| 23.8         |              | VOID   |                 | 25/09/07     |            |
| 23.9         | 428          | Detail of blocked wall box, west wall of G11, furnace house  | W               | 25/09/07     |            |
| 23.10        |              | VOID   |                 | 25/09/07     |            |
| 23.11        | 442          | Detail of northwest corner of G12, furnace house range   | NW              | 25/09/07     |            |
| 23.12        |              | VOID   |                 | 25/09/07     |            |
| 23.13        | 441          | Detail of metal framed type 24 window & steel framed structure, south wall of G12, furnace house range                               | S               | 25/09/07     |            |
| 23.14        |              | VOID   |                 | 25/09/07     |            |
| 23.15        | 443          | General view of bolted angle iron roof structure of G12, east building of furnace house range  | NE              | 25/09/07     |            |
| 23.16        |              | VOID   |                 | 25/09/07     |            |
| 23.17        | 445          | General view of west elevation of wash house (G13)   | NE              | 25/09/07     |            |
| 23.18        |              | VOID   |                 | 25/09/07     |            |
| 23.19        | 454          | Detail of timber planked door, G14 privies, wash house range   | S               | 25/09/07     |            |
| 23.20        |              | VOID   |                 | 25/09/07     |            |
| 23.21        | 444          | View from G12 towards small yard G14 & privy block, wash house range   | S               | 25/09/07     |            |
| 23.22        |              | VOID   |                 | 25/09/07     |            |
| 23.23        |              | Detail of moved anvil from south range hand forges, rear yard  | NW              | 25/09/07     |            |
| 23.24        | 415          | Detail of former paint scheme, G15, machine shop   | S               | 25/09/07     |            |
| 23.25        |              | VOID   |                 | 25/09/07     |            |
| 23.26        |              | VOID   |                 | 25/09/07     |            |
| 23.27        | 414          | Detail of bolted angle iron and rod roof truss structure, G15, machine shop  | E               | 25/09/07     |            |
| 23.28        |              | VOID   |                 | 25/09/07     |            |
| 23.29        | 411          | Detail of boarded primary window in gable of west wall, G15, machine shop  | W               | 25/09/07     |            |
| 23.30        |              | VOID   |                 | 25/09/07     |            |
| 23.31        | 410          | Detail of inserted doorways, blocked with blockwork, west wall of G15, machine shop  | W               | 25/09/07     |            |
| 23.32        |              | VOID   |                 | 25/09/07     |            |
| 23.33        | 412          | Detail of inserted window, northwest corner of G15, machine shop   | NW              | 25/09/07     |            |
| 23.34        |              | VOID   | -               | 25/09/07     |            |
| 23.35        | 267          | Detail of door within former window opening, north wall of G16, south range  | N               | 25/09/07     |            |
| 23.36        |              | ID Shot  | -               | 25/09/07     |            |

## Film 24

| Format       | 35mm         | Type  | Black and White | Photographer | J.Barnes |
|--------------|--------------|---|-----------------|--------------|----------|
| Film & frame | Report Plate | Description   | Direction       | Date         |          |
| 24.1         |              | Detail of type 3 window, west wall of F2, west range  | W               | 26/09/07     |          |
| 24.2         |              | Detail of type 3 window, west wall of F2, west range  | W               | 26/09/07     |          |
| 24.3         | 171          | Detail of type 3 window, west wall of F2, west range  | W               | 26/09/07     |          |
| 24.4         | 170          | Detail of fire place, northeast corner of F2, west range  | NE              | 26/09/07     |          |
| 24.5         |              | Detail of fire place, northeast corner of F2, west range  | NE              | 26/09/07     |          |
| 24.6         |              | View of doorways leading to F1, south wall of F3, west range  | SW              | 26/09/07     |          |
| 24.7         | 175          | View of doorways leading to F1, south wall of F3, west range  | SW              | 26/09/07     |          |
| 24.8         |              | General view of F3 showing original doorway from F1, extension with type 25 window and inserted staircase | SE              | 26/09/07     |          |
| 24.9         |              | General view of F3 showing original doorway from F1, extension with type 25 window and inserted staircase | SE              | 26/09/07     |          |
| 24.10        |              | General view of F3 showing doorway to F2 and shelving along north wall                                    | NW              | 26/09/07     |          |
| 24.11        |              | General view of F3 showing doorway to F2 and shelving along north wall                                    | NW              | 26/09/07     |          |
| 24.12        | 221          | View across central yard from F3 towards north elevation of south range                                   | S               | 26/09/07     |          |
| 24.13        |              | View across central yard from F3 towards north elevation of south range                                   | S               | 26/09/07     |          |
| 24.14        | 176          | Detail of wall paper on north wall of F3 beyond inserted stairway   | N               | 26/09/07     |          |
| 24.15        |              | Detail of wall paper on north wall of F3 beyond inserted stairway   | N               | 26/09/07     |          |
| 24.16        |              | Detail through hatch in ceiling F4, north range, showing line shafting and roof in S5 above               | -               | 26/09/07     |          |
| 24.17        |              | Detail through hatch in ceiling F4, north range, showing line shafting and roof in S5 above               | -               | 26/09/07     |          |
| 24.18        | 389          | Detail of hatch/opening in ceiling, F4, north range, leading to S5  | E               | 26/09/07     |          |
| 24.19        |              | Detail of hatch/opening in ceiling, F4, north range, leading to S5  | E               | 26/09/07     |          |
| 24.20        | 383          | Detail of cast iron column, F4, north range   | NE              | 26/09/07     |          |
| 24.21        |              | Detail of cast iron column, F4, north range   | NE              | 26/09/07     |          |
| 24.22        | 387          | Detail of type 14 window, F4, north range   | W               | 26/09/07     |          |
| 24.23        |              | Detail of type 14 window, F4, north range   | W               | 26/09/07     |          |
| 24.24        |              | Detail of line shafting supports of workbenches, east wall F4, north range                                | SE              | 26/09/07     |          |
| 24.25        | 386          | Detail of line shafting supports of workbenches, east wall F4, north range                                | SE              | 26/09/07     |          |
| 24.26        | 385          | Detail of wall box, north wall of F4, north range   | N               | 26/09/07     |          |
| 24.27        |              | Detail of wall box, north wall of F4, north range   | N               | 26/09/07     |          |
| 24.28        |              | Detail of fireplace north wall of F4, north range   | N               | 26/09/07     |          |
| 24.29        | 381          | Detail of fireplace north wall of F4, north range   | N               | 26/09/07     |          |
| 24.30        | 390          | Detail of scars in concrete floor of F4, north range  | E               | 26/09/07     |          |
| 24.31        |              | Detail of scars in concrete floor of F4, north range  | E               | 26/09/07     |          |
| 24.32        | 388          | Detail of blocked window, stair scar & hatch in ceiling, west wall of F4, north range                     | W               | 26/09/07     |          |
| 24.33        |              | Detail of blocked window, stair scar & hatch in ceiling, west wall of F4, north range                     | W               | 26/09/07     |          |
| 24.34        | 384          | Detail of blocked wall box, north wall of F4, north range   | N               | 26/09/07     |          |
| 24.35        |              | Detail of blocked wall box, north wall of F4, north range   | N               | 26/09/07     |          |
| 24.36        |              | I.D shot  | -               | 26/09/07     |          |

## Film 25

| Format       | 35mm         | Type   | B/W       | Photographer | J.Barnes |
|--------------|--------------|--|-----------|--------------|----------|
| Film & frame | Report Plate | Description  | Direction | Date         |          |
| 25.1         |              | Detail of type 4 window, north wall of F10, south range                              | N         | 26/09/07     |          |
| 25.2         | 278          | Detail of fireplace and blocked doorway, east wall of F10, south range               | E         | 26/09/07     |          |
| 25.3         |              | Detail of fireplace and blocked doorway, east wall of F10, south range               | E         | 26/09/07     |          |
| 25.4         |              | View of doorway at west end of F10, south range leading to F11/F18, west range       | W         | 26/09/07     |          |
| 25.5         | 273          | View of doorway at west end of F10, south range leading to F11/F18, west range       | W         | 26/09/07     |          |
| 25.6         | 274          | Detail of north side of timber and glazed partition, west end of F10, south range    | SE        | 26/09/07     |          |
| 25.7         |              | Detail of north side of timber and glazed partition, west end of F10, south range    | SE        | 26/09/07     |          |
| 25.8         | 275          | View of modern studwork partition at west end of F10, south range                    | E         | 26/09/07     |          |
| 25.9         |              | View of modern studwork partition at west end of F10, south range                    | E         | 26/09/07     |          |
| 25.10        | 133          | View of F12 showing upper glazed partitioning  | E         | 26/09/07     |          |
| 25.11        |              | View of F12 showing upper glazed partitioning  | E         | 26/09/07     |          |
| 25.12        | 138          | Detail of window within partition, F13, west range                                   | NW        | 26/09/07     |          |
| 25.13        |              | Detail of window within partition, F13, west range                                   | NW        | 26/09/07     |          |
| 25.14        |              | General view of F13 showing inserted partitioning, west range                        | NE        | 26/09/07     |          |
| 25.15        | 136          | General view of F13 showing inserted partitioning, west range                        | NE        | 26/09/07     |          |
| 25.16        | 141          | General view of roof F15, west range   | NW        | 26/09/07     |          |
| 25.17        |              | General view of roof F15, west range   | NW        | 26/09/07     |          |
| 25.18        |              | General view of F16, west range  | W         | 26/09/07     |          |
| 25.19        | 142          | General view of F16, west range  | W         | 26/09/07     |          |
| 25.20        |              | View of north end of F18 showing panelled partition and top of staircase, west range | N         | 26/09/07     |          |
| 25.21        | 152          | View of north end of F18 showing panelled partition and top of staircase, west range | N         | 26/09/07     |          |
| 25.22        |              | Detail of type 3 windows, west wall of F1, west range                                | W         | 26/09/07     |          |
| 25.23        | 163          | Detail of type 3 windows, west wall of F1, west range                                | W         | 26/09/07     |          |
| 25.24        |              | View of room F17, detail of toilet and window, west range                            | SW        | 26/09/07     |          |
| 25.25        | 169          | View of room F17, detail of toilet and window, west range                            | SW        | 26/09/07     |          |
| 25.26        |              | Detail of door and shelving, room F1, west range                                     | E         | 26/09/07     |          |
| 25.27        | 167          | Detail of door and shelving, room F1, west range                                     | E         | 26/09/07     |          |
| 25.28        | 161          | Detail of fireplace, south wall of F1, west range                                    | S         | 26/09/07     |          |
| 25.29        |              | Detail of fireplace, south wall of F1, west range                                    | S         | 26/09/07     |          |
| 25.30        |              | Detail of northeast corner of F1, west range   | NW        | 26/09/07     |          |
| 25.31        |              | Detail of northeast corner of F1, west range   | NW        | 26/09/07     |          |
| 25.32        | 166          | Detail of glazed partition in F1, west range   | S         | 26/09/07     |          |
| 25.33        |              | Detail of glazed partition in F1, west range   | S         | 26/09/07     |          |
| 25.34        |              | Detail of original skirting, F1, west range  | NW        | 26/09/07     |          |
| 25.35        | 164          | Detail of original skirting, F1, west range  | NW        | 26/09/07     |          |
| 25.36        |              | I.D Shot   | -         | 26/09/07     |          |

## Film 26

| Format       | 35mm         | Type  | Black and White | Photographer | J.Barnes |
|--------------|--------------|---|-----------------|--------------|----------|
| Film & frame | Report Plate | Description   | Direction       | Date         |          |
| 26.1         | 296          | Detail of light fitting in F7, south range  | NE              | 26/09/07     |          |
| 26.2         |              | Detail of light fitting in F7, south range  | NE              | 26/09/07     |          |
| 26.3         |              | Detail of light fitting in F7, south range  | NE              | 26/09/07     |          |
| 26.4         | 335          | View of northeast corner of F5, - differing roof levels & type 10 and 11 windows in east wall, east range | NE              | 26/09/07     |          |
| 26.5         |              | View of northeast corner of F5, - differing roof levels & type 10 and 11 windows in east wall, east range | NE              | 26/09/07     |          |
| 26.6         | 336          | Detail of type 4 window, west wall of F5, east range  | NW              | 26/09/07     |          |
| 26.7         |              | Detail of type 4 window, west wall of F5, east range  | NW              | 26/09/07     |          |
| 26.8         |              | Detail of blocked fireplace, north wall of F6, east range   | N               | 26/09/07     |          |
| 26.9         | 332          | Detail of blocked fireplace, north wall of F6, east range   | N               | 26/09/07     |          |
| 26.10        | 329          | Detail of timber panelled door, west wall of F6, east range   | W               | 26/09/07     |          |
| 26.11        |              | Detail of timber panelled door, west wall of F6, east range   | W               | 26/09/07     |          |
| 26.12        | 289          | Detail of timber doorway leading to/from F6, east range, north wall of F9 south range                     | N               | 26/09/07     |          |
| 26.13        |              | Detail of timber doorway leading to/from F6, east range, north wall of F9 south range                     | N               | 26/09/07     |          |
| 26.14        | 287          | Detail of doorway leading to/from external staircase, north wall of F9, south range                       | N               | 26/09/07     |          |
| 26.15        |              | Detail of doorway leading to/from external staircase, north wall of F9, south range                       | N               | 26/09/07     |          |
| 26.16        | 288          | Detail of fireplace, east wall F9, south range  | E               | 26/09/07     |          |
| 26.17        |              | Detail of fireplace, east wall F9, south range  | E               | 26/09/07     |          |
| 26.18        |              | View of southwest corner of west end of F9 showing blocked opening  | SW              | 26/09/07     |          |
| 26.19        |              | View of southwest corner of west end of F9 showing blocked opening  | SW              | 26/09/07     |          |
| 26.20        | 129          | Detail of inserted lift mechanism, G22, west range  | W               | 26/09/07     |          |
| 26.21        |              | Detail of inserted lift mechanism, G22, west range  | W               | 26/09/07     |          |
| 26.22        | 128          | View down staircase to G22, west range, from F10 south range  | W               | 26/09/07     |          |
| 26.23        |              | View down staircase to G22, west range, from F10 south range  | W               | 26/09/07     |          |
| 26.24        |              | View up staircase from F11 to S6/roof of south range  | E               | 26/09/07     |          |
| 26.25        | 178          | View up staircase from F11 to S6/roof of south range  | E               | 26/09/07     |          |
| 26.26        | 132          | Detail of lift door, F11, west range  | SW              | 26/09/07     |          |
| 26.27        |              | Detail of lift door, F11, west range  | SW              | 26/09/07     |          |
| 26.28        | 131          | View of F11, west range   | W               | 26/09/07     |          |
| 26.29        |              | View of F11, west range   | W               | 26/09/07     |          |
| 26.30        | 130          | Detail of glazed partition, F10/F11 – join between west and south ranges                                  | NW              | 26/09/07     |          |
| 26.31        |              | Detail of glazed partition, F10/F11 – join between west and south ranges                                  | NW              | 26/09/07     |          |
| 26.32        | 280          | Detail of blocked and boarded opening, south wall of F10, south range                                     | SW              | 26/09/07     |          |
| 26.33        |              | Detail of blocked and boarded opening, south wall of F10, south range                                     | SW              | 26/09/07     |          |
| 26.34        |              | Detail of type 4 window, north wall of F10, south range   | N               | 26/09/07     |          |
| 26.35        | 279          | Detail of type 4 window, north wall of F10, south range   | N               | 26/09/07     |          |
| 26.36        |              | I.D shot  | -               | 26/09/07     |          |

## Film 27

| Format       | 35mm         | Type   | B/W       | Photographer | J.Barnes |
|--------------|--------------|--|-----------|--------------|----------|
| Film & frame | Report Plate | Description  | Direction | Date         |          |
| 27.1         |              | Detail of chimneys of north range from roof of south range                                   | N         | 26/09/07     |          |
| 27.2         |              | Detail of chimneys of north range from roof of south range                                   | N         | 26/09/07     |          |
| 27.3         |              | Detail of chimneys of north range from roof of south range                                   | N         | 26/09/07     |          |
| 27.4         | 68           | Detail of a type 4 window, 2nd floor, east elevation of west range                           | NW        | 26/09/07     |          |
| 27.5         |              | Detail of a type 4 window, 2nd floor, east elevation of west range                           | NW        | 26/09/07     |          |
| 27.6         |              | Detail of inserted hatch over cart passage, west range                                       | E         | 26/09/07     |          |
| 27.7         | 78           | Detail of inserted hatch over cart passage, west range                                       | E         | 26/09/07     |          |
| 27.8         |              | Detail of inserted door within former window opening, south side of cart passage, west range | S         | 26/09/07     |          |
| 27.9         | 77           | Detail of inserted door within former window opening, south side of cart passage, west range | S         | 26/09/07     |          |
| 27.10        |              | Detail of lightwell into B2, east elevation of west range                                    | W         | 26/09/07     |          |
| 27.11        | 70           | Detail of lightwell into B2, east elevation of west range                                    | W         | 26/09/07     |          |
| 27.12        |              | Detail of section of phase 1 wall with archway, east wall of B7, south range                 | SE        | 26/09/07     |          |
| 27.13        | 241          | Detail of section of phase 1 wall with archway, east wall of B7, south range                 | SE        | 26/09/07     |          |
| 27.14        |              | Detail of external staircase and supporting brackets, north elevation of south range         | SE        | 26/09/07     |          |
| 27.15        | 224          | Detail of external staircase and supporting brackets, north elevation of south range         | SE        | 26/09/07     |          |
| 27.16        | 307          | View of inserted staircase at east end of F8, south range                                    | E         | 26/09/07     |          |
| 27.17        |              | View of inserted staircase at east end of F8, south range                                    | E         | 26/09/07     |          |
| 27.18        | 309          | Detail view up inserted staircase, F8, originally to 2nd floor of south range                | SE        | 26/09/07     |          |
| 27.19        |              | Detail view up inserted staircase, F8, originally to 2nd floor of south range                | SE        | 26/09/07     |          |
| 27.20        | 308          | View down inserted staircase, F8 towards doorway from rear yard, south range                 | N         | 26/09/07     |          |
| 27.21        |              | View down inserted staircase, F8 towards doorway from rear yard, south range                 | N         | 26/09/07     |          |
| 27.22        | 303          | Detail of workbench, along south wall of F8, south range – note wearing                      | S         | 26/09/07     |          |
| 27.23        |              | Detail of workbench, along south wall of F8, south range - note wearing                      | S         | 26/09/07     |          |
| 27.24        | 302          | Detail of sink and workbench, northwest corner of F8, south range                            | NW        | 26/09/07     |          |
| 27.25        |              | Detail of sink and workbench, northwest corner of F8, south range                            | NW        | 26/09/07     |          |
| 27.26        | 301          | Detail of fireplace in west wall of F8, south range  | W         | 26/09/07     |          |
| 27.27        |              | Detail of fireplace in west wall of F8, south range  | W         | 26/09/07     |          |
| 27.28        | 292          | Detail of fireplace in east wall of F7, south range  | E         | 26/09/07     |          |
| 27.29        |              | Detail of fireplace in east wall of F7, south range  | E         | 26/09/07     |          |
| 27.30        | 295          | Detail of gas pipes along south wall of F7, south range                                      | E         | 26/09/07     |          |
| 27.31        |              | Detail of gas pipes along south wall of F7, south range                                      | E         | 26/09/07     |          |
| 27.32        |              | Detail of fireplace, west wall of F7, south range  | NW        | 26/09/07     |          |
| 27.33        | 293          | Detail of fireplace, west wall of F7, south range  | NW        | 26/09/07     |          |
| 27.34        |              | View of northwest corner of F7, south range  | NW        | 26/09/07     |          |
| 27.35        | 294          | View of northwest corner of F7, south range  | NW        | 26/09/07     |          |
| 27.36        |              | I.D shot   | -         | 26/09/07     |          |

**Film 28**

| Format       | 35mm         | Type   | B/W       | Photographer | J.Barnes |
|--------------|--------------|--|-----------|--------------|----------|
| Film & frame | Report Plate | Description  | Direction | Date         |          |
| 28.1         |              | VOID   | -         | 26/09/07     |          |
| 28.2         |              | VOID   | -         | 26/09/07     |          |
| 28.3         |              | VOID   | -         | 26/09/07     |          |
| 28.4         |              | VOID   | -         | 26/09/07     |          |
| 28.5         |              | VOID   | -         | 26/09/07     |          |
| 28.6         |              | VOID   | -         | 26/09/07     |          |
| 28.7         |              | VOID   | -         | 26/09/07     |          |
| 28.8         |              | VOID   | -         | 26/09/07     |          |
| 28.9         |              | VOID   | -         | 26/09/07     |          |
| 28.10        |              | VOID   | -         | 26/09/07     |          |
| 28.11        |              | VOID   | -         | 26/09/07     |          |
| 28.12        |              | VOID   | -         | 26/09/07     |          |
| 28.13        |              | VOID   | -         | 26/09/07     |          |
| 28.14        |              | VOID   | -         | 26/09/07     |          |
| 28.15        |              | VOID   | -         | 26/09/07     |          |
| 28.16        |              | VOID   | -         | 26/09/07     |          |
| 28.17        |              | VOID   | -         | 26/09/07     |          |
| 28.18        |              | VOID   | -         | 26/09/07     |          |
| 28.19        |              | VOID   | -         | 26/09/07     |          |
| 28.20        |              | VOID   | -         | 26/09/07     |          |
| 28.21        |              | VOID   | -         | 26/09/07     |          |
| 28.22        |              | VOID   | -         | 26/09/07     |          |
| 28.23        |              | VOID   | -         | 26/09/07     |          |
| 28.24        | 342          | Detail of removed external staircase scar, south elevation of north range                              | N         | 26/09/07     |          |
| 28.25        |              | Detail of removed external staircase scar, south elevation of north range                              | N         | 26/09/07     |          |
| 28.26        | 179          | View down staircase to F11 from S6/roof of south range   | W         | 26/09/07     |          |
| 28.27        |              | View down staircase to F11 from S6/roof of south range   | W         | 26/09/07     |          |
| 28.28        |              | View of west elevation of machine shop from roof of south range  | SE        | 26/09/07     |          |
| 28.29        |              | View of west elevation of machine shop from roof of south range  | SE        | 26/09/07     |          |
| 28.30        |              | Detail of truncated chimney of east range from roof of south range                                     | NE        | 26/09/07     |          |
| 28.31        |              | Detail of truncated chimney of east range from roof of south range                                     | NE        | 26/09/07     |          |
| 28.32        | 316          | Detail of truncated and blocked chimney of east range from roof of south range                         | NE        | 26/09/07     |          |
| 28.33        |              | Detail of truncated and blocked chimney of east range from roof of south range                         | NE        | 26/09/07     |          |
| 28.34        |              | View of west elevation of east range showing 1st floor and removed 2nd floor, from roof of south range | NE        | 26/09/07     |          |
| 28.35        |              | View of west elevation of east range showing 1st floor and removed 2nd floor, from roof of south range | NE        | 26/09/07     |          |
| 28.36        |              | I.D Shot   | -         | 26/09/07     |          |

**Film 29**

| Format       | 400 speed    | Type  | Medium format | Photographer | Simon Jessop |
|--------------|--------------|---|---------------|--------------|--------------|
| Film & frame | Report Plate | Description   | Direction     | Date         |              |
| 29.1         |              | General view of F10, south range  | NE            | 27/09/07     |              |
| 29.2         | 276          | General view of F10, south range  | NE            | 27/09/07     |              |
| 29.3         | 277          | General view of F10, south range  | SW            | 27/09/07     |              |
| 29.4         |              | General view of F10, south range  | SW            | 27/09/07     |              |
| 29.5         |              | View of south side of timber & glazed partition at west end of F10, south range | NW            | 27/09/07     |              |
| 29.6         | 272          | View of south side of timber & glazed partition at west end of F10, south range | NW            | 27/09/07     |              |
| 29.7         |              | View of F11, west range   | W             | 27/09/07     |              |
| 29.8         |              | View of F11, west range   | W             | 27/09/07     |              |
| 29.9         |              | General view of F12, west range   | W             | 27/09/07     |              |
| 29.10        | 134          | General view of F12, west range   | W             | 27/09/07     |              |

**Film 30**

| Format       | 400 speed    | Type   | Medium format | Photographer | Simon Jessop |
|--------------|--------------|--|---------------|--------------|--------------|
| Film & frame | Report Plate | Description                                    | Direction     | Date         |              |
| 30.1         |              | General view of F12, west range                | SE            | 27/09/07     |              |
| 30.2         |              | General view of F12, west range                | SE            | 27/09/07     |              |
| 30.3         |              | General view along of corridor F18, west range | N             | 27/09/07     |              |
| 30.4         | 143          | General view along of corridor F18, west range | N             | 27/09/07     |              |
| 30.5         |              | General view of F13, west range                | NE            | 27/09/07     |              |
| 30.6         | 135          | General view of F13, west range                | NE            | 27/09/07     |              |
| 30.7         | 137          | General view of F13, west range                | SW            | 27/09/07     |              |
| 30.8         |              | General view of F13, west range                | SW            | 27/09/07     |              |
| 30.9         | 140          | General view of F14                            | W             | 27/09/07     |              |
| 30.10        |              | General view of F14                            | W             | 27/09/07     |              |



**Film 31**

| Format       | 400 speed    | Type   | Medium format | Photographer | Simon Jessop |
|--------------|--------------|--|---------------|--------------|--------------|
| Film & frame | Report Plate | Description  | Direction     | Date         |              |
| 31.1         |              | View from F18 down stairs to G1, west range  | W             | 27/09/07     |              |
| 31.2         | 153          | View from F18 down stairs to G1, west range  | W             | 27/09/07     |              |
| 31.3         | 155          | View of arch above stairs, F18, west range   | W             | 27/09/07     |              |
| 31.4         |              | View of arch above stairs, F18, west range   | W             | 27/09/07     |              |
| 31.5         |              | View along corridor F18, west range  | S             | 27/09/07     |              |
| 31.6         |              | View along corridor F18, west range  | S             | 27/09/07     |              |
| 31.7         |              | View of panelled & glazed partition at north end of F18 and door into F1, west range | N             | 27/09/07     |              |
| 31.8         |              | View of panelled & glazed partition at north end of F18 and door into F1, west range | N             | 27/09/07     |              |
| 31.9         | 156          | General view of F1, west range   | NE            | 27/09/07     |              |
| 31.10        |              | General view of F1, west range   | NE            | 27/09/07     |              |

**Film 32**

| Format       | 400 speed    | Type   | Medium format | Photographer | Simon Jessop |
|--------------|--------------|--|---------------|--------------|--------------|
| Film & frame | Report Plate | Description  | Direction     | Date         |              |
| 32.1         | 159          | View of F, west range – showing door to toilet, fireplace and windows                  | SW            | 27/09/07     |              |
| 32.2         |              | View of F1, west range – showing door to toilet, fireplace and windows                 | SW            | 27/09/07     |              |
| 32.3         |              | View of F1, west range – showing fireplace, panelled partition, shelving etc.          | SE            | 27/09/07     |              |
| 32.4         | 158          | View of F1, west range – showing fireplace, panelled partition, shelving etc.          | SE            | 27/09/07     |              |
| 32.5         |              | Detail of fireplace and doorway, northeast corner of F2, west range                    | NE            | 27/09/07     |              |
| 32.6         |              | Detail of fireplace and doorway, northeast corner of F2, west range                    | NE            | 27/09/07     |              |
| 32.7         |              | General view of F3, west range, showing doorway, type 25 window and inserted staircase | SE            | 27/09/07     |              |
| 32.8         | 172          | General view of F3, west range, showing doorway, type 25 window and inserted staircase | SE            | 27/09/07     |              |
| 32.9         |              | General view of F3, west range showing doorway to F2 and shelving                      | W             | 27/09/07     |              |
| 32.10        | 173          | General view of F3, west range showing doorway to F2 and shelving                      | W             | 27/09/07     |              |

**Film 33**

| Format       | 400 speed    | Type  | Medium format | Photographer | Simon Jessop |  |  |
|--------------|--------------|---|---------------|--------------|--------------|--|--|
| Film & frame | Report Plate | Description   | Direction     | Date         |              |  |  |
| 33.1         |              | General view of F4, north range – showing bench, windows & column | SE            | 27/09/07     |              |  |  |
| 33.2         | 376          | General view of F4, north range – showing bench, windows & column | SE            | 27/09/07     |              |  |  |
| 33.3         |              | General view of F4, north range showing columns, blocked window   | NW            | 27/09/07     |              |  |  |
| 33.4         | 378          | General view of F4, north range showing columns, blocked window   | NW            | 27/09/07     |              |  |  |
| 33.5         |              | View of north elevation of south range                            | S             | 27/09/07     |              |  |  |
| 33.6         | 222          | View of north elevation of south range                            | S             | 27/09/07     |              |  |  |
| 33.7         | 382          | View of taking in doors (closed) in south wall of F4, north range | S             | 27/09/07     |              |  |  |
| 33.8         |              | View of taking in doors (closed) in south wall of F4, north range | S             | 27/09/07     |              |  |  |
| 33.9         |              | Detail of fireplace in north wall of F4, north range              | N             | 27/09/07     |              |  |  |
| 33.10        | 380          | Detail of fireplace in north wall of F4, north range              | N             | 27/09/07     |              |  |  |

**Film 34**

| Format       | 400 speed    | Type   | Medium format | Photographer | Simon Jessop |  |  |
|--------------|--------------|--|---------------|--------------|--------------|--|--|
| Film & frame | Report Plate | Description  | Direction     | Date         |              |  |  |
| 34.1         |              | General view of southwest corner of west end of F9, south range, showing blocked opening | SW            | 28/09/07     |              |  |  |
| 34.2         | 282          | General view of southwest corner of west end of F9, south range, showing blocked opening | SW            | 28/09/07     |              |  |  |
| 34.3         | 281          | General view of west end of F9, south range, showing doorway & type 4 window             | NW            | 28/09/07     |              |  |  |
| 34.4         |              | General view of west end of F9, south range, showing doorway & type 4 window             | NW            | 28/09/07     |              |  |  |
| 34.5         | 285          | General view of east end of F9, south range showing fireplace & doorway                  | SE            | 28/09/07     |              |  |  |
| 34.6         |              | General view of east end of F9, south range showing fireplace & doorway                  | SE            | 28/09/07     |              |  |  |
| 34.7         |              | General view of east end of F9, south range showing inserted partition                   | NW            | 28/09/07     |              |  |  |
| 34.8         | 286          | General view of east end of F9, south range showing inserted partition                   | NW            | 28/09/07     |              |  |  |
| 34.9         | 290          | General view of F7, south range  | NE            | 28/09/07     |              |  |  |
| 34.10        |              | General view of F7, south range  | NE            | 28/09/07     |              |  |  |

**Film 35**

| Format       | 400 speed    | Type   | Medium format | Photographer | Simon Jessop |
|--------------|--------------|--|---------------|--------------|--------------|
| Film & frame | Report Plate | Description  | Direction     | Date         |              |
| 35.1         |              | General view of F7, south range  | NW            | 28/09/07     |              |
| 35.2         | 291          | General view of F7, south range  | NW            | 28/09/07     |              |
| 35.3         |              | General view of F8, south range  | NE            | 28/09/07     |              |
| 35.4         | 298          | General view of F8, south range  | NE            | 28/09/07     |              |
| 35.5         |              | General view of F8, south range showing workbenches & fireplace                      | SW            | 28/09/07     |              |
| 35.6         | 299          | General view of F8, south range showing workbenches & fireplace                      | SW            | 28/09/07     |              |
| 35.7         | 300          | Detail of northwest corner of F8, south range, showing fireplace, sink and workbench | NW            | 28/09/07     |              |
| 35.8         |              | Detail of northwest corner of F8, south range, showing fireplace, sink and workbench | NW            | 28/09/07     |              |
| 35.9         |              | General view of southwest corner of F6, east range, showing doorways                 | SW            | 28/09/07     |              |
| 35.10        | 328          | General view of southwest corner of F6, east range, showing doorways                 | SW            | 28/09/07     |              |

**Film 36**

| Format       | 400 speed    | Type   | Medium format | Photographer | Simon Jessop |
|--------------|--------------|--|---------------|--------------|--------------|
| Film & frame | Report Plate | Description  | Direction     | Date         |              |
| 36.1         | 331          | View of north wall of F6, east range showing blocked fireplace | NE            | 24/09/07     |              |
| 36.2         |              | View of north wall of F6, east range showing blocked fireplace | NE            | 24/09/07     |              |
| 36.3         | 333          | General view of F5, east range                                 | NE            | 24/09/07     |              |
| 36.4         |              | General view of F5, east range                                 | NE            | 24/09/07     |              |
| 36.5         |              | General view of F5, east range                                 | SW            | 24/09/07     |              |
| 36.6         | 334          | General view of F5, east range                                 | SW            | 24/09/07     |              |
| 36.7         |              | General view of G7, east range                                 | N             | 24/09/07     |              |
| 36.8         | 326          | General view of G7, east range                                 | N             | 24/09/07     |              |
| 36.9         |              | General view of G7, east range showing fireplace               | S             | 24/09/07     |              |
| 36.10        | 325          | General view of G7, east range showing fireplace               | S             | 24/09/07     |              |

**Film 37**

| Format       | 400 speed    | Type   | Medium format | Photographer | Simon Jessop |  |  |
|--------------|--------------|--|---------------|--------------|--------------|--|--|
| Film & frame | Report Plate | Description  | Direction     | Date         |              |  |  |
| 37.1         |              | General view of S2 towards entrance from roof and S1, west range | S             | 26/09/07     |              |  |  |
| 37.2         | 182          | General view of S2 towards entrance from roof and S1, west range | S             | 26/09/07     |              |  |  |
| 37.3         | 181          | General view of S2 towards S3, west range                        | N             | 26/09/07     |              |  |  |
| 37.4         |              | General view of S2 towards S3, west range                        | N             | 26/09/07     |              |  |  |
| 37.5         |              | Room S1, west range, view of lift shaft                          | S             | 26/09/07     |              |  |  |
| 37.6         | 187          | Room S1, west range, view of lift shaft                          | S             | 26/09/07     |              |  |  |
| 37.7         |              | Detail of display cabinets, S1, west range                       | NE            | 26/09/07     |              |  |  |
| 37.8         | 186          | Detail of display cabinets, S1, west range                       | NE            | 26/09/07     |              |  |  |
| 37.9         |              | General view of S1, west range                                   | NW            | 26/09/07     |              |  |  |
| 37.10        | 185          | General view of S1, west range                                   | NW            | 26/09/07     |              |  |  |

**Film 38**

| Format       | 400 speed    | Type   | Medium format | Photographer | Simon Jessop |  |  |
|--------------|--------------|--|---------------|--------------|--------------|--|--|
| Film & frame | Report Plate | Description  | Direction     | Date         |              |  |  |
| 38.1         | 201          | General view of room S3, west range showing fireplace and removed window | N             | 26/09/07     |              |  |  |
| 38.2         |              | General view of room S3, west range showing fireplace and removed window | N             | 26/09/07     |              |  |  |
| 38.3         | 200          | General view of room S3, west range showing type 4 window and doorway    | SE            | 26/09/07     |              |  |  |
| 38.4         |              | General view of room S3, west range showing type 4 window and doorway    | SE            | 26/09/07     |              |  |  |
| 38.5         |              | General view of room S2, west range, showing partitioned S1              | S             | 26/09/07     |              |  |  |
| 38.6         | 183          | General view of room S2, west range, showing partitioned S1              | S             | 26/09/07     |              |  |  |
| 38.7         |              | Room S2, west range, detail of fireplace and shelving                    | N             | 26/09/07     |              |  |  |
| 38.8         | 191          | Room S2, west range, detail of fireplace and shelving                    | N             | 26/09/07     |              |  |  |
| 38.9         |              | Detail of type 4 window, S3, west range                                  | E             | 26/09/07     |              |  |  |
| 38.10        | 208          | Detail of type 4 window, S3, west range                                  | E             | 26/09/07     |              |  |  |

## Film 41

| Format       | 35mm         | Type  | Black and White | Photographer | O.Jessop |
|--------------|--------------|---|-----------------|--------------|----------|
| Film & frame | Report Plate | Description   | Direction       | Date         |          |
| 41.1         |              | VOID  |                 | 27/09/07     |          |
| 41.2         |              | VOID  |                 | 27/09/07     |          |
| 41.3         |              | VOID  |                 | 27/09/07     |          |
| 41.4         |              | Detail of removed door in S2, west range                              | S               | 27/09/07     |          |
| 41.5         | 194          | Detail of removed door in S2, west range                              | S               | 27/09/07     |          |
| 41.6         |              | Detail of removed door in S2,west range                               | S               | 27/09/07     |          |
| 41.7         |              | Detail of fitting, S1/S2, west range                                  | -               | 27/09/07     |          |
| 41.8         |              | Detail of fittingS1/S2, west range                                    | -               | 27/09/07     |          |
| 41.9         | 189          | Detail of ceiling and lights in S1, west range                        | W               | 27/09/07     |          |
| 41.10        |              | Detail of removed wheel/pulley, S2, west range                        | W               | 27/09/07     |          |
| 41.11        | 199          | Detail of removed wheel/pulley, S2, west range                        | W               | 27/09/07     |          |
| 41.12        |              | Working shot in room S2, west range                                   | NW              | 27/09/07     |          |
| 41.13        |              | Working shot in room S2, west range                                   | NW              | 27/09/07     |          |
| 41.14        |              | Detail of type 1 sash window frame, west wall of S2, west range       | SE              | 27/09/07     |          |
| 41.15        | 196          | Detail of type 1 sash window frame, west wall of S2, west range       | SE              | 27/09/07     |          |
| 41.16        |              | Detail of removed type 3 sash window, S2, west range                  | W               | 27/09/07     |          |
| 41.17        | 195          | Detail of removed type 3 sash window, S2, west range                  | W               | 27/09/07     |          |
| 41.18        | 192          | Detail of shelving above windows, west wall of S2, west range         | NE              | 27/09/07     |          |
| 41.19        |              | Detail of shelving above windows, west wall of S2, west range         | NE              | 27/09/07     |          |
| 41.20        |              | Detail of floor in room S2, west range                                | N               | 27/09/07     |          |
| 41.21        | 198          | Detail of floor in room S2, west range                                | N               | 27/09/07     |          |
| 41.22        |              | Detail of shelving in room S2, west range                             | NW              | 27/09/07     |          |
| 41.23        | 193          | Detail of shelving in room S2, west range                             | NW              | 27/09/07     |          |
| 41.24        | 197          | Detail of floor in room S2, west range – noggins                      | N               | 27/09/07     |          |
| 41.25        |              | Detail of floor in room S2, west range – noggins                      | N               | 27/09/07     |          |
| 41.26        | 206          | Detail of flue and shelving room S3, south wall, west range           | S               | 27/09/07     |          |
| 41.27        |              | Detail of flue and shelving room S3, south wall, west range           | S               | 27/09/07     |          |
| 41.28        | 207          | Detail of door frame between rooms S2 & S3, west range                | SW              | 27/09/07     |          |
| 41.29        |              | Detail of door frame between rooms S2 & S3, west range                | SW              | 27/09/07     |          |
| 41.30        |              | Detail of exposed section of roof truss in room S3, west range        | N               | 27/09/07     |          |
| 41.31        | 205          | Detail of exposed section of roof truss in room S3, west range        | N               | 27/09/07     |          |
| 41.32        |              | Detail of fireplace and shelving in north wall of room S3, west range | N               | 27/09/07     |          |
| 41.33        | 203          | Detail of fireplace and shelving in north wall of room S3, west range | N               | 27/09/07     |          |
| 41.34        | 204          | Detail of bench in room S3, along west wall, west range               | N               | 27/09/07     |          |
| 41.35        |              | Detail of bench in room S3, along west wall, west range               | N               | 27/09/07     |          |
| 41.36        |              | I.D Shot  | -               | 27/09/07     |          |

**Film 42**

| Format       | 35mm         | Type  | B/W       | Photographer | O. Jessop. |
|--------------|--------------|---|-----------|--------------|------------|
| Film & frame | Report Plate | Description   | Direction | Date         |            |
| 42.1         |              | VOID  |           | 09/10/07     |            |
| 42.2         |              | VOID  |           | 09/10/07     |            |
| 42.3         |              | VOID  |           | 09/10/07     |            |
| 42.4         |              | VOID  |           | 09/10/07     |            |
| 42.5         |              | VOID  |           | 09/10/07     |            |
| 42.6         |              | VOID  |           | 09/10/07     |            |
| 42.7         |              | VOID  |           | 09/10/07     |            |
| 42.8         |              | VOID  |           | 09/10/07     |            |
| 42.9         |              | VOID  |           | 09/10/07     |            |
| 42.10        |              | VOID  |           | 09/10/07     |            |
| 42.11        |              | VOID  |           | 09/10/07     |            |
| 42.12        |              | VOID  |           | 09/10/07     |            |
| 42.13        |              | VOID  |           | 09/10/07     |            |
| 42.14        |              | VOID  |           | 09/10/07     |            |
| 42.15        |              | VOID  |           | 09/10/07     |            |
| 42.16        |              | VOID  |           | 09/10/07     |            |
| 42.17        |              | VOID  |           | 09/10/07     |            |
| 42.18        |              | VOID  |           | 09/10/07     |            |
| 42.19        |              | VOID  |           | 09/10/07     |            |
| 42.20        |              | Detail of hole and fixings in north wall of G6, north range           | N         | 09/10/07     |            |
| 42.21        | 373          | Detail of hole and fixings in north wall of G6, north range           | N         | 09/10/07     |            |
| 42.22        |              | Detail of hoist in G6, north range                                    | N         | 09/10/07     |            |
| 42.23        | 375          | Detail of hoist in G6, north range                                    | N         | 09/10/07     |            |
| 42.24        | 374          | Detail of bracket in south wall of G6, north range                    | S         | 09/10/07     |            |
| 42.25        |              | Detail of bracket in south wall of G6, north range                    | S         | 09/10/07     |            |
| 42.26        |              | Detail of flue, northeast corner of G6, north range                   | E         | 09/10/07     |            |
| 42.27        | 372          | Detail of flue, northeast corner of G6, north range                   | E         | 09/10/07     |            |
| 42.28        |              | Detail of sockets in north wall of G6, north range                    | NW        | 09/10/07     |            |
| 42.29        | 370          | Detail of sockets in north wall of G6, north range                    | NW        | 09/10/07     |            |
| 42.30        | 371          | Detail of brick floor, G6, north range                                | S         | 09/10/07     |            |
| 42.31        |              | Detail of brick floor, G6, north range                                | S         | 09/10/07     |            |
| 42.32        | 352          | Detail of type 20 window frame, east elevation of north range         | W         | 09/10/07     |            |
| 42.33        |              | Detail of type 20 window frame, east elevation of north range         | W         | 09/10/07     |            |
| 42.34        | 353          | Detail of type 20 window frame, east elevation of north range – hinge | W         | 09/10/07     |            |
| 42.35        |              | Detail of type 20 window frame, east elevation of north range – hinge | W         | 09/10/07     |            |
| 42.36        |              | I.D shot  | -         | 09/10/07     |            |

**Film 43**

| <b>Format</b>           | 400 speed           | <b>Type</b>  | Medium format    | <b>Photographer</b> | O.Jessop |
|-------------------------|---------------------|--|------------------|---------------------|----------|
| <b>Film &amp; frame</b> | <b>Report Plate</b> | <b>Description</b>   | <b>Direction</b> | <b>Date</b>         |          |
| 43.1                    | 349                 | Detail of doorway and type 20 window, east elevation of north range                        | W                | 09/10/07            |          |
| 43.2                    |                     | Detail of doorway and type 20 window, east elevation of north range                        | W                | 09/10/07            |          |
| 43.3                    | 367                 | General view of G6, north range  | NW               | 09/10/07            |          |
| 43.4                    |                     | General view of G6, north range  | NW               | 09/10/07            |          |
| 43.5                    | 369                 | General view of G6, north range – northeast corner   | NE               | 09/10/07            |          |
| 43.6                    |                     | General view of G6, north range – northeast corner   | NE               | 09/10/07            |          |
| 43.7                    |                     | View of modern doors, G6, north range, looking into yard                                   | SE               | 09/10/07            |          |
| 43.8                    | 368                 | View of modern doors, G6, north range, looking into yard                                   | SE               | 09/10/07            |          |
| 43.9                    |                     | Detail of external staircase & cast iron brackets, west elevation, south end of east range | SE               | 09/10/07            |          |
| 43.10                   | 313                 | Detail of external staircase & cast iron brackets, west elevation, south end of east range | SE               | 09/10/07            |          |

## Film 44

| Format       | 35mm         | Type   | Black and White | Photographer | O.Jessop |
|--------------|--------------|--|-----------------|--------------|----------|
| Film & frame | Report Plate | Description  | Direction       | Date         |          |
| 44.1         | 450          | Detail of towel rail and tiling, G13, wash house                                   | W               | 09/10/07     |          |
| 44.2         | 449          | General view of G13 towards doorway in west wall, wash house                       | W               | 09/10/07     |          |
| 44.3         | 448          | Detail of shower cubicles, south wall of G13, wash house                           | S               | 09/10/07     |          |
| 44.4         | 446          | General view of G13, wash house  | E               | 09/10/07     |          |
| 44.5         | 304          | Detail of lower workbench along south wall of F8, south range                      | S               | 09/10/07     |          |
| 44.6         |              | Detail of lower workbench along south wall of F8, south range                      | W               | 09/10/07     |          |
| 44.7         |              | Detail of workbench along south wall of F8, south range                            | E               | 09/10/07     |          |
| 44.8         | 305          | Detail of workbench along south wall of F8, south range                            | S               | 09/10/07     |          |
| 44.9         |              | Detail of motor, S5, north range   | SW              | 09/10/07     |          |
| 44.10        | 403          | Detail of motor, S5, north range   | SW              | 09/10/07     |          |
| 44.11        | 396          | Detail of roof structure, S5, north range  | SE              | 09/10/07     |          |
| 44.12        |              | Detail of roof structure, S5, north range  | SE              | 09/10/07     |          |
| 44.13        | 401          | Detail of below bench line shafting, S5, north range                               | SE              | 09/10/07     |          |
| 44.14        |              | Detail of below bench line shafting, S5, north range                               | SE              | 09/10/07     |          |
| 44.15        | 400          | Detail of below bench line shafting, S5, north range                               | SE              | 09/10/07     |          |
| 44.16        |              | Detail of below bench line shafting, S5, north range                               | SE              | 09/10/07     |          |
| 44.17        | 397          | Detail of roof structure & line shafting, S5, north range                          | SW              | 09/10/07     |          |
| 44.18        |              | Detail of roof structure & line shafting, S5, north range                          | SW              | 09/10/07     |          |
| 44.19        |              | Detail of cast iron stove, S4, west range extension                                | S               | 09/10/07     |          |
| 44.20        | 211          | Detail of cast iron stove, S4, west range extension                                | S               | 09/10/07     |          |
| 44.21        | 209          | General view of S4 showing doorway from S3, west range extension                   | W               | 09/10/07     |          |
| 44.22        |              | General view of S4 showing doorway from S3, west range extension                   | W               | 09/10/07     |          |
| 44.23        | 405          | Detail of timber stairs to/from S4, northwest corner of S5, north range            | W               | 09/10/07     |          |
| 44.24        |              | Detail of timber stairs to/from S4, northwest corner of S5, north range            | W               | 09/10/07     |          |
| 44.25        |              | Detail of type 14 window in S5, north range  | W               | 09/10/07     |          |
| 44.26        | 402          | Detail of type 14 window in S5, north range  | W               | 09/10/07     |          |
| 44.27        | 398          | View showing overhead and below line shafting & central workbench, S5, north range | NE              | 09/10/07     |          |
| 44.28        |              | View showing overhead and below line shafting & central workbench, S5, north range | NE              | 09/10/07     |          |
| 44.29        | 399          | Detail of workbench & line shafting, south wall of S5, north range                 | E               | 09/10/07     |          |
| 44.30        |              | Detail of workbench & line shafting, south wall of S5, north range                 | E               | 09/10/07     |          |
| 44.31        |              | Blocked hatch in floor of S5, north range  | N               | 09/10/07     |          |
| 44.32        | 405          | Blocked hatch in floor of S5, north range  | N               | 09/10/07     |          |
| 44.33        |              | Detail of doorway, east wall of G4, north range                                    | E               | 09/10/07     |          |
| 44.34        | 356          | Detail of doorway, east wall of G4, north range                                    | E               | 09/10/07     |          |
| 44.35        |              | I.D Shot   | -               | 09/10/07     |          |
| 44.36        |              | VOID   | -               | 09/10/07     |          |



**Film 45**

| <b>Format</b>           | 400 speed           | <b>Type</b>   | Medium format | <b>Photographer</b> | O.Jessop         |             |  |
|-------------------------|---------------------|---|---------------|---------------------|------------------|-------------|--|
| <b>Film &amp; frame</b> | <b>Report Plate</b> | <b>Description</b>  |               |                     | <b>Direction</b> | <b>Date</b> |  |
| 45.1                    | 394                 | General view of S5, north range                           |               |                     | NW               | 09/10/07    |  |
| 45.2                    |                     | General view of S5, north range                           |               |                     | NW               | 09/10/07    |  |
| 45.3                    |                     | General view of S5, north range                           |               |                     | SW               | 09/10/07    |  |
| 45.4                    | 393                 | General view of S5, north range                           |               |                     | SW               | 09/10/07    |  |
| 45.5                    |                     | General view of S5, north range                           |               |                     | SE               | 09/10/07    |  |
| 45.6                    | 392                 | General view of S5, north range                           |               |                     | SE               | 09/10/07    |  |
| 45.7                    |                     | General view of S5, north range (VOID)                    |               |                     | NE               | 09/10/07    |  |
| 45.8                    |                     | General view of S5, north range (VOID)                    |               |                     | NE               | 09/10/07    |  |
| 45.9                    |                     | Detail of roof structure & line shafting, S5, north range |               |                     | NE               | 09/10/07    |  |
| 45.10                   | 395                 | Detail of roof structure & line shafting, S5, north range |               |                     | NE               | 09/10/07    |  |

| <b>Film 46</b>          |                     |  |                  |                     |          |
|-------------------------|---------------------|--|------------------|---------------------|----------|
| <b>Format</b>           | 35mm                | <b>Type</b>  | Black and White  | <b>Photographer</b> | J.Barnes |
| <b>Film &amp; frame</b> | <b>Report Plate</b> | <b>Description</b>   | <b>Direction</b> | <b>Date</b>         |          |
| 46.1                    |                     | Detail of west elevation of machine shop – stone & brick walling                           | E                | 05/11/07            |          |
| 46.2                    | 49                  | Detail of west elevation of machine shop – stone & brick walling                           | E                | 05/11/07            |          |
| 46.3                    |                     | Detail of west elevation of machine shop – stone & brick walling                           | E                | 05/11/07            |          |
| 46.4                    |                     | Detail of blockings, west elevation of machine shop  | E                | 05/11/07            |          |
| 46.5                    | 50                  | Detail of blockings, west elevation of machine shop  | E                | 05/11/07            |          |
| 46.6                    |                     | Detail of blocked windows & later roof scar, west elevation of machine shop                | E                | 05/11/07            |          |
| 46.7                    | 51                  | Detail of blocked windows & later roof scar, west elevation of machine shop                | E                | 05/11/07            |          |
| 46.8                    | 52                  | Detail of raised ridge louvered roof & upper window, west elevation of machine shop        | E                | 05/11/07            |          |
| 46.9                    |                     | Detail of raised ridge louvered roof & upper window, west elevation of machine shop        | E                | 05/11/07            |          |
| 46.10                   |                     | Detail of bracket & window head, south elevation of south range                            | NE               | 05/11/07            |          |
| 46.11                   | 41                  | Detail of bracket & window head, south elevation of south range                            | NE               | 05/11/07            |          |
| 46.12                   | 43                  | Partially blocked type 9 window, south elevation, south range                              | N                | 05/11/07            |          |
| 46.13                   |                     | Partially blocked type 9 window south elevation, south range                               | N                | 05/11/07            |          |
| 46.14                   |                     | Detail of changes in brickwork, etc, south elevation of south range                        | N                | 05/11/07            |          |
| 46.15                   | 36                  | Detail of changes in brickwork etc, south elevation of south range                         | N                | 05/11/07            |          |
| 46.16                   | 35                  | Detail of door to B7 in south elevation, south range                                       | N                | 05/11/07            |          |
| 46.17                   |                     | Detail of door to B7 in south elevation, south range                                       | N                | 05/11/07            |          |
| 46.18                   |                     | Detail of type 4 window & inserted window, south elevation of south range                  | N                | 05/11/07            |          |
| 46.19                   | 42                  | Detail of type 4 window & inserted window, south elevation of south range                  | N                | 05/11/07            |          |
| 46.20                   | 32                  | View of blocked power transmission shaft, south elevation of south range                   | N                | 05/11/07            |          |
| 46.21                   |                     | View of blocked power transmission shaft, south elevation of south range                   | N                | 05/11/07            |          |
| 46.22                   | 25                  | Detail of change in brickwork finish and concrete stairends, south elevation of west range | N                | 05/11/07            |          |
| 46.23                   |                     | Detail of change in brickwork finish and concrete stairends, south elevation of west range | N                | 05/11/07            |          |
| 46.24                   |                     | Detail of blocked opening, 1st floor of south range, south elevation                       | N                | 05/11/07            |          |
| 46.25                   | 24                  | Detail of blocked opening, 1st floor of south range, south elevation                       | N                | 05/11/07            |          |
| 46.26                   | 29                  | Detail of blocked arches in south elevation of south range                                 | N                | 05/11/07            |          |
| 46.27                   |                     | Detail of blocked arches in south elevation of south range                                 | N                | 05/11/07            |          |
| 46.28                   |                     | Detail of blocked opening in early section of wall, south elevation of south range         | N                | 05/11/07            |          |
| 46.29                   | 30                  | Detail of blocked opening in early section of wall, south elevation of south range         | N                | 05/11/07            |          |
| 46.30                   |                     | Detail of south gable, west range, showing 2nd floor blocked window/door                   | N                | 05/11/07            |          |
| 46.31                   | 22                  | Detail of south gable, west range, showing 2nd floor blocked window/door                   | N                | 05/11/07            |          |
| 46.32                   | 21                  | Detail of painted lettering, south elevation of west range                                 | N                | 05/11/07            |          |
| 46.33                   |                     | Detail of painted lettering, south elevation of west range                                 | N                | 05/11/07            |          |
| 46.34                   | 20                  | Detail of ground floor & varying brickwork, south elevation of west range                  | N                | 05/11/07            |          |
| 46.35                   |                     | Detail of ground floor & varying brickwork, south elevation of west range                  | N                | 05/11/07            |          |
| 46.36                   |                     | I.D shot   | -                | 05/11/07            |          |

**Film 47**

| Format       | 400 speed    | Type   | Medium format | Photographer | L.Dawson |
|--------------|--------------|--|---------------|--------------|----------|
| Film & frame | Report Plate | Description  | Direction     | Date         |          |
| 47.1         | 17           | General view of south elevation of west range and west end of south range                    | N             | 05/11/07     |          |
| 47.2         |              | General view of south elevation of west range and west end of south range                    | N             | 05/11/07     |          |
| 47.3         | 19           | General view of south elevation of west range and west end of south range                    | N             | 05/11/07     |          |
| 47.4         |              | General view of south elevation of west range and west end of south range                    | N             | 05/11/07     |          |
| 47.5         |              | General view of south elevation of south & west ranges                                       | N             | 05/11/07     |          |
| 47.6         | 23           | General view of south elevation of south & west ranges                                       | N             | 05/11/07     |          |
| 47.7         | 33           | View of south elevation of south range   | NE            | 05/11/07     |          |
| 47.8         |              | View of south elevation of south range   | NE            | 05/11/07     |          |
| 47.9         | 28           | Detail of two phased south wall with blocked arched openings, south elevation of south range | N             | 05/11/07     |          |
| 47.10        |              | Detail of two phased south wall with blocked arched openings, south elevation of south range | N             | 05/11/07     |          |

**Film 48**

| Format       | 400 speed    | Type  | Medium format | Photographer | L.Dawson |
|--------------|--------------|---|---------------|--------------|----------|
| Film & frame | Report Plate | Description   | Direction     | Date         |          |
| 48.1         | 31           | View of brick blocking, projecting bricks and change in brickwork, south elevation of south range | NE            | 05/11/07     |          |
| 48.2         |              | View of brick blocking, projecting bricks and change in brickwork, south elevation of south range | NE            | 05/11/07     |          |
| 48.3         |              | View of doorway leading into basement B7, south elevation of south range                          | N             | 05/11/07     |          |
| 48.4         | 34           | View of doorway leading into basement B7, south elevation of south range                          | N             | 05/11/07     |          |
| 48.5         |              | Detail of type 8 & 9 windows, south elevation of south range                                      | N             | 05/11/07     |          |
| 48.6         | 40           | Detail of type 8 & 9 windows, south elevation of south range                                      | N             | 05/11/07     |          |
| 48.7         | 39           | View of unidentified metal objects above 2nd-storey windows, south elevation of south range       | NE            | 05/11/07     |          |
| 48.8         |              | View of unidentified metal objects above 2nd-storey windows, south elevation of south range       | NE            | 05/11/07     |          |
| 48.9         | 47           | General view of west elevation of machine shop  | E             | 05/11/07     |          |
| 48.10        |              | General view of west elevation of machine shop  | E             | 05/11/07     |          |

## Film 49 Trafalgar and Kangaroo Works Watching Brief

| Format       | 400 speed    | Type   | Medium format | Photographer | Oliver Jessop |
|--------------|--------------|--|---------------|--------------|---------------|
| Film & frame | Report Plate | Description  | Direction     | Date         |               |
| 49.1         |              | Detail of lower section of south elevation of south range                                      | N             | 26/06/08     |               |
| 49.2         | 44           | Detail of lower section of south elevation of south range                                      | N             | 26/06/08     |               |
| 49.3         |              | Detail of lower section of south elevation of south range, showing paintwork                   | N             | 26/06/08     |               |
| 49.4         | 45           | Detail of lower section of south elevation of south range, showing paintwork                   | N             | 26/06/08     |               |
| 49.5         | 46           | Detail of lower section of south elevation of south range, showing paintwork                   | N             | 26/06/08     |               |
| 49.6         |              | Detail of lower section of south elevation of south range, showing paintwork                   | N             | 26/06/08     |               |
| 49.7         | 48           | View of lower section of west elevation of machine shop showing height of internal floor level | E             | 26/06/08     |               |
| 49.8         |              | View of lower section of west elevation of machine shop showing height of internal floor level | E             | 26/06/08     |               |
| 49.9         |              | Detail of former passage B7 and earlier flue, south range                                      | N             | 26/06/08     |               |
| 49.10        | 37           | Detail of former passage B7 and earlier flue, south range                                      | N             | 26/06/08     |               |

## Film 50 Trafalgar and Kangaroo Works Watching Brief

| Format       | 400 speed    | Type  | Medium format | Photographer | Oliver Jessop |
|--------------|--------------|---|---------------|--------------|---------------|
| Film & frame | Report Plate | Description   | Direction     | Date         |               |
| 50.1         |              | North facing elevation of east boundary wall of works                                   | S             | 26/06/08     |               |
| 50.2         |              | North facing elevation of east boundary wall of works                                   | S             | 26/06/08     |               |
| 50.3         |              | North facing elevation of east boundary wall of works                                   | S             | 26/06/08     |               |
| 50.4         |              | North facing elevation of east boundary wall of works                                   | S             | 26/06/08     |               |
| 50.5         |              | West facing elevation of east boundary wall of works                                    | E             | 26/06/08     |               |
| 50.6         |              | West facing elevation of east boundary wall of works                                    | E             | 26/06/08     |               |
| 50.7         |              | West facing elevation of east boundary wall of works                                    | NE            | 26/06/08     |               |
| 50.8         |              | West facing elevation of east boundary wall of works                                    | NE            | 26/06/08     |               |
| 50.9         |              | Detail of cast iron columns/flues & vertical I-sections in south wall of Kangaroo works | E             | 26/06/08     |               |
| 50.10        |              | Detail of cast iron columns/flues & vertical I-sections in south wall of Kangaroo works | E             | 26/06/08     |               |

## Film 51 Trafalgar and Kangaroo Works Watching Brief

| Format       | 400 speed    | Type  | Medium format | Photographer | Oliver Jessop |
|--------------|--------------|---|---------------|--------------|---------------|
| Film & frame | Report Plate | Description   | Direction     | Date         |               |
| 51.1         |              | North boundary wall post demolition of north and east ranges                  | NW            | 26/06/08     |               |
| 51.2         |              | North boundary wall post demolition of north and east ranges                  | NW            | 26/06/08     |               |
| 51.3         |              | North wall of former furnace house  | NW            | 26/06/08     |               |
| 51.4         | 434          | North wall of former furnace house  | NW            | 26/06/08     |               |
| 51.5         |              | Detail of lower section of chimney stack, northeast corner of furnace house   | NE            | 26/06/08     |               |
| 51.6         | 436          | Detail of lower section of chimney stack, northeast corner of furnace house   | NE            | 26/06/08     |               |
| 51.7         |              | Detail of machine base scar in secondary concrete floor of G11, furnace house | NW            | 26/06/08     |               |
| 51.8         | 438          | Detail of machine base scar in secondary concrete floor of G11, furnace house | NW            | 26/06/08     |               |
| 51.9         | 435          | Detail of north wall of former furnace house range                            | NE            | 26/06/08     |               |
| 51.10        |              | Detail of north wall of former furnace house range                            | NE            | 26/06/08     |               |

## Film Colour Slide 1

| Format       | 35mm         | Type   | Colour slide | Photographer | O.Jessop, L.Dawson, J.Barnes & J.Thomson |
|--------------|--------------|--|--------------|--------------|--|
| Film & frame | Report Plate | Description  | Direction    | Date         |  |
| C/S 1.1      |              | View of west end of F10, south range   | W            | Sep/Oct 2007 |  |
| C/S 1.2      |              | Working shot, F10, south range   | N            | Sep/Oct 2007 |  |
| C/S 1.3      |              | General view of north wall of G2, west range   | NW           | Sep/Oct 2007 |  |
| C/S 1.4      | 110          | Detail of ceiling, room G2, west range   | N            | Sep/Oct 2007 |  |
| C/S 1.5      |              | Working shot, F4, north range  | S            | Sep/Oct 2007 |  |
| C/S 1.6      | 177          | Detail of embossed wallpaper of F3, west range extension   | N            | Sep/Oct 2007 |  |
| C/S 1.7      |              | Detail of hole in floor of F3, west range extension  | W            | Sep/Oct 2007 |  |
| C/S 1.8      |              | View of hole in floor of F3, west range extension  | NE           | Sep/Oct 2007 |  |
| C/S 1.9      |              | General view of fire station to east of works from south range roof                                    | E            | Sep/Oct 2007 |  |
| C/S 1.10     |              | General view of Kangaroo Works from south range roof   | SW           | Sep/Oct 2007 |  |
| C/S 1.11     |              | View of south elevation of north range from south range roof   | N            | Sep/Oct 2007 |  |
| C/S 1.12     |              | View of removed 2 <sup>nd</sup> floor of east range truncated chimney stacks, from roof of south range | NE           | Sep/Oct 2007 |  |
| C/S 1.13     |              | View of west elevation of machine shop from roof of south range  | SE           | Sep/Oct 2007 |  |
| C/S 1.14     |              | General view from roof of south range showing former TGW yard and Kangaroo Works beyond                | SE           | Sep/Oct 2007 |  |
| C/S 1.15     |              | View of north elevation of Kangaroo Works from roof of south range                                     | S            | Sep/Oct 2007 |  |
| C/S 1.16     |              | General view of east elevation of west range from roof of south range                                  | NW           | Sep/Oct 2007 |  |
| C/S 1.17     |              | Detail of S1. west range cabinet   | -            | Sep/Oct 2007 |  |
| C/S 1.18     |              | Detail of removed type 3 sash window from west wall of S2, west range                                  | S            | Sep/Oct 2007 |  |
| C/S 1.19     |              | View of fireplace & removed timber floor board, S2, west range   | N            | Sep/Oct 2007 |  |
| C/S 1.20     |              | Detail of lighting within S1 and decorated ceiling, west range   | W            | Sep/Oct 2007 |  |
| C/S 1.21     | 190          | Detail of lighting within S1 and decorated ceiling, west range   | W            | Sep/Oct 2007 |  |
| C/S 1.22     |              | Detail of former paint scheme, west wall of s1, west range   | SW           | Sep/Oct 2007 |  |
| C/S 1.23     | 188          | View of lift shaft & storage area at south end of S1, west range                                       | S            | Sep/Oct 2007 |  |
| C/S 1.24     |              | Detail of shelves, south wall of S2, west range  | S            | Sep/Oct 2007 |  |
| C/S 1.25     |              | Detail of removed type 3 sash window from west wall of S2, west range                                  | E            | Sep/Oct 2007 |  |
| C/S 1.26     |              | View of removed timber floor boards, S2, west range  | NE           | Sep/Oct 2007 |  |
| C/S 1.27     |              | View of removed timber floor boards, S2, west range  | NE           | Sep/Oct 2007 |  |
| C/S 1.28     |              | Detail of type 4 window, S3, west rang   | E            | Sep/Oct 2007 |  |
| C/S 1.29     |              | Detail of shelves, north wall of S2, west range  | N            | Sep/Oct 2007 |  |
| C/S 1.30     | 184          | View of S2 showing partitioned S1 within the southwest corner  | SW           | Sep/Oct 2007 |  |
| C/S 1.31     |              | Detail of visible noggins between timber floor joists, S2, west range                                  | N            | Sep/Oct 2007 |  |
| C/S 1.32     |              | Detail of timber shelving, S2, west range  | -            | Sep/Oct 2007 |  |
| C/S 1.33     |              | VOID   | -            | Sep/Oct 2007 |  |
| C/S 1.34     |              | View of doorway to S2 from S3, south wall of S3, west range  | S            | Sep/Oct 2007 |  |
| C/S 1.35     |              | View of south wall of S3, west range   | S            | Sep/Oct 2007 |  |
| C/S 1.36     | 202          | General view of S3, west range   | N            | Sep/Oct 2007 |  |

## Film Colour Slide 2

| Format       | 35mm         | Type   | Colour slide | Photographer | O.Jessop, L.Dawson, J.Barnes & J.Thomson |  |
|--------------|--------------|--|--------------|--------------|--|--|
| Film & frame | Report Plate | Description  | Direction    | Date         |  |  |
| C/S 2.1      |              | General view of F10, south range   | NE           | Sep/Oct 2007 |  |  |
| C/S 2.2      | 144          | General view of corridor F18 showing colour scheme, west range                                 | N            | Sep/Oct 2007 |  |  |
| C/S 2.3      | 139          | General view of F13 showing original skirting, inserted partitions & colour scheme, west range | NW           | Sep/Oct 2007 |  |  |
| C/S 2.4      | 154          | View from F18 down stairs to G1, west range  | W            | Sep/Oct 2007 |  |  |
| C/S 2.5      | 157          | General view of room F1, west range  | NW           | Sep/Oct 2007 |  |  |
| C/S 2.6      | 160          | General view of room F1, west range  | SW           | Sep/Oct 2007 |  |  |
| C/S 2.7      | 162          | Detail of fireplace, F1, west range  | S            | Sep/Oct 2007 |  |  |
| C/S 2.8      |              | View of doorways leading from F3 to F1, west range   | SW           | Sep/Oct 2007 |  |  |
| C/S 2.9      | 377          | General view of F4, north range  | SE           | Sep/Oct 2007 |  |  |
| C/S 2.10     | 379          | General view of F4, north range  | NW           | Sep/Oct 2007 |  |  |
| C/S 2.11     |              | View of furnace house, G11, furnace house range  | W            | Sep/Oct 2007 |  |  |
| C/S 2.12     | 456          | Detail of toilet cubicle & old toilet, G14 privies, wash house range                           | S            | Sep/Oct 2007 |  |  |
| C/S 2.13     | 453          | General view of privies, wash house range from yard area, G14                                  | SE           | Sep/Oct 2007 |  |  |
| C/S 2.14     |              | View of northwest corner of machine shop, G15  | NW           | Sep/Oct 2007 |  |  |
| C/S 2.15     |              | View of southwest corner of G18 showing window   | SW           | Sep/Oct 2007 |  |  |
| C/S 2.16     |              | General view of G8, east range   | S            | Sep/Oct 2007 |  |  |
| C/S 2.17     |              | General view of G19, south range   | SE           | Sep/Oct 2007 |  |  |
| C/S 2.18     |              | General view of G20, south range   | SE           | Sep/Oct 2007 |  |  |
| C/S 2.19     | 103          | View of archway leading to loading door beneath staircase, room G2, west range                 | S            | Sep/Oct 2007 |  |  |
| C/S 2.20     | 102          | General view of G2, west range   | NE           | Sep/Oct 2007 |  |  |
| C/S 2.21     | 99           | General view of G1 west range, up staircase to F18   | E            | Sep/Oct 2007 |  |  |
| C/S 2.22     | 115          | Detail of truncated & blocked window, west wall of G3, west range extension                    | W            | Sep/Oct 2007 |  |  |
| C/S 2.23     | 359          | General view of southwest corner of G5, north range  |              | Sep/Oct 2007 |  |  |
| C/S 2.24     |              | VOID   | -            | Sep/Oct 2007 |  |  |
| C/S 2.25     | 232          | General view of B5, south range  | NE           | Sep/Oct 2007 |  |  |
| C/S 2.26     | 89           | Detail of altered lightwell to coal chute, B3, west range                                      | NW           | Sep/Oct 2007 |  |  |
| C/S 2.27     | 88           | Detail of blocked lightwell, B3, west range  | SW           | Sep/Oct 2007 |  |  |
| C/S 2.28     |              | VOID   | -            | Sep/Oct 2007 |  |  |
| C/S 2.29     | 73           | Detail of cart passage with gate closed, east elevation of west range                          | W            | Sep/Oct 2007 |  |  |
| C/S 2.30     | 58           | General view of the east elevation of machine shop, wash house & furnace house ranges          | SW           | Sep/Oct 2007 |  |  |
| C/S 2.31     | 63           | General view of east & north elevation of east range   | SW           | Sep/Oct 2007 |  |  |
| C/S 2.32     | 65           | General view of north elevation of east, north & west range                                    | S            | Sep/Oct 2007 |  |  |
| C/S 2.33     | 18           | View of south elevation of west range  | N            | Sep/Oct 2007 |  |  |
| C/S 2.34     | 26           | General view of south elevation of south range   | NE           | Sep/Oct 2007 |  |  |
| C/S 2.35     | 15           | General view of principal façade/west elevation & south elevation of west range                | NE           | Sep/Oct 2007 |  |  |
| C/S 2.36     | 3            | General view of Trafalgar Works, west elevation of west range                                  | SE           | Sep/Oct 2007 |  |  |

### Film Colour Slide 3

| Format       | 35mm         | Type  | Colour slide | Photographer | O.Jessop, L.Dawson, J.Barnes & J.Thomson |
|--------------|--------------|---|--------------|--------------|--|
| Film & frame | Report Plate | Description   | Direction    | Date         |  |
| C/S 3.1      | 420          | General view of G10, furnace house range, west building showing boiler/incinerator                          | E            | Sep/Oct 2007 |  |
| C/S 3.2      | 330          | Detail of timber doorway, west wall of F6, eat range  | W            | Sep/Oct 2007 |  |
| C/S 3.3      |              | Detail of lift door, F11, west range  | W            | Sep/Oct 2007 |  |
| C/S 3.4      | 271          | View of south side of timber & glazed partition at west end of F10, south range, leading to F11, west range | NW           | Sep/Oct 2007 |  |

### Film Colour Slide 4

| Format       | 35mm         | Type   | Colour slide | Photographer | O.Jessop, L.Dawson, J.Barnes & J.Thomson |
|--------------|--------------|--|--------------|--------------|--|
| Film & frame | Report Plate | Description  | Direction    | Date         |  |
| C/S 4.1      |              | Detail of removed anvil, rear yard                           | NW           | Sep/Oct 2007 |  |
| C/S 4.2      |              | Detail of paint scheme, privies G14, wash house range        | S            | Sep/Oct 2007 |  |
| C/S 4.3      |              | Detail of old toilet, G14, wash house range                  | S            | Sep/Oct 2007 |  |
| C/S 4.4      | 447          | General view of G13, wash house                              | E            | Sep/Oct 2007 |  |
| C/S 4.5      |              | Detail of black & white tile boarder , G13, wash house       | W            | Sep/Oct 2007 |  |
| C/S 4.6      | 451          | Detail of black & white tile boarder , G13, wash house       | W            | Sep/Oct 2007 |  |
| C/S 4.7      |              | Detail of tiling & towel rail, west wall of G13 wash house   | NW           | Sep/Oct 2007 |  |
| C/S 4.8      |              | View of workbenches, south wall of F8, south range           | S            | Sep/Oct 2007 |  |
| C/S 4.9      | 306          | Detail of wear on workbench, south wall of f8, south range   | S            | Sep/Oct 2007 |  |
| C/S 4.10     |              | View of workbenches, south wall of F8, south range           | E            | Sep/Oct 2007 |  |
| C/S 4.11     |              | General view of S4 looking towards S3 – west range extension | W            | Sep/Oct 2007 |  |
| C/S 4.12     | 212          | Detail of cast iron stove, S4, west range extension          | S            | Sep/Oct 2007 |  |
| C/S 4.13     | 210          | General view of S4 looking towards S3 – west range extension | W            | Sep/Oct 2007 |  |
| C/S 4.14     |              | View of central workbench, S4, north range                   | NW           | Sep/Oct 2007 |  |
| C/S 4.15     |              | View of workbench along south wall of S4, north range        | SW           | Sep/Oct 2007 |  |
| C/S 4.16     |              | General view of S4, north range                              | SW           | Sep/Oct 2007 |  |
| C/S 4.17     |              | Detail of lineshafting, S4, north range                      | SE           | Sep/Oct 2007 |  |
| C/S 4.18     |              | General view of S4, north range                              | S            | Sep/Oct 2007 |  |
| C/S 4.19     |              | Detail of line shafting, S4, north range                     | SE           | Sep/Oct 2007 |  |
| C/S 4.20     |              | Detail of shoe, S4, north range                              | -            | Sep/Oct 2007 |  |
| C/S 4.21     |              | View of workbenches, S4, north range                         | SE           | Sep/Oct 2007 |  |
| C/S 4.22     |              | View of S4, north range                                      | NE           | Sep/Oct 2007 |  |
| C/S 4.23     |              | Detail of hatch in floor of s4, north range                  | N            | Sep/Oct 2007 |  |
| C/S 4.24     | 357          | Detail of doorway, east wall of G4, north range              | E            | Sep/Oct 2007 |  |
| C/S 4.25     |              | Detail of doorway, east wall of G4, north range              | E            | Sep/Oct 2007 |  |



**Digital Photographic Register:****Project Name:** Trafalgar Works Project      **Project No:** 899e**Date(s):**                      **Photographer:** Lucy Dawson

| Frame: | Report Plate: | Description  | Int. | Ext. | Direction | Date          |
|--------|---------------|--|------|------|-----------|---------------|
| D.1    | 108           | View of void beneath floor of G2, west alcove of north wall, west range  | X    |      | E         | Sept-Dec 2007 |
| D.2    | 117           | View of north wall of G3, west range extension, showing join with north and west ranges & steel I-section beam carrying 1st floor north wall |      | X    | N         | Sept-Dec 2007 |
| D3     | 145           | View of rooms F11-F16 & F18 after removal of partitions, west range  | X    |      | SW        | Sept-Dec 2007 |
| D.4    | 146           | View of rooms F11-F16 & F18 after removal of partitions, west range  | X    |      | N         | Sept-Dec 2007 |
| D.5    | 147           | Detail of F11/F18 after removal of partitions with F10 beyond – west and south ranges  | X    |      | E         | Sept-Dec 2007 |
| D.6    | 148           | View of lift shaft, west range   | X    |      | S         | Sept-Dec 2007 |
| D.7    | 149           | View of base of lift shaft with inserted timber platform & basement below, west range  | X    |      | S         | Sept-Dec 2007 |
| D.8    | 150           | Detail of lift counterweight, lift shaft, west range   | X    |      | W         | Sept-Dec 2007 |
| D.9    | 151           | Detail of inserted lift mechanism within lift shaft, west range  | X    |      | E         | Sept-Dec 2007 |
| D.10   | 168           | Detail of partition construction with lath & plaster covering, north wall of F1, west range  | X    |      | N         | Sept-Dec 2007 |
| D.11   | 213           | General view of west range showing contemporary join with former south range   |      | X    | NW        | Sept-Dec 2007 |
| D.12   | 214           | Detail of original east wall of lift shaft, west range   |      | X    | NE        | Sept-Dec 2007 |
| D.13   | 215           | Detail of timber floor joists, boarding and lath and plaster construction, west range  |      | X    | NW        | Sept-Dec 2007 |
| D.14   | 216           | View of west range showing transverse steel I-section beams within which the timber joists were set  |      | X    | NW        | Sept-Dec 2007 |
| D.15   | 217           | Detail of king-post roof of with diagonal braces, west range   |      | X    | NW        | Sept-Dec 2007 |
| D.16   | 218           | Detail of roof structure of king-post without diagonal braces, west range  |      | X    | NW        | Sept-Dec 2007 |
| D.17   | 270           | View depicting doorway into G16 from G15 machine shop – showing original type 9 window features, south wall of G16, south range              |      | X    | NW        | Sept-Dec 2007 |
| D.18   | 284           | Detail of formerly boarded fireplace, west wall of F9, south range   | X    |      | W         | Sept-Dec 2007 |
| D.19   | 297           | General view of F7 after clearance showing previous colour schemes on ceiling, south range   | X    |      | E         | Sept-Dec 2007 |
| D.20   | 310           | Detail of timber floor joists set into south wall of south range   |      | X    | N         | Sept-Dec 2007 |
| D.21   | 311           | Detail of blocked arched opening showing painted reveals, south elevation of south range   |      | X    | N         | Sept-Dec 2007 |
| D.22   | 327           | Detail of blocked type 4 windows within east wall of G7, east range  | X    |      | E         | Sept-Dec 2007 |
| D.23   | 337           | Detail of inserted doorway within former type 4 window, leading to secondary external staircase, F5, east range                              | X    |      | SW        | Sept-Dec 2007 |
| D.24   | 338           | Detail of inserted secondary external staircase leading from F5, east range to central yard  |      | X    | W         | Sept-Dec 2007 |
| D.25   | 339           | General view of east range during demolition showing floor and ceiling construction  |      | X    | N         | Sept-Dec 2007 |
| D.26   | 391           | Detail of bull nosed brick jamb, north wall of former F4, north range – also note modern brickwork below                                     |      | X    | NE        | Sept-Dec 2007 |
| D.27   | 406           | Detail of section through external chimney stack of north range  |      | X    | NW        | Sept-Dec 2007 |
| D.28   | 416           | View showing detail of steel structure of machine shop and relationship with earlier privy block to the north                                |      | X    | W         | Sept-Dec 2007 |
| D.29   | 423           | General view of G10 & G9, furnace house range, west building after removal of roof   |      | X    | NE        | Sept-Dec 2007 |
| D.30   | 424           | View of north wall of G9, west building of furnace house, showing vertical joints to east and west   |      | X    | N         | Sept-Dec 2007 |
| D.31   | 430           | Detail of blocked door opening, south elevation of furnace house, G11, west end  |      | X    | N         | Sept-Dec 2007 |
| D.32   | 431           | General view of remains of south elevation of furnace house  |      | X    | NW        | Sept-Dec 2007 |
| D.33   | 432           | Detail of SE corner of south elevation of furnace house showing remains of spring of segmental brick arched head of doorway                  |      | X    | NE        | Sept-Dec 2007 |





## 15 APPENDIX I: RATEBOOK INFORMATION

**Table 1: Rate book Information 1850-1868**

| Reference             | Date    | Owner   | Occupier  | Premises   | Description      | Gross Rental Value |
|-----------------------|---------|---|---|--|------------------|--------------------|
| RB472/35<br>Ecclesall | 1850-51 | Wiley Thomas<br>(Noted in the Slater's 1846 Directory as a Table Knife manufacturer residing in Trafalgar St) | Wiley Thomas  | New Wheel & Machinery                                | Trafalgar Street | £16-0-0            |
| RB475<br>Ecclesall    | 1853-4  | Wiley Thomas Exors  | Wiley Anna & Others                                     | Grinding Wheels, Engine House, Workshops & Machinery | Trafalgar Street | £205-15-0          |
| RB477<br>Ecclesall    | 1854-55 | Wiley's Exors   | Waterhouse Thomas (Wiley Anna & Others crossed through) | Grinding Wheels, Engine House, Workshops & Machinery | Trafalgar Street | £200-15-0          |
| RB481/32<br>Ecclesall | 1857-58 | Wiley's Exors   | Waterhouse Thomas                                       | Grinding Wheels, Engine House, Workshops & Machinery | Trafalgar Wheel  | £160-0-0           |
| RB485/32<br>Ecclesall | 1861-2  | Wiley's Exors   | Waterhouse Thomas                                       | Grinding Wheels, Engine House, Workshops & Machinery | Trafalgar Wheel  | £160-0-0           |
| RB489/32<br>Ecclesall | 1862-63 | Wiley's Exors   | Waterhouse Thomas                                       | Grinding Wheels, Engine House, Workshops & Machinery | Trafalgar Wheel  | £160-0-0           |
| RB494/32<br>Ecclesall | 1866    | Waterhouse Thomas   | Sorby   | Grinding Wheels, Engine House, Workshops & Machinery | Trafalgar Wheel  | £160-0-0           |
| RB497/22<br>Ecclesall | 1868    | Waterhouse Thomas   | Sorby Robert  | Grinding Wheels, Engine House, Workshops & Machinery | Trafalgar Wheel  | £160-0-0           |

## 16 APPENDIX II: FENESTRATION TYPOLOGY

**Table 2: Fenestration typology for Trafalgar Works**

| Type | Description   | Photos  |
|------|---|---|
| 1    | <p>Original window:</p> <p>External – Chamfered flush stone lintel, projecting stone sill, brick jambs</p> <p>Internal – Timber sill, bull nosed brick reveals</p> <p>Frame – Timber frame double hung sash with 12 panes.</p> <p>Dimensions – 115cm x 236cm (3ft 7” x 7ft 7”)</p>  |    |
| 2    | <p>Original window:</p> <p>External – Chamfered flush stone lintel, projecting stone sill, brick jambs</p> <p>Internal – Timber sill, bull nosed brick reveals covered by later timber reveals</p> <p>Frame – Timber hung sash, with multi-paned upper section (8 panes) &amp; replacement single pane lower section</p> <p>Dimensions – 110cm x 236cm (3ft 6”x 7ft 7”)</p> |   |
| 3    | <p>Original Window: - Similar to type 1</p> <p>External – Chamfered flush stone lintel, projecting stone sill, brick jambs</p> <p>Internal – Timber sill, moulded architrave</p> <p>Frame – Timber double hung sash, original window removed, but would have had 12 panes</p> <p>Dimensions – 110cm x 210cm (3ft 6”x 6ft 8”)</p>  |  |
| 4    | <p>Original Window:</p> <p>External – Segmental brick arched head, bull nosed brick sill, brick jambs</p> <p>Internal – Stepped brick sill, bull nosed brick reveals</p> <p>Frame - Timber frame with 8 panes, upper two casements of inwards hopper opening, some also with central single casement</p> <p>Dimensions – 115cm x 230cm (3ft 7”x 7ft 5”)</p>                 |  |

- 5 Original Window: - similar to type 4  
 External – Segmental brick arched head, bull nosed brick sill, brick jambs  
 Internal – Timber sill, moulded architrave  
 Frame - Timber frame with 8 panes, upper two casements of inwards hopper opening  
 Dimensions – 115cm x 230cm (3ft 7”x 7ft 5”)



- 6 Original Window:  
 External – Chamfered flush stone lintel, opening blocked with brick  
 Internal – Timber sill and lintel, brick reveals  
 Frame – Timber frame with 6 panes and small upper casement with inward hopper opening, frosted glass  
 Dimensions – 122cm x 98cm (4ft x 3ft 2”)



- 7 Original Window:  
 External – Segmental brick arched head, Bull nosed brick sill, brick jambs  
 Internal – Brick sill, straight brick reveals  
 Frame – Timber multi-paned frame, two lower casements with outward openings of four panes  
 Dimensions – 155cm x 260cm (5ft x 8ft 5”)



- 8 Inserted Window:  
 External – Segmental brick arched head, brick sill, brick jambs  
 Internal – Brick sill, plain brick reveals  
 Frame – Timber frame with 6 fixed panes  
 Dimensions – 100cm x 164cm (3ft 2”x 5ft 3”)



- 9 Original Window:  
 External – Segmental brick arched head, bull nosed brick sill (raised), plain brick jambs- lower section of original window opening blocked  
 Internal – Brick sill, brick reveals  
 Frame – Timber frame with 8 panes, upper two being casement openings  
 Dimensions - 150cm x 197cm (4ft 9”x 6ft 4”)



- 10 Original Window:  
 External – Lintel obscured by roof, bull nosed brick sill, brick jambs  
 Internal – Timber lintel, stepped brick sill, bull nosed brick reveals  
 Frame – Adapted type 4 frame: Timber frame with 6 panes, upper casements with inward awning opening and central inward hopper opening casement  
 Dimensions – 115cm x 158cm (3ft 7”x 5ft 1”)



- 11 Original Window:  
 External – Timber lintel, bull nose brick sill, brick jambs  
 Internal – Timber lintel, stepped brick sill, bull nosed brick reveals  
 Frame – Adapted upper section of type 4 frame: Timber frame with 4 panes, upper casements with inward hopper opening  
 Dimensions – 115cm x 83cm (3ft 7”x 2ft 7”)



- 12 Inserted Window – original door:  
 External – Segmental brick arched head, bull nosed brick sill, bull nosed brick jambs  
 Internal – Timber lintel, brick sill, bull nosed brick reveals  
 Frame – Timber frame, 4 panes  
 Dimensions – 100cm x 138cm (3ft 2”x 4ft 5”)



- 13 Original Window:  
 External – Segmental brick arched head, bull nosed brick sill, plain brick jambs  
 Internal – Timber lintel, timber sill, bull nosed brick reveals  
 Frame – Timber frame with 6 panes, western half casement outward opening  
 Dimensions – 86cm x 142cm (2ft 8”x 4ft 6”)



- 14 Original Window:  
 External – Concrete flush lintel, projecting bull nosed brick & tile sill, plain brick jambs  
 Internal – Concrete sill & lintel, bull nose brick reveals  
 Frame – Timber frame with 12 panes, central four paned inward opening casement  
 Dimensions – 215cm x 137cm (7ft x 4ft 5”)



- 15 Original Window:  
 External – Concrete flush lintel, bull nosed brick & tile sill, plain brick jambs  
 Internal – Concrete lintel, brick sill, plain brick reveals  
 Frame – Timber frame with 8 panes, western inward opening casement of four panes  
 Dimensions – 125cm x 110cm (4ft 1”x 3ft 6”)



- 16 Original Window:  
 External – Concrete flush lintel, bull nosed brick & tile sill, plain brick jambs  
 Internal – Concrete lintel, brick sill, brick reveals  
 Frame – Timber fixed frame with 4 panes  
 Dimensions – 90cm x 100cm (2ft 9”x 3ft 2”)



- 17 Inserted Window:  
 External – Concrete flush lintel, projecting bull nosed brick sill, plain (cut) brick jambs  
 Internal – Concrete lintel, brick sill, plastered brick reveals  
 Frame – Timber frame with 8 panes. Lower outer outward opening casements & central upper outward awning casements  
 Dimensions – 244cm x 152cm (8ft x 4ft 9”)



- 18 Inserted Window:  
 External – No sill, no lintel, cut brick jambs with partial modern cement  
 Internal – No sill, no lintel, cut brick reveals  
 Frame – Timber frame with 2 panes  
 Dimensions - 72cm x 60cm (2ft 4”x 1ft 9”)



- 19 Original Window: adjacent and over door  
 External – steel I-section lintel, bull nosed brick sill, bull nosed brick jambs  
 Internal – steel I-section lintel, bull nosed brick sill, bull nosed brick reveals  
 Frame – Timber frame, divided into 3 sections, southern and central section with 3 panes, northern section has been altered with four panes. The central section is an outward opening casement. Above window and door, a further two, three panes lights with timber frames  
 Dimensions – 120cm x 116cm (3ft 9”x 3ft 8”)





20 Original Window: adjacent and over door  
 External – steel I-section lintel, bull nosed brick sill, bull nosed brick jambs  
 Internal – steel I-section lintel, brick sill, bull nosed brick reveals  
 Frame – Timber frame with two multi-paned (10) outward opening casements with original external hinges. Overlight above door also timber framed with two panes. Outer frames of window have beaded moulding  
 Dimensions - 120cm x 164cm (3ft 9"x 5ft 3")



21 Inserted Window: Altered to window from inserted door  
 External – Segmental brick arched head, bull nosed brick sill, plain (cut) brick jambs  
 Internal – Timber linter, timber sill, brick (cut) reveals  
 Frame – Timber frame with two fixed panes  
 Dimensions – 80cm x 124cm (2ft 6"x 4ft)



22 Original Window:  
 External – Concrete flush lintel, projecting concrete sill, plain brick jambs  
 Internal – Plastered wall of surround, tiled sill  
 Frame – Timber frame, 6 panes, upper outer panes were inward opening awning casements – frosted glass  
 Dimensions – 178cm x 120cm (5ft 8"x 3ft 9")



23 Original Window:  
 External – Concrete flush lintel, projecting concrete sill, plain brick jambs  
 Internal - Plastered wall of surround, tiled sill  
 Frame – Timber frame with four panes, upper two were hopper casements  
 Dimensions – 130cm x 147cm (4ft 2"x 4ft 8")



24 Original Window: Only frame retained  
 Frame – Metal frame with 15 panes, upper central 6 panes within outward awning opening casement  
 Dimensions – 165cm x 142cm (5ft 4"x 4ft 6")



25 Original Window

External – Concrete flush lintel, projecting bull nosed brick sill and tile sill, plain brick jambs

Internal – Timber sill, plastered reveals

Frame – Timber frame with 18 panes, upper central two panes within inward hopper casement.

Dimensions - 210cm x 158cm (6ft 8"x 5ft 1")



## 17 APPENDIX III: RPS/SYAS BRIEF



## **'TRAFALGAR WORKS', TRAFALGAR STREET, SHEFFIELD BUILDING RECORDING BRIEF**

### **1 Introduction**

- 1.1 The former metal-trades workshop complex referred to today as 'the Trafalgar Works' is to be demolished in advance of the construction of a New Retail Quarter for the city of Sheffield. A detailed record of the building/complex is thus required in advance of the site's redevelopment.
- 1.2 The origin of the complex is unclear, although it is known that it was originally called the Portland Works and that it was constructed between 1850 and 1896, by which latter date it formed part of a group of factories on Trafalgar Street ('Kangaroo Works', 'Trafalgar Grinding Wheel' and the Portland (now 'Trafalgar') Works) belonging to the renowned Sheffield tool-making firm of Robert Sorby & Sons. Whilst the surviving buildings functioned since at least 1896 as part of a much larger integrated cutlery factory that included the adjacent (and now demolished) Trafalgar Grinding Wheel and so-called 'Kangaroo Works', the 'Trafalgar Works' appears to have been built as a self-contained metal-trades workshop. It thus is shown in 1896 as containing workshops and warehousing as well as three forges, a carpenter's shop, a machine shop and a furnace house.
- 1.3 The Trafalgar Street factories were taken over en-block in 1934 by the cutlery and electro-plating specialists Harrison & Fisher, who introduced additional facilities for grinding and electro-plating and remained on site until c.1967, when the buildings were compulsorily-purchased by Sheffield City Council. Some parts of the surviving complex have subsequently been let to a variety of tenants, although none of these have had a significant effect on the building's fabric. Other parts of the complex have remained wholly unused. Apart from the demolition of the former Trafalgar Grinding Wheel to the south and an un-associated sawmill to the north, the most significant alteration in modern times has been the removal of the uppermost (third) storey from three of the complex's main ranges
- 1.4 The principal interest of the buildings derives from the fact that it appears to be a large and apparently self-contained metal-trades workshop or factory which has lain scarcely used since the late 1960s, with a number of areas that appear to remain unaltered since the early part of the 20<sup>th</sup> Century. Its interest is enhanced because of its association with the extant 'Kangaroo Works' Portland, although this interest has been diminished through the demolition of the intervening Trafalgar Grinding Wheel with which both buildings were functionally related to for some 70 years. Its interest is further elevated because both the companies that operated it from c.1896 to 1934 and from 1934 to c.1967, are still in production in Sheffield, respectively maintaining to this day unsurpassed reputations for making wood-working tools and kitchen knives of the very highest quality.

- 1.5 It appears that no historic constructional drawings have survived, but people who worked on the site prior to closure in the 1960s have been identified. Because of the building's lack of surviving plans and its unusually unaltered condition, a permanent detailed record will be required prior to demolition. In addition to a detailed photographic and descriptive survey, a full measured survey will be carried out, comprising elevations and plans of all floors at a 1:100 level of detail, cross-sections through the north, west and east ranges at a 1:50 level of detail, cross-sections through the south range (east end) and 'machine shop & forge' range at a 1:20 level of detail. It is proposed that the measured survey be carried out electronically, to a specification that would allow a three-dimensional model to be generated. This would enable the survey to be married up with below-ground remains that may be revealed post-demolition and allow a cut-away view (or views) to be derived, showing the building's internal layout and flues. A contingency will need to be allowed for two additional long-sectional elevations if required.
- 1.6 It is intended that a measured baseline survey will be carried out by a specialist contractor under a separate contract. This specification is for the remainder of the required archaeological recording, including the enhancement and appropriate annotation of the baseline survey, photographic and written survey, oral history, reporting and archiving.

## **2 Archival Study**

- 2.1 Following the granting of outline planning consent for the NRQ development, a documentary survey of the NRQ site has been undertaken (ARCUS 2006). This survey examined the 18<sup>th</sup>, 19<sup>th</sup> and 20<sup>th</sup>-century development of the land within the NRQ site on a plot-by-plot basis, using locally held material at the South Yorkshire Sites and Monuments Record (SMR); Sheffield Archives; Sheffield Local Studies Library; ARCUS archives and the Hawley Collection archives. Key sources were historic maps (most notably the Goad surveys of 1896, 1937 and 1959) and various collections of historic terrestrial and aerial photographs. These are included in the Assessment Report that accompanies this brief.
- 2.2 Further documentary study has included a trawl of surviving Deposited Building Plans at Sheffield Archives, but unfortunately no plans appear to have survived for this site. Two sets of floor plans have been supplied by the building's current owner, Sheffield City Council. The first is a complete set of undated schematic floor plans of the combined Trafalgar Street factories ('Kangaroo Works', 'Trafalgar Grinding Wheel' and the Portland (now 'Trafalgar') Works) labelled 'Harrison Fisher & Co Ltd – Works Trafalgar Street & Wellington Street'. Whilst the plans had no survey date, they were stamped 'Sheffield City Council' with a date 13-6-1967. The second set of plans comprised a more detailed survey of the first (ground) and second storeys only, carried out for Sheffield City Council, dated 19/7/1990.
- 2.3 Subsequent research via the internet has revealed that that both of the metal trades companies that had used the building; R. Sorby (1896-1934) and Harrison Fisher (1934-1967) are still trading, the latter recently re-branded as Taylors Eye Witness Limited. Unfortunately mergers and de-mergers have resulted in the current operating companies having no historical archive material. There is nevertheless a short company history for R. Sorby & Sons published by the Hand Tool Preservation Association of Australia, a transcript of which is available via the Robert Sorby website. Inquiries with Taylors Eye Witness Limited have revealed that they still have two employees (Mr Inman and Mr Inman) who worked on the site before Harrison & Fisher consolidated its production at the Eye Witness Works in Milton Street in the late 1960s.

- 2.4 With the exception of some company records of Hattersley and Davidson (owners of Robert Sorby from 1923) dated 1942, no relevant company records appear to have been deposited with the Hawley collection or Sheffield Archives. It is clear that both known metal trades companies that operated from the site were relatively major players in their fields, both with parent and successor companies that are still in existence. It thus seems probable that more persistent searching may bring further privately held documentary material to light. Obvious sources for further enquiry that would need to be explored in parallel with recording would include the collections of publicity material and trade catalogues held by the Hawley Collection. Other possible avenues for further research would include inquiries being made with HD Skates (successors to Hattersley & Davidson) and with the hand tool manufacturing group who inherited R. Sorby & Sons edge tool interests and whose brands include the well known Sheffield names of Spear and Jackson, Eclipse and Moore & Wright. Further searches will need to be made for any records of R. Sorby & Sons, Harrison & Fisher and Hattersley & Davidson at The Company of Cutlers in Hallamshire, Sheffield Libraries and Sheffield Museums and Galleries.

### **3 Aims of the Project**

- 3.1 The aim of the proposed work is to identify and objectively record by means of photographs and annotated and measured drawings any significant evidence for the original and subsequent historical form and use of the so-called 'Trafalgar Works' and its component structures. Use will be made wherever possible of existing records, notably the 1896, 1937 and 1959 Goad plans and 20<sup>th</sup>-century floor plans (see above).
- 3.2 The second aim of the proposed work is to present this information as an archive and as an illustrated report. The roles of historical plan form, constructional detail and process flow should all be considered in the process of interpretation and recording.

### **4 Recording Methodology**

#### **4.1 General Instructions**

- 4.1.1 The principal of the proposed recording is that a general written, measured and photographic record of the building be undertaken, corresponding roughly to English heritage (former RCHME) Level 4. The final report to be produced will incorporate both the results of the purposive photographic and written recording, together with the results of oral testimony (principally the older Mr Inman at Taylor's Eye Witness) and excerpts from available historic plans and photographs.
- 4.1.2 Health and Safety The archaeologist on site will naturally operate with due regard for Health and Safety regulations, specifically the *Management of Health and Safety at Work Regulations* 1999. Some areas of the site are currently (August 2007) still in active use and these areas should presents few hazards. Other parts have been disused for many years and these areas may present hazards from dust and bird droppings. The upper storey of the south range (east end) has a very weak floor. Whilst this is securely propped from beneath, this area may require the use of temporary plywood flooring or crawl boards. Prior to the commencement of any work on site (and preferably prior to submission of the tender) the archaeological contractor is required to appraise themselves with the condition of the buildings and the results of purposive asbestos and structural surveys that have been carried out and then to carry out a Risk Assessment in accordance with the Health and Safety at Work Regulations. On the basis of this Risk Assessment, the contractor should then submit in writing to RPS a strategy for safe working. Neither the South Yorkshire Archaeology Service nor RPS

can be held responsible for any accidents which may occur to outside contractors engaged to undertake this survey while attempting to conform to this specification.

- 4.1.3 Confirmation of adherence to specification Prior to the commencement of any work, the archaeological contractor must confirm in writing adherence to this specification, or state in writing (with reasons) any specific proposals to vary the specification. Should the contractor wish to vary the specification, then written confirmation of the agreement of RPS and the South Yorkshire Archaeology Service to any variations is required prior to work commencing. Unauthorised variations are made at the sole risk of the contractor. Modifications presented in the form of a re-written project brief will not be considered by RPS or the South Yorkshire Archaeology Service.
- 4.1.3 Confirmation of timetable and contractor's qualifications Prior to the commencement of work on site, the archaeological contractor should provide RPS and the South Yorkshire Archaeology Service in writing with a projected timetable for the site work, and with details regarding staff structure and numbers. *Curriculum vitae* of key project members (including photographer, any proposed specialists etc.), along with details of any specialist sub-contractors should be provided. All project staff provided by the archaeological contractor must be suitably qualified and experienced for their on-site roles, in accordance with PPG 16 para. 21. In particular, staff involved in building recording should have proven expertise in the recording and analysis of industrial buildings.
- 4.1.4 Site preparation The recording of the 'Trafalgar works' buildings generally would be aided by the removal of modern rubbish and dumped material that may obscure material requiring an archaeological record. Specifically it will be necessary to remove all undergrowth from the 'furnace house range' prior to recording. Any such work will need to conform to a soft-strip strategy to be agreed by RPS and SYAS and would need to be costed separately. It is nevertheless expected the contractor would carry out normal limited operations within a fixed price, such as laying down crawl-boards, placing safety tape and tidying or removing ephemeral material and rubbish prior to carrying out the photographic record. For reasons of allowing safe and convenient access through the buildings, it may be presumed that the modern concrete-blockwork within the internal doorways in the 'Trafalgar Works' will be removed. ***Whilst it cannot be predicted what state the buildings will be left in by the current tenants, we would advise that the archaeological contractor allow a 2 days for 1 technician for site clearance works within the 'Trafalgar Works'. An allowance will also be necessary for the use of a contractor with a chainsaw licence for clearance work within the 'furnace house' range.***
- 4.1.5 Documentary research Prior to the commencement of work on site, the contractor should carefully examine all aspects of the Historic Building Assessment Report prepared by RPS, in order to inform the archaeological recording by providing background information with regard to function and phasing. It is expected that the contractor will make provision within their tender for meeting on site with at least one former employee of Harrison & Fisher who will explain the uses and layouts of rooms during the latter industrial use of the building. This on-site meeting should take place before, or during, the process of fieldwork and recording. ***An allowance of two research days (total for both the Trafalgar and Kangaroo Works) should be made for further checks for additional documentary material in the sources identified in paragraph 2.4 above.***
- 4.1.6 Use of existing plans Key historic plans to be referred to during site work and reporting will include Goad fire insurance plans of 1896, 1937 and 1959), the undated schematic floor plans labelled 'Harrison Fisher & Co Ltd – Works Trafalgar Street & Wellington

Street' and the surveys of roof level and third storey only, dated 19/7/1990 (to be supplied by RPS). These plans are schematic and / or poorly scaled and should not be used for the purposes of measured survey.

4.1.7 Watching Brief It is understood that building is to be dismantled in a controlled fashion.

Generally there should be little requirement for a watching-brief during demolition, although it will be necessary to make certain specific observations regarding typical and atypical constructional details when the building is being dismantled.

4.1.8 Scope of record In the written and photographic record, and in the annotation of floor plans, elevations and cross-sections, all features of archaeological and architectural interest should be noted. In addition to evidence relating to the function of each building, the record should identify and note:

- any significant changes in construction material – this is intended to include significant changes in brick or mortar type
- any blocked, altered or introduced openings
- evidence of the historic status or use of a space or building (e.g. evidence for work benches, plant or machinery, heating, plasterwork, moulded joinery etc)
- evidence for phasing, and for historical additions or alterations to the building. This should include comparison of brick types, comparison of architectural detailing, lintels, sills and the use of the same moulded joinery details in different buildings, indicative of concurrent phasing.

This list should not be treated as exhaustive

4.1.9 Because of the building's lack of surviving plans, its interesting constructional features and its unusually unaltered condition, a full measured survey will be required in advance of the archaeological recording process. This would comprise a full set of plans and elevations to a 1:100 level of detail, cross-sectional elevations through the north, west and east ranges at a 1:50 level of detail and a cross-section through the 'machine shop & forge' range at a 1:20 level of detail. ***A separate contingency should also be allowed for two long-sectional elevations (1:100 level of detail), should they be required by the monitors.***

4.1.10 Whilst the requirement for on-site recording is 2-dimensional, the measured survey will need to be carried out electronically, to a specification that would allow a simple three-dimensional model to be generated. This would enable both a general external bird's eye view and cut-away views to be derived during the reporting phase or later. These views, which could be rendered by hand or digitally (or by a combination of both) would be intended to show the complex's general external appearance and its internal layout including details of its flue and power transmission systems (see ***Reporting*** below).

## 4.2 Written Record

4.2.1 The archaeologist on site should carefully examine all parts of each building prior to the commencement of the drawn and photographic recording, in order to identify all features relevant to its original and later use. As part of this exercise, the archaeologist on site should produce written observations (e.g. on phasing; on detailing, on building function) sufficient to permit the preparation of a report on the structures. The crucial requirement is that each external wall or internal space should be examined individually and the results of that examination noted in a systematic fashion. The site records will need to be adequate to allow a full architectural and archaeological description of the building, as a walk around and through each building, starting with setting / location, then progressing to each side of the structure in sequence, and finally describing the



interior in a logical sequence from the ground floor up. Measurements should be expressed in both metric and imperial units.

### **4.3 Photographic Record**

- 4.3.1 External photographs An external photographic record should be made of all elevations of each building, from vantage points as nearly parallel to the elevation being photographed as is possible within the constraints of the site. The contractor should ensure that all visible elements of each elevation are recorded photographically; this may require photographs from a number of vantage points. A general external photographic record should also be made which includes a number of oblique general views of the various ranges from all sides, including views of the complex as a whole in its setting (including the associated 'Kangaroo Works').
- 4.3.2 Internal photographs A general internal photographic record should be made of all of the complex's component buildings. General views should be taken of each room or discrete internal space from a sufficient number of vantage points to adequately record the form, general appearance and manner of construction of each area photographed.
- 4.3.3 Internal and external detail photographs The general record photographs are to be supplemented by detailed record shots of all individual elements noted in section 4.1.8 above. Elements for which multiple examples exist (e.g. each type of column or window frame) may be recorded by means of a single representative illustration. **N.B.** Detail photographs must be taken at medium-to-close range and be framed in such a way as to ensure that the element being photographed clearly constitutes the principal feature of the photograph.
- 4.3.4 Equipment General photographs should be taken with a Large Format camera (5" x 4" or 10" x 8") using a monorail tripod, or with a Medium Format camera which has perspective control, using a tripod. The contractor must have proven expertise in this type of work. Detail photographs may be taken with either a Medium Format or a 35mm camera. Unless there are good reasons otherwise (e.g. health and safety or there being sufficient natural scale from items such as furniture), all detail photographs must contain a graduated photographic scale of appropriate dimensions (measuring tapes and surveying staffs are not considered to be acceptable scales in this context). A 2-metre ranging-rod, discretely positioned, should be included in a selection of general shots, sufficient to independently establish the scale of all elements of the building and its structure.
- 4.3.5 Film stock All record photographs to be black and white, using conventional silver-based film only, such as Ilford FP4 or HP5, or Delta 400 Pro (a recent replacement for HP5 in certain film sizes such as 220). Dye-based (chromogenic) films such as Ilford XP2 and Kodak T40CN are unacceptable due to poor archiving qualities. Digital photography is unacceptable due to unproven archiving qualities.
- 4.3.6 Printing Record photographs should be printed at a minimum of 5" x 4". In addition, a small selection of photographs (the best of the exterior and interior shots) should be printed at 10" x 8". Bracketed shots of identical viewpoints need not be reproduced, but all viewpoints must be represented within the report. Prints may be executed digitally from scanned versions of the film negatives, and may be manipulated to improve print quality (but **not** in a manner which alters detail or perspective). All digital prints must be made on paper and with inks which are certified against fading or other deterioration for a period of 75 years or more when used in combination. If digital printing is employed, the contractor must supply details of the paper/inks used in writing to the South Yorkshire Archaeology Service, with supporting documentation indicating their archival stability/durability.

4.3.7 Colour Slide Survey In addition to the monochrome survey, a 35mm general colour-slide survey of the buildings should also be provided (using a variety of wide-angle, medium and long-distance lenses). While it is not necessary to duplicate every black-and-white shot, the colour record should be sufficiently comprehensive to provide a good picture of the form, general appearance, content and detailing of the individual structures and their setting, including the relationship with the associated 'Kangaroo Works'.

4.3.8 Documentation A photographic register detailing (as a minimum) location, direction and subject of each shot must accompany the photographic record; a separate photographic register should be supplied for any colour slides. Position and direction of each photograph should be noted on a copy of the building plan, which should also be marked with a north pointer; separate plans should be annotated for each floor of each building

#### **4.4 Drawn Record**

4.4.1 The building should be carefully examined prior to the commencement of recording, in order to identify all features relevant to the original and subsequent historical uses of the site. It is anticipated that most on-site drawn recording will be made by hand-annotation of the survey drawings, comprising elevations and plans of all floors at a 1:100 level of detail, cross-sectional elevations through the north, west and east ranges at a 1:50 level of detail, cross-sections through the south range (east end) and 'machine shop & forge range at a 1:20 level of detail and a full set of plan and internal and external elevations of the 'furnace house' at a 1:20 level of detail.

4.4.2 The buildings should be recorded as existing, although a clear distinction should be made on the drawings between surviving as-built features, material introduced during the building's industrial life and features introduced subsequently. Extrapolated or interpolated lost features should be clearly identified as such in the drawn record. These features should then be incorporated into the final drawn record; RCHME drawing conventions will be followed. The following list should not be treated as exhaustive. However, items of interest would typically include:

- all structural elements (including posts, columns, etc)
- staircases
- industrial-period fitted furniture including shelves, cupboards and benched
- industrial-period doors and windows
- industrial-period internal partitions
- any evidence of gas piping and for the mechanical or early electrical transmission of power
- evidence of traps, hoists or lifting mechanisms
- evidence of machinery or work benches
- flues and the position of lost or extant in-situ hearths or fire-places

4.4.3 The archaeologist on site should also identify and record:

- any significant changes in construction material, including significant changes in mortar / cement and changes in brick type and size
- any blocked openings
- evidence for phasing, and for historical additions or alterations.

4.4.4 The drawn record will specifically comprise:

- a scale plan of each floor and roof of the building (1:100 level of detail).

- all elevations (to include cross-sections of neighbouring ranges on internal corners) (1:100 level of detail)
- cross-sectional elevations to include the west, north and east ranges (1:50 level of detail), cross-sectional elevations through the south range (east end) and 'machine shop & forge range at a 1:20 level of detail and a full set of plans and internal and external elevations of the 'furnace house' at a 1:20 level of detail.
- a cut-away perspective view of the complex with upper storeys restored (1:200 level of detail), showing the complex's internal layout and flues
- a cut-away perspective view of the furnace house as existing and 'restored' (1:20 level of detail), showing internal detail and flues

***A contingency will also need to be allowed for two long-sectional elevations (1:100 level of detail), should they be required by the monitors.***

- 4.4.5 Dimensional accuracy should accord with the normal requirements of the English Heritage Architecture and Survey Branch (at 1:20, measurements should be accurate to at least 10mm; at 1:50, to at least 20mm; at 1:100, to at least 50mm).
- 4.4.6 Drawn site records, including hand-enhanced measured survey drawings, will form part of the site archive and will need to be executed on acetate sheet. The enhanced survey drawings incorporating the digitised hand additions will also need to be printed on acetate sheet therefore.

## **5 Monitoring**

- 5.1 South Yorkshire Archaeology Service (SYAS) and RPS will be responsible for monitoring the contractor's work. The contractor must give a minimum of one week's notice of the commencement of fieldwork in order that arrangements for monitoring can be made.
- 5.2 The need for contingency work to be undertaken must be discussed with and agreed by the monitors whilst the recording work is ongoing. Any alterations to the agreed programme, found to be necessary during the work, are also to be discussed and agreed with the monitors.
- 5.3 In particular, the contractor should advise the monitors if archive material (i.e. paper records or artefacts relating to the use of the building being recorded) are found to be present; a contingency is to be allowed for specialist assessment of any such material identified. The monitors will then discuss the removal of this material off site, to an appropriate archive store, with the site owners. Evidence from such material will be used by the contractor to supplement their previous research.
- 5.4 The work shall be carried out by appropriately qualified and experienced staff. Details of staff and their relevant experience should be discussed and agreed with the monitors prior to the work being carried out.
- 5.5 Written, drawn and photographic site records will need to be approved as satisfactory by the monitors prior to the commencement of demolition works.

## **6 Post-Recording Work and Report Preparation**

- 6.1 A fully indexed field archive is to be compiled consisting of all primary written documents, plans, photographic negatives and a complete set of labelled photographic prints. Record photographs are to be printed at a minimum of 5" x 4". The best of the exterior setting shots and interior shots) should be printed at 10" x 8". Bracketed shots of identical viewpoints need not be reproduced, but all viewpoints must be represented within the report. Labelling should be in indelible ink on the back of the print and should include: film and frame number; date recorded and photographers name; name and

address of feature/building; national grid reference. Photographic prints should be mounted in appropriate archivally-stable sleeves.

- 6.2 A written report should be produced. Drawing on observations made on site, documentary material discovered on site or during the archive search and information provided by former employees, this should include:
- an executive summary including dates of fieldwork, name of commissioning body, and a brief summary of the results including details of any significant finds
  - an introduction outlining the reasons for the survey
  - a historical background section placing the complex in its local and historical contexts, describing and analysing the development of the complex as a whole. This analysis should consider the site type as an integrated system intended to perform a specialised function, with particular attention being given to historical plan form, technical layout and process flow.
  - An architectural and historical description of the building correlated to the drawn and photographic record, presented in a logical manner. This will include a description of the building, as a walk around and through each building, starting with setting / location, then progressing to all sides of each structure in sequence, and finally describing the interior in a logical sequence from the ground floor up. The descriptive text will be both architectural and archaeological, with all primary and secondary fabric and features being phased, with the description citing evidence for that attribution (e.g. *'the window and its opening are both clearly of mid-20<sup>th</sup>-century origin (c.1920-1950), with a concrete lintel, horizontal glazing bars and an opening that is crudely cut through the primary brickwork', 'whilst clearly not primary, the moulded architraves and lath and plaster construction of the partition imply a relatively early origin'* or, *'this wall is of machine-made brick bonded with modern cement mortar. It is first shown on the Goad plan of 1959'*).
- 6.3 In the written report, both architectural description and historical/analytical discussion should be fully cross-referenced to the drawn and photographic record, sufficient to illustrate the major features of the site and the major points raised. The report will also include an analysis of the results that will allow an understanding of the building(s) historical and architectural significance to be established. The analysis will also place, and discuss the significance of, the building/complex within its environs.
- 6.4 The report is unlikely to be published as a stand-alone monograph, but it should be produced with sufficient care and attention to detail to be of academic use to future researchers and to contribute towards any overall synthesis of the industrial archaeology of the New Retail Quarter. A copy of this brief and a quantified index to the field archive should also be bound into the back of the report. The cover sheet should include a centred eight-figure OS grid reference and the name of the parish or township in which the site is located.
- 6.5 Report illustrations should include:
- a location map at a scale sufficient to allow clear identification of the site in relation to other buildings on in the immediate area
  - an overall keyed plan of the Site, including the adjacent 'Kangaroo Works' showing the surviving buildings in relation to each other and to other now-demolished buildings, notably those of the now-demolished Trafalgar grinding Wheel (to be based on schematic factory plans to be supplied by RPS)
  - all relevant historic map editions, with the position and extent of the site clearly indicated
  - a complete set of floor plans and elevations as existing (1:100 level of detail), at appropriate and consistent scales (normally 1:100 or 1:200). These should be

sufficient to illustrate points made in written text, showing phasing and features noted and recorded during the archaeological survey. Lost features should be restored where possible, in contrasting line type.

- cross-sectional elevations through the west, east, north, south (east end) and the 'machine shop & forge' ranges as existing at a 1:50 level of detail, at appropriate and consistent scales (normally 1:50). These should be sufficient to illustrate points made in written text, showing phasing and features noted and recorded during the archaeological survey. Lost features should be restored where possible, in contrasting line type.
- a complete set of floor plans and internal and external elevations of the western and central elements of the 'furnace house' range as existing to a 1:20 level of detail, at appropriate and consistent scales (normally 1:50). These should be sufficient to illustrate points made in written text, showing phasing and features noted and recorded during the archaeological survey. Lost features should be restored where possible, in contrasting line type.
- selected excerpts from historic building plans, photographs etc suitable to demonstrate (where possible) the original plan, appearance and form of the building and subsequent major changes
- a cut-away perspective bird's eye view of the 'Trafalgar Works' (restored) at a 1:200 level of detail. (*As stated in 4.1.10, this view may be rendered by hand or digitally, or by a combination of both*).
- a cut-away perspective drawing of the western and central portions of the 'furnace house' range (as existing and restored) at a 1:50 level of detail (*As stated in 4.1.10, this view may be rendered by hand or digitally, or by a combination of both*).
- a complete set of plans, on which position and direction of each photograph has been noted
- a complete set of good-quality laser copies of all photographic viewpoints.

6.6 The latter should be bound into the report in the same logical sequence employed in the architectural description and should be appropriately labelled (numbered, and captioned in full). When captioning, contractors should identify the individual photographs by means of a running sequence of numbers (e.g. Plate no. 1; Plate no. 2), and it is this numbering system which should be used in cross-referencing throughout the report and on the photographic plans. However, the relevant original film and frame number should be included in brackets at the end of each caption.

6.7 ***A separate contingency should also be allowed for the additional long-sectional elevations, should they be required.***

## **7 Submission of Report**

- 7.1 A completed draft of the report should be submitted within 2 months of the completion of fieldwork. Once any amendments required by RPS or SYAS have been made, four copies of the printed final report are to be submitted to RPS, including one copy to be submitted to the Local Planning Authority.
- 7.2 A further copy of the final printed report must be submitted by the contractor direct to SYAS for incorporation into the South Yorkshire SMR.
- 7.3 A CD Rom containing the text of the report and illustrations (**including all photos and slides taken**), scanned at 300 dpi, is to be provided with each copy of the printed report.

## **8 Submission and deposition of Archive**

- 8.1 The archive, including a copy of the report, will be compiled, indexed and then offered for deposition with the appropriate Local Authority archive.
- 8.2 The contractor will either arrange for copyright on the deposited material to be assigned to the archive, or will licence the archive to use the material, in perpetuity; this licence would allow the archive to reproduce material, including for use by third parties, with the copyright owner suitably acknowledged.

## **9 Publicity / Dissemination**

- 9.1 A summary report of an appropriate length, accompanied by illustrations, must be prepared and submitted in digital format, for publication in the *Archaeology in South Yorkshire*.
- 9.2 Acceptable digital formats are:
- text (Word and ASCII);
  - images (.JPG at no less than 300 dpi. resolution).
- 9.3 Provision must be made for publicising the results of the work locally, e.g. by presenting a paper at South Yorkshire Archaeology Day and talking to local societies.
- 9.4 The archaeological contractor must complete the online OASIS form at <http://ads.ahds.ac.uk/project/oasis/>.