Wessex Archaeology

River Don Development, Plots 3/4: Staybrite Works, Sheffield, South Yorkshire

Historic Building Recording

Ref: 74360.02

September 2010

RIVER DON DEVELOPMENT, PLOTS 3/4: STAYBRITE WORKS, SHEFFIELD, SOUTH YORKSHIRE

Historic Building Recording

Prepared for:
British Land PLC
York House,
45 Seymour Street,
London,
W1H 7LX

by
Wessex Archaeology
Unit R6, Riverside Block,
Sheaf Bank Business Park,
Prospect Road,
Sheffield
S2 3EN

Report reference: 74369.02

September 2010

DISCLAIMER

QUALITY ASSURANCE

SITE CODE	74360	ACCESSION CODE	TBC	CLIENT CODE	N/A
PLANNING APPLICATION REF.	08/02594/OUT	NGR	SK 390 904		

VERSION	STATUS*	PREPARED BY	APPROVED BY	APPROVER'S SIGNATURE	DATE	FILE
1.0	I	JT	CM			74360.02_BDG_V1_0

* I= INTERNAL DRAFT E= EXTERNAL DRAFT F= FINAL

RIVER DON DEVELOPMENT, PLOTS 3/4: STAYBRITE WORKS, SHEFFIELD, SOUTH YORKSHIRE

Historic Building Recording

Contents

Figures and Plates iv
Summary viii
Acknowledgements ix

1 INTRODUCTION 1
1.1 Project Background 1
1.2 Site Location 1

2 METHODOLOGY 1
2.1 Introduction 1
2.2 Aims 2
2.3 Building Recording 2
2.4 Copyright 3

3 HISTORICAL BACKGROUND 3
3.1 Introduction 3
3.2 Initial Development 3
3.3 Expansion and Modernisation 4

4 RESULTS 5
4.1 Introduction 5
4.2 Building 10: Power House 6
4.3 Building 11: Rolling Mill 9
4.4 Building 12: Weighing Up Shed 12
4.5 Building 13: Crucible Pot Shop 13
4.6 Building 14: Offices 14
4.7 Building 15: Offices and Welfare 15
4.8 Building 16: Lavatories 16
4.9 Building 17: Brick Store 16
4.10 Building 18: Cogging Mill 17
4.11 Building 19: Substation 18

5 DISCUSSION 18
5.1 Summary of Phases 18
5.2 Discussion of Processes 20
5.3 Conclusion 23

6 ARCHIVE 24
6.1 Preparation 24
6.2 Deposition 24

7 REFERENCES 25
7.1 Bibliography 25
7.2 Cartographic Sources Consulted 26
7.3 Documents consulted 26

8 APPENDIX 1: RECOVERED ARCHIVE 27

9 APPENDIX 2: PHOTOGRAPHIC REGISTERS 36

RIVER DON DEVELOPMENT, PLOTS 3/4: STAYBRITE WORKS, SHEFFIELD, SOUTH YORKSHIRE

Historic Building Recording

Figures and Plates

Front cover View of *in situ* machinery from the 18" rolling mill in Building 11
Back cover Advertisement for Firth Stainless Steel from *The Engineer's Year-Book,* 1943.

Figure 1 Site location plan
Figure 2 Historic maps: 1795 Fairbank map and 1895 Ordnance Survey
Figure 3 Historic maps: 1905 and 1923 Ordnance Survey
Figure 4 Historic maps: 1954 and 1987 Ordnance Survey
Figure 5 Historic plans: 1908 and 1917 site plans
Figure 6 Historic plans: 1908 section of Buildings 12-13, and plan of adjacent gas producers
Figure 7 Historic plans: *c.* 1910 plan of Building 10, and proposed extensions *c.* 1916
Figure 8 Historic plan: 1940s site plan
Figure 9 Historic plan: 1980s site plan
Figure 10 Historic Drawing: Alloy Rod & Bar Mill Layout 1957
Figure 11 Historic Drawing: Alloy Rod & Bar Mill Foundation 1957

Figure 12 Building 10: General Plan
Figure 13 Building 10: Plan of Turbine hall and ancillary structures
Figure 14 Building 10: Transverse section through turbine hall
Figure 15 Building 10: Longitudinal section through turbine hall and pump house
Figure 16 Building 11: General Plan
Figure 17 Building 11: Phased Plan
Figure 18 Building 11: Plan of 18" Rolling Mill
Figure 19 Building 11: Plan of 10½" Double Duo Mill
Figure 20 Building 11: Transverse section
Figure 21 Building 11: Detail of truss in first range
Figure 22 Buildings 12-14: Plans
Figure 23 Buildings 12-13: Transverse sections
Figure 24 Building 17: Plan and transverse section
Figure 25 Buildings 15, 16 and 19: Plans
Figure 26 Building 18: Plan
Figure 27 Process flow around the Site
Figure 28 Arrangement of plant within Building 10 *c.* 1920s
Figure 29 Photographic viewpoints
Figure 30 Building 10: Photographic viewpoints

Plate 1 General view across the Staybrite Works from the west showing the embankment of the former Sheffield District Railway Line (film 14.03)
Plate 2 General view across the Works from the northwest (film 14.05)
Plate 3 Detail of western Weedon Street site entrance with 1950s steel gate (film 9.10)

Plate 4 Detail of eastern Weedon Street site entrance with weighbridge (film 6.35)
Plate 5 General view of the former internal rail network, looking south (film 15.10)
Plate 6 General view showing vehicular access road to the north of Building 14 (film 16.09)
Plate 7 Detail of cart outside of Building 18 (film 4.21)
Plate 8 General view of Building 10 showing the demolished remains of the former boiler house between Vulcan Street and the turbine hall (colour slide 18)
Plate 9 General view showing two-storey height of northern wall of the demolished western range of Building 10 (film 27.32)
Plate 10 General view of the northern end of Building 10 showing the arched top of the blocked windows above the lean-to extension (film 17.03)
Plate 11 General view of southern elevation of Building 10 (film 25.01)
Plate 12 Detail of change in construction technique at eaves level of east elevation of Building 10 between 1908 building and 1915 extension (film 27.07)
Plate 13 General view of water tower, noting integrated iron framework (film 17.07)
Plate 14 Detail of former depth gauge on water tower of Building 10 (film 27.08)
Plate 15 General view of interior of turbine hall showing original structure and 1940s machine bases and switchgear (film 19.03)
Plate 16 Detail of glazed tiles across original 1908 structure (right of pier) and 1915 extension (left of pier) (colour slide 4)
Plate 17 Detail of terrazzo floor with black trimming, Building 10 (colour slide 5)
Plate 18 General view of office in southwest corner of Building 10 (film 18.07)
Plate 19 General view of interior of office in southwest corner of Building 10 (film 19.06)
Plate 20 Detail of machine base from 1940s compressor (film 26.20)
Plate 21 General view showing blocked arches in east wall of Building 10 (film 17.09)
Plate 22 Detail of name plate above blocked arch in Building 10 (26.10)
Plate 23 General view of substation room in northern end of cableway within eastern aisle of Building 10 (26.08)
Plate 24 Detail of straight joint between original 1908 structure and 1915 extension (26.29)
Plate 25 General view of pumps and well within water tower, Building 10 (27.16)
Plate 26 General view of pumps and well in lean-to extension to Building 10 (film 14)
Plate 27 General view of CO_2 storage room, Building 10 (film 27.14)
Plate 28 General view of Building 11 from the southwest showing demolished southern ranges (14.07)
Plate 29 General view of western elevation of Building 11 (film 24.05)
Plate 30 Detail of blocked arched windows in west elevation of Building 11, one retaining timber shutters (film 12.28)
Plate 31 General view of northern elevation of the first range of Building 11 (film 8.14)
Plate 32 General view of eastern elevation of Building 11 (film 9.14)
Plate 33 General view of eastern elevation of Building 11 (film 15.01)
Plate 34 General view looking south down the first range of Building 11 (film 21.02)

Plate 35 General view looking south down the second range of Building 11 (film 21.04)
Plate 36 General view looking south down the third range of Building 11 (film 21.06)
Plate 37 General view looking south down the fourth range of Building 11 (film 21.08)
Plate 38 General view of turning workshop in northwest corner of Building 11 (film 20.09)
Plate 39 General view of workshop within bay 1 of ranges 2-3 of Building 11 (film 20.07)
Plate 40 Detail of blocked circular openings in north wall of the third range of Building 11 (film 9.01)
Plate 41 General view of office structure in southeast corner of Building 11 (film 12.14)
Plate 42 Detail of dining room within office structure in southeast corner of Building 11 (film 24.04)
Plate 43 General view within office situated on the east elevation of Building 11 (film 13.29)
Plate 44 General view of boiler house situated on the east elevation of Building 11 (film 10.32)
Plate 45 General view of recalculating house situated on the east elevation of Building 11 (film 13.32)
Plate 46 General view of switchgear within the 18" Rolling Mill's motor house (film 22.02)
Plate 47 General view of control room within the 18" Rolling Mill's motor house (film 11.17)
Plate 48 General view of control booth to the west of the 18" Rolling Mill (film 27.03)
Plate 49 General view showing the billet reheating furnace and approach rolls of the 18" Rolling Mill (film 22.06)
Plate 50 General view showing approach rolls in relation to skids, the pinion housing, and control room (film 22.08)
Plate 51 Detail of the 'Brightside' branded pinion housing from the 18" Rolling Mill (film 23.02)
Plate 52 Detail of the remaining sub-structure of a tilt-table relating to the first intermediary stand of the 18" Rolling Mill (film 11.11)
Plate 53 Detail of motor base and pinion housing from the run-out rolls of the second intermediary stand of the 18" Rolling Mill (film 11.10)
Plate 54 Detail of part of a cable powered skid mechanism for transferring bars between the approach rolls for the three stands comprising the 18" Rolling Mill (film 22.10)
Plate 55 General view looking west over the foundations for the 18" Rolling Mill's cooling bed (film 21.10)
Plate 56 General view of switchgear within motor house of the 10½" Double-Duo Mill (film 10.21)
Plate 57 General view of billet reheating furnaces to the south of the 10½" Double-Duo Mill (film 23.08)
Plate 58 General view of foundation trench for the 6 stand mill arrangement of the10½" Double-Duo Mill (film 23.04)
Plate 59 General view of foundation trench for run-out rolls from the final stand of the 10½" Double-Duo Mill (film 23.06)
Plate 60 General view of the disused motor house in the southern half of Building 11 (film 12.01)

Plate 61 General view of the former switchgear room of the disused motor house in the southern half of Building 11 (film 12.04)
Plate 62 General view of the southern half of Building 11 looking northwest (film 24.03)
Plate 63 General view of rails cutting through the south of Building 11 relating to the Site's former internal rail network (film 24.01)
Plate 64 General view of the air filter house in the south of Building 11 (film 12.22)
Plate 65 General view of the west elevation of Building 12 (film 17.01)
Plate 66 Detail of roof structure over Building 12 (film 20.06)
Plate 67 Detail of blocked arched window in west elevation of Building 12 (film 7.07)
Plate 68 General view of interior of Building 12 showing disassembled furnace (film 7.18)
Plate 69 General view of Building 13, looking from the northeast (film 6.02)
Plate 70 Detail of window in the east elevation of Building 13 (film 16.08)
Plate 71 General view of the interior of Building 13 looking northeast (film 20.01)
Plate 72 General view of north elevation of Building 14 (film 7.12)
Plate 73 General view of the ground floor interior of Building 14, looking south (film 7.22)
Plate 74 General view of the first floor interior of Building 14, looking south (film 7.20)
Plate 75 General view of Building 15, looking southwest (film 16.01)
Plate 76 General view of the first floor interior of Building 15, looking east (film 6.15)
Plate 77 General view of Building 16, looking northwest (film 8.20)
Plate 78 General vie of Building 17, looking north (film 16.03)
Plate 79 Detail of cast iron column in west elevation of Building 17 (film 6.20)
Plate 80 General view of interior of Building 17 (film 6.06)
Plate 81 General view of Building 18, looking north (film 15.05)
Plate 82 General view of Building 18, looking southwest (film 4.10)
Plate 83 General view of Building 18, looking east (4.24)
Plate 84 General view of interior of Building 18, looking east (film 4.07)
Plate 85 General view of office in centre of north wall of Building 18 (film 5.14)
Plate 86 General view of interior of office in Building 18 (film 5.11)
Plate 87 General view of Building 19, looking south (film 15.03)

RIVER DON DEVELOPMENT, PLOTS 3/4: STAYBRITE WORKS, SHEFFIELD, SOUTH YORKSHIRE

Historic Building Recording

Summary

Wessex Archaeology was commissioned by British Land PLC to undertake a historic building survey at the former Staybrite Works centred on National Grid Reference (NGR) SK 389 903. The Site is located to the northeast of Sheffield, in the lower Don valley, immediately south of the Meadowhall shopping centre and occupies an area of approximately 7.34ha at 34.5m AOD.

The surveyed structures represented a large part of the former Tinsley Steel Works built by Thomas Firth in 1908. The works was one of the earliest electrically driven rolling mills in Britain. The works was later renamed the Staybrite Works and had expanded to cover approximately three times as much ground by the 1920s. The earliest buildings dated to the early 20th century had all been largely altered during subsequent years of development, with often little evidence retained to indicate their former arrangement.

Through survey it was possible to gain a fairly detailed picture of the whole evolution of the power house (Building 10) and of the 1950s refit of the rolling mill (Building 11). The power house was of particular interest retaining a glazed tile interior, terrazzo floor, large travelling crane, and evidence of former machinery.

During the century of industrial occupation, the works largely produced shaped rods and plate out of specialist steels and iron. The majority of the demolished structures on site where utilised for heat treatment and finishing processes, except for the Firth-Derinon Drop Stamping department which was located east of the Site boundary.

In addition to the rolling process the works had also produced crucible steels. Although this process had ceased by the 1930s, ancillary buildings (Buildings 12-13) situated to the north of the rolling mill which had originally served as a weighing up shop and pot maker's shop in this process had been retained. Historic plans illustrate gas fired crucible furnaces towards the northern end of the rolling mill, and although no distinct evidence remains for them above ground, there is the potential that evidence remains below ground.

Observations made during the course of the historic building recording were complemented and enhanced by historic drawings recovered from a drawing office on Site during the survey. The plans depict both the general arrangement and technical specifications of machinery from the 1950s mill, and are to be offered to Sheffield City Archives.

RIVER DON DEVELOPMENT, PLOTS 3/4: STAYBRITE WORKS, SHEFFIELD, SOUTH YORKSHIRE

Historic Building Recording

Acknowledgements

The Historic Building Recording was commissioned by British Land PLC and Wessex Archaeology would like to thank them in this regard.

The recording was undertaken by James Thomson and Chris Swales with assistance from Zac Nellist, Chris Harrison, and Ash Tuck. Medium Format photography was by Simon Jessop. The preparation of this report was undertaken by James Thomson, with illustrations by Chris Swales. The project was managed on behalf of Wessex Archaeology by Oliver Jessop.

RIVER DON DEVELOPMENT, PLOTS 3/4: STAYBRITE WORKS, SHEFFIELD, SOUTH YORKSHIRE

Historic Building Recording

1 INTRODUCTION

1.1 Project Background

1.1.1 Wessex Archaeology was commissioned by British Land PLC (hereafter 'the Client') to undertake historic building recording at the former Staybrite Works (hereafter 'the Site') centred on National Grid Reference (NGR) SK 389 903. (**Figure 1**).

1.1.2 The River Don Development (RDD) project comprises in total an area of approximately 26 hectares divided between five plots situated to the south of Meadowhall shopping centre. This report concerns Plots 3 and 4 which were located on the site of the former Staybrite Works to the north of Weedon Street, and east of Vulcan Street.

1.1.3 The programme of archaeological works followed a Written Scheme of Investigation (WSI) prepared in 2009 by ARCUS which was approved by South Yorkshire Archaeological Services (SYAS). This report presents a brief description of the methodology followed, the results of the monitoring, and the archaeological interpretation of the findings.

1.2 Site Location

1.2.1 The Site is located to the northeast of Sheffield, in the lower Don valley, immediately south of the Meadowhall shopping centre (**Figure 1**). The boundaries of the Site comprised Weedon Street to the south, Vulcan Street to the west, the embankment of the former Sheffield District Railway line to the north, and a modern business park to the east. The Site occupies an area of approximately 7.34ha at 34.5m AOD.

2 METHODOLOGY

2.1 Introduction

2.1.1 The methodology employed on site was in accordance with the WSI (ARCUS 2009). The WSI identified nine specific historic buildings within the Site which were to be targeted for survey and assigned numbers 10-19 (**Figure 1**). The level of detail employed in the survey of each structure varied dependent upon the level of archaeological significance attributed to them by a previous appraisal of the Site (ARCUS 2008).

2.1.2 The level of recording employed during the historic building survey was to a Levels 1-3 standard as laid out in English Heritage's *Understanding Historic Buildings: a guide to good recording practice* (2006) and in compliance with the Institute for Archaeologists' *Standards and Guidance for the archaeological investigation and recording of standing buildings or structures* (Revised 2008).

2.2 Aims

2.2.1 The principal purpose of the archaeological survey was to make a permanent record of the buildings and structures on the Site prior to their proposed demolition. The general aims of the building recording were:

- to produce a level 1 survey of Buildings 16, 18 and 19 comprising 35mm and Medium Format photography with plans sufficient to locate viewpoints;
- to produce a level 2 survey of Buildings 12-15 and 17 comprising 35mm and Medium Format photography, measured plans, and select measured sections;
- to produce a level 2-3 survey of Buildings 10-11 comprising 35mm and Medium Format photography, measured plans and sections;
- to understand the site as a whole and to identify significant details of specific buildings relevant to their construction and development; and
- to undertake an archaeological structural watching brief during the demolition of the historic buildings to preserve, by record, any previously unobserved historic features.

2.3 Building Recording

2.3.1 The programme of recording was conducted between the 22nd April and the 9th of June 2010. A complete index of the fieldwork archive is included in section 6 of this report as **Table 1**.

2.3.2 During the course of the programme a number of technical drawings were located in paper, linen and microfiche formats depicting structures and machines produced for the Site. The drawings were removed to Wessex Archaeology Sheffield offices for cataloguing and are to be offered to Sheffield City Archives. A complete index of the recovered records is included as **Tables 2-3** in **Appendix 1** of this report.

Photography

2.3.3 A photographic record was created of general and detail viewpoints of both exterior elevations and interior divisions with black and white 35mm and medium format film. Graduated photographic scales were used wherever possible. The film record was supplemented with digital images.

2.3.4 A full set of photographic registers (**Appendix 2**) and comprehensive photographic viewpoint plans were produced for the Site archive. A selection of the photographic record is reproduced in this report as **Plates 1-87**, and their location and direction recorded on **Figures 29-30**. Films 1-3 were taken as part of the archaeological recording of RDD Plot 1: Carbrook Street, and their registers and a selection of the photographic record can be found within a separate report (Wessex 2010).

Measured Survey

2.3.5 The buildings were recorded using both digital and hand-measuring techniques. All field drawings were digitised using *AutoCAD 2004* software

into scaled drawings included in this report as **Figures 10-26**. Archive drawings were prepared at 1:100 for plans of Buildings 10-13, and 17, and 1:200 for buildings 14-16 and 18-19; and 1:50 for sections of Buildings 10-13 and 17.

2.4 Copyright

2.4.1 This report may contain material that is non-Wessex Archaeology copyright (e.g. Ordnance Survey, British Geological Survey, Crown Copyright), or the intellectual property of third parties, which we are able to provide for limited reproduction under the terms of our own copyright licences, but for which copyright itself is non-transferrable by Wessex Archaeology. You are reminded that you remain bound by the conditions of the Copyright, Designs and Patents Act 1988 with regard to multiple copying and electronic dissemination of the report.

3 HISTORICAL BACKGROUND

3.1 Introduction

3.1.1 A full assessment of the impact of the proposed River Don Development on archaeology and cultural assets was produced by ARCUS (2008). A selection of the historic maps and plans from this assessment are reproduced in this report as **Figures 2-9**. The results of this assessment relevant to Plots 3/4 are summarised below.

3.2 Initial Development

3.2.1 Before the development of the Works, the Site was on the edge of urban Sheffield, and whilst predominantly green-field, 19th century mapping illustrates a series of structures at the junction of Vulcan Road and Weedon Street called Holme Farm, and Tinsley Brick and Tile Works to the east of the site behind the Grade 2 listed Tram Depot (**Figure 2**). The Tram Depot was built in 1874 as depot for horse drawn trams, and later converted for electric tram cars in 1899.

3.2.2 Construction of the Works began in 1907 as an expansion of the already established Sheffield firm of Thomas Firth and Sons, whose main premises where to the southwest on Savile Street. Then known as the Tinsley Works, the new works were to replace the company's steel operations at the Norfolk Works accommodating new gas fired crucible furnaces and one of the earliest applications of electrically driven rolling mills in Britain.

3.2.3 The earliest known plan of the Works dates from 1908 (CA 206/20343) and depicts a long rolling mill (Building 11) stretching northeast from Weedon Street to the Sheffield District Railway, a small store on Weedon Street to the west of the rolling mill, and a power house (Building 10) beside Vulcan Road to the northwest (**Figure 5**). Abutting the north of the rolling mill were two smaller structures comprising a crucible pot-makers workshop (Building 13) and a weighing-up shop (Building 12). Both of these buildings appear in more detail on a historic drawing (**Figure 6**) depicting them as single storey brick structures with steel framed trusses and tiled roofs, and indicating that they had been a secondary addition to Building 11 (CA 20343 40/56).

3.2.4 An outline plan of the structures to the north of Building 11 also dated to 1908 (**Figure 6**) indicates that three gas producers, a chimney stack, a

charcoal shed, and a mould store were located to the east of Building 13 (CA 20343 37/56). The presence of gas producers on the Site suggests that the furnaces used within the rolling mill for heating the ingots and billets prior to rolling would have been gas fired. Notes taken by Derek Bayliss during his visit to the Works in 1994 (Bayliss 1994) indicate that there had also been three blocks of crucible furnaces within the northern end of Building 11 and in proximity to the crucible pot-makers workshop (Building 13).

3.2.5 A joint venture in 1908 between Firths and John Brown and Co, of the neighbouring Atlas Works, established a research laboratory which is credited with the development of the first high chromium steel resilient to rust and tarnishing. This was first commercially produced in 1913, under the name "rustless steel", but subsequently became known as stainless steel. Continued development after the First World War produced further improved steels, including the 'Staybrite' series of austenitic, non-magnetic steels, which were resistant to a wider variety of corrosive conditions than the original rustless steels, and possessed deep-drawing and welding qualities which allowed a much wider range of applications.

3.3 Expansion and Modernisation

3.3.1 Within seven years of its construction, the Works was undergoing substantial changes. Historic drawings for the expansion of the Power House (Building 10) indicate that its generating capabilities were doubled (at least) between 1915 and 1917 (**Figure 7**) suggesting a significant increase in industrial activity on the Site. This is clearly evident on the 1923 OS map (**Figure 3**) where the Works is shown to have expanded massively, including several structures almost as large as the original rolling mill.

3.3.2 From the late 1920s, numerous changes were made to the Works in conjunction with subsequent mergers first with John Brown Ltd in 1930, then with English Steel Corporation Ltd in 1934 and finally with the British Steel Corporation in 1982.

3.3.3 An account of the firm in 1928 stated that the Works was producing higher grade steel including carbon and alloy steels for motor car and aeroplane construction, "Speedicut" high-speed steel, and crucible cast carbon tool steels, spring steels, sheets and strips, permanent magnet steels, mining steels, special hard steels for bearings, and other specialist steels.

3.3.4 Between 1928 and 1954 a number of additions were made to the Works which included a de-scaling plant, extensions to the mill and power plant, additional stores and welfare facilities, a heat treatment department (CA 206/32031), and the closure of the gas-fired crucible furnaces. A plan of the Works produced in the mid-1940s shows the internal layout of the buildings at this time and labels a number of the buildings (**Figure 8**).

3.3.5 Alterations made to the Works during the mid-20th century were also in line with technological changes. The two largest alterations to the arrangement and functioning of the Works revolved around the end of on-site gas production *c.* 1930 followed by power production in *c.* 1940, and the complete refitting of the hot rolling mill *c.* 1956 (**Figure 9-11**).

3.3.6 In 1982 Firth-Brown merged with the British Steel Corporation (BSC) to form Sheffield Forgemasters, and the majority of production was transferred to BSC's River Don Works on the west bank of the river. The Staybrite Works was taken over by Allvac Ltd, who may also have taken over Firth's stainless steel department. Many of the buildings were demolished in the 1980s-90s, although several structures survive, and had latterly been leased to small firms as light industrial and storage units.

4 RESULTS

4.1 Introduction

4.1.1 Historical building recording of the Staybrite Works was undertaken for nine principal buildings. A few additional structures remained on the Site at time of survey, comprising a large steel frame shed at the north-western end of Building 11, and a narrow brick built store to the west of Building 14.

4.1.2 By the late 20th century the Works had been significantly reduced from its full extent as depicted on historic mapping. Whilst the surveyed buildings represented only a fraction of the extent of the Works in the mid-20th century, they nerveless comprised a significant proportion of the early 20th-century Works.

4.1.3 The arrangement of access onto and around the site remained largely unchanged throughout much of the Works' lifetime. The most significant change was the closure of the Sheffield District Railway in the late 20th century, which can be seen on historic maps from 1905-1954 (**Figures 2-4**) to have been heavily integrated with the Works. Although the railway and its associated structures have been dismantled, the embankment is still visible along the northern boundary of the Site (**Plates 1-2**).

4.1.4 Road access onto the Site was from two entrances on Weedon Street, either side of Building 11. The western entrance appears on the earlier plans of the Site (**Figure 5**), and retained a 1950s steel gate (**Plate 3**) the plans for which survive (**Appendix 1: Plan 10**). The eastern entrance had originally been through a cart-passage (**Figures 2-4**), and although the surrounding structure had not survived the steel balance plate of a weigh bridge produced by Pooley of Birmingham was still visible (**Plate 4**).

4.1.5 The movement of goods around the Site had been facilitated by a comprehensive internal rail network, along which goods and materials would have been shuttled between the processes contained within the various buildings. The network fell into disuse towards the end of the 20th century, likely as a combined result of the closure of the Sheffield District Line and the transferral of Firth-Browns industrial interests away from the Site in the 1980s. Portions of track are still visible in places around the Site (**Plate 5**) and their routes were preserved as access roads (**Plate 6**) for the diesel and electric vehicles succeeded the role of the rail network.

4.1.6 The transferral of materials over shorter distances appeared to have occasionally been via small trolleys, a number of which were identified across the Site. One trolley left outside of Building 18 had been stencilled with the words 'Goods Inwards' (**Plate 7**).

4.2 Building 10: Power House

Summary

4.2.1 Building 10 (**Figures 12-15**) was located to the northwest of the Site (**Plate 8**), adjacent to Vulcan Road, and measured approximately 39 x 50m and comprised of two separate ranges orientated roughly north-south. The building had historically been divided into a boiler house to the west and an engine/turbine hall to the east. At the time of survey the western range had been largely demolished, and both ranges were flooded throughout the lower ground floor level.

4.2.2 Building 10 was built *c.* 1908 to provide power for the rolling mill (Building 11). Both ranges of the building were extended in 1915, expanding the generating capabilities of the power station. Unfortunately no record has been found to indicate the machines used or their output. A subsequent 10m extension was made in 1917 to the boiler house within west range of the building, adding additional boilers and an ash handling plant.

4.2.3 The eastern range of Building 10 was brick built, and comprised of a rectangular five bay turbine hall, a small square water tower situated beyond it to the north, and a narrow lean-to range running between them.

4.2.4 The western range of the building comprised a rectangular brick structure that had been truncated to the south where it had originally extended beyond the eastern range. The range had been largely demolished above ground floor level, except towards the north where the height of the wall suggested the structure had originally been two storeys high (**Plate 9**). Nothing remained of the roof structure beyond a series of iron trusses truncated to the west wall of the east range.

4.2.5 The boiler house had at its largest extent measured approximately 19 x 55m, however it had been largely rebuilt following the structures demolition and at time of survey enclosed an area of 19 x 37m. Whilst the majority of the western wall had been demolished, its southern extent retained elements of the 1915 and 1917 extensions including three blocked windows (**Plate 8**).

Exterior

4.2.6 The turbine hall dated to *c.* 1908, and had been extended by two bays southwards *c.* 1915. It comprised a rectangular brick built structure with a pitched corrugated sheet clad roof with a hot working vent along the full length of the ridge. Patches of modern steel cladding indicated that the range had originally incorporated skylights along the length of both pitches.

4.2.7 The northern elevation of the turbine hall (**Plate 10**) incorporated three tall windows, which had been blocked. These windows had represented the only original lights into the structure, other then the skylights, and had been blocked during the construction of a lean-to. The southern gable was exposed to lower ground floor level from where an earth ramp ascended to the south (**Plate 11**). The lower ground floor level of the southern gable was brick built whilst above the gable comprised of an iron frame with corrugated sheet cladding. Located in the centre of the elevation at lower ground floor level was a double doorway with timber panelled door.

4.2.8 Incorporated along the eastern elevation of the building was an 4m wide aisle that caused the gables to appear asymmetric. There were a number of truncated RSJs in the southern end of the eastern elevation that indicated where a further lean-to had been demolished. The brickwork between the 1908 powerhouse and its 1915 expansion appeared to have been carefully keyed in on both eastern and western elevations, although a change had been visible at eaves level on the east elevation (**Plate 12**).

4.2.9 The water tower to the north of the turbine hall was a square brick built structure, 11m tall, built *c.* 1908 (**Plate 13**). It had originally been free standing, and blocked narrow arched windows were evident in all elevations. An original arched doorway was situated in the east elevation, and an additional inserted entrance in the west elevation. Integrated into the brick structure was an iron frame which would have supported a large metal water tank on the roof of the building. Located to the side of the original doorway was a gauge that would have originally shown the level of the water within the water tank (**Plate 14**).

4.2.10 The western wall of the turbine hall (**Plate 8**), formerly the dividing wall between the ranges, contained a series of round openings along its length which are believed to have accommodated high pressure steam pipes from the boilers to the turbines/engines. Towards the north of the elevation was a timber door from the ground floor level within the turbine hall from which the lower level of the boiler house was accessible down a metal staircase.

4.2.11 The lean-to structure between the turbine hall and water tower was built *c.* 1928 to house an air compressor for the bar treatment furnaces between Buildings 10 and 11. The structure was brick built with a large opening and adjacent doorway in the centre of the northern elevation.

Interior

4.2.12 The interior of the turbine hall comprised of five recessed arched bays along the east and west elevations, supporting an approximately 6.75m high rail along either side of the building upon which the ends of a large travelling fabricated angle-iron crane rested (**Plate 15**). The crane would originally have been employed for stripping down the engines and generator equipment when it became necessary to service them. The interior of the hall was clad in an off-white tile with dado, moulded mid-wall cornice, and a repeating diamond pattern between the arches all picked out in a green tile (**Plate 16**).

4.2.13 Although the basement of Building 10 was not accessible due to flooding, it had formerly been accessed from the ground floor by two metal staircases. In both cases the staircases appeared to be late 20th century in date, although there could possibly have replaced earlier ones.

4.2.14 The floor throughout the building was originally of a white terrazzo with black frames (**Figure 13; Plate 17**), and was raised along the eastern wall and within the southern three bays. Scars and concrete blockings were evident within the floor throughout the hall and related to the footings of earlier machinery. The raised platform along the eastern wall had previously been edged with iron railings, with oval scars towards the northern end likely indicating the location of former control pedestals for the generating plant.

4.2.15 Two offices were located within the northeast and southwest corners of the turbine hall, which had provided desk space for the engineers. The northeast office comprised of timber partition walls with extensive glazing and was located at the top of a first phase stone staircase and represents a relatively late installation. The southwest office was more substantially built with a timber frame with multi-paned glazing, and was contemporary with the *c.* 1915 expansion of the hall (**Plates 18-19**).

4.2.16 The most recent installation within the turbine hall was two Bellis and Morcan compressors and British Thomson Houston (BTH) switchgear for a 1000v AC system (Bayliss 1994). In addition to the compressors were two three phase 1000v motors and associated switchgear cabinets. The function of the installation was for the receival and distribution of electricity throughout the works from the National Grid, and the generation of heated compressed air for bar treatment furnaces. The machine bases (**Plate 20**) and switchgear (**Plate 15**) observed within the building at time of survey possibly related to this installation.

4.2.17 Scars in the floor of the hall indicate that historically there had been a rectangular machine comprised of three elements in the northern half of the building, and two identical sub-rectangular machines within the southern half (**Figures 13 and 28**). Whilst the shape of the southern machines are indicative of turbine generator sets, the scars from the earlier generating plant within the north of the building are less conclusive. One possibility based on the layout of the blockings is for two vertical compound engines with flywheels and generators. The *c.* 1940 plan of the Site (**Figure 8**) indicates that the surveyed scars related to four rectangular bases within the sub ground floor.

4.2.18 Located along the eastern side of the turbine hall was a narrow aisle which had historically been labelled as a cableway (**Figure 7**), implying that it had been associated with the routing of power cables from the building to the rest of the Works. The arched bays (**Plate 21**) between the main room and the cableway appeared to have originally been open. Labelled plates over the blockings named machines and buildings suggesting they had formerly corresponded to switchgear situated within the arches (**Plate 22**). At time of survey the cableway was in use as a corridor, with two rooms portioned in the northern end containing switchgear (**Plate 23**).

4.2.19 A wall scar relating to the extension of the building *c.* 1915 was visible above the glazed wall tiles between the fourth and fifth bays (**Plate 24**). The decorative tile work continued unbroken across the joint, and although a slight change in the colour of the tiles was visible between the phases it was evident considerable care had been taken to match the décor.

4.2.20 The ancillary buildings towards the north of Building 10 contained two wells (**Plates 25-26**) from which water had been drawn for the boilers. Both wells had two pumps associated with them, and a system of overhead pipes leading from them that were suspended from the walls of the turbine hall on cast iron brackets. In addition, there was a room within the western end of the northern lean-to that had initially served as an air compressor house, but had been refitted as a carbon-dioxide store (**Plate 27**) when air compression was moved to the main turbine hall.

4.3 Building 11: Rolling Mill

Summary

4.3.1 Building 11 (**Figures 14-18**) occupied a large part of the centre of the Site, measuring 75 x 171m (**Figure 1**). It comprised of four ranges of steel frame construction, orientated northeast-southwest, and divided into 16 bays (**Figure 2**). Abutting the north of Building 10 were Buildings 12-14, whilst to the south Building 10 had formerly abutted a range of office buildings fronting Weedon Street, but which had been demolished before recording began (**Plate 28**).

4.3.2 Whilst the main structural elements of Building 11 date to the earliest phase of development of the Works in 1907, the internal organisation of the building dated to the second half of the 20th century.

4.3.3 In order to facilitate the description of Building 11, the ranges are numbered 1-4 from west to east, and the bays from 1-16 from north to south (**Figure 14**). Each bay measures approximately 60 x 35 ft.

Exterior

4.3.4 Building 11 comprised a steel frame structure largely clad in brickwork. The roof over the building was divided into four 60ft wide pitched spans each possessing hot working vents along their central third. The roof over the westernmost range was slightly higher then the others owing to the additional length of the columns forming that range. This inconsistency appears to be original, although the purpose of the high clearance within the range is not known.

4.3.5 The western wall of Building 11 was largely brick built with the steel superstructure incorporated within its fabric (**Plate 29**). A row of substations had been built against the southern half of the elevation *c.* 1940. The construction of the substations had caused a number of openings in the western elevation to be blocked, including a series of arched windows along the length of the wall and a wide arched opening towards its centre. Although the windows had all been blocked, a set of timber shutters had been retained within one (**Plate 30**). The wall had been truncated to the north when an extension was added in the 1930s.

4.3.6 The northern wall of the building was brick built with an integrated steel frame (**Plate 31**), and a number of blocked arched openings within the second range. Positioned within each range were high level arched windows that had been refitted with modern frames.

4.3.7 The eastern wall of the building was largely clad in corrugated sheet except for where a number of ancillary buildings had been built into and against the elevation replacing earlier fabric (**Plates 32-33**). The ancillary buildings all dated to after 1930, including a 1930s concrete office building and steel framed boiler house, as well as a 1940s brick welfare building.

4.3.8 The southern wall of Building 11 comprised of the remnants of the Weedon Street Offices at the end of bays 3-4 which were demolished 2002-7. The southern extent of range 2 had been truncated in line with the office and clad in corrugated sheet, whilst range 1 possessed a full height inserted brick gable (**Plate 28**). Three broad phases were evident within the fabric of the

offices relating to the original 1907 offices and two subsequent expansions in 1917 and 1947.

Interior – summary

4.3.9 The interior of Building 11 was divided into several working areas comprising a few areas divided off within the building, with the vast majority situated within a large open space broken by lines of steel I-section columns supporting the roof structure.

4.3.10 The structure of Building 11 comprised of rolled steel I-section columns positioned every 10.67m (35ft) supporting riveted angle-iron lattice girders longitudinally between four 18.29m (60ft) wide ranges (**Plates 34-37**). Brackets from the columns and girders supported riveted angle-iron trusses which spanned the ranges (**Figures 20-21**) at 3.56m (11⅔ft) intervals. The roof cladding was of corrugated sheet steel with hidden valley gutters between each range.

4.3.11 A secondary structure of steel columns, tied to the main structural columns, and supporting large RSJs, had originally run longitudinally down the sides of each range supporting large overhead travelling cranes. The majority of this structure, including all the cranes, had been removed by time of survey, although scars remained to indicate their former extent. The location of the travelling cranes is illustrated on the 1980s site plan (**Figure 9**) as rectangular boxes with crosses through them.

Interior – workshops and offices

4.3.12 Located within the northern end of Building 11 were two rooms divided off from the rest of the building. The first was situated in bay 1 of the first range and comprised of brick walls with continuous glazing and incorporated two offices that lay just beyond the western elevation of Building 11. The room was created in the 1950s to contain lathes for turning the rolls used on the mills, and although the machines had been removed by time of survey their foundations were still clearly evident (**Plate 38**).

4.3.13 The second portioned room within Building 11 was situated in bay 1 of the second and third range (**Plate 39**) and had steel framed walls with corrugated metal cladding. Although little remained to indicate what the function of the space had been when it was created in the late 20th century, possible remnants of the former gas-fired crucibles were visible. These comprised of ground level circular openings in the northern wall (**Plate 40**), and remnants of brick built structures visible within the floor just to the south of the room (**Figure 14**). The circular openings were presumably for gas pipes from the gas producers, which in the early 20th century had been located just to the north of Building 11. Whilst the floor level brick features are not necessarily indicative of a furnace, they do indicate where an earlier working area had been situated.

4.3.14 Additionally within the southern corner of Building 11 was a brick built structure (**Plate 41**) containing a kitchen and dining room, as well as several small stores and a possible show room. The dining room was of particular architectural interest with art deco inspired panelling, stainless steel fireplace and false skylight (**Plate 42**).

4.3.15 A number of small brick and concrete structures comprising substations, office and workshops were also constructed along the northwest and southeast walls of the building.

4.3.16 Substations were located within the long brick structure situated against the western wall of Building 11 and in two brick structures adjacent to bays 6 and 12 of the east wall. The western range was built *c.* 1940 about the same time as power generation ceased on site and had likely facilitated the distribution of electricity taken from the national grid. The eastern substations were built *c.* 1960 and were related to the 18" mills, presumably containing switchgear and transformers to adjust the power provided to their motors.

4.3.17 Two single storey office/welfare structures were situated along the eastern wall of building 11 in bays 3-4 and 11-12. The first dates to *c.* 1940, was brick built and had provided an office and cloakroom space. Whilst the second was constructed of concrete panels *c.* 1920 and provided management space (**Plate 43**) that had latterly included a car pool office, and a union representative's office.

4.3.18 An additional brick built lean-to range had been built against the northern wall of the third range *c.* 1940. The range comprised of two rooms providing offices for the electrical department. Several windows and a door had been inserted in the northern wall of Building 11 to facilitate access and observation from the offices.

4.3.19 Towards the north of the building was a *c.* 1930s boiler house of steel frame construction and clad in corrugated metal sheet (**Plate 44**). The majority of fixtures and fittings had been stripped from the room, however a steam gauge and a series of three concrete bases were still visible. Towards the centre of Building 11's east elevation was a brick built workshop (**Plate 45**) also dating from *c.* 1930, that had formally functioned as a recirculation pump house for the water used as a coolant on the 18" mills.

4.3.20 Located in the southwest corner of the building were two small rectangular rooms that functioned as stores. The western room featured an iron fire-door made by Mathews and Mumby Ltd. of Manchester and stamped as erected in June 1942. No other fire doors were identified during the survey, and it was possible the room was used to store combustible substances. The eastern room contained grease tanks, presumably for use on the machines and cranes within Building 11.

Interior – Rolling mills

4.3.21 The vast majority of the internal space in the northern half of Building 11 was taken up by a 10½ inch Double Duo Mill (DD Mill), and an 18 inch intermediary and finishing mill (18" Mill), both dating to the *c.* 1950s (**Figures 16 and 18-19**). A roughing mill from the same date had also been located within the south of Building 11, although this had been removed, indicating that the 18" Mill may have been adapted to undertake this process as well.

4.3.22 Associated with both mills were single storey brick built motor houses containing 1000 H.P. electric motors, and the electrical equipment to govern it and the various other motors that drove the rolls and tilt tables, skids, saws

and cooling beds. These included switchgear installed by BTH, mercury arc rectifiers for the conversion of AC to DC electricity, and rheostats.

4.3.23 The 18" Mill (**Figure 18**) was situated within bays 3-9 of the third and fourth range, although its cooling bed lay in bay 4 of ranges 1-3. It had originally comprised a rectangular brick built motor-house containing switchgear (**Plate 46**) and control booth (**Plate 47**), a small control booth (**Plate 48**), a billet re-heating furnace (**Plate 49**), series of approach and run-out rolls, two intermediary rolling stands with tilt tables, one finishing stand, a hot saw and cooling bed (**Plate 55**).

4.3.24 At time of survey the majority of the machinery associated with both rolling processes had been removed, leaving a series of concrete foundations and occasional fixings. The 18" Mill retained several additional elements including a stretch of electrical powered approach rolls (**Plate 50**), a large cast iron pinion housing (**Plate 51**), the base of a tilt table (**Plate 52**), various motor bases from the rolling beds (**Plate 53**), part of the transfer skids (**Plate 54**) and bases related to the cooling bed mechanisms (**Plate 55**).

4.3.25 The DD Mill (**Figure 19**) was situated in bays 3-4 of the first and second range, and comprised a rectangular brick built motor-house (**Plate 56**), two billet re-heating furnaces (**Plate 57**), a line of six rolling stands (**Plate 58**), and run-out rolls (**Plate 59**).

4.3.26 The remains of an additional mill were located to the south of the 18" Rolling Mill, comprising of a rectangular brick built motor house (**Plate 60**) associated with a linear floor scar that lined up with the approach rolls to the 18" Mill. The interior of the disused motor house had been stripped of all machinery (**Plate 61**), and part of it appeared to have been used as offices.

Interior – Storage

4.3.27 The southern half of Building 11 had largely comprised of a large area of virtually unbroken concrete floor dating from the mid-late 20th century (**Plate 62**) bisected by rails remaining from the earlier rail system (**Plate 63**). Located within this area of the building were a few scars and bases relating to removed machinery. The only standing structure other then the disused motor house was located in bay 13 across the first and second range. It comprised a small rectangular brick structure, and contained air filtration equipment (**Plate 64**).

4.4 Building 12: Weighing Up Shed

Summary

4.4.1 Building 12 (**Figures 22-23**) was a square single storey brick built structure (**Plate 65**), measuring 8.5 x 9.5m, which abutted Building 10 to the southwest and Building 14 to the southeast. The building had originally abutted Building 13, but had been truncated by the construction of Building 14 *c.* 1930.

Exterior

4.4.2 The exterior walls of Building 12 were to the northeast and northwest of the structure, with Buildings 10 and 14 forming the southeast and southwest walls. The walls were constructed of machine made red brick in English Garden Wall bond. The pitched slate roof of the building was supported on

fabricated iron trusses comprising tensioned rod lower cords and angle iron principals and struts. The wooden rafters were supported on angle irons (**Plate 66**) indicating the roof structure may have been designed to have been fire proof, and therefore possibly housed hot working activities.

4.4.3 The openings within the west and north walls of Building 12 were all inserted with the windows comprising concrete lintels and brick sills and rectangular timber frames. A blocked window in the northern half of the west elevation indicated that the original windows had been arched (**Plate 67**), corroborated by a historic drawing of the building (**Figure 6**).

Interior

4.4.4 The interior of Building 12 comprised of a single space with concrete floor and painted walls. A raised concrete surface in the northeast corner of the building related to scars in the north and east walls indicating that a brick partition had once been inserted within this corner.

4.4.5 Fixtures and furniture within the building at time of survey included a substantial mid 18th-century wooden bench, a relatively modern simple fume cupboard, and the remains of a small gas fired brick furnace (**Plate 68**). These items indicated that in its last period of occupation the building had housed a testing laboratory. A set of instructions found on the fume cupboard for carrying out an Intercrystalline Corrosion Test would appear to confirm this.

4.5 Building 13: Crucible Pot Shop

Summary

4.5.1 Building 13 (**Figures 22-23**) was a rectangular single storey brick built structure, measuring 9.5 x 23.5m, and orientated roughly northeast-southwest (**Plate 69**). It abutted the centre of the northern elevation of Building 11, and was abutted by Building 14 to the west. The building is recorded as a crucible pot-maker's shop on drawings from as early as 1908 (CA 20343 40/56).

Exterior

4.5.2 The exterior walls of Building 13 were built in red brick laid in English Garden Wall bond. The roof of the building was pitched with slate cladding and a glazed skylight along the western half of the roof. The roof was supported on iron trusses identical to those of Building 12 except for the absence of iron rafter supports.

4.5.3 An entrance with a sliding door produced by Henderson of Essex had been inserted in the northern wall *c.*1930 through an earlier inserted window. A similar entrance had also been inserted in the southern wall of the building, into Building 11, replacing an earlier arched opening to the west that had subsequently been blocked.

4.5.4 The eastern wall of Building 13 contained six arched windows (**Plate 70**), the southern two of which had been blocked, while the rest had retained their small paned iron window frames. In addition there was a blocked arched entrance at the northern end of the eastern wall that represented the original access to the building.

4.5.5 The western wall of Building 13 was contemporary with the first phase structure but had been significantly altered during the construction of Building 14 in the 1930s, including the insertion of two doorways and two windows.

Interior

4.5.6 The interior of Building 13 comprised of a single open space with concrete floor and painted walls (**Plate 71**). The concrete floor had been patched and re-laid in places, although it was not possible to discern the location of the puddling trough in which the clay for making the crucible pots could have been mixed by foot. However, it was possible to identify timber wall plugs within the western and southern walls that would have corresponded to shelving for the air drying of formed pots.

4.5.7 Centred in the northern wall of Building 13 was a scar relating to a removed flue and fireplace through which a small shallow arched opening had been inserted, possibly for an extraction fan.

4.5.8 After the closure of the crucible department in the 1930s the building was converted to a testing house, and the furnishings relating to crucible pot making would have been removed. A number of the floor scars could potentially result from removed machine bases relating to test machinery. Furthermore, a number of transverse RSJs had been inserted along the length of the building that could presumably have facilitated the lifting and manoeuvring of samples of metal.

4.6 Building 14: Offices

Summary

4.6.1 Building 14 (**Figure 22**) was a *c.* 1930 two storey brick structure measuring 6 x 23.5m, comprising a number of partitioned spaces on both floors that would have been used for testing laboratories and offices (**Plate 72**).

4.6.2 The construction of Building 14 partly truncated Building 12 from the point at which it had formerly abutted Building 13.

Exterior

4.6.3 Building 14 was built of machine pressed red bricks laid in English bond. The roof of the structure was flat with a low parapet around the edge. There were regular windows along both the north and west elevations with concrete lintels and sills with timber frames. There were three ground floor entrances in addition to two entrances from Building 13 and one from Building 12.

4.6.4 A narrow passage ran down the western elevation of Building 14, paved with stone setts, separating it from a long single storey building to the west that was used as a store. Access into a small office above the store was possible from a first floor door in the west elevation of Building 14 via a concrete platform. The first floor door did not appear to have been inserted and therefore predated the construction of the store *c.* 1940-50. Access to the door may have been through an earlier staircase that could relate to the linear scar across the northern elevation of the building.

Interior

4.6.5 The ground floor of Building 14 was broadly divided into five rooms with a corridor across the centre of the floor and a staircase to the first floor against the southern wall. The southern two rooms on the ground floor were separated by glazed timber partitions (**Plate 73**).

4.6.6 The first floor of Building 14 was divided into five offices divided by glazed partitions (**Plate 74**). One of the rooms appeared to have been a drawing room with a drawing table and several piles of technical drawings. The drawings were recovered and arrangements are being made for their deposition in Sheffield City Archives. A complete index to the records is included as **Appendix 1**.

4.7 Building 15: Offices and Welfare

Summary

4.7.1 Building 15 (**Figure 25**) was located to the east of Building 13 and to the North of Building 11 and measured approximately 24 x 9m. It was a two storey brick built structure with a flat roof surrounded with a short parapet (**Plate 75**). The structure comprised two phases the first comprising a roughly rectangular range built *c.* 1940 as welfare and offices, with a square extension added to the west of the north elevation adding sanitary facilities and additional offices *c.* 1947 (CA 206/32031).

4.7.2 It was not possible to survey the southern elevation or ground floor of the building due to restricted access.

Exterior

4.7.3 Building 15 was built of red bricks laid in English Garden Wall bond, with a concrete stringcourse above the ground floor and a continuous band of concrete above the first floor windows, which also served as their lintels. At ground floor level there were steel framed windows with doorways in the north and south elevations. The northern extension was constructed similarly to the primary structure, although with wider windows beneath concrete lintels.

4.7.4 Around the first floor were wider more numerous steel framed windows. An original external staircase was located in the eastern elevation, although its external metal staircase had been removed by time of survey. An additional concrete staircase had been created on the northern elevation between the primary structure and the northern extension. The doorways accessed by this staircase comprised a contemporary door into the northern extension with a ornate stone hood, and an additional door that had been inserted through an earlier window in the primary structure.

Interior

4.7.5 The interior of the ground floor of the building was largely inaccessible, however the 1980s plan of the works (**Figure 9**) indicated it had been divided into several small rooms. A danger sign attached to the ground floor north elevation suggested that part of the structure had latterly been converted to use as a substation. The northern extension was divided into paired male and female cloakrooms and toilets.

4.7.6 The first floor comprised of a large open office within the centre of the floor with partitioned offices to the eastern and western end of the building (**Plate 76**).

4.8 Building 16: Lavatories

Summary

4.8.1 Building 16 (**Figure 25**) was a small sub-rectangular brick built structure measuring 6 x 5m located to the east of the northern end of Building 11 (**Plate 77**). It was constructed *c.* 1960 and functioned as men's lavatories.

Exterior

4.8.2 The building was constructed of machine made red brick laid in English Garden Wall with a foundation of engineer's brick on a concrete platform. Small windows were positioned high on the north, west and south elevations for privacy. A doorway was positioned in the southern elevation with a short curtain wall around it to reduce visibility into the building from the outside.

Interior

4.8.3 The interior of the building was not accessible at time of survey, however a historic plan recovered from the Site illustrated the interior of the building as comprising a series of small cubicles and a urinal (**Figure 25; Appendix 1, Plan 52**).

4.9 Building 17: Brick Store

Summary

4.9.1 Building 17 (**Figure 24**) was a relatively small sub-rectangular brick built structure measuring 5.25 x 6.75m located to the northeast of Building 11, and to the west of Building 18 (**Plate 78**). The building first appears on the 1917 plan of the works (**Figure 5**), when it is recorded as a Silica Brick Store. Although at time of survey the building was free standing, historic mapping illustrates that a series of extensions had stood to the western side of the building by 1923 (**Figure 3**).

Exterior

4.9.2 The building comprised of two elements. The northern half of the building was primarily built of two rows of three cast iron columns (**Plate 79**) supporting longitudinal RSJs. Running laterally between the rows of columns were fabricated iron trusses identical to those in buildings 12-13. The building had likely originally been open sided and was enclosed at a later phase with the construction of a brick structure within the original steel frame. The northern elevation of the internal brick structure contained a blocked doorway and high level window, whilst a further doorway was located in the west wall.

4.9.3 The southern half of the building was entirely brick built, to the same width of the steel frame in the northern half of the building. There was a wide opening in the southern elevation with a sliding door produced by Henderson of Essex and a blocked window above it. In addition there was a blocked window in the eastern wall, and a blocked window and door in the western wall. The eastern wall of the southern half of the building was slightly skewed where it had avoided encroaching on a branch of the Site's internal railway.

4.9.4 The roof structure over the southern half of the building differed slightly to those to the north, and had no comparison elsewhere in the works. The trusses were similarly fabricated from iron angles and rods, however the webbing plates were square rather then oblong in shape.

4.9.5 A modern lean-to structure had been built against the eastern side of Building 17 out of scaffold bars.

Interior

4.9.6 The interior of the building largely comprised of one space (**Plate 80**), except for a small office that had been inserted into the southwest corner. The floor throughout the building was concrete and possibly had a vehicle inspection pit inside of the southern entrance beneath a thick metal plate.

4.9.7 The office within the southeast corner of the building was brick built with a timber door in the north elevation. The construction of the partition blocked a doorway in the western elevation indicating it had been inserted.

4.10 Building 18: Cogging Mill

Summary

4.10.1 Building 18 (**Figure 26**) was a large steel framed structure measuring approximately 128 x 32m, and was located east of Building 11 along the northern boundary of the Site (**Plate 81**). The building was constructed in the 1920s and functioned as a Cogging Mill within which iron and steel blooms would be shaped into billets.

Exterior

4.10.2 Building 18 was of a steel frame construction (**Plate 82**) comprising large fabricated steel stanchions supporting a lighter weight gantry structure that also accommodated space for a travelling crane structure that had been removed by time of survey. The structure was divided into 12 bays of unequal widths, likely corresponding with the arrangement of internal plant. The western five bays were over two ranges, and were of identical construction (**Plate 83**). The external walls were of corrugated metal cladding throughout.

4.10.3 The roof structure comprised riveted angle-iron trusses incorporating a hot working vent along the ridge and skylights along both north and south pitches.

4.10.4 In addition to the main structure there was a narrow aisle and small brick built office along the northern wall of the building, and a lean-to from the western elevation that spanned both ranges.

Interior

4.10.5 The interior of Building 18 was open with a dirt floor with occasional concrete patches (**Plate 84**). There were no visible above ground elements of the former plant with the building, although areas of metalworking debris were identified within the floor indicating lathe activities. Amongst other accumulated debris were elements of a large ventilation system, possibly originally from the building.

4.10.6 The office building spanned the centre of the northern wall of Building 18 (**Plate 85**), with timber framed windows in both north and south elevations. Internally the office was divided into two small rooms (**Plate 86**).

4.11 Building 19: Substation

Summary

4.11.1 Building 19 (**Figure 25**) was a partially derelict structure measuring 7 x 7m that abutted the Sheffield Corporation Tramway Sheds along the south-eastern boundary of the Site (**Plate 87**). The structure was built *c.* 1930 and was recorded on the *c.* 1940s site plan at a sub station (**Figure 5**).

Exterior

4.11.2 Building 19 was constructed of red brick laid in English Wall bond. While the northern wall of the structure had been demolished, the extent of the building was evident in floor scars indicating it had been roughly square. A blocked window was located within in the western wall.

4.11.3 The roof structure comprised of a tiled roof over timber rafters supported on a riveted angle iron truss.

4.11.4 To the north of Building 19 were a disused well and a mounting for a pump. A tall metal water tower had been situated on the area during the production of the archaeological assessment in 2005 (ARCUS 2008).

Interior

4.11.5 The interior of the building comprised of a single room, partially bisected by a stub wall that supported a concrete ceiling above the southern half of the structure. The floor of the building was of concrete with conduits running along the east and south walls.

4.11.6 Internal plant comprised a BTH 1000kv transformer and a timber battery charging cabinet.

5 DISCUSSION

5.1 Summary of Phases

Phase 1: 1908-1909

5.1.1 When the Works was established in 1908 it had simply comprised an extension of Firths industrial interests. The Site was conveniently situated within a mile of the main premises on Saville Street, directly adjacent to the Sheffield District Railway Line, and had sufficient room for a large workshop as well as for future expansion.

5.1.2 Initially, the Works had comprised rolling processes within Building 11 (**Figure 5**) and the electrical generation plant in Building 10 to power them. Although significant elements of the Phase 1 structure of both buildings had survived at time of survey, virtually nothing remained of the machinery that would have then been contained within.

5.1.3 The addition of Buildings 12 and 13 was made soon after completion of Building 11, adding pot making and metal weighing facilities for crucible steel production. Presumably at this time the crucible furnaces were also

completed within the northern end of Building 11, along with the gas producers and associated charcoal store required to power them.

5.1.4 In addition to the crucible furnaces, the gas would have been required for any reheating furnaces used in preheating metal prior to rolling, and heat treatment furnaces for altering the properties of the finished products.

5.1.5 Building 17 had also likely been built during this period featuring identical roof structure to that used in Buildings 12-13. It had originally comprised an open sided refractory brick store.

Phase 2: 1910-1929

5.1.6 By the 1920s the works had expanded massively with new facilities for rolling, heat treatment, pickling, descaling and storage, including the construction of Building 18 as a Cogging mill for the initial shaping of iron blooms.

5.1.7 As a consequence of the Works' expansion, Building 10 (the power house) was greatly expanded in 1915 with the addition of an additional boiler and two steam turbines. The new installation did not, however, appear to have been satisfactory since only two years later an additional boiler was added. The addition of the turbines could have more then doubled power output of the power station, illustrating the increase in the scale of production. Furthermore, an air compressor plant was built within a lean-to on the northern side of Building 10 to provide hot compressed air for bar treatment furnaces.

5.1.8 Although no alterations from this phase were evident in Buildings 11-13, the expansion of the Works would likely have moved some processes away from Building 11. Building 17 was likely enclosed during this phase and a range of structures constructed against it to the west.

Phase 3: 1930-49

5.1.9 During this period the Works continued to expand, with changes tending towards becoming more specialised rather then diversifying production. These changes are evident in the cessation of crucible steel production, as well as on site power and gas production. During the Second World War the works was prohibited from supplying steel for domestic use owing to the large demand for government purposes, namely cartridge production.

5.1.10 The changes in the operation of the Works during this period had a significant influence on several of the buildings within this survey. The power generating equipment in Building 10 would have become obsolete, and its cooling towers built over by a new bar treatment plant. Towards the end of this period Building 10 was refitted as an air compressor house.

5.1.11 As a consequence of the move from power generation, a number of new substations were built around the site to handle power coming in from the National Grid. Building 19 and the range of structures built against the western range of Building 11 were both substations dating to this period.

5.1.12 With the end of crucible steel production on the Site, Buildings 12-13 were converted for use as a heat-treatment shop and testing shop. New laboratory facilities were created in this period comprising Building 14 that

was built within the angle of Buildings 12-13 and added an additional storey over the western half of Building 12.

5.1.13 The refinement and enforcement of employee rights laid down in the Factory Act of 1937 required the supply of suitable welfare including the supply of drinking water, washing facilities, accommodation for clothing, sitting facilities and first aid. This, in conjunction with the growth of the Works, stimulated a number of welfare improvements across the Site. Evidence for this amongst the surveyed buildings included the construction of Building 15 to the north of Building 11 on the site of the former gas producers, and a small office/welfare structure on the east elevation of Building 11.

Phase 4: 1950-79

5.1.14 Massive reorganisation of processes was undertaken within Building 11, significantly consolidating and automating much of the rolling processes during this phase. This resulted in the construction of both the 18" Rolling Mill and the 10½" Double-Duo Mill, the remains of which were both still visible at time of survey. Comparison of the *c.* 1940 and *c.* 1980 site plans (**Figures 6-7**) indicates that little, if anything, was retained between these phases.

5.1.15 The reorganisation of Building 11 also brought about the construction of new substations on its eastern elevation to direct and regulate power for the new mills.

5.1.16 Continued improvement of welfare was also undertaken including an extension to Building 15, and the construction of new lavatories in the form of Building 16.

Phase 5: 1980-Present

5.1.17 The final phase is one of considerable decline of industry on the Site following the movement of Firths industrial interests to the British Steel Corporation's River Don Works. Subsequently many of the buildings on site were demolished, and while production in Building 11 was continued by Allvac Ltd, this was on a much reduced scale. The 18" and 10½" mills were both still in use, however further mills within the southern half of the building were removed and the area in which they had stood was largely resurfaced.

5.1.18 The Site ceased steel production in 2005 since when the remaining standing buildings were stripped, removing much of the machinery and secondary steel structures such as travelling cranes and their rails.

5.2 Discussion of Processes

5.2.1 The historic building survey of the Staybrite Works has provided extensive information on the nature of former industrial processes undertaken within the Works (**Figure 23**). However, no processes survived completely and their piecemeal development across the Works makes detail discussion of a single site-wide process of production impractical. What follows is a discussion of key processes identified within the Site, rather than a phase by phase discussion of the whole works. These are Power Generation, Steel Production, and Rolling Processes. A simplified illustration of the general flow of processes within the surveyed buildings is presented as **Figure 27**.

Power Generation

5.2.2 From 1908 until the 1930s the electrical requirements of the Works was fulfilled by the generating equipment in Building 10 (**Figure 28**). The process began with the import of coal in wagons directly from the Sheffield District Railway Line into the western range of Building 10 (the boiler house) at first floor level. The coal would subsequently have been tipped directly into large hoppers from where it could be distributed to the boilers via automated stokers.

5.2.3 The second requirement was for water, which was drawn from two wells located in the north of the building. This water was primarily pumped into an elevated tank, from where it was piped along the northern and western walls of the turbine hall to the boilers. The water tank served to create a head of pressure and allow a reserve of water to be maintained in case the pumps were off.

5.2.4 Three boilers are depicted on the 1940s site plan (**Figure 6**) arrayed against the eastern wall of the west range of Building 10, which are indicated on a *c.* 1917 plan (CA 20343 27/56) to have been paired sets of Badcock and Wilcox boilers (**Figure 24**). Exhaust gas from the combustion of coal in the boilers was drawn off through two chimneys, likely via an economiser which would use the heat of the exhaust to preheat the water for the boilers. The 1917 extension is also believed to have added an ash handling plant to the southern end of the boiler house.

5.2.5 Steam produced by the boilers would be transferred along cast iron pipes through round openings in the western wall of the turbine hall. Within the hall had been two steam engines dating to the original 1908 construction, and two steam turbines which had been added in the course of the 1915 extension. The steam, being under pressure, pushes through the pistons of the engine and blades of the turbine, which in turn drives an axle. The exhaust steam is then condensed using cold water which creates low pressure increasing the draw of the steam from the boilers. The resultant hot water from condensing was then pumped to cooling towers situated to the east of the power station (**Figures 3 & 9**), which cooled the water and allowed it to be recirculated.

5.2.6 Each engine and turbine would have been paired with an exciter and a generator by which the kinetic energy of the rotating axle could be transformed into electricity. Switchgear arrayed along the eastern wall would have monitored and regulated the output from the boilers and generators, ensuring that a constant current and voltage was provided to the Works machinery. Second stage substations would have transformed the power station output for the specific machines.

Steel production

5.2.7 From 1908 until the mid 1930s the Works produced special steels via the crucible process (**Figure 25**). Historical documentation describes a line of gas fired crucible furnaces within the northern bays of Building 11 (Bayliss 1994), and although there remained no firm indication for their location, evidence did remain for associated processes. An additional plan (**Appendix 1: Plan 38**) detailing the construction of a roof over a 'new crucible shop' for the Works dated 1913 indicating it was a free standing

structure, although it has not been possible to place where it was built or even if indeed it was built.

5.2.8 Buildings 12 and 13 housed the weighing-up shop and crucible pot maker's shop. The weighing up shop would have been responsible for weighing out and preparing the quantities of iron and alloys for the crucible furnace, whilst the pot maker's shop would have prepared the crucible pots for the furnace, each of which could survive only a couple of uses. Unfortunately the fixtures and fittings relating to these processes had been removed from both buildings, although it was possible to see where shelving for air drying the crucible pots had been situated along the northern, western and southern walls of Building 13.

5.2.9 Within Building 11 there is circumstantial evidence for the location of the crucible furnaces. Circular scars in the northern wall of Building 11 likely correlated with gas piping from gas producers, the site of which was built over by Building 15. Although elements of fragmentary brick surfaces to the south of these openings possibly suggest a location of the furnaces, there remains no definitive evidence in the standing structure to confirm this.

18" Rolling Mill

5.2.10 The 18" Mill (**Figure 25**), so called due to the diameter of the rolls, was constructed in the 1950's to take billets of steel or iron and shape them to the desired cross sectional bar by passing them through increasingly finer shaped rollers. The process remained in use until the closure of the Works in the early years of the 21st century.

5.2.11 Before rolling could commence the billet would first have to be re-heated to make it malleable using specialised furnaces to achieve a uniform temperature throughout its interior, ensuring it reacted evenly when pressure was applied by the mills. The re-heating furnace for the 18'' Mill was situated in bay 8 across ranges 3 and 4 and was designed and built by Priest Furnaces Ltd of Middlesbrough *c.* 1956 (**Figure 10, Plate 49** & **Appendix 1: Plan 4**). It was constructed of refractory bricks, and would have been gas fired. A rectangular structure to the east of the furnace represented the remains of a charging mechanism that would have fed the billet into the furnace.

5.2.12 Once reheated the billet was transferred by crane onto approach rolls for the first rolling stand. The approach rolls comprised of electrically powered rotating cylinders, elements of which survived at time of survey (**Plate 50**). These moved the billet to the first stand which in 1955 had comprised a three roller high intermediary mill (**Figure 10**). Once the billet had passed between the lower rollers, a pneumatically powered ramp, or 'tilt table', would raise the rolling bed and put the billet back through the upper rollers (**Figure 11**, **Plate 52**). This process could be repeated with the billet passing back and forth through the mill until the desired bar was achieved. The bar would then be 'skidded' (**Plate 54**) across to a parallel set of rolls where the shape of the bar could be further refined through a second three roller high intermediary mill. Once the refined shape had been attained the bar would be skidded onto a final set of rolls and put through a finishing mill where the final shape of the bar was achieved. From the finishing mill the bar travelled along run-out rolls and through a hot saw that would shear off the ends of

the bar and cut it to the desired length. The finished bars were then skidded onto a cooling bed (**Plate 55**) before being transported to storage.

10½" Double Duo Mill

5.2.13 The 10½" DD mill (**Figure 25**), in comparison to the degree of mechanisation of the 18" Mill, was more in line with traditional rolling techniques. It was constructed in the 1950's and remained in use until the closure of the Works in the early years of the 21st century.

5.2.14 The mill's name derived from the diameter of the roll and the feature of two sets of rolls within each stand operating, so that in each pass through the stand the bars would be rolled twice. After each pass the bar would be man handled over to the next stand, or over the top of the same stand in what is known as a dead pass so that it could be passed through a second time. The 1980s site plan (**Figure 7**) indicated this mill had comprised 5 double-duo stands and 1 single stand. Following from the final stand were a line of run-out rolls leading up to a hot saw where the formed bar would be trimmed to the required length. The 10½" DD mill did not appear to have a cooling bed and the finished bars may have been pulled to one side to cool off.

5.3 Conclusion

5.3.1 During the industrial occupation of the Site, production largely comprised of shaped rods and plate out of specialist steels and iron. The surveyed structures represented a large part of the first phase of construction of the Works, although perhaps only approximately thirty percent of the Works by the 1920s. The majority of the demolished structures on site where utilised for heat treatment and finishing processes, except for the Firth-Derinon Drop Stamping department which was located east of the Site boundary.

5.3.2 By the construction of the works in 1908, steel framed structures were the preferred method of constructing industrial buildings, being relatively cheap and quickly allowing large spaces to be covered with few internal supports compared to traditional brick built structures. Equally, the steel framed building proved easier to expand with external walls often built from corrugated metal sheet allowing them to be erected and disassembled without consequences to structural integrity. Even where brick was used to clad the structure, such as in Building 11, the brick panels could be removed to leave the steel structure. A consequence of this method of construction for historic building recording is that there is often relatively little fabric in which to observe changes. This difficulty was compounded in Building 11 since the machinery within it was electrically driven and so did not require line shafting, making it impossible to locate earlier machines, especially where the floor was of dirt or had been re-laid in concrete.

5.3.3 Despite these difficulties it was possible to gain a fairly detailed picture of the whole evolution of Building 10 (the power house) and of the 1950s refit of Building 11 (the rolling mill). Observations made during the course of the historic building recording were complemented and enhanced by the historic drawings recovered from the Site, which depict both the general arrangement and technical specifications of machinery from the 1950s mill.

5.3.4 The proposed demolition of the Works offers the opportunity to target areas where our understanding can be furthered. These include the examination of

areas inaccessible for survey, such as the lower ground floor level and travelling crane in Building 10, within the furnaces in Building 11, and within the fabric of Buildings 12-13. The first phase arrangement of machinery and crucible furnaces within Building 11 is not clearly evident within the standing fabric, and our understanding of this period would greatly benefit from archaeological investigation below ground.

5.3.5 Whilst examples of the products manufactured in the Works were not identified during survey; the stainless steel fire place incorporated into the dining room in the southeast corner of Building 11 remained as a rather conspicuous advert of stainless steel, and of the pride those at the Staybrite Works took in its production.

6 ARCHIVE

6.1 Preparation

6.1.1 The project archive, consisting of all primary written documents, plans, sections, photographs, and electronic data, will be prepared by Wessex Archaeology staff in accordance with the requirements of the repository museum and in line with guidelines published by the United Kingdom Institute for Conservation (1990), Museums and Galleries Commission (1992), and English Heritage (1991).

6.2 Deposition

6.2.1 The physical Site archive will be deposited with Sheffield City Archives under an accession number to be confirmed. Until deposition the Site archive will be kept in Wessex Archaeology's Sheffield office.

6.2.2 Two copies of the report will be prepared for the client and additional copies will be submitted with the Site archive, and to the Historic Environment Record (HER).

6.2.3 An OASIS form will be completed at http://ads.ahds.ac.uk/project/oasis/ for inclusion in the ADS database. This will include an electronic copy of the report in PDF format.

Paper archive		
Folder no.	**Folder type**	**Item(s)**
1	A4 Lever-arch folder	Written Scheme of Investigation
		Risk assessment for survey
		Graphic registers
		Drawings (33)
		Index for recovered drawings
		Recovered archive material (2 leaflets)
		Photographic registers (27)
		Viewpoint plans (10)
		Contact prints for Films 1-27
		Prints and negatives for Films 1-5
		Also contained in this folder is the archive for 74361 RDD Plot 1: Carbrook Street Watching Brief

2	A4 Lever-arch folder	Prints and negatives for Films 6-27
		Colour slides
		Graphic registers
		Bound copies of final report
		Index for recovered drawings

7 REFERENCES

7.1 Bibliography

ARCUS 2005. *An Archaeological Desk-Based Assessment of the Staybrite Works Site at Weedon Street, Sheffield, South Yorkshire.* Unpublished report 915.1.

ARCUS 2008. *The British Land Company PLC: River Don Development – Historic Environment.* Unpublished Environmental Impact Assessment Chapter and Appendices 1156.1.

ARCUS 2009. *Written Scheme of Investigation for Historic Building Recording and Structural Watching Brief of the River Don Development, Weedon Street, Sheffield.* Unpublished WSI 1156.2(2)

Babcock and Wilcox Co. 1917. *Steam, Its Generation and Use* (35th Edition). Available at www.gutenburg.org

Bayliss, D. 1994. *South Yorkshire Industrial History Society: Firth's Tinsley/Staybrite Works. Visit 4th March 1994 with Douglas Oldham, to see Brian Harris, Engineer there for SMP.* Document from ARCUS 2005 archive.

English Heritage. 1991. *Management of Archaeological Projects*, London; English Heritage.

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

Institute for Archaeologists, 2008. *Standards and Guidance for the archaeological investigation and recording of standing buildings or structures.*

Jones, W. 2006. *Dictionary of Industrial Archaeology,* 2nd Edition. Sutton Publishing; Stroud.

Museum and Galleries Commission. 1992. *Standards in the museum care of archaeological collections.*

United Kingdom Institute of Conservation (UKIC). 1990. *Guidelines for the Preparation of Excavation Archives for Long Term Storage.*

Wessex Archaeology, 2010. *River Don Development, Plot 1: Carbrook Street Walls, Sheffield, South Yorkshire: Architectural Photography and Archaeological Watching Brief.* Report reference: 74361.02.

7.2 Cartographic Sources Consulted

1795 Fairbank map of the parish of Sheffield.
1854 OS 6 inch: 1 mile map sheets Yorkshire 289 and 295
1891 OS 25 inch: 1 mile map sheets Yorkshire 289.13 and 295.1
1903 OS 25 inch: 1 mile map sheets Yorkshire 289.13 and 295.1
1923 OS 25 inch: 1 mile map sheets Yorkshire 289.13 and 295.1
1935 OS 25 inch: 1 mile map sheets Yorkshire 289.13 and 295.1
1955 OS 1:2500 map sheets SK 3890 NE, SK 3890 SE, SK 3990 NW and SK 3990 SW
1964-74 OS 1:2500 map sheets SK 3890 NE, SK 3890 SE, SK 3990 NW and SK 3990 SW
1982-91 OS 1:2500 map sheets SK 3890 NE, SK 3890 SE, SK 3990 NW and SK 3990 SW

7.3 Documents consulted

CA 206/20343: Plans for the Tinsley Works of Thomas Firth and Sons Ltd, Weedon Street, 1907-1919. Sheffield Archives
CA 206/32031: Plans for additions and alterations to the Staybrite Works, Firth-Vickers Stainless Steels Ltd, 1928-1955. Sheffield Archives
Plans and microfiche recovered from the Staybrite Works during the historic buildings survey (Appendix 1). To be offered to Sheffield City Archives.

8 APPENDIX 1: RECOVERED ARCHIVE

Table 3: Plans recovered during buildings survey

WA No.	Title	Drawn by	No.	2nd No.	Date
Plan 1	Standard arrangement of P67 water cooler	Heenan & Froude Ltd. Engineers, Worcester.	SQ³/42104	M4805	23/01/1957
Plan 2	Firth-Vickers - Staybright Works - Weedon St Extension of 20" Outlet Main	East Midlands Gas Board Sheffield & Rotherham Division.	3297/2A	m4898	10/02/1958
Plan 3	Messrs Firth-Vickers Stainless Steel Ltd. Proposed heating plant	John Hughes & Co (Heating) Ltd. Engineers, Nottingham.	None	M4586	??/09/1956
Plan 4	Proposed arrangement of discharge end apron plates - Firth-Vickers roughing mill furnace.	Priest Furnaces Ltd, Furnace Builders and Engineers, Middlesbrough.	3678A/1	M4893	20/01/1958
Plan 5	Showing arrangment of water pipes on disch mach.	Priest Furnaces Ltd, Furnace Builders and Engineers, Middlesbrough.	21732	M4890	13/01/1958
Plan 6	Plan of foundation for the P214/1555 platform scale	Henry Pooley & Son Ltd. Head Office, Birmingham.	XW676/2	M4882	None
Plan 7	Proposed layout for 250,000 Cu Ft per Hr industrial installation for Messrs Firth Vickers, Weedon St, Sheffield	East Midlands Gas Board Sheffield & Rotherham Division.	3297	M4876	27/07/1957
Plan 8	Foundation details for 250,000 Cu Ft per Hr industrial installation.	East Midlands Gas Board Sheffield & Rotherham Division.	3297/1	M4877	25/10/1957
Plan 9	Pipework at Firth Vickers Staybright works, Weedon Street pipe supports in culverts 9" DIA.	Sheffield Corporation Waterworks.	2133 B	M4869	19/11/1957
Plan 10	Mild steel entrance gates for Firth - Vickers Stainless Steel Ltd, Sheffield	Bayliss, Jones and Bayliss Ltd, Fencing and Gate dept.	E. 564A	M4892	02/01/1958
Plan 11	3 Ton 3 motor single girder electric crane general arrangement.	Herbert Morris Ltd. Loughborough.	H.55192	M4802	30/10/1957
Plan 12	Outline arrangement of heenan - Marley aquatower No 353	Heenan & Froude Ltd. Engineers, Worcester.	SH³/27795	M4804	11/08/1955
Plan 13	Showing position of water pipes on disch. Machine Firth Vickers Stainless Steels Sheffield	Priest Furnaces Ltd, Furnace Builders and Engineers, Middlesbrough.	3678/B	M4891	22/01/1958
Plan 14	Alloy Rod & Bar Mill layout of plant	The Brightside Foundry & Engineering Co. Ltd.	S27472	M4585	04/06/1956
Plan 15	Alloy Rod & Bar Mill layout of plant	The Brightside Foundry & Engineering Co. Ltd.	S27472	M4585	04/06/1956
Plan 16	10 ½" Double Duo Mill Roll Stands, details of single housing.	The Brightside Foundry & Engineering Co. Ltd.	S.31240	M4895	05/02/1956
Plan 17	Plan of foundation for the 42/P832/1555 Pooley Platform Scale (5 Ton strength)	Henry Pooley & Son Ltd. Head Office, Birmingham.	XS 3884	M4886	None
Plan 18	Plan of foundations for the 42/1555/P832	Henry Pooley & Son Ltd. Head Office, Birmingham.	XW 680/6	M4885	23/10/1957
Plan 19	Plan of foundations for the 42/P214/1555 platform scale (5 Ton strength)	Henry Pooley & Son Ltd. Head Office, Birmingham.	XS 3778	M4884	None
Plan 20	Firth Vickers Staybright Works, Weedon Street. Proposed layout of 6" diameter pipework from culvert and along roof trusses.	Sheffield Corporation Waterworks.	2129A	M7868	14/11/1957

WA No.	Title	Drawn by	No.	2nd No.	Date
Plan 21	Handrailing round skid pit - at end of 18" finishing mill runout.	Firth Vickers Stainless Steels Limited. Engineers Department. Staybright Works, Weedon Street.	T4086	M4819	07/10/1957
Plan 22	18" Three High Mill, intermediate & finishing stand arrangement of roll stand.	The Brightside Foundry & Engineering Co. Ltd.	S 26822	M7214	05/06/1954
Plan 23	Details of gantry foundations for furnace discharge machine, Firth Vickers Stainless Steels Ltd, Sheffield	Priest Furnaces Ltd, Furnace Builders and Engineers, Middlesbrough.	21369	M4594	15/08/1957
Plan 24	Alloy Rod & Bar Mill Intermediate & Finishing Mill Water Cooling Arrangement	The Brightside Foundry & Engineering Co. Ltd.	S 27491	M4593	03/10/1956
Plan 25	Alloy Rod & Bar Mill 18" Roughing Mill Details of Water Cooling	The Brightside Foundry & Engineering Co. Ltd.	S 28185	M4592	07/05/1957
Plan 26	Alloy Rod & Bar Mills Intermediate 7 Finishing Mills. Arrgt & Details of Water Cooling	The Brightside Foundry & Engineering Co. Ltd.	S.28184	M4591	08/05/1957
Plan 27	Block plan of main buildings	Firth Vickers Stainless Steels Limited. Engineers Department. Staybright Works, Weedon Street.	T4078	M4806	27/06/1952
Plan 28	Alloy Rod and Bar Mill Foundation Section Block (3)	The Brightside Foundry & Engineering Co. Ltd.	S 28120	M4583	14/01/1957
Plan 29	Alloy Rod and Bar Mill Foundation Section Block (3)	The Brightside Foundry & Engineering Co. Ltd.	S 28121	M4584	14/01/1957
Plan 30	Rs IX 25/1,6 Blechrichtmas????e Fundament	?	Illegible	M4900	25/03/1937
Plan 31	Arrgt. and details of one C.I. closed top tank 7' - 9 ½" x 7' - 9 ½" x 7' - 11 1/16"	Newton Chambers & Co Ltd Thorncliffe, NR. Sheffield	2003/1	M4588	27/03/1957
Plan 32	15 Tons E.O.T. Crane. General Arrangement	Clyde, Crane & Booth Clyde Branch Mossend, Scotland	12515	M4589	03/09/1956
Plan 33	Diagrammatic arrangement of control scheme Priest Furnaces Ltd.	Priest Furnaces Ltd, Furnace Builders and Engineers, Middlesbrough.	WDG385?	M4779?	16/11/1956
Plan 34	Handrailing round 250 ton shear scrap pit - 18" rod mill	Firth Vickers Stainless Steels Limited. Engineers Department. Staybright Works, Weedon Street.	T4080	M7823	25/09/1957
Plan 35	Details of M.S. casing finishing furnace	Firth Vickers Stainless Steels. Sheffield.	20351	M4596	12/10/1956
Plan 36	Details of M.S. casing finishing furnace	Priest Furnaces Ltd Middlesbrough	Illegible	M4596	12/10/1956
Plan 37	Arrgt of brickwork ???? Finishing furnace	Priest Furnaces Ltd Furnace Builders & Engineers Middlesbrough	20537	M4595	15/08/1957
Plan 38	New crucible shop. Detail of plating & gangways for lean-to & main roofs.	Messrs T. Firth & Sons Ltd.	27	M3389	20/11/1913
Plan 39	C.I. Tank 20'-0 x 20'-0" x 10'-0" Deep, erected on site on W.S. framing 45'-0" high.	None	B.1562	M2183	25/05/1907
Plan 40	Mono raidal spring relief valve	Andrew Fraser & Co Ltd. Buckingham Gate. London S.W.1.	VB2654	M3495	13/05/1948
Plan 41	Details of rolls for No 2A bar straightening	Sir James Farmer ????& Co Ltd. Adelphi Iron Works, Salford	46082	M3857	31/05/1950
Plan 42	Firth Vickers Staybright Works, Weedon Street. Proposed arrangement of 8" Emco Governor & No75 BM Meter	East Midlands Gas Board Sheffield & Rotherham Division.	3230	M3864	14/02/1956
Plan 43	No Title	None	None	M3597	None

WA No.	Title	Drawn by	No.	2nd No.	Date
Plan 44	General arrangement of 2*/3" "A" open type liquor pump & B.T.H. K.Z.4826.5.H.P motor	Mather & Platt Ltd. Manchester	3.2357P-7	M3150	06/05/1949
Plan 45	Details of 12" Std. Hydraulic operated brake	Joseph Booth & Bros. Union Crane Works. Rodley. Leeds.	3.2357P-7	M4157	07/02/1946
Plan 46	Details for the HYDc operated breaks	Joseph Booth & Bros. Union Crane Works. Rodley. Leeds.	B1876	M4155	23/07/1956
Plan 47	Arrangement of foot pedal unit. For hydraulic breaks.	Joseph Booth & Bros. Union Crane Works. Rodley. Leeds.	BS.178.	M4154	23/07/1956
Plan 48	Cylinder & details for 12" Hydraulic operated brake	Joseph Booth & Bros. Union Crane Works. Rodley. Leeds.	B2157	M4156	23/07/1956
Plan 49	Assembly of class QF.351 single busbar vertical plugging SWGR.	The British Thomson Houston Co Ltd Willesden London N.W.	LX2313042	M3874	14/09/1956
Plan 50	Fundamentplan Richtmaschine ESRH 5	None	None	M3879	None
Plan 51	Richtmaschine ESRH.5.	None	0.1793	M3577	16/10/1961
Plan 52	Lavatory block at Messrs Firth-Vickers	None	3	M3705	None
Plan 53	Diagram showing the "Fluifeed" system on Noble 7 Lund cold sawing machines	None	B8793	M3478	None
Plan 54	15 Tons electric overhead travelling crane. Arrangements & details of main leads	Clyde, Crane & Booth Clyde Branch Mossend, Scotland	12515/11	M4159	04/10/1956
Plan 55	15 Tons electric overhead travelling crane. Details of cage	Clyde, Crane & Booth Clyde Branch Mossend, Scotland	12515/12	M4158	12/10/1956
Plan 56	Proposed arrgt of continuous billet reheating furnace	Priest Furnaces Ltd. Middlesbrough	E 3446	M3875	27/02/1956
Plan 57	Oil hydraulic pusher and equipment	The Wellman Smith Owen Engineering Corporation Limited. Parnell House, Wilton Road, London S.W.	5819/5.	M3491	None
Plan 58	Prop arrgt of billet reheating fce 18" finishing mill	Priest Furnaces Ltd. Middlesbrough	3424/A	M3877	02/08/1956
Plan 59	12½" / 14" Two high cold rectification mill general arrangement	The Brightside Foundry & Engineering Co. Ltd.	E.5269	M3882	21/10/1956
Plan 60	Preliminary arrangement of skid transfer. For alloy rod & bar mill	The Brightside Foundry & Engineering Co. Ltd.	8405	M3886	04/05/1956
Plan 61	4" Dia. Bar reeler arrgt & dets motorised rolls adjustment	The Head Wrightson Machine Co Ltd Middlesbrough	56/129	M3389	24/05/1956

Table 3: Recovered Microfiche

WA No.	Title on plan	Drawn by	No.	2nd No.	Date
Microfiche 1	34 1/2" x 56 1/2" x 90" Hot reversing plate mill sectional arrg't of work roll, bearing & chocks	Davy and United Engineering Company Limited Sheffield	94739	None	18-Oct
Microfiche 2	Alloy rod & bar mill 18" roughing mill general arrangement	The Brightside Foundry & Engineering Co. Ltd.	S.27492	M4176	10/10/1956
Microfiche 3	Plan of columns giving minimum dimensions and crane column centres rod mill bays	Firth Vickers Stainless Steels Limited. Engineers Department. Staybright Works, Weedon Street.	T3709	None	28/02/1956
Microfiche 4	8" 3 High mill detail of roll housing	The Brightside Foundry & Engineering Co. Ltd.	S.29466	M5770	08/06/1960
Microfiche 5	Alloy rod & bar mill roller tables table drive arrangement	The Brightside Foundry & Engineering Co. Ltd.	S.37465	M4933	?/?/56
Microfiche 6	Illegible	The Brightside Foundry & Engineering Co. Ltd.	S 22374	M5180	Illegible
Microfiche 7	Alloy rod & bar mill skid gear lineshaft pedestal & tail pulley	The Brightside Foundry & Engineering Co. Ltd.	S 27909	M5181	20/11/1956
Microfiche 8	8" 2 High mill grease lubrication details	The Brightside Foundry & Engineering Co. Ltd.	S29473	None	12/07/1960
Microfiche 9	Alloy rod and bar mill skid gear lineshafts for skid drums	The Brightside Foundry & Engineering Co. Ltd.	S27910	M5182	26/111/1956
Microfiche 10	Alloy rod & bar mill skid drum adjusting details	The Brightside Foundry & Engineering Co. Ltd.	S22371	M5165	Illegible
Microfiche 11	Alloy rod & bar mill roller tables table drive details	The Brightside Foundry & Engineering Co. Ltd.	S27462	M5248	05/04/1956
Microfiche 12	Alloy rod & bar mill shear approach table detail of rollers & shaft	The Brightside Foundry & Engineering Co. Ltd.	S27962	M5243	Jan-57
Microfiche 13	8" three high mill general arrangement	The Brightside Foundry & Engineering Co. Ltd.	S29471	M5761	30/06/1960
Microfiche 14	8" Three & two high mills details of screw down gear & clamps	The Brightside Foundry & Engineering Co. Ltd.	S29469	None	28/06/1960
Microfiche 15	Alloy rod & bar mill roller table drive detail of motor bedplate	The Brightside Foundry & Engineering Co. Ltd.	S27466	M5244	22/?/1956
Microfiche 16	Alloy rod & bar mill roller tables details of roller etc	The Brightside Foundry & Engineering Co. Ltd.	S27460	M5250	Illegible
Microfiche 17	Alloy rod & bar mill roller tables details of roller shafts	The Brightside Foundry & Engineering Co. Ltd.	S27448	M5251	?/?/1956
Microfiche 18	Alloy rod & bar mill roller tables details of mitre gears etc	The Brightside Foundry & Engineering Co. Ltd.	S27473	M5245	21/11/1957
Microfiche 19	8" 2&3 High mills detail of 2 high mill chocks etc	The Brightside Foundry & Engineering Co. Ltd.	S29465	None	30/06/1960
Microfiche 20	Alloy rod & bar mill. Shear approach mill. Modifications to general arrangement.	The Brightside Foundry & Engineering Co. Ltd.	S28793	None	10/04/1961
Microfiche 21	Alloy rod & bar mill roller tables table drive details	The Brightside Foundry & Engineering Co. Ltd.	S27463	M5247	05/04/1956
Microfiche 22	Alloy rod & bar mill. Intermediate mill approach table. Details of roller shafts.	The Brightside Foundry & Engineering Co. Ltd.	S28295	M5241	16/07/1957
Microfiche 23	Alloy rod & bar mill. Shear approach table. Details of outer bearing etc.	The Brightside Foundry & Engineering Co. Ltd.	S.28789.	None	01/03/1961
Microfiche 24	Alloy rod & bar mills	Illegible	S27268	M5239	Illegible
Microfiche 25	Alloy rod & bar mill. Shear approach table. Detail of modification to underframes.	The Brightside Foundry & Engineering Co. Ltd.	S28790	None	06/01/1961
Microfiche 26	Illegible	Illegible	S27267	M5240	Illegible

WA No.	Title on plan	Drawn by	No.	2nd No.	Date
Microfiche 27	Alloy rod & bar mill. Shear approach table. Details of apron plate, sided guards etc.	The Brightside Foundry & Engineering Co. Ltd.	S28791	None	13/03/1961
Microfiche 28	Alloy rod & bar mill. Roller tables. Table drive details	The Brightside Foundry & Engineering Co. Ltd.	S27461	M5249	4th April 1956
Microfiche 29	Run out table to hot saw details of thrust washers etc.	Illegible	S27269	M5238	Illegible
Microfiche 30	Alloy rod & bar mill. Lineshaft mitre mounting tool. Mounting procedure.	The Brightside Foundry & Engineering Co. Ltd.	S27377	M5253	20/11/1957
Microfiche 31	Alloy rod & bar mill. Shear runout table. Details of chain drive.	The Brightside Foundry & Engineering Co. Ltd.	S28136	M5242	31/01/1957
Microfiche 32	Alloy rod & bar mill. 18" mill tilting table. Details of universal coupling.	The Brightside Foundry & Engineering Co. Ltd.	S27455	M5189	16/07/1956
Microfiche 33	Alloy rod & bar mill. 18" mill tilting table. Details of lifting frame.	The Brightside Foundry & Engineering Co. Ltd.	S27456	M5190	23/04/1956
Microfiche 34	Alloy rod & bar mill. 18" mill tilting table. Details for chain manipulator.	The Brightside Foundry & Engineering Co. Ltd.	S27469	M5192	22/03/1956
Microfiche 35	None	None	F.V.No 1402/710	7451	None
Microfiche 36	Alloy rod & bar mill. 18" Mill tilting table. Details of chain manipulator.	The Brightside Foundry & Engineering Co. Ltd.	S27468	M5191	02/03/1956
Microfiche 37	Alloy rod & bar mill. 18" Mill tilting table. Details of balance levers.	The Brightside Foundry & Engineering Co. Ltd.	S27477	M5194	24/04/?
Microfiche 38	Alloy rod & bar mill. 18" Mill tilling table. Details of unit box.	The Brightside Foundry & Engineering Co. Ltd.	S27439	M5185	Illegible
Microfiche 39	Alloy rod & bar mill. 18" Mill tilting table. Details of lifting mechanism.	The Brightside Foundry & Engineering Co. Ltd.	S27475	M5193	03/04/1956
Microfiche 40	Alloy rod & bar mill. 18" mill tilting table. Details for chain manipulator.	The Brightside Foundry & Engineering Co. Ltd.	S27453	M518	15/02/1956
Microfiche 41	Alloy rod & bar mill. Roller tables. Asst. of unit boxes.	The Brightside Foundry & Engineering Co. Ltd.	S27454	M4934	Not known
Microfiche 42	18" Three high mill. C.S. Roll neck chocks. Top roll chock detail.	The Brightside Foundry & Engineering Co. Ltd.	S26816	M5486	Illegible
Microfiche 43	18" Three high mill. C.S. Roll neck chock X5. Bottom roll chock details.	The Brightside Foundry & Engineering Co. Ltd.	S26818	M5770	Illegible
Microfiche 44	18" Three high mill. C.S. roll neck chocks. Middle roll chock details.	The Brightside Foundry & Engineering Co. Ltd.	S26817	M5172	28/04/1954
Microfiche 45	Alloy rod & bar mill. Intermediate & finishing mill. Top roll chock detail.	The Brightside Foundry & Engineering Co. Ltd.	S27503	M5173	Illegible
Microfiche 46	Alloy rod & bar mill. Intermediate & finishing mill. Adjusting gear details.	The Brightside Foundry & Engineering Co. Ltd.	S27505	M5178	Illegible
Microfiche 47	Alloy rod & bar mill. Intermediate & finishing mill. Arrgt. & details of roll change rig.	The Brightside Foundry & Engineering Co. Ltd.	S27507	M5175	Illegible
Microfiche 48	None	The Brightside Sheffield England	Sk8583	M5489	13/05/1958
Microfiche 49	Run out table to hot saw detail of shaft roller	Illegible	27272	M5237	Illegible

WA No.	Title on plan	Drawn by	No.	2nd No.	Date
Microfiche 50	Alloy rod & bar mill. Roller tables. Table drive details	The Brightside Foundry & Engineering Co. Ltd.	S27464	M5246	?/04/1956
Microfiche 51	Alloy rod & bar mill. Roll housing details	The Brightside Foundry & Engineering Co. Ltd.	S22345	M5101	Illegible
Microfiche 52	Cycle of operation - Circuit NO, H.2212/1. 48" Pendulum hot saw	None	H2212/1	None	None
Microfiche 53	Alloy rod & bar mill. 48" Hot saw apprch & run-out tables. Gen. Arrgt. Table drive gearbox	The Brightside Foundry & Engineering Co. Ltd.	S27903	M4936	27/03/1956
Microfiche 54	Alloy rod & bar mill. Intermediate & finishing mills. Arrangement of roll housings	The Brightside Foundry & Engineering Co. Ltd.	S28177	M4543	09/04/1957
Microfiche 55	Alloy rod & bar mill. 18" 2 High finishing mill. Top roll chock details	The Brightside Foundry & Engineering Co. Ltd.	S28918	M5487	07/11/1958
Microfiche 56	Alloy rod & bar mill. 18" 2 High finishing mill. Bottom roll chock details	The Brightside Foundry & Engineering Co. Ltd.	S28919	M5488	07/10/1956?
Microfiche 57	Alloy rod & bar mill. Intermediate & finishing mill. Bottom roll chock details	The Brightside Foundry & Engineering Co. Ltd.	S27502	M5171	Illegible
Microfiche 58	Alloy rod & bar mill. 18" Mill tilting table. Details of outer.....?	The Brightside Foundry & Engineering Co. Ltd.	S27442	M5196	Illegible
Microfiche 59	Alloy rod & bar mill. 18" Mill tilting table. Special end unit box for ext. tables	The Brightside Foundry & Engineering Co. Ltd.	S27449	M5186	Illegible
Microfiche 60	Alloy rod & bar mill. 18" Mill tilting table. Details of unit box (95 w/w Brg)	The Brightside Foundry & Engineering Co. Ltd.	S27441	M5195	Illegible
Microfiche 61	Alloy rod & bar mill. Roller tables. Details of rollers	The Brightside Foundry & Engineering Co. Ltd.	S27447	M6252	Illegible
Microfiche 62	Alloy rod & bar mill. 18" Mill tilting table. General arrangement	The Brightside Foundry & Engineering Co. Ltd.	S27478	M5217	Illegible
Microfiche 63	Alloy rod & bar mill. Shear runout table. General arrangement	The Brightside Foundry & Engineering Co. Ltd.	S28126	M4925	Illegible
Microfiche 64	Alloy rod & bar mill. Billet bank skids. General arrangement	The Brightside Foundry & Engineering Co. Ltd.	S27379	M4947	Illegible
Microfiche 65	Alloy rod & bar mill. Tables at inter. & fin. Mills. Arrangement of apron plates	The Brightside Foundry & Engineering Co. Ltd.	S27929	M4560	Illegible
Microfiche 66	Alloy rod & bar mill. Cooling bed skins. General arrangement	The Brightside Foundry & Engineering Co. Ltd.	S27378	M4938	Illegible
Microfiche 67	Alloy rod & bar mill. Intermiediate mill skids. General arrangement	The Brightside Foundry & Engineering Co. Ltd.	S27380	M4939	27/11/1957
Microfiche 68	Alloy rod & bar mill. Ingoing table to roughing mill. General arrangement	The Brightside Foundry & Engineering Co. Ltd.	S27943	M4929	Illegible
Microfiche 69	Alloy rod & bar mill. Intermediate & finishing mills. 2-High housing arrangement	The Brightside Foundry & Engineering Co. Ltd.	S27494	M4945	Illegible
Microfiche 70	Alloy rod & bar mill. 18" Inter. & Fin. Mill. General arrangement	The Brightside Foundry & Engineering Co. Ltd.	S27495	M4451	Illegible
Microfiche 71	Alloy rod & bar mill. Approach table. General arrangement	The Brightside Foundry & Engineering Co. Ltd.	S27954	M4931	Illegible
Microfiche 72	Alloy rod & bar mill. 18" Intermediate mills. Arrgt of idler extension tables	The Brightside Foundry & Engineering Co. Ltd.	S28188	M4932	None
Microfiche 73	Illegible	The Brightside Foundry & Engineering Co. Ltd.	S27273	M5236	Illegible
Microfiche 74	Alloy rod & bar mill. Intermediate & finishing mill. Spindle balance details	The Brightside Foundry & Engineering Co. Ltd.	S27508	M5174	Illegible

WA No.	Title on plan	Drawn by	No.	2nd No.	Date
Microfiche 75	Screwdown gear details	The Brightside Foundry & Engineering Co. Ltd.	S22343	M5679	15/07/1948
Microfiche 76	Alloy rod & bar mill. 18" Roughing mill. Arrgt of idler approach table	The Brightside Foundry & Engineering Co. Ltd.	S28191	M4928	21/05/1957
Microfiche 77	10 1/2' Double duo mill. Roll stand. Details for roll chocks	The Brightside Foundry & Engineering Co. Ltd.	S25942	O/C 9009	15/09/1953
Microfiche 78	Alloy roll & bar mill. Intermediate & finishing mill. Top roll chock details	The Brightside Foundry & Engineering Co. Ltd.	S27503	24792	12/08/1956
Microfiche 79	10 1/2" Double duo mill. Roll stand. Details of top roll chocks	The Brightside Foundry & Engineering Co. Ltd.	S25943	O/C1816	19/11/1953
Microfiche 80	11 1/2" Double duo mill. Roll stand. Details of bottom roll chocks	The Brightside Foundry & Engineering Co. Ltd.	S25594	O/C1816	Illegible
Microfiche 81	Details of pinions for multiple drive 17 roll T.S. type flattening machine	W.H.A. Robertson & Co LTD Lynton Works Bedford	2479..?	None	Illegible
Microfiche 82	Details of pinions for multiple drive 17 roll T.S. type flattener (1 3/4 x 96")	W.H.A. Robertson & Co LTD Lynton Works Bedford	S24793	None	Illegible
Microfiche 83	Schematic arrangement of gas & water pipelines on No2 bright annealing line furnace	Firth Vickers Stainless Steels Ltd. Staybright Works. Weedon Street. Sheffield. 9.	T.S.M.5596A	None	22/08/1963
Microfiche 84	Schematic arrangement of gas pipework for vertical furnace - No2 bright annealing line	Firth Vickers Stainless Steels Ltd. Staybright Works. Weedon Street. Sheffield. 9.	T.S.M.5562	None	06/05/1963
Microfiche 85	Diagrammatic arrangement of pipework on ammonia storage tank - narrow strip mill	Firth Vickers Stainless Steels Ltd. Staybright Works. Weedon Street. Sheffield. 9.	T.S.M.5571	None	12/06/1963
Microfiche 86	Schematic arrangement of pipework in ammonia cracker house - narrow strip mill	Firth Vickers Stainless Steels Ltd. Staybright Works. Weedon Street. Sheffield. 9.	T.S.M. 5573A	None	24/06/1963
Microfiche 87	8" Two high mill. General arrangement	The Brightside Foundry & Engineering Co. Ltd.	S29470	M5965	28/06/1960
Microfiche 88	8" Two high mill. General arrangement	The Brightside Foundry & Engineering Co. Ltd.	S29470	None	28/06/1960
Microfiche 89	34 1/2" x 5" x 90".4 High rev. plate mill detail of top driveside work roll chock	Davey and United Engineering Company Limited	94639	F,V No 10/42/3/3/3	08/10/1962
Microfiche 90	34 1/2 & 56 1/2 x 90' Details of bottom R.C.S. & D.S. work rall chock	Davey and United Engineering Company Limited	94640	F,V No 10/42/3/3/2	17/10/1962
Microfiche 91	34 1/2" x 53" x 90". 4 High Rev. Plate mill detail of top R.C.S. Work roll chock	Davey and United Engineering Company Limited	94638	F,V No 10/42/3/3/4	16/10/1962
Microfiche 92	Section Guilthwaite - Tinsley	Distribution Headquarters East Midlands Gas Board Planning Department	O/C 8447	None	None
Microfiche 93	A composite of the two plans below	See below	94636 & 94635	See below	See below
Microfiche 94	34 1/2 & 53" x 90" Reversing plate mill. Detail of 34 1/2 dia work roll	Davey and United Engineering Company Limited	94635	F,V No 10/42/3/3/6	22/10/1962
Microfiche 95	34 1/2" & 56 1/2" x 90" Reversing plate mill. Details of composite back up roll 56 1/2" dia	Davey and United Engineering Company Limited		F.V.No 10/42/3/3/5	24/10/1962
Microfiche 96	Arrangement of under firing burners. Walking beam slab furnace.	Priest Furnaces Middlesborough	O/C 5527	None	14/04/196?
Microfiche 97	Longitudinal section through furnace. Walking beam slab furnace	Priest Furnaces Middlesborough	O/C 5227	None	31/08/1964

WA No.	Title on plan	Drawn by	No.	2nd No.	Date
Microfiche 98	Walking beam reheating furnace.	Priest Furnaces Middlesborough	O/C 5227	F.V. No 10/42/1/2/2	07/03/1963
Microfiche 99	Bar & continuous rod mill 11"/14" mill coupling & details	The Brightside Foundry & Engineering Co. Ltd.	S.30699	None	20/09/1955
Microfiche 100	5 tons Steam hammer arch form. Cylinder & c.	Illegible	19743B	None	Illegible
Microfiche 101	26" x 50" Sheet finishing mill - arrangement	Davy Brothers Limited Sheffield	M212	None	August 23rd 1933?
Microfiche 102	Three 1 ton 9 motor 4 armed jib cranes general arrangement	Herbert Morris Ltd Loughborough	M921	H 21493	20/04/1936?
Microfiche 103	Arrangement of gas & air mains & control valves. Roughing & finishing furnaces.	Firth Vickers Stainless Steels Ltd. Sheffield.	M4537	None	21/03/1936?
Microfiche 104	Arrangement of brickwork for sheet mill finishing furnace	Illegible	M4539	None	Illegible
Microfiche 105	Revised arrangement of brickwork for one vertical sheet? Furnace	Priest Furnaces Middlesborough	M2317	None	Illegible
Microfiche 106	Impeller (commercial)	Dowty fuel systems Ltd Cheltenham.. Glos.	A N 7017	None	16/09/1957
Microfiche 107	None	None	RPM3000	None	None
Microfiche 108	Impeller (commercial)	Dowty fuel systems Ltd Cheltenham.. Glos.	A N 7016	None	16/09/1957
Microfiche 109	Impeller	Dowty fuel systems Ltd Cheltenham.. Glos.	A BRS 140-17	None	22/01/1957
Microfiche 110	Arrangement of three peel rotating charging machine	R.N Stothert (engineers) Ltd. Sheffield	M5665	None	None
Microfiche 111	Sub assembly of cylinder + limit switches for quench tank	R.N Stothert (engineers) Ltd. Sheffield	M5564	None	None
Microfiche 112	Arrangement of neckar boiler water control & heat recovery equipment	Neckar Water Softener Co Ltd	P272	None	None
Microfiche 113	OV arrangement of the Weir electrofeeder E.F.7. (4 stage)	G & J Weir. Ltd Cathcart, Glasgow.	145792/816	None	None
Microfiche 114	Revised arrangement of water heating & heat recovery equipment	Firth Vickers Stainless Steels Ltd. Sheffield.	1748/12	F.V. No 1402/20	27/01/1954
Microfiche 115	Arrangement of Neckar deaerator, hourly capacity 4000 galls.	Firth Vickers Stainless Steels Ltd. Sheffield.	1748/5	F.V.No 1402/21	06/01/1954
Microfiche 116	Diagrammatic arrangement of continuous return lines	Firth Vickers Stainless Steels Ltd. Sheffield.	1748/1	F.V.No 1402/22	25/11/1953
Microfiche 117	Arrangement of economiser casings & top duct	F. Creen & Son Ltd Wakefield	19849	F.V.No 1408/107	03/03/1944
Microfiche 118	Details of inlet flue & economiser brickwork foundations foe general plan No H6709/44 Ref No G.6003/25.	None	9819-2	F.V.No 1408/303	16?/07/1944
Microfiche 119	Ash handling plant arrangement of conveyor at Bawtry level & filler pit	Thos. Firth & Sons Sheffield	5331	F.V.No 1403/3	None
Microfiche 120	Foundation plan for ash handling plant	Thos. Firth & Sons Sheffield	7426	F.V.No 1403/302	None

WA No.	Title on plan	Drawn by	No.	2nd No.	Date
Microfiche 121	Adjustment table for MALCUS Centreless Grinding Machine type MC 4. Sizes 5 1/8" - 6 1/2"	None	O/C 3686	None	None
Microfiche 122	Adjustment table for MALCUS Centreless Grinding Machine type MC 4. Sizes 3 5/8" - 5	None	O/C 3686	None	None
Microfiche 123	Adjustment table for MALCUS Centreless Grinding Machine type MC 4. Sizes 2 1/8" - 3 1/2"	None	O/C 3686	None	None
Microfiche 124	Adjustment table for MALCUS Centreless Grinding Machine type MC 5. Sizes 5 1" - 6 1/2" /8	None	O/C 3686	None	None
Microfiche 125	Adjustment table for MALCUS Centreless Grinding Machine type MC 4. Sizes 1 1/16" - 2"	None	O/C 3686	None	None
Microfiche 126	Adjustment table for MALCUS Centreless Grinding Machine type MC 5. Sizes 3 5/8" - 5"	None	O/C 3686	None	None
Microfiche 127	Adjustment table for MALCUS Centreless Grinding Machine type MC 5. Sizes 2 1/8" - 3 1/2"	None	O/C 3686	None	None
Microfiche 128	Adjustment table for MALCUS Centreless Grinding Machine type MC 5. Sizes 1/16" - 2"	None	O/C 3686	None	None
Microfiche 129	Adjustment table for MALCUS Centreless Grinding Machine type MC 3 & 2. Sizes 1/16" - 1 5/8"	None	O/C 3686	None	None
Microfiche 130	12 1/2" / 14" x 20" Rectification mill gauges for rolls	The Brightside Foundry & Engineering Co. Ltd.	531351	None	27th June 19??

9 APPENDIX 2: PHOTOGRAPHIC REGISTERS

NB: FILMS 1-2 & 3.14-35 RELATE TO RDD PLOT 1: CARBROOK STREET BOUNDARY WALL, SHEFFIELD

Film 3

Film type: 35mm mono

Frame	Description	View From	Date	Report Plate
1	Detail of pump base to north of Building 19	W	23.04.10	
2	General view of pump base to north of Building 19	W	23.04.10	
3	General view of pump base to north of Building 19	W	23.04.10	
4	Detail of riveted iron truss over Building 19	N	23.04.10	
5	Detail of riveted iron truss over Building 19	N	23.04.10	
6	General view of battery charging cabinet, Building 19	N	23.04.10	
7	General view of battery charging cabinet, Building 19	N	23.04.10	
8	Detail of BTH switchgear, Building 19	N	23.04.10	
9	Detail of BTH switchgear, Building 19	N	23.04.10	
10	General view of Building 19	N	23.04.10	
11	General view of Building 19	N	23.04.10	
12	General view of Building 19	NW	23.04.10	
13	General view of Building 19	NW	23.04.10	
14	RDD Plot 1: Carbrook Street Wall	-	23.04.10	
15	RDD Plot 1: Carbrook Street Wall	-	23.04.10	
16	RDD Plot 1: Carbrook Street Wall	-	23.04.10	
17	RDD Plot 1: Carbrook Street Wall	-	23.04.10	
18	RDD Plot 1: Carbrook Street Wall	-	23.04.10	
19	RDD Plot 1: Carbrook Street Wall	-	23.04.10	
20	RDD Plot 1: Carbrook Street Wall	-	23.04.10	
21	RDD Plot 1: Carbrook Street Wall	-	23.04.10	
22	RDD Plot 1: Carbrook Street Wall	-	23.04.10	
23	RDD Plot 1: Carbrook Street Wall	-	23.04.10	
24	RDD Plot 1: Carbrook Street Wall	-	23.04.10	
25	RDD Plot 1: Carbrook Street Wall	-	23.04.10	
26	RDD Plot 1: Carbrook Street Wall	-	23.04.10	
27	RDD Plot 1: Carbrook Street Wall	-	23.04.10	
28	RDD Plot 1: Carbrook Street Wall	-	23.04.10	
29	RDD Plot 1: Carbrook Street Wall	-	23.04.10	
30	RDD Plot 1: Carbrook Street Wall	-	23.04.10	
31	RDD Plot 1: Carbrook Street Wall	-	23.04.10	
32	RDD Plot 1: Carbrook Street Wall	-	23.04.10	
33	RDD Plot 1: Carbrook Street Wall	-	23.04.10	
34	RDD Plot 1: Carbrook Street Wall	-	23.04.10	
35	RDD Plot 1: Carbrook Street Wall	-	23.04.10	
36	I.D. shot	-	23.04.10	

Film 4

Film type: 35mm mono

Frame	Description	View From	Date	Report Plate
1	Detail of fabricated steel stanchion in Building 18	SE	23.04.10	
2	Detail of fabricated steel stanchion in Building 18	SE	23.04.10	
3	Detail of fabricated steel stanchion in Building 18	SE	23.04.10	
4	Detail of lean-to truss over northern aisle of Building18	E	23.04.10	
5	Detail of lean-to truss over northern aisle of Building18	E	23.04.10	
6	Detail of wall panel construction in Building 18	N	23.04.10	
7	Detail of wall panel construction in Building 18	N	23.04.10	84
8	General view of interior of Building 18	SE	23.04.10	
9	General view of interior of Building 18	SE	23.04.10	
10	General view of north elevation of Building 18	NE	23.04.10	82
11	General view of north elevation of Building 18	NE	23.04.10	
12	General view of office against north elevation of B.18	N	23.04.10	
13	General view of office against north elevation of B.18	N	23.04.10	
14	General view of north elevation of Building 18	NE	23.04.10	
15	General view of north elevation of Building 18	NE	23.04.10	
16	General view of south annex to Building 18	S	23.04.10	
17	General view of south elevation of Building 18	S	23.04.10	
18	General view of south elevation of Building 18	S	23.04.10	
19	General view of south annex to Building 18	S	23.04.10	
20	General view of south annex to Building 18	S	23.04.10	
21	Detail of cart located against south wall of Building 18	S	23.04.10	7
22	Detail of Building 18 roof structure viewed from outside	W	23.04.10	
23	Detail of Building 18 roof structure viewed from outside	W	23.04.10	
24	General view of west elevation of Building 18	W	23.04.10	83
25	General view of west elevation of Building 18	W	23.04.10	
26	General view of Building 18	SW	23.04.10	
27	General view of Building 18	SW	23.04.10	
28	General view of north elevation of Building 16	N	23.04.10	
29	General view of north elevation of Building 16	N	23.04.10	
30	General view of south elevation of Building 16	S	23.04.10	
31	General view of south elevation of Building 16	S	23.04.10	
32	General view of east elevation of Building 16	E	23.04.10	
33	General view of east elevation of Building 16	E	23.04.10	
34	Detail of blocked window in west wall of Building 19	W	23.04.10	
35	Detail of blocked window in west wall of Building 19	W	23.04.10	
36	I.D. shot	-	23.04.10	

Film 5

Film type: 35mm mono

Frame	Description	View From	Date	Report Plate
1	Not taken	-	-	
2	Not taken	-	-	
3	Not taken	-	-	
4	Not taken	-	-	
5	Not taken	-	-	
6	Not taken	-	-	
7	Not taken	-	-	
8	Not taken	-	-	
9	Not taken	-	-	
10	Not taken	-	-	
11	Not taken	-	-	
12	Not taken	-	-	
13	Not taken	-	-	
14	Not taken	-	-	
15	Not taken	-	-	
16	Not taken	-	-	
17	Not taken	-	-	
18	Not taken	-	-	
19	Not taken	-	-	
20	Not taken	-	-	
21	Not taken	-	-	
22	General view within lean-to to north of west of B.18	SW	23.04.10	
23	General view within lean-to to north of west of B.18	SW	23.04.10	
24	General view of interior of the southern range of B.18	W	23.04.10	
25	General view of interior of the southern range of B.18	W	23.04.10	
26	General view of interior of the southern range of B.18	E	23.04.10	
27	General view of interior of the southern range of B.18	E	23.04.10	
28	General view of interior of Building 18	W	23.04.10	
29	General view of interior of Building 18	W	23.04.10	
30	General view of stanchion in Building 18	SW	23.04.10	
31	General view of stanchion in Building 18	SW	23.04.10	
32	General view of interior of office in Building 18	SE	23.04.10	86
33	General view of interior of office in Building 18	SE	23.04.10	
34	General view of south elevation of office in Building 18	S	23.04.10	
35	General view of south elevation of office in Building 18	S	23.04.10	85
36	I.D. shot	-	23.04.10	

Film 6

Film type: 35mm mono

Frame	Description	View From	Date	Report Plate
1	General view of Building 13	NE	07.05.10	
2	General view of Building 13	NE	07.05.10	69
3	General view of Building 13	NE	07.05.10	
4	General view of interior of Building 17	N	07.05.10	
5	General view of interior of Building 17	N	07.05.10	
6	General view of interior of Building 17	S	07.05.10	80
7	General view of interior of Building 17	S	07.05.10	
8	General view within women's toilets in Building 15	NE	07.05.10	
9	General view within women's toilets in Building 15	NE	07.05.10	
10	General view of west elevation of Building 15	NW	07.05.10	
11	General view of west elevation of Building 15	NW	07.05.10	
12	Detail of first floor door into northern extension to B.15	E	07.05.10	
13	Detail of first floor door into northern extension to B.15	E	07.05.10	
14	General view of first floor of Building 15	W	07.05.10	
15	General view of first floor of Building 15	W	07.05.10	
16	General view of east elevation of Building 15	E	07.05.10	
17	General view of east elevation of Building 15	E	07.05.10	
18	General view of north elevation of Building 15	N	07.05.10	
19	General view of north elevation of Building 15	N	07.05.10	
20	Detail of cast iron column in west elevation of B. 17	W	07.05.10	79
21	Detail of cast iron column in west elevation of B. 17	W	07.05.10	
22	General view of north elevation of Building 17	NW	07.05.10	
23	General view of north elevation of Building 17	NW	07.05.10	
24	General view of west elevation of Building 17	W	07.05.10	
25	General view of west elevation of Building 17	W	07.05.10	
26	General view of south elevation of Building 17	S	07.05.10	
27	General view of south elevation of Building 17	S	07.05.10	
28	General view of east elevation of Building 17	SE	07.05.10	
29	General view of east elevation of Building 17	SE	07.05.10	
30	General view of internal rail network	N	07.05.10	
31	General view of internal rail network	N	07.05.10	
32	Detail of maker's mark on weighbridge	N	07.05.10	
33	Detail of maker's mark on weighbridge	N	07.05.10	
34	General view of weighbridge	N	07.05.10	
35	General view of weighbridge	N	07.05.10	4
36	I.D. shot	-	07.05.10	

Film 7

Film type: 35mm mono

Frame	Description	View From	Date	Report Plate
1	General view of long store to west of Building 14	W	07.05.10	
2	General view of passage between Building 14 & store	S	07.05.10	
3	General view of passage between Building 14 & store	S	07.05.10	
4	General view of west elevation of Building 14	W	07.05.10	
5	General view of west elevation of Building 14	W	07.05.10	
6	Detail of blocked window in west elevation of building 12	W	07.05.10	
7	Detail of blocked window in west elevation of building 12	W	07.05.10	67
8	General view of interior of store to west of Building 14	W	07.05.10	
9	General view of interior of store to west of Building 14	W	07.05.10	
10	General view of route way along north of Building 13	NE	07.05.10	
11	General view of route way along north of Building 13	NE	07.05.10	
12	General view of north elevation of Building 14	N	07.05.10	72
13	General view of north elevation of Building 14	N	07.05.10	
14	General view of workbench in Building 12	SE	07.05.10	
15	General view of workbench in Building 12	SE	07.05.10	
16	General view of fume cupboard in Building 12	NW	07.05.10	
17	General view of fume cupboard in Building 12	NW	07.05.10	
18	General view of dismantled furnace in Building 12	SW	07.05.10	68
19	General view of dismantled furnace in Building 12	SW	07.05.10	
20	General view of first floor offices in Building 14	N	07.05.10	74
21	General view of first floor offices in Building 14	N	07.05.10	
22	General view of ground floor offices in Building 14	N	07.05.10	73
23	General view of ground floor offices in Building 14	N	07.05.10	
24	Detail of scar from removed chimney inside Building 13	S	07.05.10	
25	Detail of scar from removed chimney inside Building 13	S	07.05.10	
26	Detail of wall plugs from removed shelves, Building 13	E	07.05.10	
27	Detail of wall plugs from removed shelves, Building 13	E	07.05.10	
28	Detail of trusses in Building 13	S	07.05.10	
29	Detail of trusses in Building 13	S	07.05.10	
30	General view of interior of Building 13	NE	07.05.10	
31	General view of interior of Building 13	NE	07.05.10	
32	General view of interior of Building 13	SW	07.05.10	
33	General view of interior of Building 13	SW	07.05.10	
34	Detail of window and blocked door, Building 13	E	07.05.10	
35	Detail of window and blocked door, Building 13	E	07.05.10	
36	I.D. shot	-	07.05.10	

Film 8

Film type: 35mm mono

Frame	Description	View From	Date	Report Plate
1	General view of west elevation of Building 11	W	07.05.10	
2	General view of west elevation of Building 11	W	07.05.10	
3	General view of west elevation of Building 11	W	07.05.10	
4	General view of west elevation of Building 11	W	07.05.10	
5	General view of west elevation of Building 11	W	07.05.10	
6	General view of west elevation of Building 11	W	07.05.10	
7	General view of west elevation of Building 11	W	07.05.10	
8	General view of west elevation of Building 11	W	07.05.10	
9	General view of west elevation of Building 11	W	07.05.10	
10	General view of west elevation of Building 11	W	07.05.10	
11	General view of west elevation of Building 11	W	07.05.10	
12	General view of north elevation of Building 11	S	07.05.10	
13	General view of north elevation of Building 11	S	07.05.10	
14	General view of north elevation of Building 11	S	07.05.10	31
15	General view of north elevation of Building 11	S	07.05.10	
16	General view of north elevation of Building 11	S	07.05.10	
17	General view of north elevation of Building 11	S	07.05.10	
18	General view of east elevation of Building 11	E	07.05.10	
19	General view of east elevation of Building 11	E	07.05.10	
20	General view of east elevation of Building 11	E	07.05.10	
21	General view of east elevation of Building 11	E	07.05.10	
22	General view of east elevation of Building 11	E	07.05.10	
23	General view of east elevation of Building 11	E	07.05.10	
24	General view of east elevation of Building 11	E	07.05.10	
25	General view of east elevation of Building 11	E	07.05.10	
26	General view of east elevation of Building 11	E	07.05.10	
27	General view of east elevation of Building 11	E	07.05.10	
28	General view of east elevation of Building 11	E	07.05.10	
29	General view of east elevation of Building 11	E	07.05.10	
30	General view of east elevation of Building 11	E	07.05.10	
31	General view of east elevation of Building 11	E	07.05.10	
32	General view of east elevation of Building 11	E	07.05.10	
33	General view of east elevation of Building 11	E	07.05.10	
34	General view of east elevation of Building 11	E	07.05.10	
35	General view of east elevation of Building 11	E	07.05.10	
36	I.D. shot	-	07.05.10	

Film 9

Film type: 35mm mono

Frame	Description	View From	Date	Report Plate
1	Detail of blocked circular openings in north wall of B.11	S	07.05.10	40
2	Detail of blocked circular openings in north wall of B.11	S	07.05.10	
3	Detail of blocked circular openings in north wall of B.11	S	07.05.10	
4	General view in northern lean-to of Building 11	E	07.05.10	
5	General view in northern lean-to of Building 11	E	07.05.10	
6	General view of internal north wall of Building 11	SW	07.05.10	
7	General view of internal north wall of Building 11	SW	07.05.10	
8	General view of internal north elevation of Building 10	S	07.05.10	
9	General view of internal north elevation of Building 10	S	07.05.10	
10	Detail of the western Weedon Street gate	S	07.05.10	3
11	Detail of the western Weedon Street gate	S	07.05.10	
12	General view of western street elevation of Building 10	W	07.05.10	
13	General view of western street elevation of Building 10	W	07.05.10	
14	General view of western street elevation of Building 10	W	07.05.10	32
15	General view of western street elevation of Building 10	W	07.05.10	
16	General view of western street elevation of Building 10	W	07.05.10	
17	General view of western street elevation of Building 10	W	07.05.10	
18	General view of southern elevation of Building 10	SE	07.05.10	
19	General view of southern elevation of Building 10	SE	07.05.10	
20	General view of southern elevation of Building 10	S	07.05.10	
21	General view of southern elevation of Building 10	S	07.05.10	
22	General view of southern elevation of Building 11	SW	07.05.10	
23	General view of southern elevation of Building 11	SW	07.05.10	
24	General view of southern elevation of Building 11	SW	07.05.10	
25	General view of southern elevation of Building 11	SW	07.05.10	
26	General view of southern elevation of Building 11	SW	07.05.10	
27	General view of southern elevation of Building 11	SW	07.05.10	
28	Detail of truss visible in southern elevation of B.11	S	07.05.10	
29	Detail of truss visible in southern elevation of B.11	S	07.05.10	
30	General view of southern elevation of Building 11	S	07.05.10	
31	General view of southern elevation of Building 11	S	07.05.10	
32	General view of western elevation of Building 11	W	07.05.10	
33	General view of western elevation of Building 11	W	07.05.10	
34	General view of western elevation of Building 11	W	07.05.10	
35	General view of western elevation of Building 11	W	07.05.10	
36	I.D. shot	-	07.05.10	

Film 10

Film type: 35mm mono

Frame	Description	View From	Date	Report Plate
1	General view of lubrication pump pit, DD mill, B.11	S	07.05.10	
2	General view of lubrication pump pit, DD mill, B.11	S	07.05.10	
3	General view of lubrication pump pit, DD mill, B.11	S	07.05.10	
4	General view of chimney and furnace control for DD mill	SW	07.05.10	
5	General view of chimney and furnace control for DD mill	SW	07.05.10	
6	Detail of collapsed furnaces south of DD mill, B.11	W	07.05.10	
7	Detail of collapsed furnaces south of DD mill, B.11	W	07.05.10	
8	Detail of collapsed furnace south of DD mill, B.11	W	07.05.10	
9	Detail of collapsed furnace south of DD mill, B.11	W	07.05.10	
10	Detail of fixings for hot saw in DD mill, B.11	NW	07.05.10	
11	Detail of fixings for hot saw in DD mill, B.11	NW	07.05.10	
12	General view of foundations for run-out rolls, DD mill	S	07.05.10	
13	General view of foundations for run-out rolls, DD mill	S	07.05.10	
14	General view of foundations for rolling stands, DD mill	E	07.05.10	
15	General view of foundations for rolling stands, DD mill	E	07.05.10	
16	Detail of aperture in DD mill motor house for motor	W	07.05.10	
17	Detail of aperture in DD mill motor house for motor	W	07.05.10	
18	Detail of switchgear in DD mill motor house	W	07.05.10	
19	Detail of switchgear in DD mill motor house	W	07.05.10	
20	General view of switchgear in DD mill motor house	NW	07.05.10	
21	General view of switchgear in DD mill motor house	NW	07.05.10	56
22	Detail of remnant of travelling crane, north of B.11	SW	07.05.10	
23	Detail of remnant of travelling crane, north of B.11	SW	07.05.10	
24	General view of lathe bases in north end of B.11	W	07.05.10	
25	General view of lathe bases in north end of B.11	W	07.05.10	
26	General view of workshop in north end of Building 11	SW	07.05.10	
27	General view of workshop in north end of Building 11	SW	07.05.10	
28	Detail of brick floor fragments in Building 11	E	07.05.10	
29	Detail of brick floor fragments in Building 11	E	07.05.10	
30	Detail of brick floor fragments in Building 11	E	07.05.10	
31	Detail of brick floor fragments in Building 11	E	07.05.10	
32	General view of boiler house, east wall of Building 11	NW	07.05.10	44
33	General view of boiler house, east wall of Building 11	NW	07.05.10	
34	I.D. shot	-	07.05.10	
35	General view of internal north elevation of Building 11	S	07.05.10	
36	General view of internal north elevation of Building 11	S	07.05.10	

Film 11

Film type: 35mm mono

Frame	Description	View From	Date	Report Plate
1	General view of foundations for cooling beds, 18" Mill	E	07.05.10	
2	General view of foundations for cooling beds, 18" Mill	E	07.05.10	
3	General view of foundations for hot saw, 18" Mill, B.11	S	07.05.10	
4	General view of foundations for hot saw, 18" Mill, B.11	S	07.05.10	
5	General view of foundations for run-out rolls for 18" Mill	N	07.05.10	
6	General view of foundations for run-out rolls for 18" Mill	N	07.05.10	
7	General view of foundations for run-out rolls for 18" Mill	N	07.05.10	
8	General view of foundations for run-out rolls for 18" Mill	N	07.05.10	
9	General view of motor base for run-out rolls for 18" Mill	NW	07.05.10	
10	General view of motor base for run-out rolls for 18" Mill	NW	07.05.10	53
11	General view of remnant of tilt-table for 18" Mill, B.11	N	07.05.10	52
12	General view of remnant of tilt-table for 18" Mill, B.11	N	07.05.10	
13	General view of foundations for stands, 18" Mill, B.11	E	07.05.10	
14	General view of foundations for stands, 18" Mill, B.11	E	07.05.10	
15	General view of approach rolls for 18" Mill, Building 11	NE	07.05.10	
16	General view of approach rolls for 18" Mill, Building 11	NE	07.05.10	
17	General view of control room in motor house of 18" Mill	SE	07.05.10	47
18	General view of control room in motor house of 18" Mill	SE	07.05.10	
19	General view of pinion housing for 18" Mill, Building 11	N	07.05.10	
20	General view of pinion housing for 18" Mill, Building 11	N	07.05.10	
21	General view of bearing unit for 18" Mill, Building 11	W	07.05.10	
22	General view of bearing unit for 18" Mill, Building 11	W	07.05.10	
23	General view of foundations for main motor for 18" Mill	E	07.05.10	
24	General view of foundations for main motor for 18" Mill	E	07.05.10	
25	General view of switchgear in 18" Mill motor house	NW	07.05.10	
26	General view of switchgear in 18" Mill motor house	NW	07.05.10	
27	General view of chimney for 18" Mill billet furnace	SW	07.05.10	
28	General view of chimney for 18" Mill billet furnace	SW	07.05.10	
29	View of charging mechanism for 18" Mill furnace	E	07.05.10	
30	View of charging mechanism for 18" Mill furnace	E	07.05.10	
31	Detail of cast iron plate to 18" mill billet furnace	W	07.05.10	
32	Detail of cast iron plate to 18" mill billet furnace	W	07.05.10	
33	General view of collapsed billet reheating furnace	S	07.05.10	
34	General view of collapsed billet reheating furnace	S	07.05.10	
35	I.D. shot	-	07.05.10	

Film 12

Film type: 35mm mono

Frame	Description	View From	Date	Report Plate
1	General view of disused motor house, south end of B.11	NW	07.05.10	60
2	General view of disused motor house, south end of B.11	NW	07.05.10	
3	General view of disused motor house, south end of B.11	NW	07.05.10	
4	General view of interior of disused motor house, B.11	S	07.05.10	61
5	General view of interior of disused motor house, B.11	S	07.05.10	
6	Detail of false skylight in south office within B.11	N	07.05.10	
7	Detail of false skylight in south office within B.11	N	07.05.10	
8	General view of room in south end of Building 11	N	07.05.10	
9	General view of room in south end of Building 11	N	07.05.10	
10	Detail of fireplace of room in south end of Building 11	E	07.05.10	
11	Detail of fireplace of room in south end of Building 11	E	07.05.10	
12	General view of disused motor house, south end of B.11	SE	07.05.10	
13	General view of disused motor house, south end of B.11	SE	07.05.10	
14	General view of office in south end of Building 11	NW	07.05.10	41
15	General view of office in south end of Building 11	NW	07.05.10	
16	General view of staircase to unsurveyed basement, B11	S	07.05.10	
17	General view of staircase to unsurveyed basement, B11	S	07.05.10	
18	General view of machine base in south end of B.11	N	07.05.10	
19	General view of machine base in south end of B.11	N	07.05.10	
20	General view of machine base in south end of B.11	S	07.05.10	
21	General view of machine base in south end of B.11	S	07.05.10	
22	General view of air filter house in south end of B.11	SW	07.05.10	64
23	General view of air filter house in south end of B.11	SW	07.05.10	
24	General view of narrow store in south end of B.11	E	07.05.10	
25	General view of narrow store in south end of B.11	E	07.05.10	
26	General view of entrance and rails in west wall of B.11	E	07.05.10	
27	General view of entrance and rails in west wall of B.11	E	07.05.10	
28	Detail of blocked windows in west wall of B.11	E	07.05.10	30
29	Detail of blocked windows in west wall of B.11	E	07.05.10	
30	General view of former arched opening in W wall of B11	E	07.05.10	
31	General view of former arched opening in W wall of B11	E	07.05.10	
32	Detail of blocked windows in west wall of B.11	E	07.05.10	
33	Detail of blocked windows in west wall of B.11	E	07.05.10	
34	General view of machine base towards centre of B.11	E	07.05.10	
35	General view of machine base towards centre of B.11	E	07.05.10	
36	I.D. shot	-	07.05.10	

Film 13

Film type: 35mm mono

Frame	Description	View From	Date	Report Plate
1	Detail of inserted machine base, north end of B.10	W	07.05.10	
2	Detail of inserted machine base, north end of B.10	W	07.05.10	
3	Detail of inserted machine base, north end of B.10	W	07.05.10	
4	Detail of truncated rail of oval machine base, B.10	W	07.05.10	
5	Detail of truncated rail of oval machine base, B.10	W	07.05.10	
6	Detail of machine base, north end of Building 10	W	07.05.10	
7	Detail of machine base, north end of Building 10	W	07.05.10	
8	Detail of stone staircase, north end of Building 10	SW	07.05.10	
9	Detail of stone staircase, north end of Building 10	SW	07.05.10	
10	Detail of cabinets adjacent north wall of Building 10	S	07.05.10	
11	Detail of cabinets adjacent north wall of Building 10	SW	07.05.10	
12	General view of inserted opening, north wall of B.10	SW	07.05.10	
13	General view of inserted opening, north wall of B.10	SW	07.05.10	
14	Detail of blockings in floor of Building 10	N	07.05.10	
15	Detail of blockings in floor of Building 10	N	07.05.10	
16	General view of remnant of travelling crane, Building 11	SW	07.05.10	
17	General view of remnant of travelling crane, Building 11	SW	07.05.10	
18	General view of grinding base, east side of Building 11	W	07.05.10	
19	General view of grinding base, east side of Building 11	W	07.05.10	
20	General view of trusses in Building 11	S	07.05.10	
21	General view of trusses in Building 11	S	07.05.10	
22	Detail view of trusses in Building 11	S	07.05.10	
23	Detail view of trusses in Building 11	S	07.05.10	
24	Detail view of trusses in Building 11	E	07.05.10	
25	Detail view of trusses in Building 11	E	07.05.10	
26	Detail view of stanchion in Building 11	SE	07.05.10	
27	Detail view of stanchion in Building 11	SE	07.05.10	
28	General view in office on east wall of Building 11	NW	07.05.10	
29	General view in office on east wall of Building 11	NW	07.05.10	43
30	General view of office on east wall of Building 11	NW	07.05.10	
31	General view of office on east wall of Building 11	NW	07.05.10	
32	General view in recirculating house, east wall of B.11	NW	07.05.10	45
33	General view in recirculating house, east wall of B.11	NW	07.05.10	
34	Detail of pit to south of 18" Mill, Building 11	E	07.05.10	
35	Detail of pit to south of 18" Mill, Building 11	E	07.05.10	
36	I.D. shot	-	07.05.10	

Film 14

Film type: Medium Format

Frame	Description	View From	Date	Report Plate
1	General view of Building 10 from embankment W of Site	NW	10.05.10	
2	General view of Building 10 from embankment W of Site	NW	10.05.10	
3	General view of Site from embankment	W	10.05.10	1
4	General view of Site from embankment	W	10.05.10	
5	General view of Site from embankment	NW	10.05.10	2
6	General view of Site from embankment	NW	10.05.10	
7	General view of Building 11	SW	10.05.10	28
8	General view of Building 11	SW	10.05.10	
9	General view of Building 11	E	10.05.10	
10	General view of Building 11	E	10.05.10	

Film 15

Film type: Medium Format

Frame	Description	View From	Date	Report Plate
1	General view of Building 11	SE	10.05.10	33
2	General view of Building 11	SE	10.05.10	
3	General view of Building 19	N	10.05.10	87
4	General view of Building 19	N	10.05.10	
5	General view of Building 18	S	10.05.10	81
6	General view of Building 18	S	10.05.10	
7	General view of interior of Building 18	W	10.05.10	
8	General view of interior of Building 18	W	10.05.10	
9	General view of rail tracks along east side of B.11	N	10.05.10	
10	General view of rail tracks along east side of B.11	N	10.05.10	5

Film 16

Film type: Medium Format

Frame	Description	View From	Date	Report Plate
1	General view of Building 15	NE	10.05.10	
2	General view of Building 15	NE	10.05.10	
3	General view of Building 17	SE	10.05.10	
4	General view of Building 17	SE	10.05.10	
5	General view of yard between Buildings 11, 13 and 15	N	10.05.10	
6	General view of yard between Buildings 11, 13 and 15	N	10.05.10	78
7	Detail of window in east elevation of Building 13	E	10.05.10	
8	Detail of window in east elevation of Building 13	E	10.05.10	70
9	General view of Building 14 and adjacent store	NE	10.05.10	6
10	General view of Building 14 and adjacent store	NE	10.05.10	

Film 17

Film type: Medium Format

Frame	Description	View From	Date	Report Plate
1	General view of yard between Buildings 11-12 and store	W	10.05.10	65
2	General view of yard between Buildings 11-12 and store	W	10.05.10	
3	General view of Building 10	NE	10.05.10	10
4	General view of Building 10	NE	10.05.10	
5	General view of Building 10	N	10.05.10	
6	General view of Building 10	N	10.05.10	
7	General view of Building 10's water tower	NE	10.05.10	13
8	General view of Building 10's water tower	NE	10.05.10	
9	General view of interior of Building 10	NW	10.05.10	21
10	General view of interior of Building 10	NW	10.05.10	

Film 18

Film type: Medium Format

Frame	Description	View From	Date	Report Plate
1	General view of northern wall of Building 10	S	10.05.10	
2	General view of northern wall of Building 10	S	10.05.10	
3	General view of interior of Building 10	SW	10.05.10	
4	General view of interior of Building 10	SW	10.05.10	
5	Detail of switchgear cabinets in Building 10	SW	10.05.10	
6	Detail of switchgear cabinets in Building 10	SW	10.05.10	
7	Detail of office in southwest corner of Building 10	NE	10.05.10	18
8	Detail of office in southwest corner of Building 10	NE	10.05.10	
9	Detail of overhead crane in Building 10	S	10.05.10	
10	Detail of overhead crane in Building 10	S	10.05.10	

Film 19

Film type: Medium Format

Frame	Description	View From	Date	Report Plate
1	General view along raised platform in Building 10	SE	10.05.10	
2	General view along raised platform in Building 10	SE	10.05.10	
3	General view of interior of Building 10	N	10.05.10	15
4	General view of interior of Building 10	N	10.05.10	
5	General view of interior of office in SW corner of B.10	NE	10.05.10	
6	General view of interior of office in SW corner of B.10	NE	10.05.10	19
7	Detail of recessed arch in west wall of B.10	E	10.05.10	
8	Detail of recessed arch in west wall of B.10	E	10.05.10	
9	General view of lean-to to north of Building 10	NW	10.05.10	
10	General view of lean-to to north of Building 10	NW	10.05.10	

Film 20

Film type: Medium Format

Frame	Description	View From	Date	Report Plate
1	General view of interior of Building 13	SW	10.05.10	71
2	General view of interior of Building 13	SW	10.05.10	
3	General view of interior of Building 12	NE	10.05.10	
4	General view of interior of Building 12	NE	10.05.10	
5	Detail of roof structure of Building 12	NE	10.05.10	
6	Detail of roof structure of Building 12	NE	10.05.10	66
7	General view of workshop in north of Building 11	W	10.05.10	39
8	General view of workshop in north of Building 11	W	10.05.10	
9	General view of workshop in northwest of Building 11	SW	10.05.10	38
10	General view of workshop in northwest of Building 11	SW	10.05.10	

Film 21

Film type: Medium Format

Frame	Description	View From	Date	Report Plate
1	General view of west range of Building 11	N	10.05.10	
2	General view of west range of Building 11	N	10.05.10	34
3	General view of second to west range of Building 11	N	10.05.10	
4	General view of second to west range of Building 11	N	10.05.10	35
5	General view of second to east range of Building 11	N	10.05.10	
6	General view of second to east range of Building 11	N	10.05.10	36
7	General view of east range of Building 11	N	10.05.10	
8	General view of east range of Building 11	N	10.05.10	37
9	General view of foundation of cooling bed, 18" Mill, B.11	E	10.05.10	
10	General view of foundation of cooling bed, 18" Mill, B.11	E	10.05.10	55

Film 22

Film type: Medium Format

Frame	Description	View From	Date	Report Plate
1	Detail of switchgear in 18" Mill motor house, B.11	NW	10.05.10	
2	Detail of switchgear in 18" Mill motor house, B.11	NW	10.05.10	46
3	Detail of switchgear in 18" Mill motor house, B.11	NW	10.05.10	
4	Detail of switchgear in 18" Mill motor house, B.11	NW	10.05.10	
5	Detail of approach rolls and furnace of 18" Mill	W	10.05.10	
6	Detail of approach rolls and furnace of 18" Mill	W	10.05.10	49
7	Detail of approach rolls, 18" Mill, Building 11	SW	10.05.10	
8	Detail of approach rolls, 18" Mill, Building 11	SW	10.05.10	50
9	Detail of skid mechanism, 18" Mill, Building 11	SE	10.05.10	
10	Detail of skid mechanism, 18" Mill, Building 11	SE	10.05.10	54

Film 23

Film type: Medium Format

Frame	Description	View From	Date	Report Plate
1	Detail of pinion housing, 18" Mill, Building 11	N	10.05.10	
2	Detail of pinion housing, 18" Mill, Building 11	N	10.05.10	51
3	General view of DD Mill motor house, Building 11	W	10.05.10	
4	General view of DD Mill motor house, Building 11	W	10.05.10	58
5	General view of foundations of DD mill run-out rolls, B11	S	10.05.10	
6	General view of foundations of DD mill run-out rolls, B11	S	10.05.10	59
7	General view of furnaces to south of DD mill, Building 11	W	10.05.10	
8	General view of furnaces to south of DD mill, Building 11	W	10.05.10	57
9	Detail of air filter house, Building 11	W	10.05.10	
10	Detail of air filter house, Building 11	W	10.05.10	

Film 24

Film type: Medium Format

Frame	Description	View From	Date	Report Plate
1	View along internal rail network in southern half of B.11	E	10.05.10	63
2	View along internal rail network in southern half of B.11	E	10.05.10	
3	General view of southern half of Building 11	SE	10.05.10	62
4	General view of southern half of Building 11	SE	10.05.10	
5	General view of dining room in office in S of B.11	NE	10.05.10	42
6	General view of dining room in office in S of B.11	NE	10.05.10	
7	General view of kitchen in office in S of B.11	NW	10.05.10	
8	General view of kitchen in office in S of B.11	NW	10.05.10	
9	General view of southern wall of Building 11	NE	10.05.10	
10	General view of southern wall of Building 11	NE	10.05.10	

Film 25

Film type: Medium Format

Frame	Description	View From	Date	Report Plate
1	General view of south elevation of Building 10	SE	10.05.10	11
2	General view of south elevation of Building 10	SE	10.05.10	
3	General view of west elevation of turbine hall, B.10	SW	10.05.10	
4	General view of west elevation of turbine hall, B.10	SW	10.05.10	
5	General view of west elevation of Building 11	W	10.05.10	29
6	General view of west elevation of Building 11	W	10.05.10	
7	Detail of column and lattice girder, Building 11	SE	10.05.10	
8	Detail of column and lattice girder, Building 11	SE	10.05.10	
9	Detail of makers mark on weighbridge east of B.11	S	10.05.10	
10	Detail of makers mark on weighbridge east of B.11	S	10.05.10	

Film 26

Film type: 35mm mono

Frame	Description	View From	Date	Report Plate
1	Blocked arch between turbine hall and cableway, B.10	NE	11.05.10	
2	Blocked arch between turbine hall and cableway, B.10	NE	11.05.10	
3	Blocked arch between turbine hall and cableway, B.10	NE	11.05.10	
4	Open arch between turbine hall and cableway, B.10	SE	11.05.10	
5	Open arch between turbine hall and cableway, B.10	SE	11.05.10	
6	General view of room in north of cableway, B.10	N	11.05.10	
7	General view of room in north of cableway, B.10	N	11.05.10	
8	General view of room in north of cableway, B.10	S	11.05.10	23
9	General view of room in north of cableway, B.10	S	11.05.10	
10	Detail of name plate above blocked arch, Building 10	W	11.05.10	22
11	Detail of name plate above blocked arch, Building 10	W	11.05.10	
12	Detail of machine base in north end of Building 10	E	11.05.10	
13	Detail of machine base in north end of Building 10	E	11.05.10	
14	Detail of floor scars on platform in north end of B.10	NW	11.05.10	
15	Detail of floor scars on platform in north end of B.10	NW	11.05.10	
16	General view of floor scar in south end of Building 10	N	11.05.10	
17	General view of floor scar in south end of Building 10	N	11.05.10	
18	General view of floor scar in south end of Building 10	NW	11.05.10	
19	General view of floor scar in south end of Building 10	NW	11.05.10	
20	General view of air compressor base in Building 10	SW	11.05.10	20
21	General view of air compressor base in Building 10	SW	11.05.10	
22	General view of machine base in S end of Building 10	N	11.05.10	
23	General view of machine base in S end of Building 10	N	11.05.10	
24	Detail of trusses in south end of Building 10	S	11.05.10	
25	Detail of trusses in south end of Building 10	S	11.05.10	
26	Detail of trusses in north end of Building 10	N	11.05.10	
27	Detail of trusses in north end of Building 10	N	11.05.10	
28	Detail of straight joint in west elevation of Building 10	E	11.05.10	
29	Detail of straight joint in west elevation of Building 10	E	11.05.10	24
30	Detail of matched tiles between phases in Building 10	E	11.05.10	
31	Detail of matched tiles between phases in Building 10	E	11.05.10	
32	Detail of oil tank in Building 10	E	11.05.10	
33	Detail of oil tank in Building 10	E	11.05.10	
34	Detail of machine base in northern half of Building10	S	11.05.10	
35	Detail of machine base in northern half of Building10	S	11.05.10	
36	I.D. shot	-	11.05.10	

Film 27

Film type: 35mm mono

Frame	Description	View From	Date	Report Plate
1	Detail of control booth to west of 18" Mill, Building 11	SE	11.05.10	
2	Detail of control booth to west of 18" Mill, Building 11	SE	11.05.10	
3	Detail of control booth to west of 18" Mill, Building 11	SE	11.05.10	48
4	General view of east elevation of Building 10	NE	11.05.10	
5	General view of east elevation of Building 10	NE	11.05.10	
6	Detail of change in eaves in east elevation of B.10	SE	11.05.10	
7	Detail of change in eaves in east elevation of B.10	E	11.05.10	12
8	Detail of water depth gauge on water tower, B.10	E	11.05.10	14
9	Detail of water depth gauge on water tower, B.10	E	11.05.10	
10	General view of north elevation of water tower, B.10	N	11.05.10	
11	General view of north elevation of water tower, B.10	N	11.05.10	
12	General view of north elevation Building 10	N	11.05.10	
13	General view of north elevation Building 10	N	11.05.10	
14	General view of CO_2 store, Building 10 lean-to	E	11.05.10	27
15	General view of CO_2 store, Building 10 lean-to	E	11.05.10	
16	General view of pump room in Building 10 water tower	W	11.05.10	25
17	General view of pump room in Building 10 water tower	W	11.05.10	
18	General view of well in Building 10 lean-to	S	11.05.10	26
19	General view of well in Building 10 lean-to	S	11.05.10	
20	General view of south elevation of B.10 water tower	SW	11.05.10	
21	General view of south elevation of B.10 water tower	SW	11.05.10	
22	Detail of window in south elevation of B.10 water tower	S	11.05.10	
23	Detail of window in south elevation of B.10 water tower	S	11.05.10	
24	General view in CO_2 store, Building 10 lean-to	SE	11.05.10	
25	General view in CO_2 store, Building 10 lean-to	SE	11.05.10	
26	Detail of boiler house door in W elevation of turbine hall	S	11.05.10	
27	Detail of boiler house door in W elevation of turbine hall	S	11.05.10	
28	Detail of water pipe suspended from W all of turbine hall	S	11.05.10	
29	Detail of water pipe suspended from W all of turbine hall	S	11.05.10	
30	General view of boiler house, Building 10	NE	11.05.10	
31	General view of boiler house, Building 10	NE	11.05.10	
32	General view of boiler house, Building 10	E	11.05.10	9
33	General view of boiler house, Building 10	E	11.05.10	
34	General view of south wall of Building 10	N	11.05.10	
35	General view of south wall of Building 10	N	11.05.10	
36	I.D. shot	-	11.05.10	

Colour slide

Film type: 35mm colour slide

Frame	Description	View From	Date	Report Plate
1	General view of pump room in Building 10 water tower	W	10.05.10	
2	General view of pump room in Building 10 water tower	W	10.05.10	
3	Detail of tiles in Building 10	E	10.05.10	
4	Detail of tiles in Building 10	E	10.05.10	16
5	Detail of floor in Building 10	S	10.05.10	17
6	Detail of floor in Building 10	S	10.05.10	
7	General view of interior of Building 10	SW	10.05.10	
8	General view of interior of Building 10	SW	10.05.10	
9	General view of interior of Building 10	NW	10.05.10	
10	General view of interior of Building 10	NW	10.05.10	
11	General view of interior of Building 18	W	10.05.10	
12	General view of interior of Building 18	W	10.05.10	
13	General view of Building 11	SW	10.05.10	
14	General view of Building 11	SW	10.05.10	
15	General view of Building 11	NE	10.05.10	
16	General view of Building 11	NE	10.05.10	
17	General view of Building 10	E	10.05.10	
18	General view of Building 10	E	10.05.10	8
19	General view of site	E	10.05.10	
20	General view of site	E	10.05.10	

Site boundary

Building Recorded

Building unsurveyed

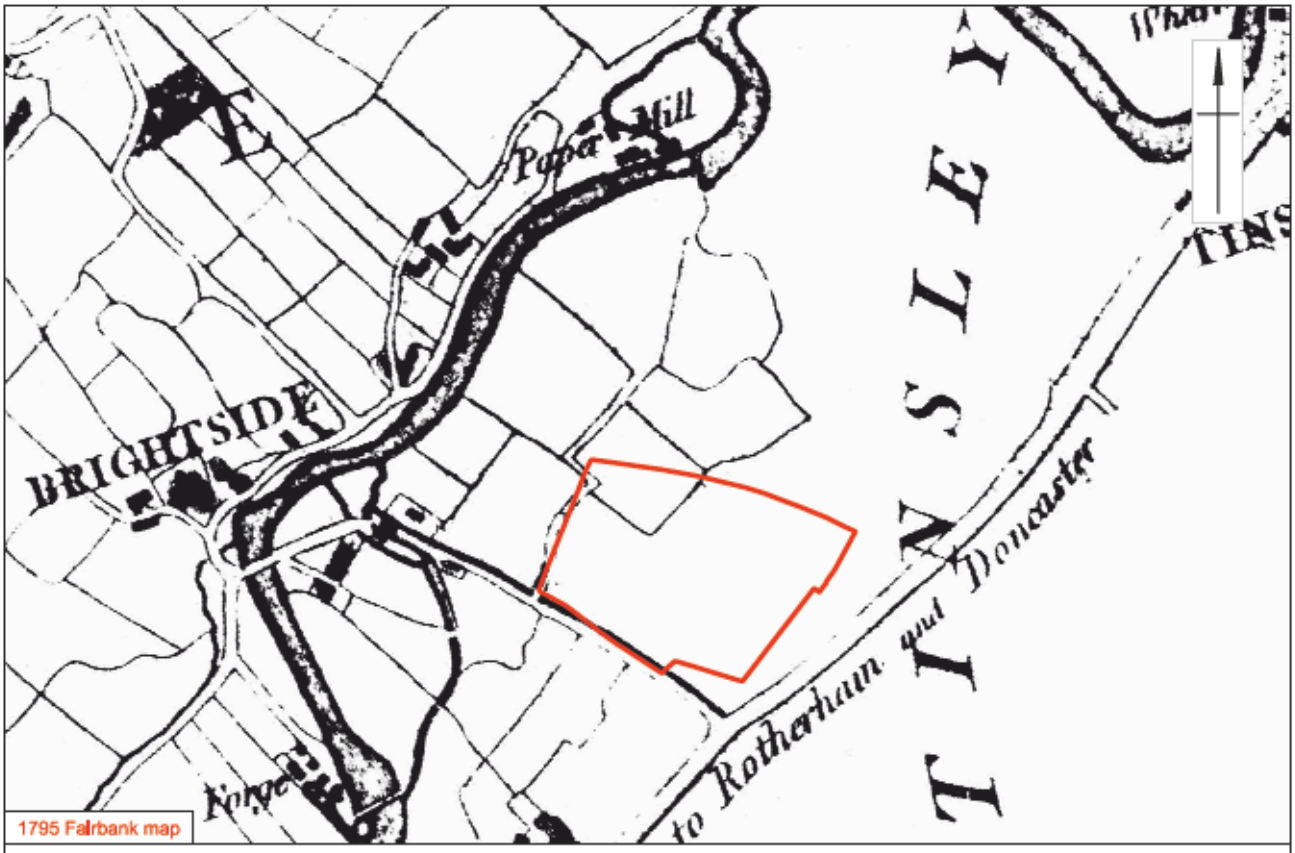
Building demolished at time of survey

Wessex Archaeology

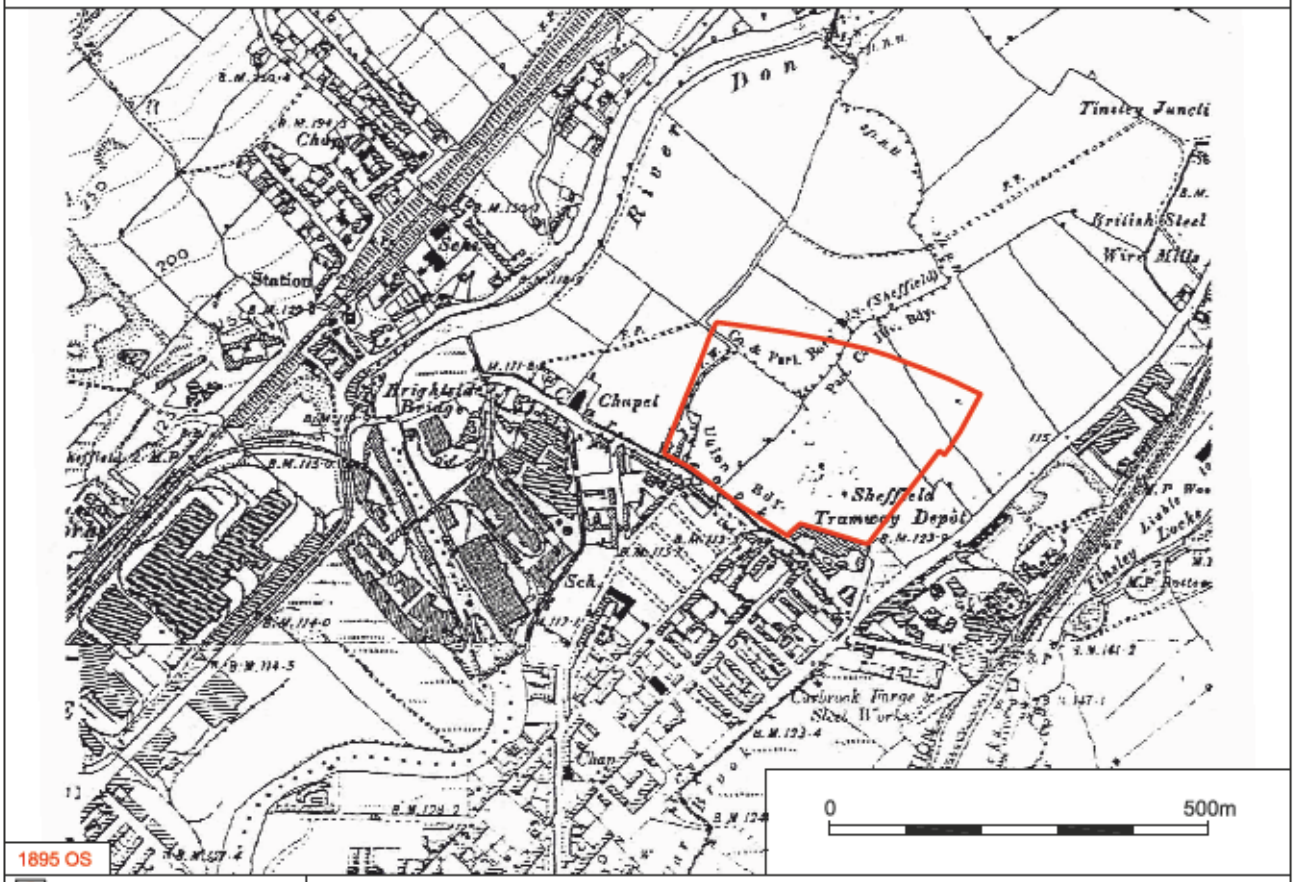
Date:	07/06/2010	Revision Number:	0
Scale:	1:2500 @ A4	Illustrator:	CS
Path:	Y:\Projects\74360_Meadowhall Rolling Mill\Drawing Office\Report Figs\Building Report\x-ref\74360_Buildings_plans_sections.dwg		

Site location

Figure 1



1795 Fairbank map



1895 OS

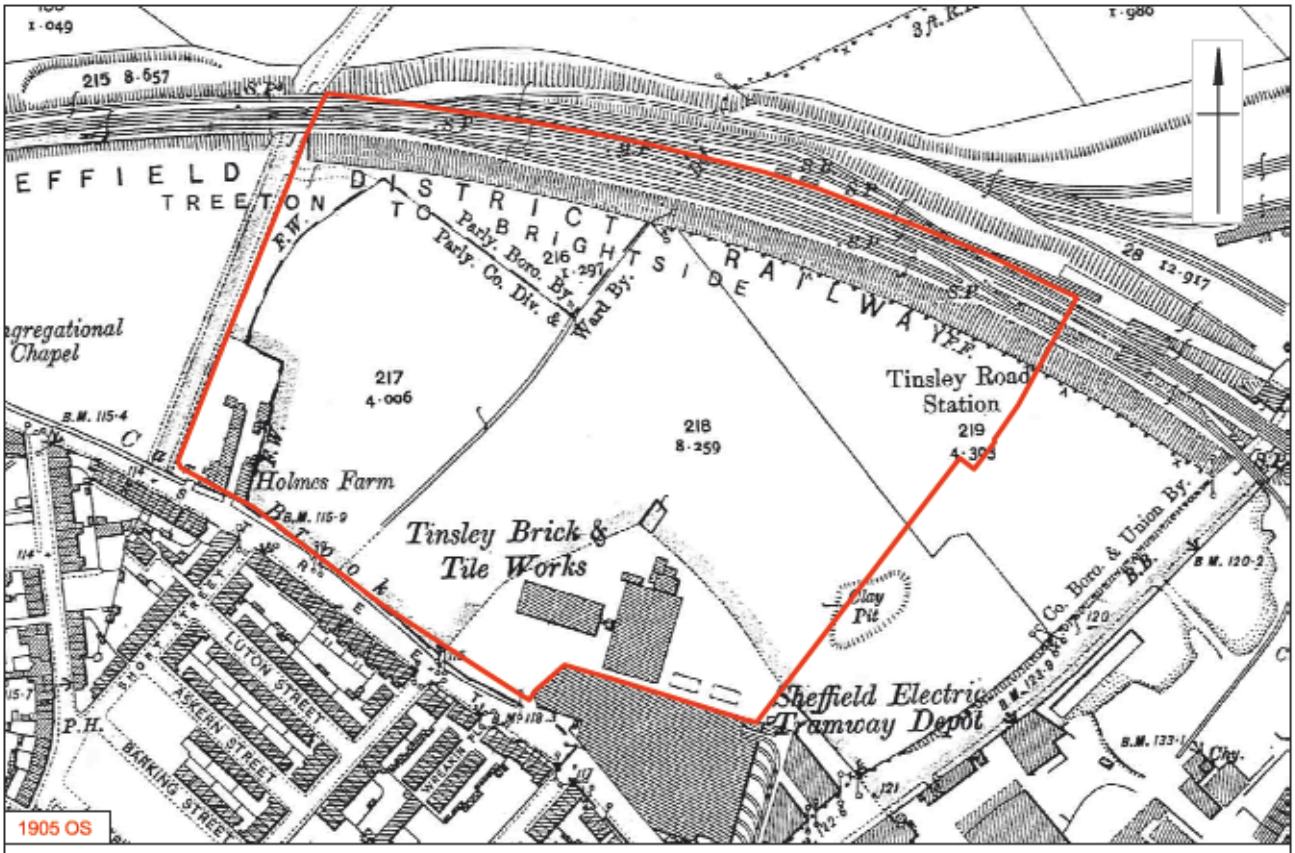
Site boundary

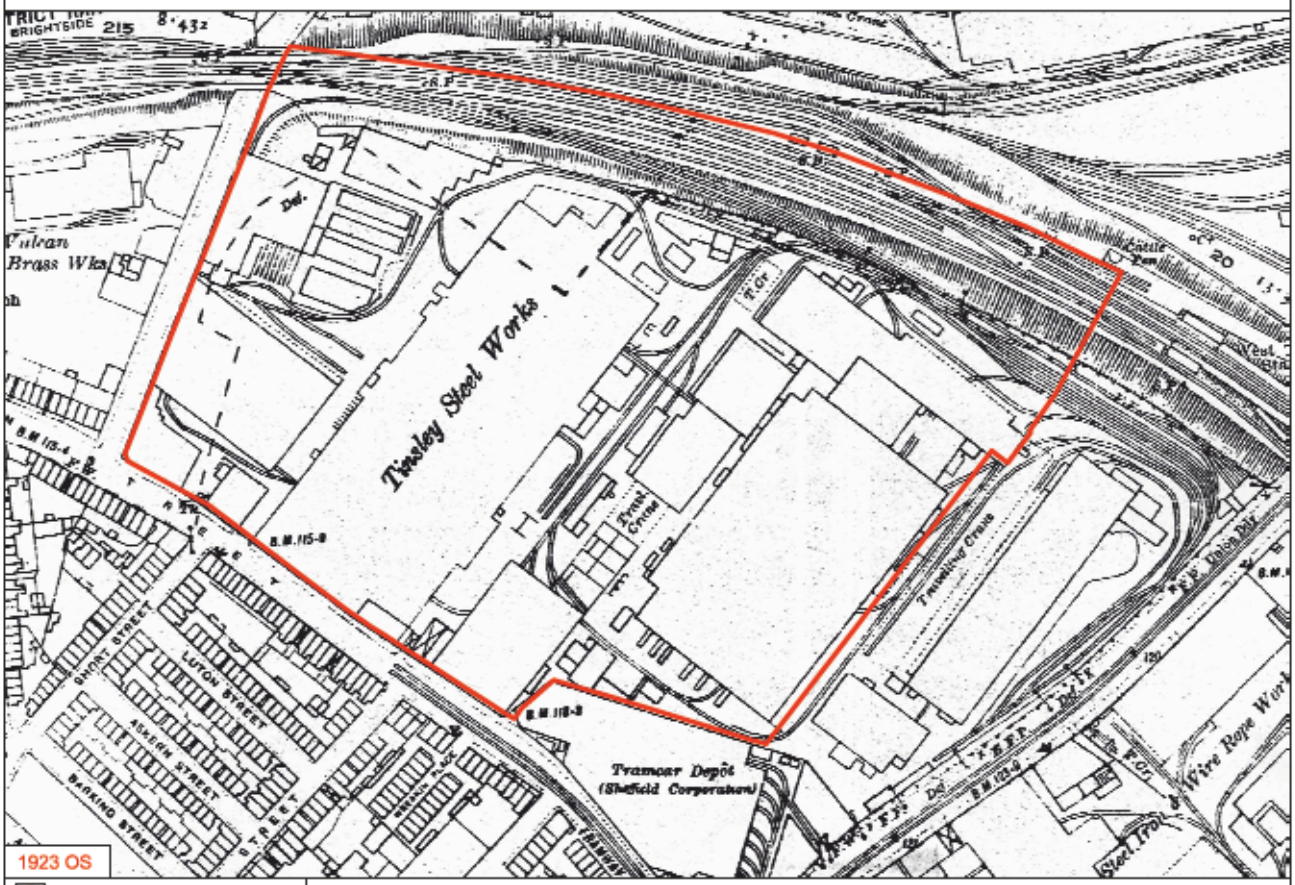
Date:	01/07/2010	Revision Number:	0
Scale:	1:10000 @ A4	Illustrator:	CS
Path:	Y:\Projects\74360_Meadowhall Rolling Mill\Drawing Office\Report Figs\Building Report\w+d\74360_Buildings_plans_sections.dwg		

Wessex Archaeology

Historic maps: 1795 Fairbank map and 1895 Ordnance Survey

Figure 2





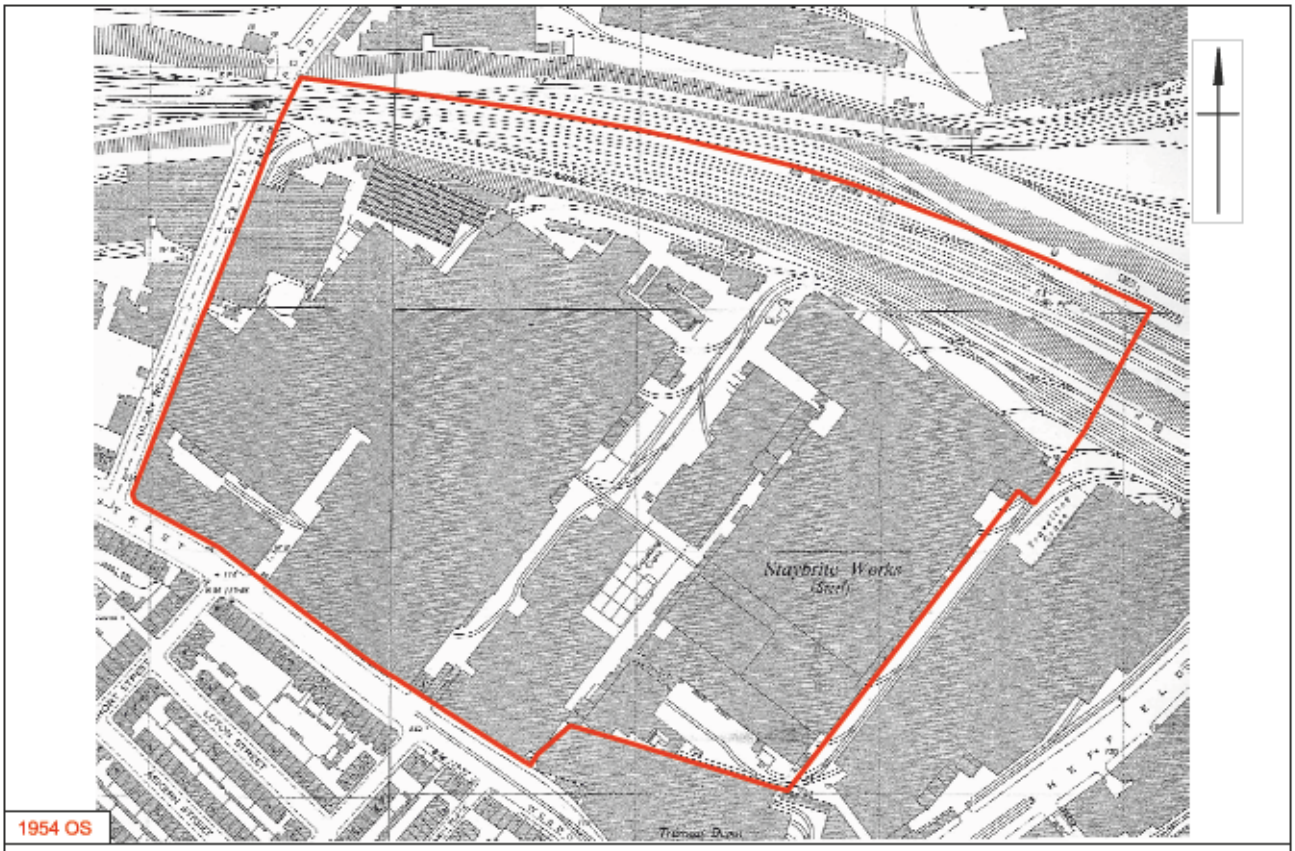
Site boundary

Date:	01/07/2010	Revision Number:	0
Scale:	not to scale	Illustrator:	CS
Path:	Y:\Projects\74360_Meadowhall Rolling Mill\Drawing Office\Report Figs\Building Report\[74360_Buildings_plans_sections.dwg		

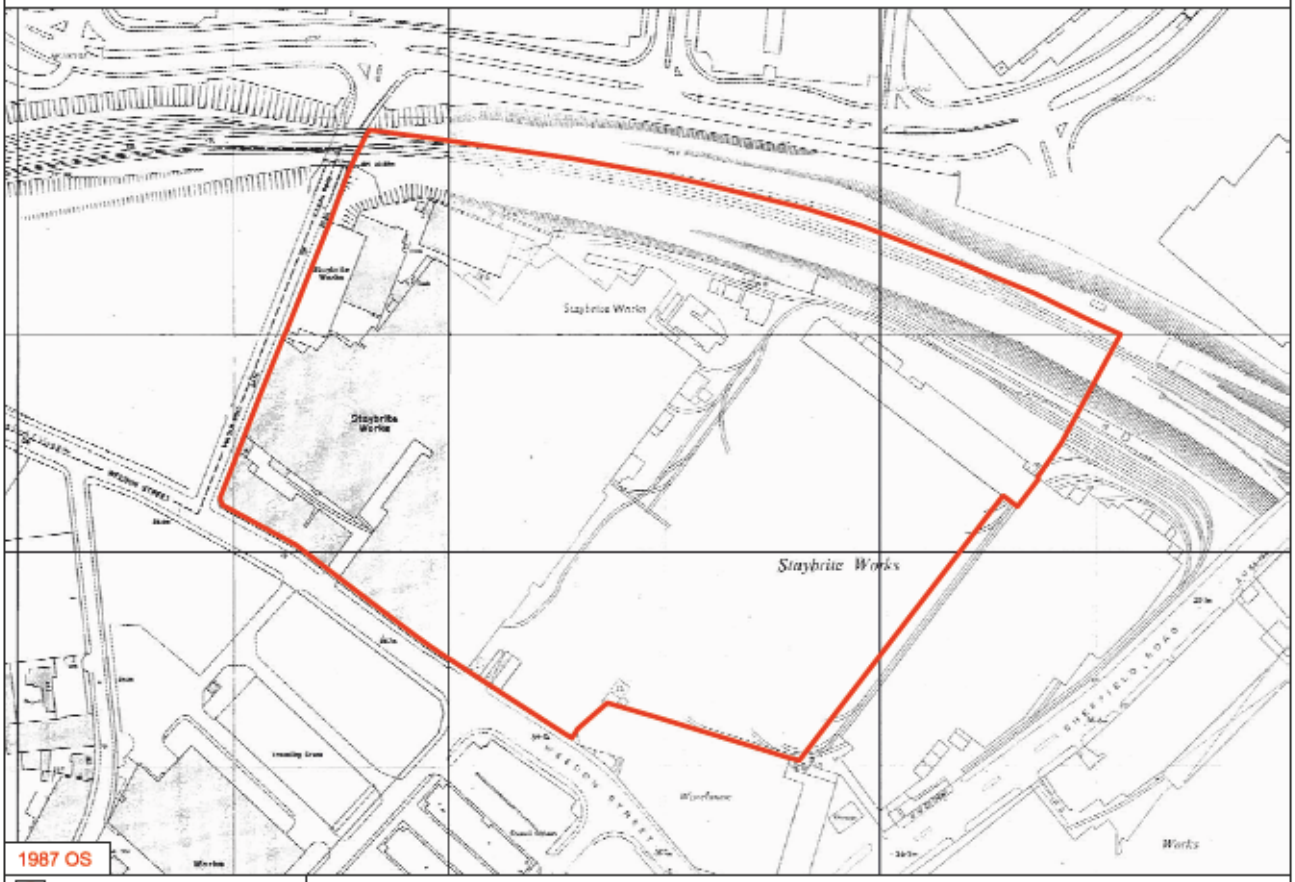
Wessex Archaeology

Historic maps: 1905 and 1923 Ordnance Survey

Figure 3



1954 OS



1987 OS

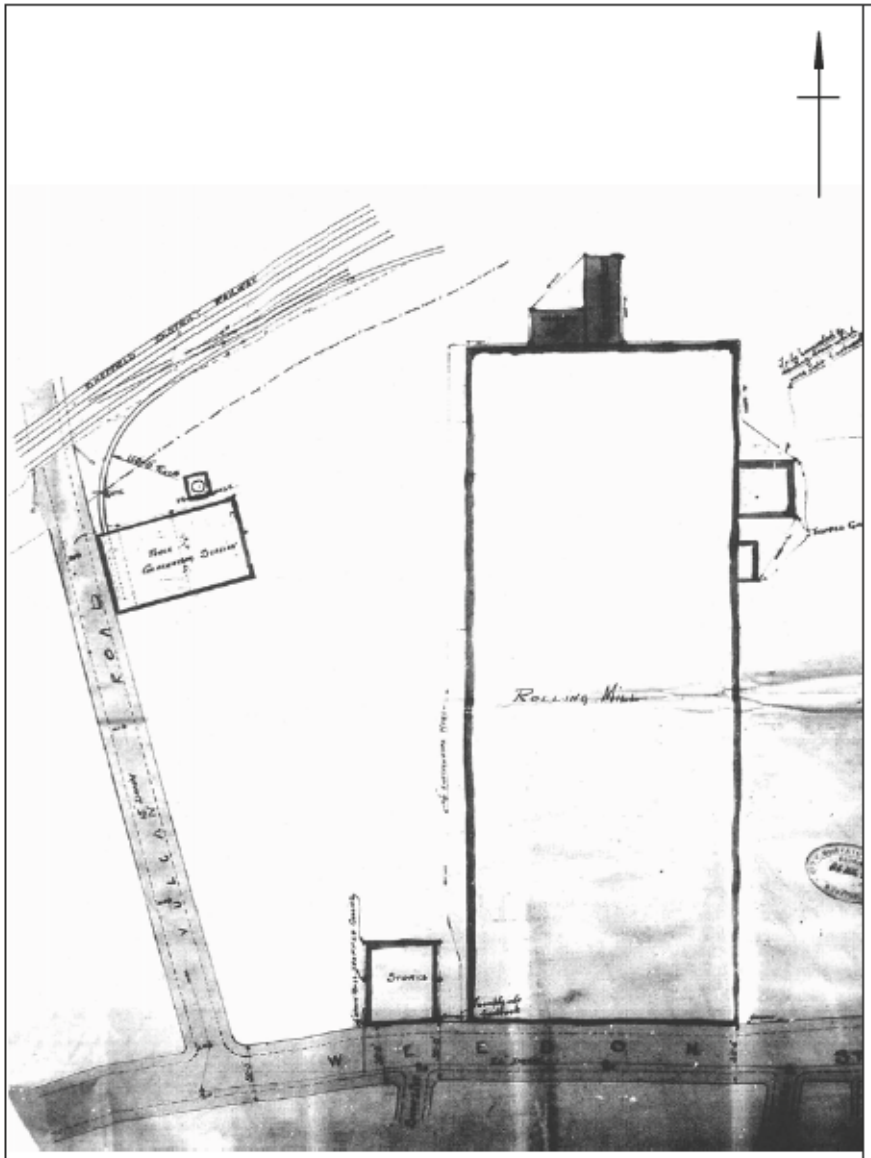
Site boundary

Date:	01/07/2010	Revision Number:	0
Scale:	not to scale	Illustrator:	CS
Path:	Y:\Projects\74360_Meadowhall Rolling Mill\Drawing Office\Report Figs\Building Report*.dwg\74360_Buildings_plans_sections.dwg		

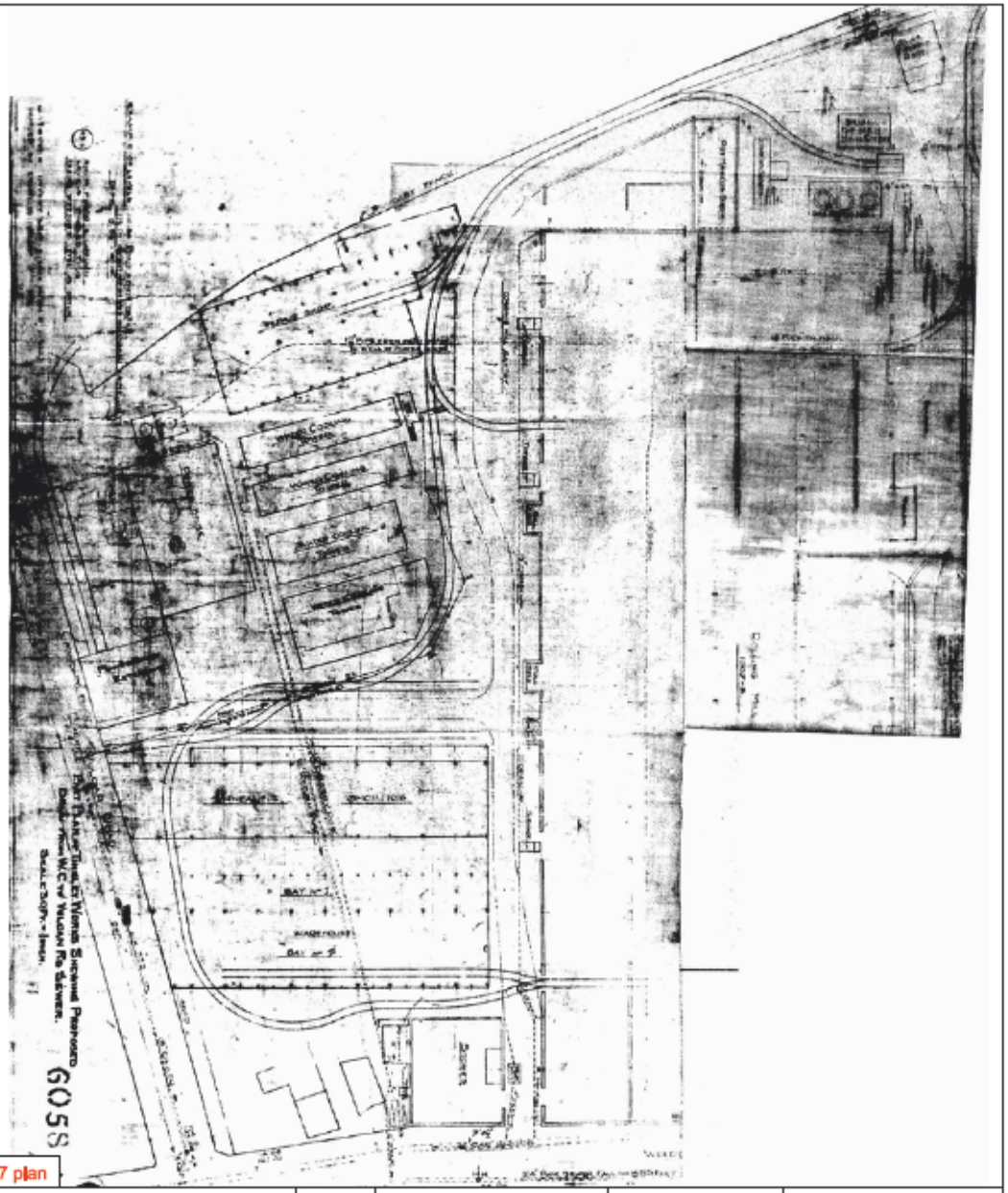
Wessex Archaeology

Historic maps: 1954 and 1987 Ordnance Survey

Figure 4



1908 plan



1917 plan

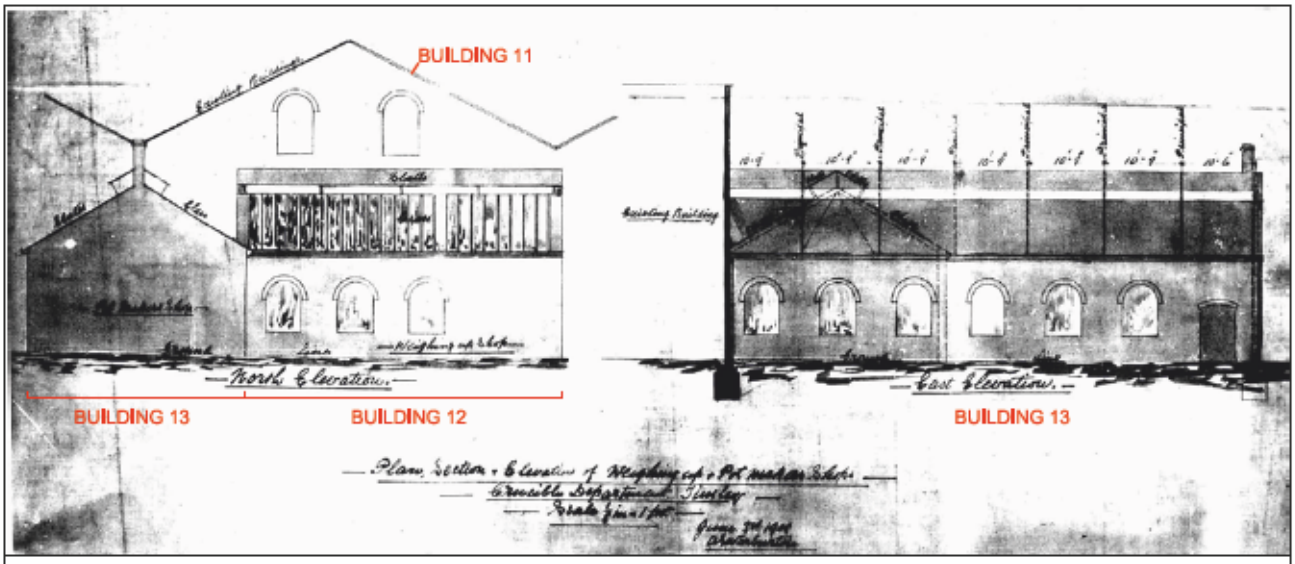
Wessex Archaeology

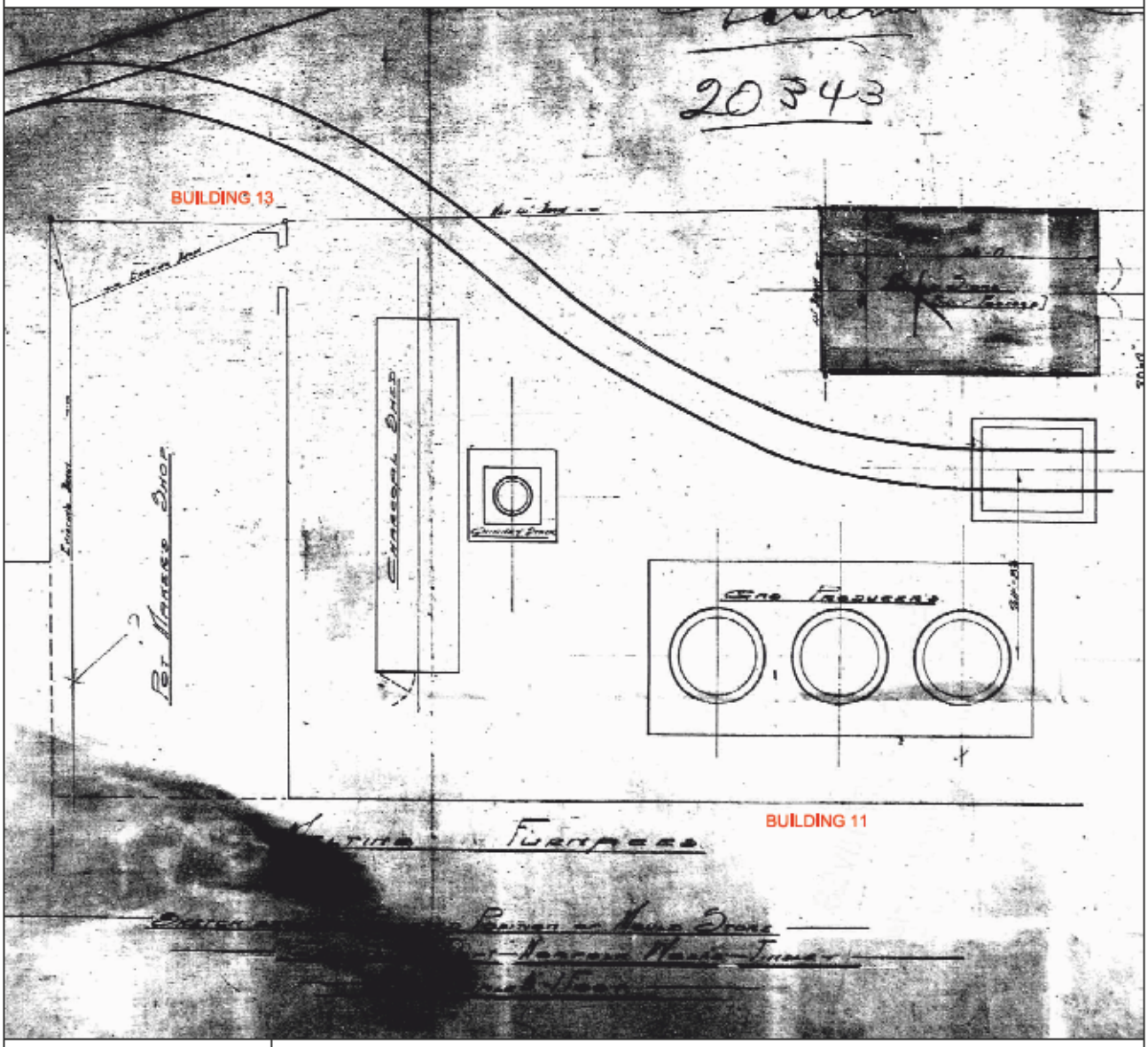
Historic plans provided by Sheffield City Archives, REF CA20343 39/56, CA20343 26/56 and 30/56
This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date:	01/07/2010	Revision Number:	0
Scale:	not to scale	Illustrator:	CS
Path:	Y:\Projects\74360_Meadowhall Rolling Mill\Drawing Office\Report Figs\Building Reports\w-d\74360_Buildings_plans_sections.dwg		

Historic plans: 1908 and 1917 site plans

Figure 5





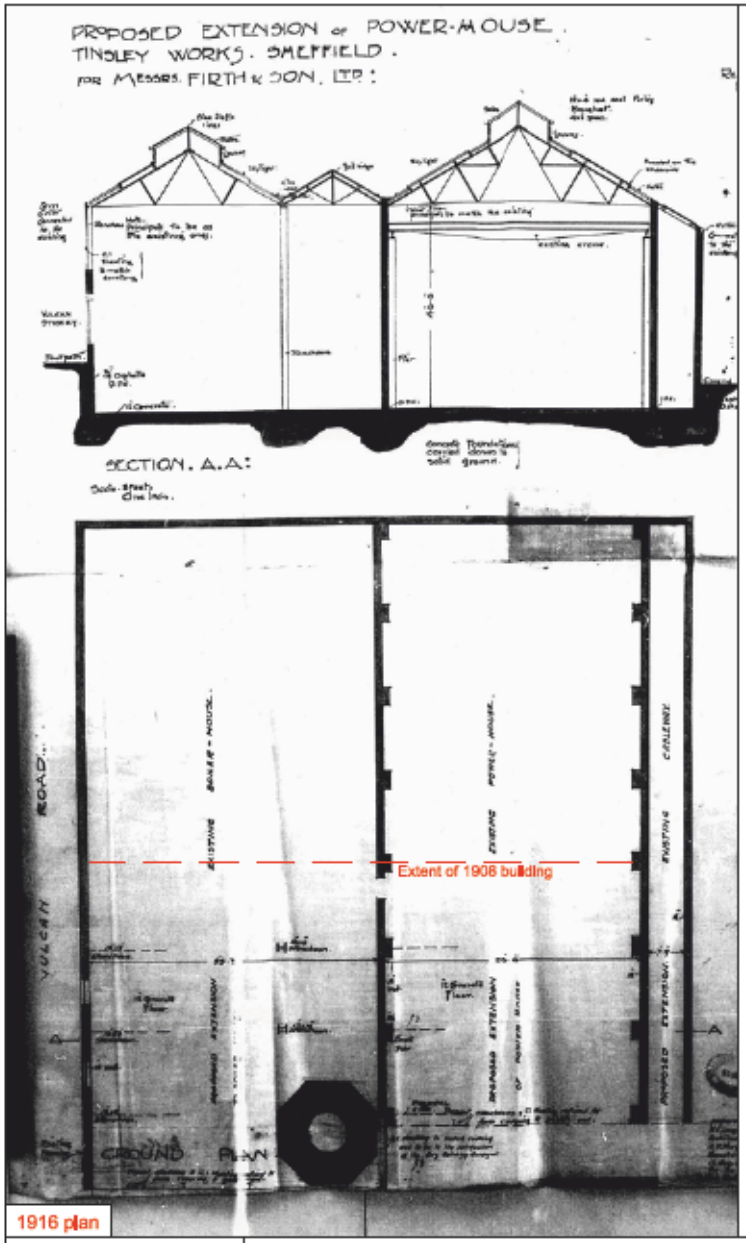
Historic plans provided by Sheffield City Archives. REF CA 20343 37/56 and CA 20820343 40/56

Date:	01/07/2010	Revision Number:	0
Scale:	not to scale	Illustrator:	CS
Path:	Y:\Projects\74360_Meadowhall Rolling Mill\Drawing Office\Report Figs\Building Report\x-ref\74360_Buildings_plans_sections.dwg		

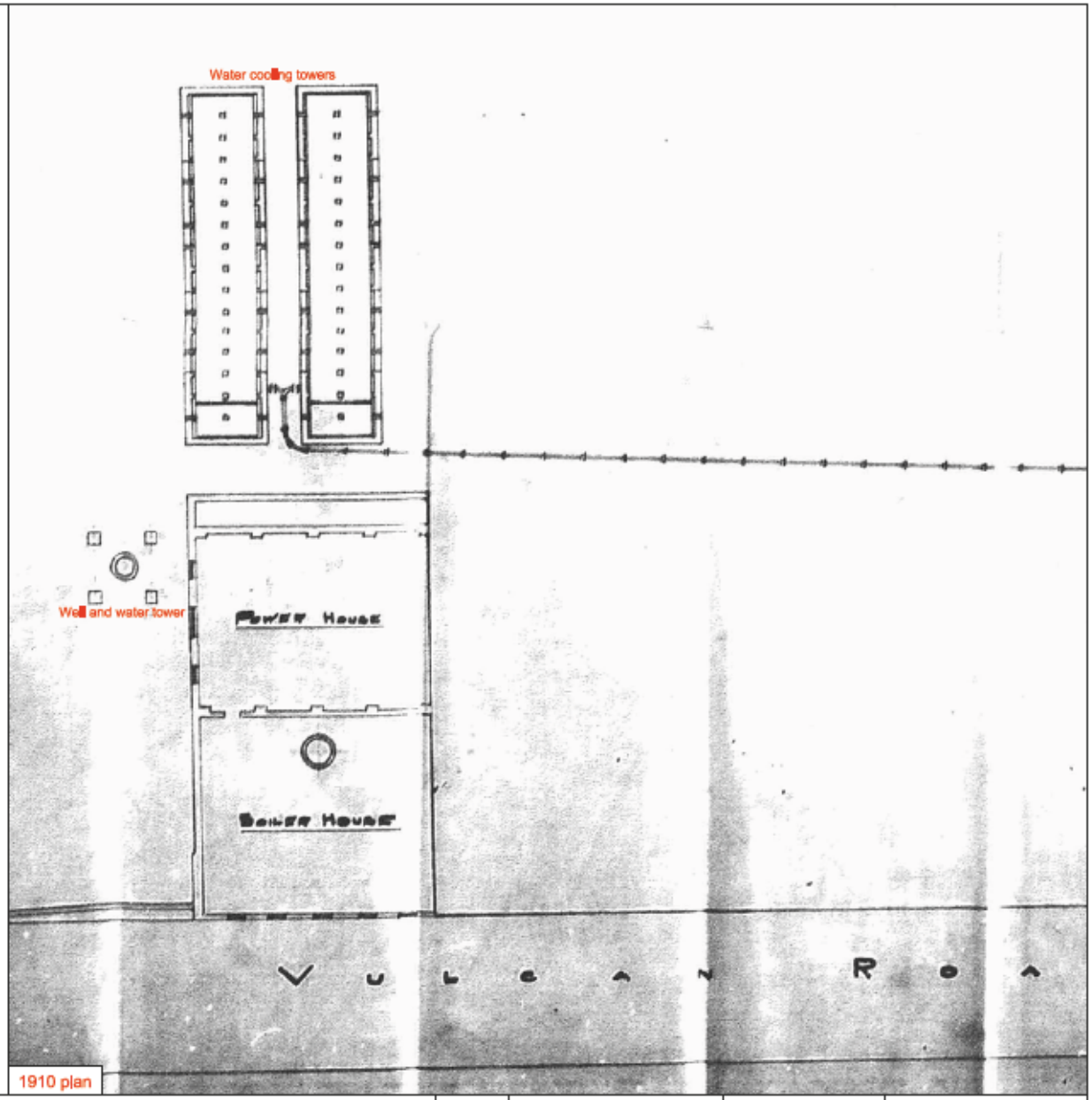
Wessex Archaeology

Historic plans: 1908 section of Buildings 12-13 and plan of adjacent gas producers

Figure 6



1916 plan



1910 plan

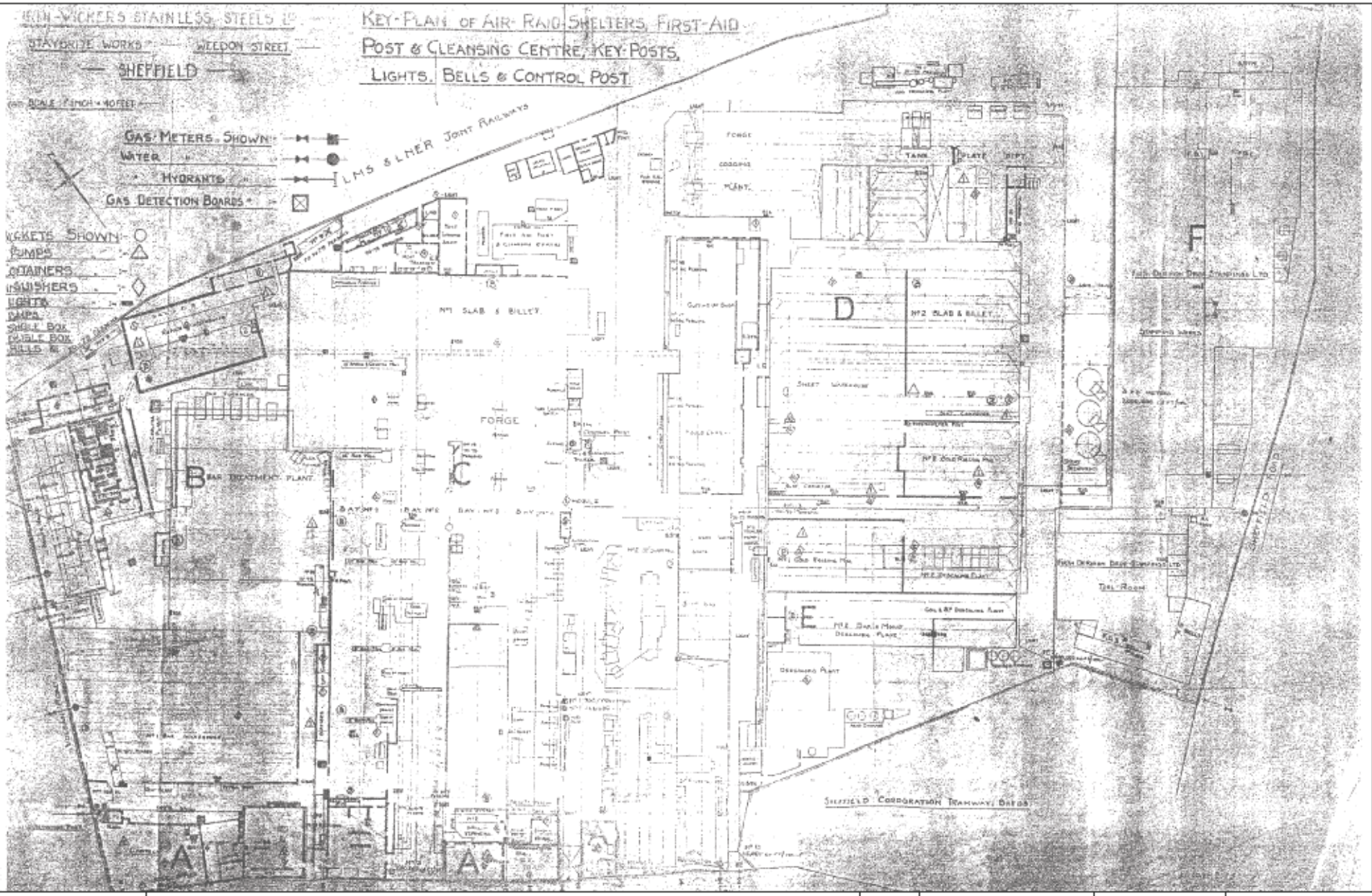
Wessex Archaeology

Historic plans provided by Sheffield City Archives, REF CA 20343 5/56 and CA 20343 24/56

Date:	01/07/2010	Revision Number:	0
Scale:	not to scale	Illustrator:	CS
Path:	Y:\Projects\74360_Meadowhall Rolling Mill\Drawing Office\Report Figs\Building Reports\mxd\74360_Buildings_plans_sections.dwg		

Historic plans: c.1910 plan of building 10 and proposed extension c.1916

Figure 7



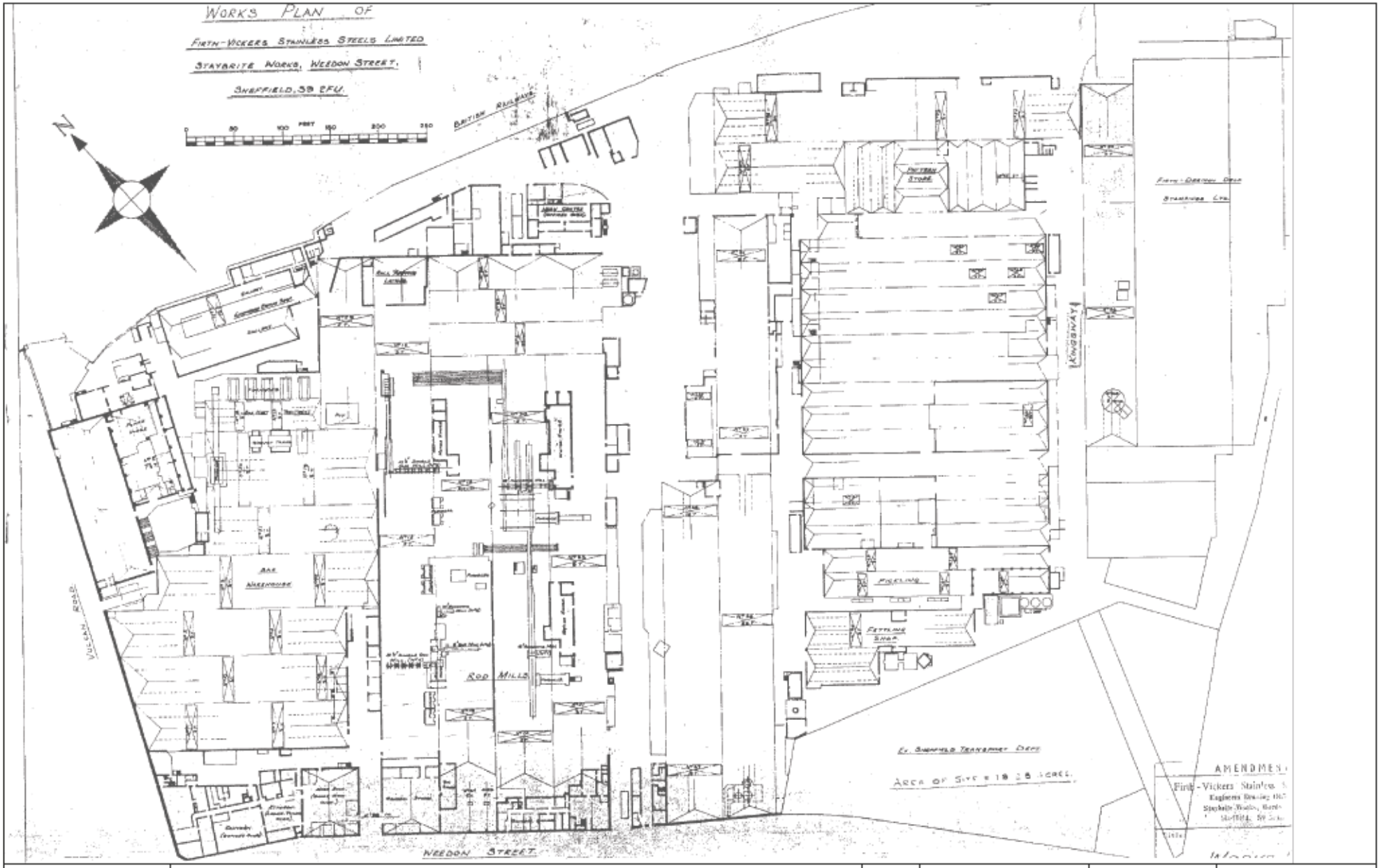
Wessex Archaeology

Historic plans provided by Sheffield City Archives
This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date:	01/07/2010	Revision Number:	0
Scale:	not to scale	Illustrator:	CS
Path:	Y:\Projects\74360_Meadowhall Rolling Mill\Drawing Office\Report Figs\Building Reports\w=d\74360_Buildings_plans_sections.dwg		

Historic plans: 1940's site plan

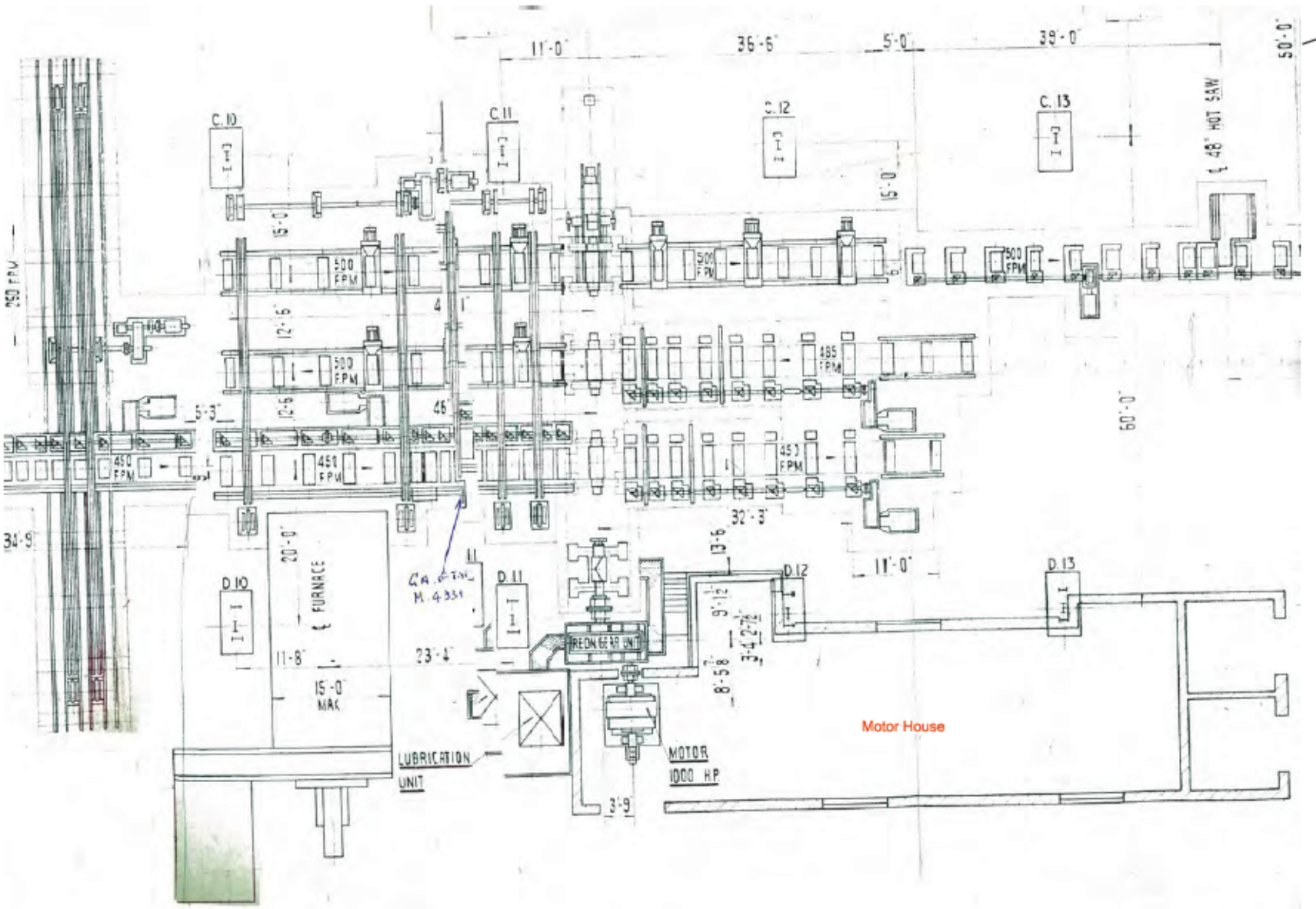
Figure 8



Wessex Archaeology	Historic plans provided by Sheffield City Archives This material is for client report only © Wessex Archaeology. No unauthorised reproduction.	Date: 01/07/2010	Revision Number: 0
		Scale: not to scale	Illustrator: CS
		Path:	Y:\Projects\74360_Meadowhall Rolling Mill\Drawing Office\Report Figs\Building Reports\w-d\74360_Buildings_plans_sections.dwg

Historic plans: 1980's site plan

Figure 9



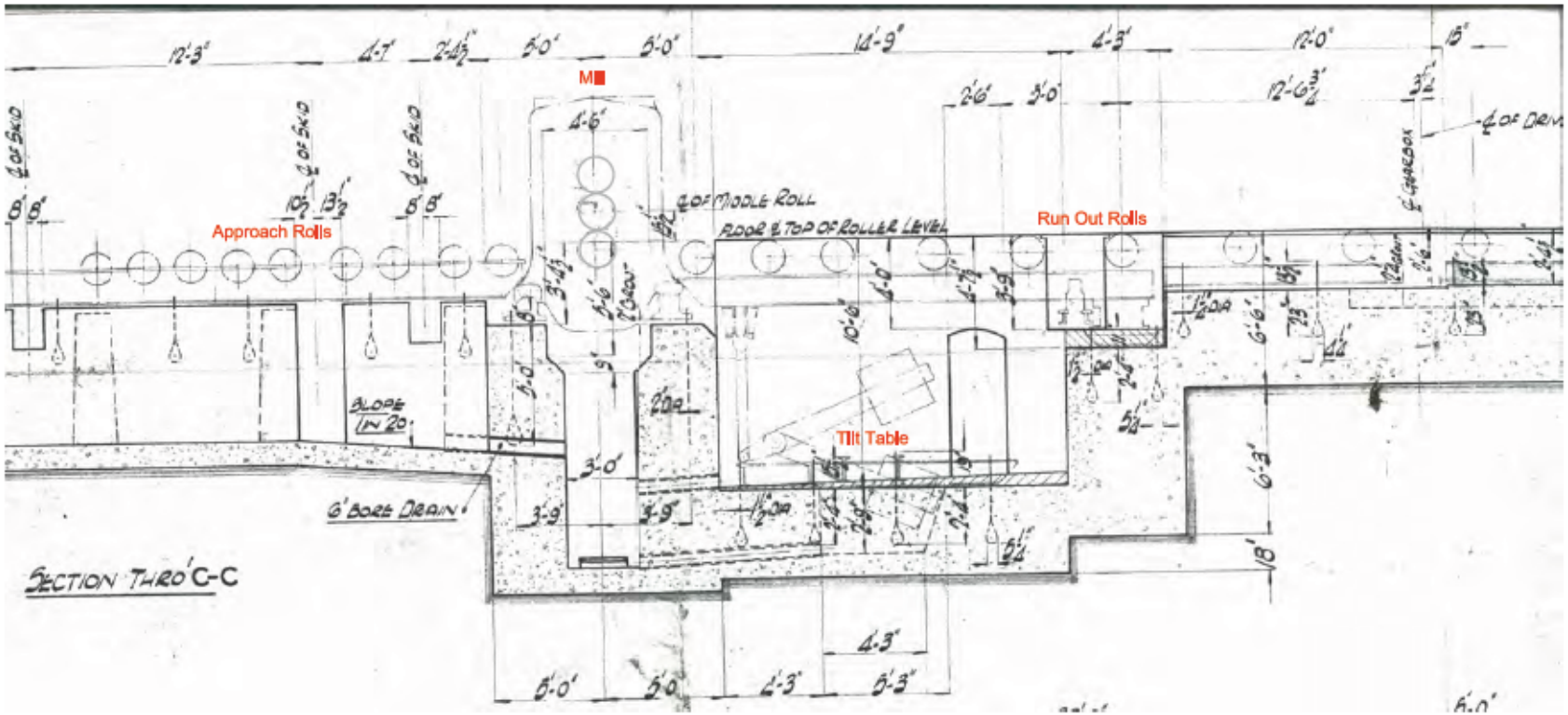
Wessex Archaeology			
	Date: 01/07/2010	Revision Number:	0
	Scale: not to scale	Illustrator:	CS
	Path: Y:\Projects\74360_Meadowhall Rolling Mill\Drawing Office\Report Figs\Building Reports\w-d\74360_Buildings_plans_sections.dwg		

Historic drawing: Alloy Rod and bar Mill layout, 1957 (Appendix 1:Plan 14)

Figure 10

S

N



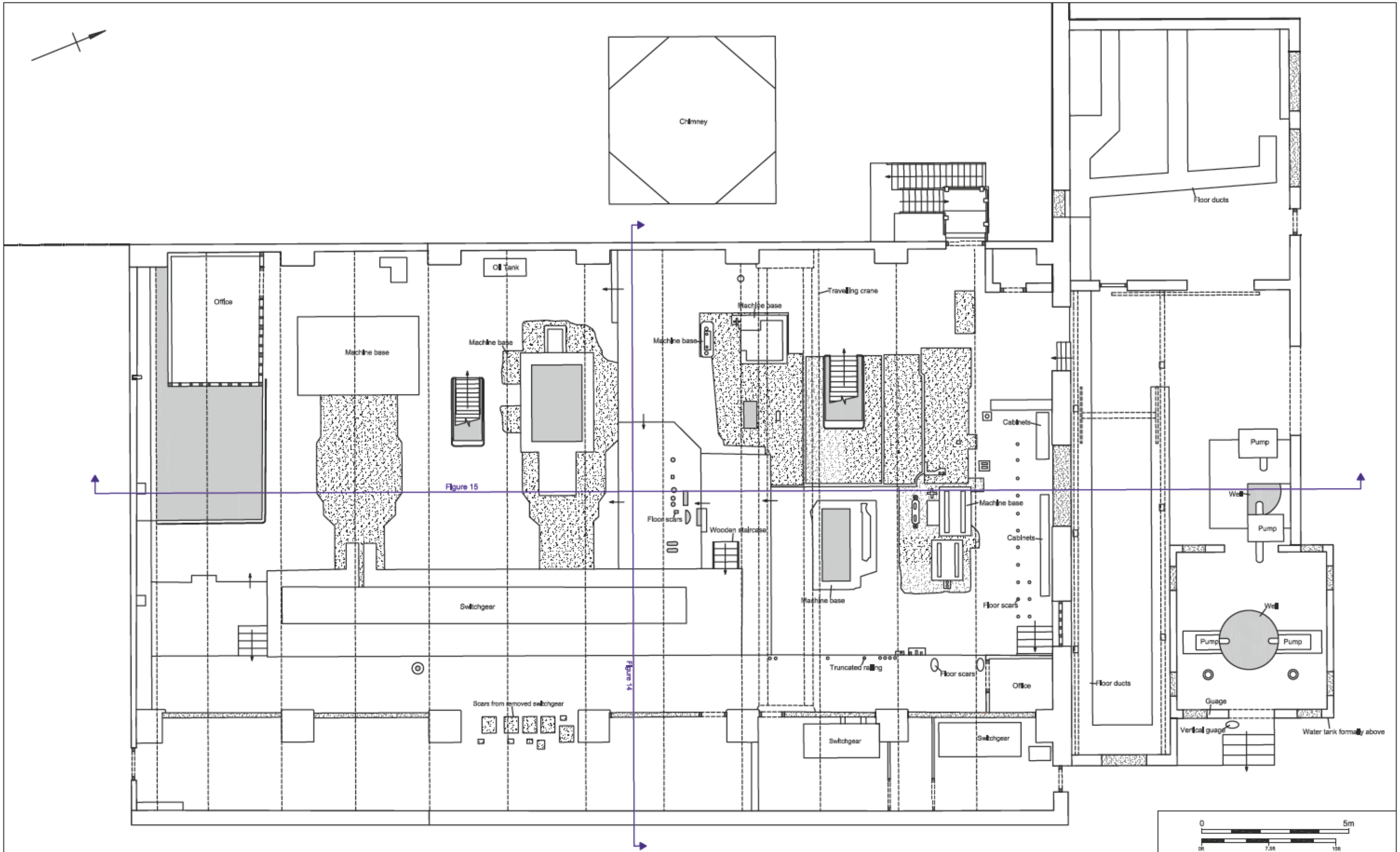
Wessex Archaeology		Date: 01/07/2010	Revision Number: 0
		Scale: not to scale	Illustrator: CS
	This material is for client report only © Wessex Archaeology. No unauthorised reproduction.	Path: Y:\Projects\74360_Meadowhall Rolling Mill\Drawing Office\Report Figs\Building Reports\74360_Buildings_plans_sections.dwg	

Historic drawing: Alloy Rod and bar Mill Foundation, 1957 (Appendix 1:Plan 28)

Figure 11

Building 10: General plan

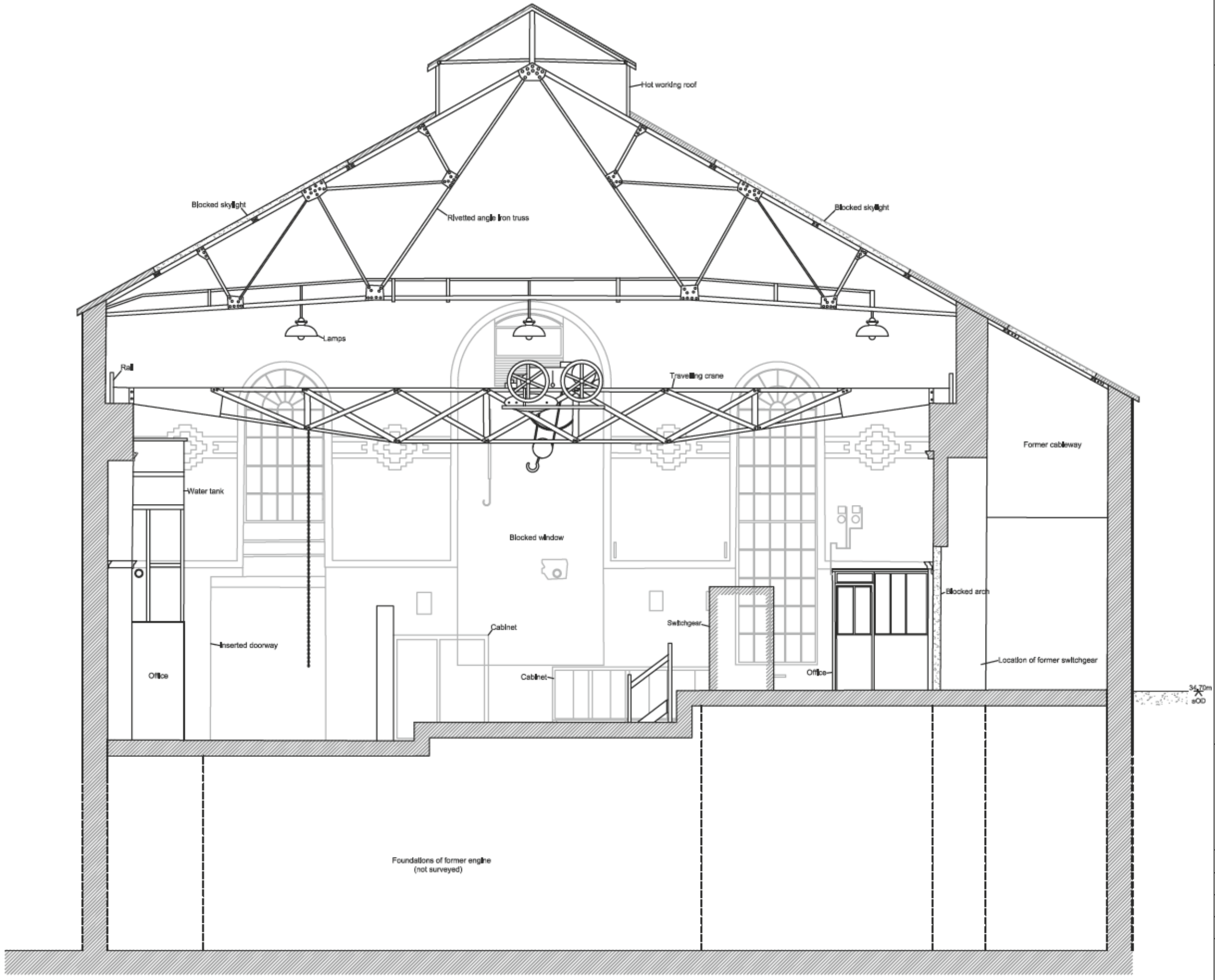
Figure 12



Building 10: Plan of Turbine Hall and ancillary structures

Figure 13

Wessex Archaeology



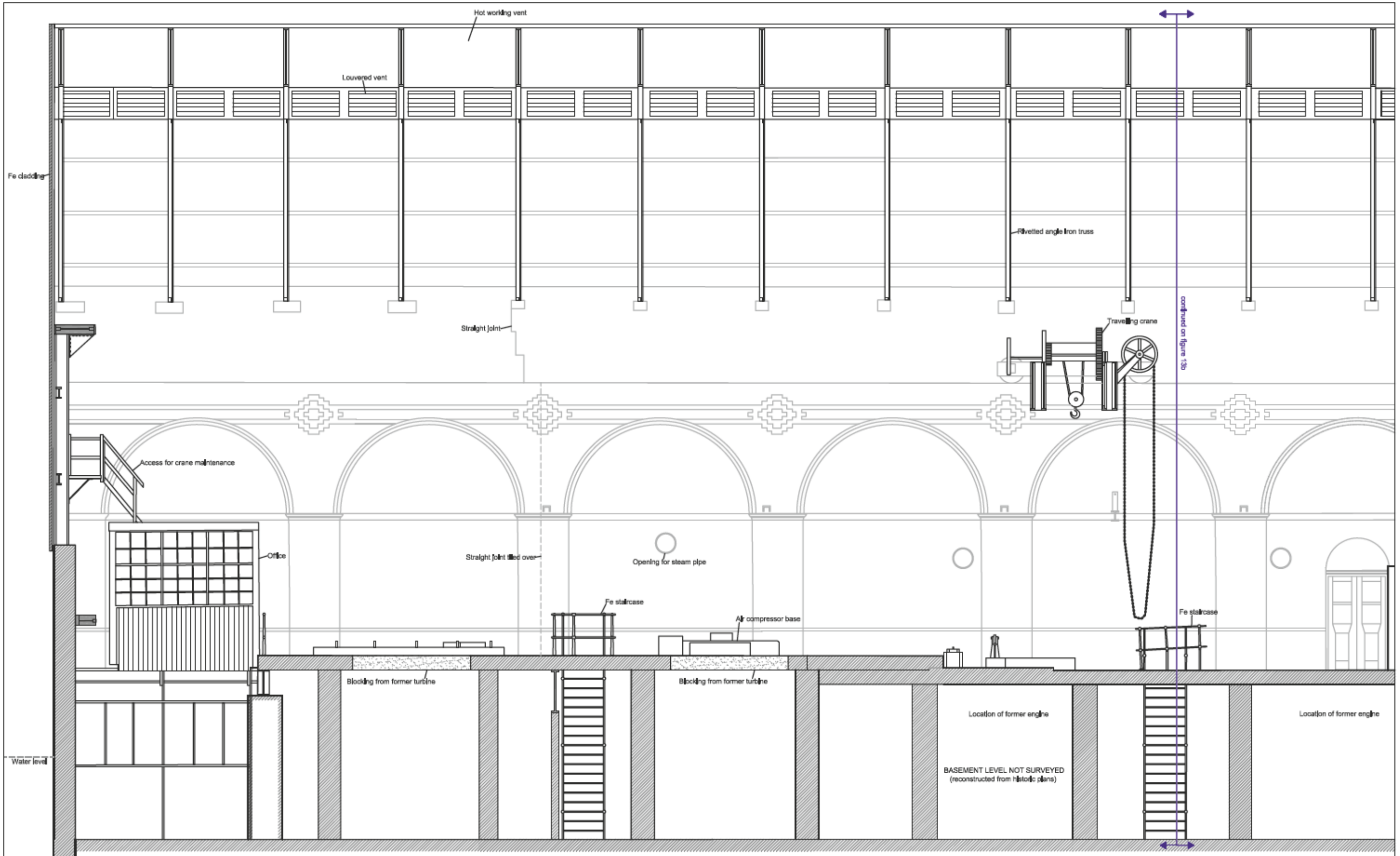
0 4m

0ft 6ft 12ft

Revision Number:	0
Illustrator:	CS
Date:	01/07/2010
Scale:	1:75 @ A3
Path:	Y:\Projects\74360_Meadowhall Rolling Mill\Drawing Office\Report Figs\Building Reports\74360_Buildings_plans_sections.dwg

Building 10: Transverse section through Turbine Hall

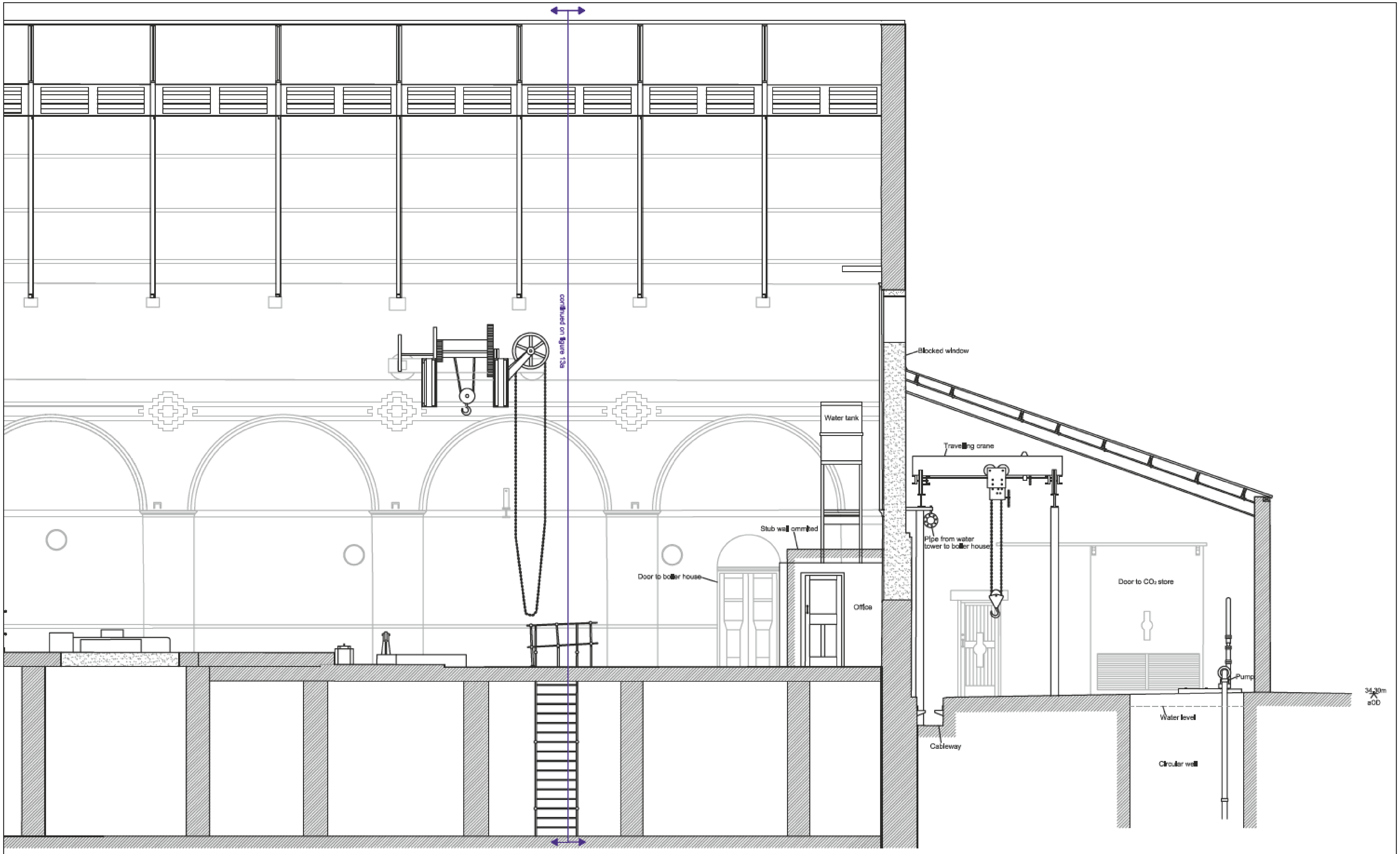
Figure 14



Date:	01/07/2010	Revision Number:	0
Scale:	1:125 @ A3	Illustrator:	CS
Path:	Y:\Projects\74360_Meadowhall Rolling Mill\Drawing Office\Report Figs\Building Report\v=m=d\74360_Buildings_plans_sections.dwg		

Building 10: Longitudinal section through Turbine Hall and Pump House

Figure 15a

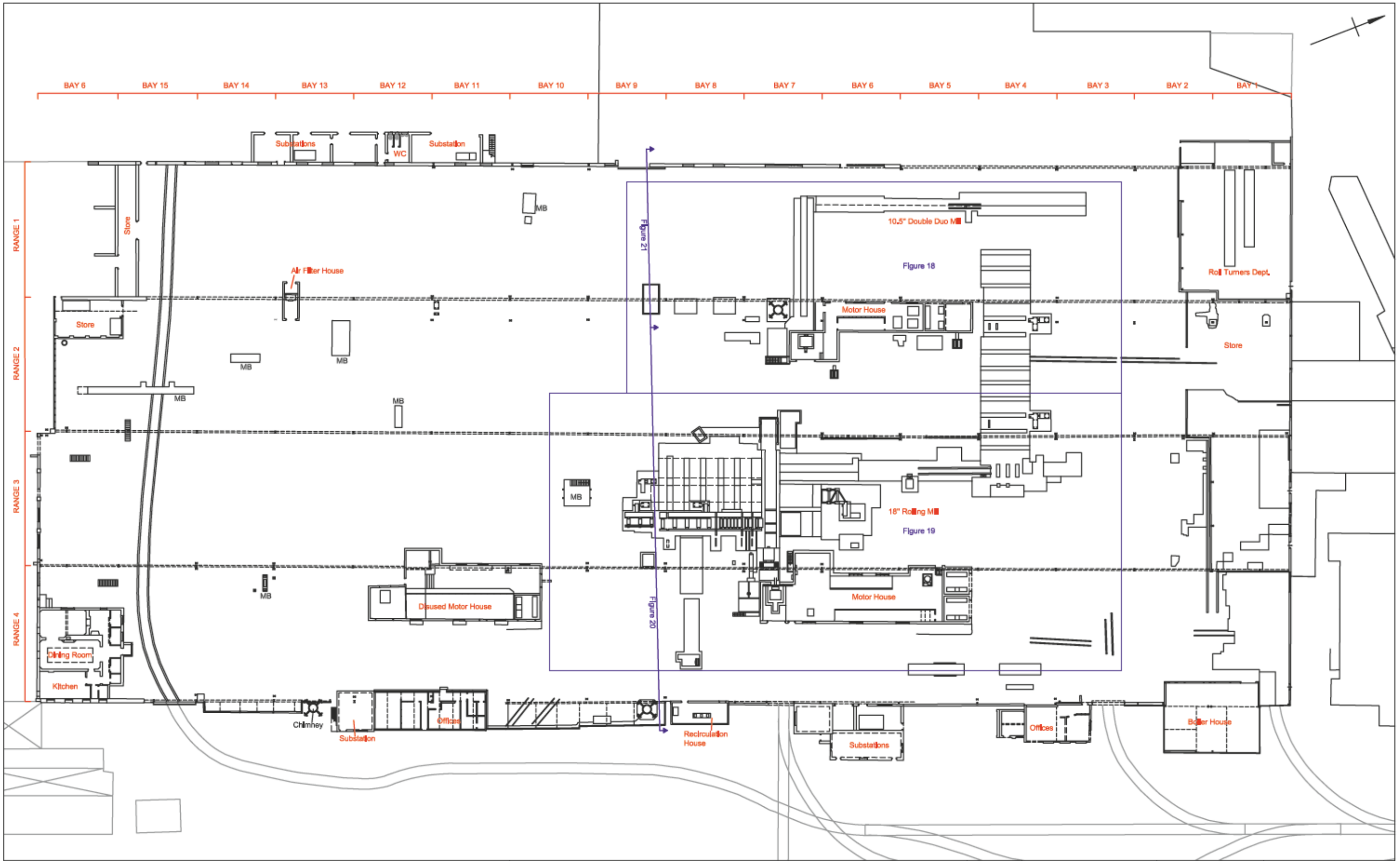


Wessex Archaeology

Date:	01/07/2010	Revision Number:	0
Scale:	1:125 @ A3	Illustrator:	CS
Path:	Y:\Projects\74360_Meadowhall Rolling Mill\Drawing Office\Report Figs\Building Report\y-m-d\74360_Buildings_plans_sections.dwg		

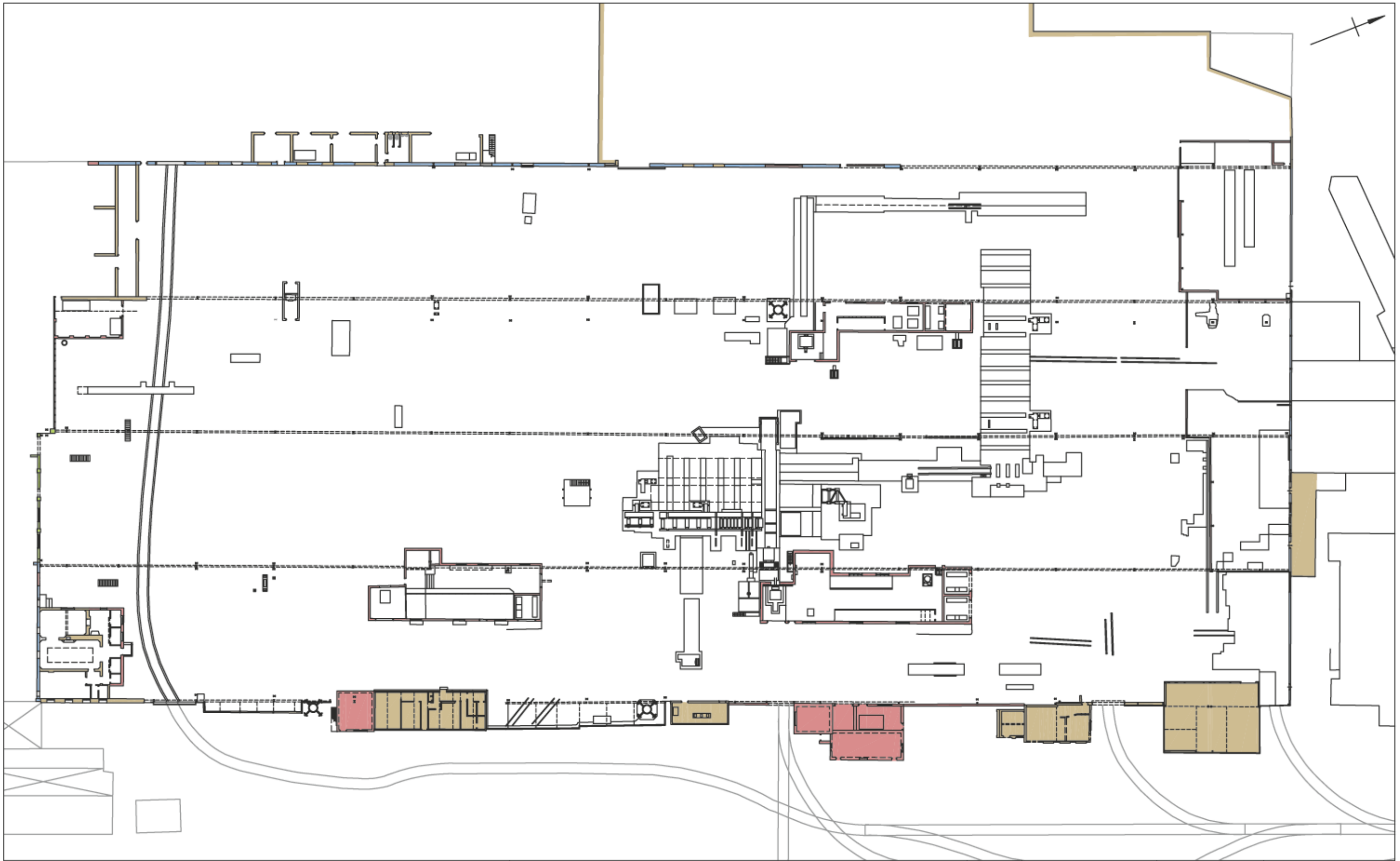
Building 10: Longitudinal section through Turbine Hall and Pump House

Figure 15b



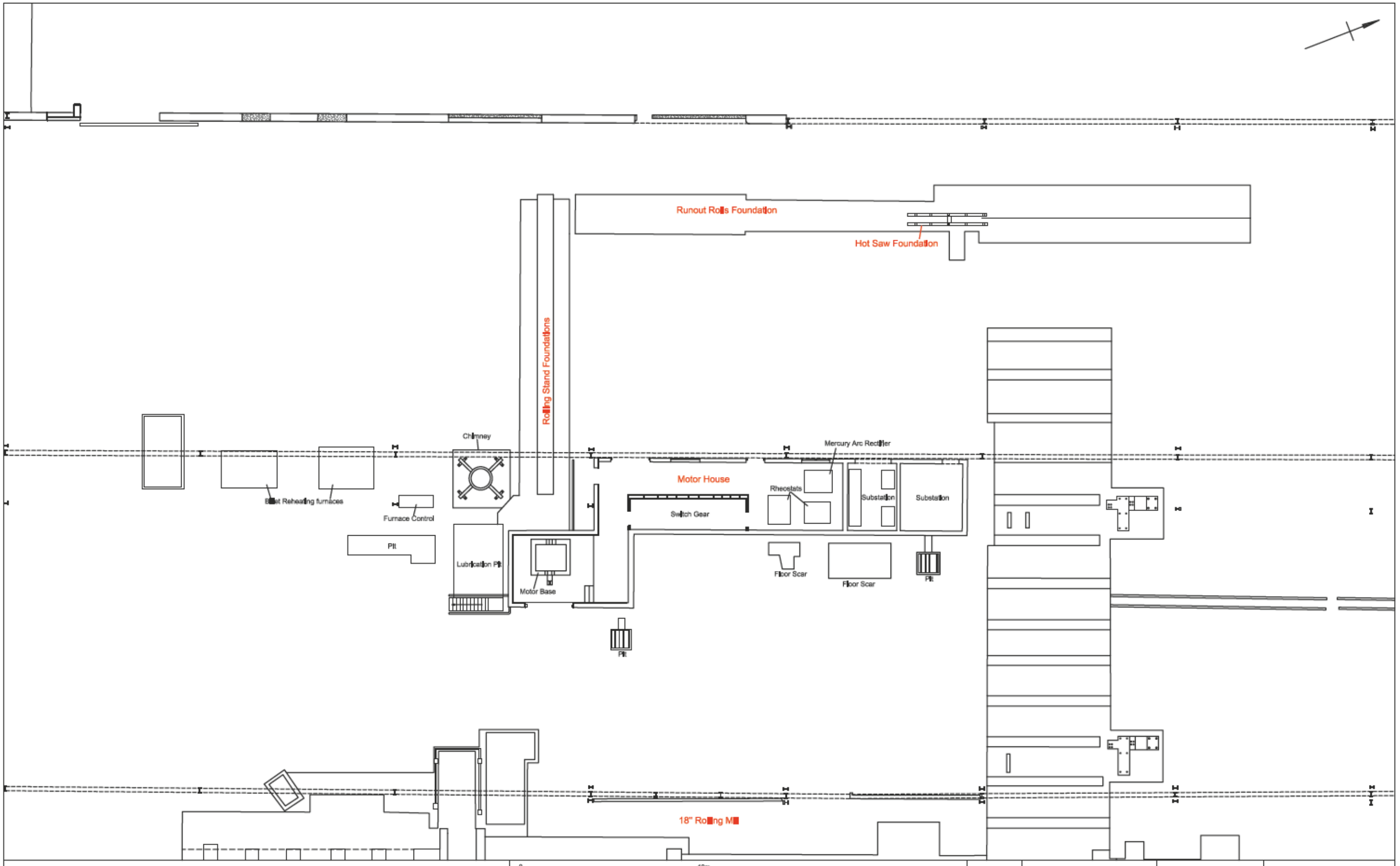
Building 11: General plan

Figure 16



Building 11: Phased plan

Figure 17



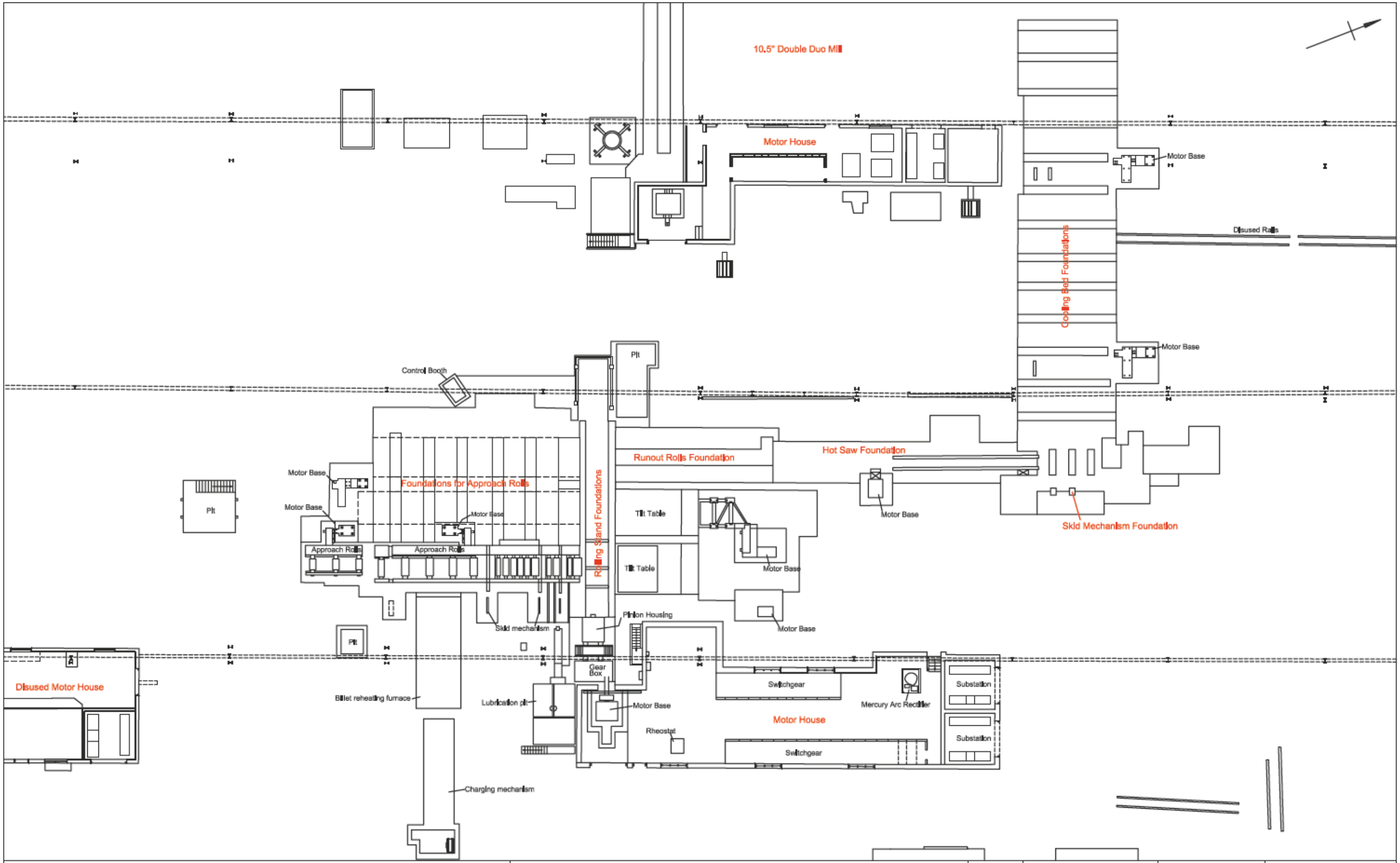
Wessex Archaeology

0 10m
0ft 15ft 30ft

Date:	06/07/2010	Revision Number:	0
Scale:	1:200 @ A3	Illustrator:	CS
Path:	Y:\Projects\74360_Meadowhall Rolling Mill\Drawing Office\Report Figs\Building Report\v-m-d\74360_Buildings_plans_sections.dwg		

Building 11: Plan of 10.5" Double Duo Mill

Figure 18



Wessex Archaeology

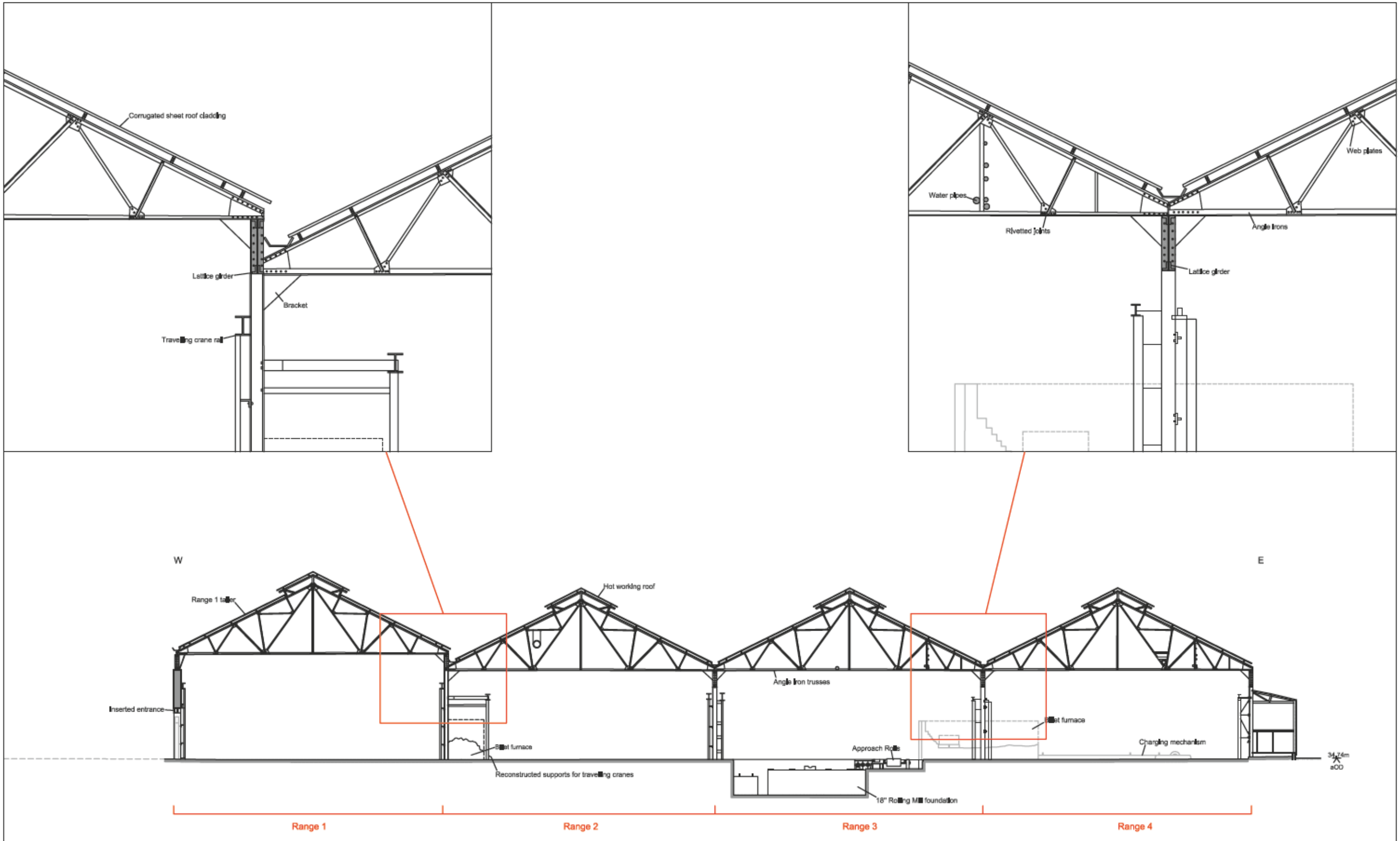
0 10m
0ft 15ft 30ft

Digital data provided by the University of Sheffield
This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date:	06/07/2010	Revision Number:	0
Scale:	1:250 @ A3	Illustrator:	CS
Path:	Y:\Projects\74360_Meadowhall Rolling Mill\Drawing Office\Report Figs\Building Report\[name]\74360_Buildings_plans_sections.dwg		

Building 11: Plan of 18" Rolling Mill

Figure 19



Wessex Archaeology

0 1:250 @ A3 10m
0ft 10ft 30ft

0 1:75 @ A3 4m
0ft 6ft 12ft

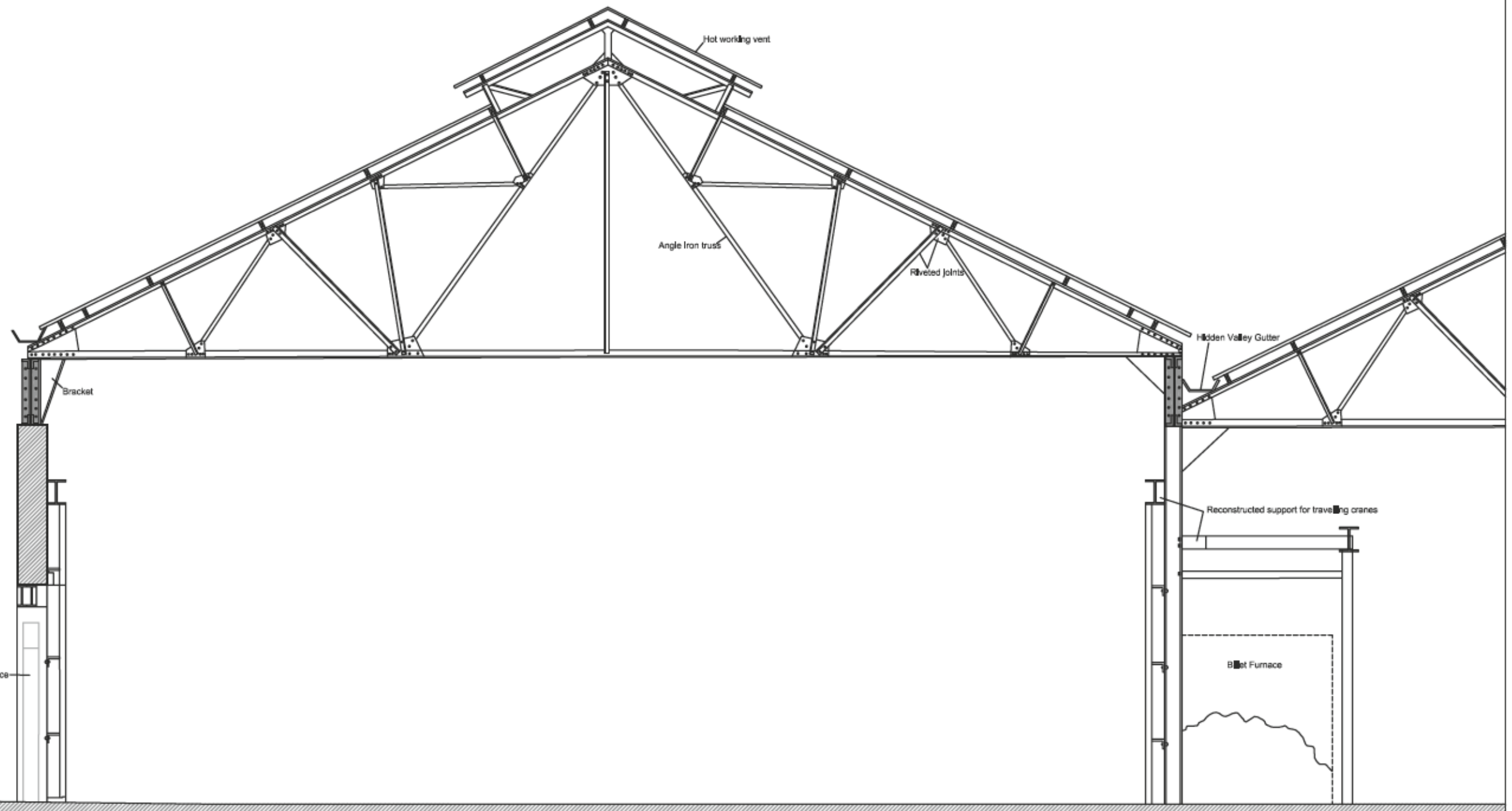
Date:	06/07/2010	Revision Number:	0
Scale:	Main graphic - 1:250 @ A3 Insert graphic - 1:75 @ A3	Illustrator:	CS
Path:	Y:\Projects\74360_Meadowhall Rolling Mill\Drawing Office\Report Figs\Building Report\v=m=d\74360_Buildings_plans_sections.dwg		

Building 11: Transverse section

Figure 20

W

E



Range 1

Range 2

Wessex Archaeology

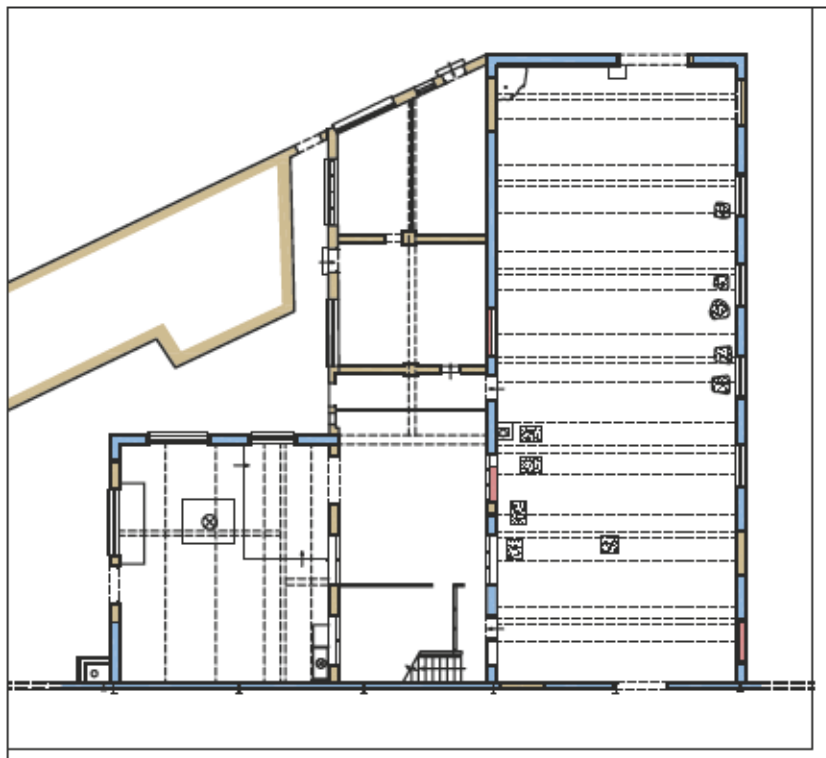
0 4m

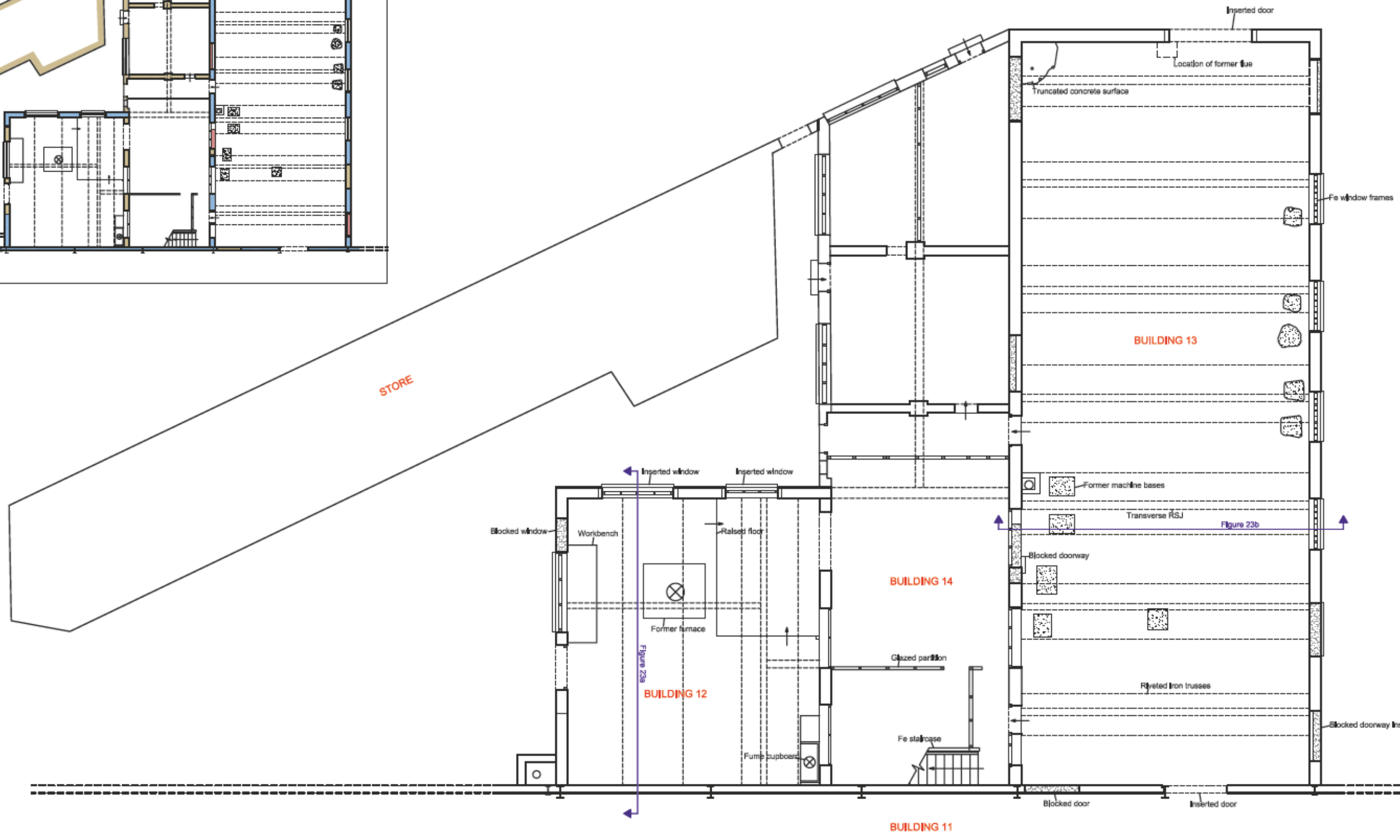
0ft 6ft 12ft

Date:	06/07/2010	Revision Number:	0
Scale:	1:75 @ A3	Illustrator:	CS
Path:	Y:\Projects\74360_Meadowhall Rolling Mill\Drawing Office\Report Figs\Building Report\y=m=d\74360_Buildings_plans_sections.dwg		

Building 11: Detail of Truss In Range 1

Figure 21





Wessex Archaeology

Phase 1 | Phase 2 | Phase 3 | Phase 4

Concrete fill in floor

0 4m

0ft 6ft 12ft

Date:	01/07/2010	Revision Number:	0
Scale:	1:125 @ A3	Illustrator:	CS
Path:	Y:\Projects\74360_Meadowhall Rolling Mill\Drawing Office\Report Figs\Building Report\[...]\74360_Buildings_plans_sections.dwg		

Buildings 12-14: Plan

Figure 22

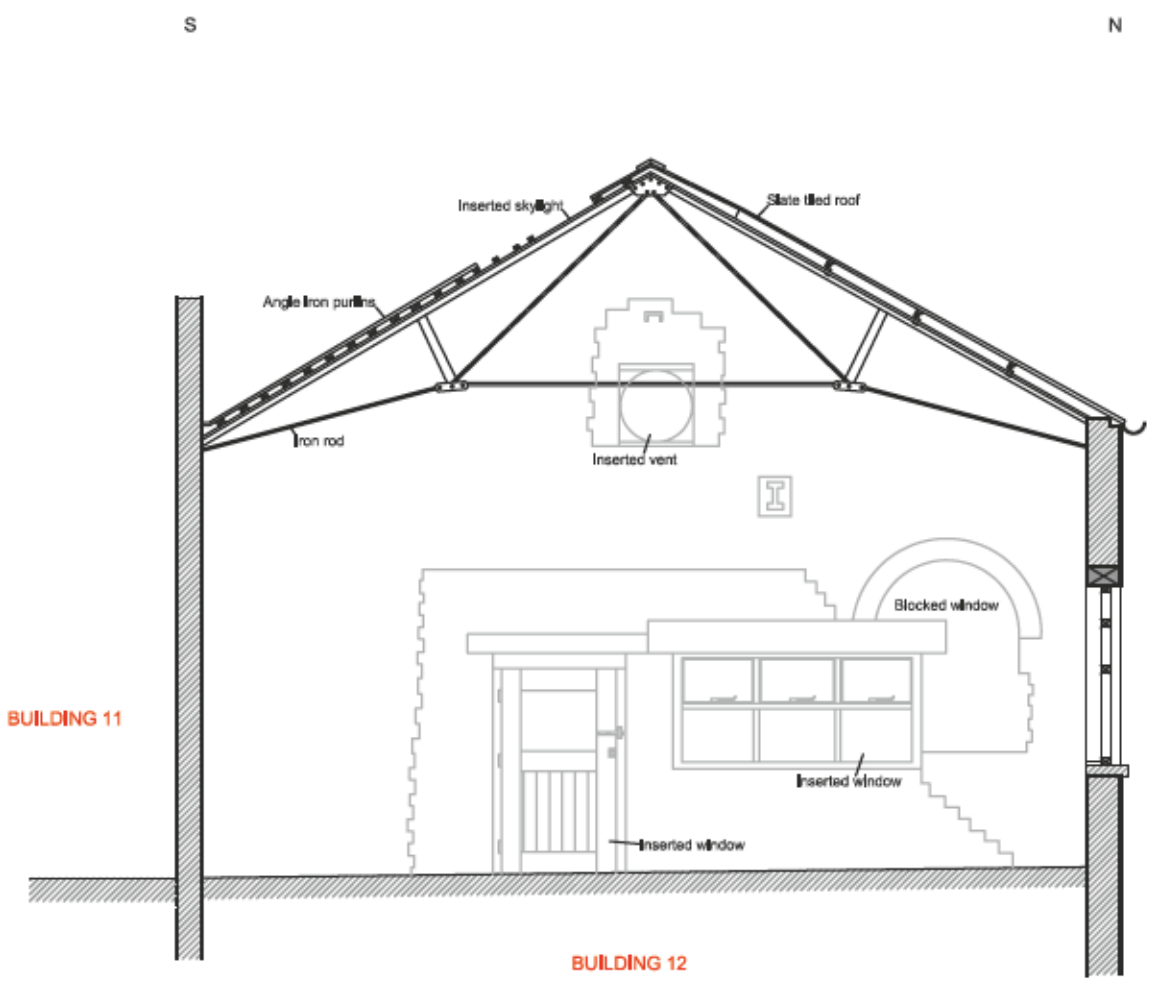


Figure 23a

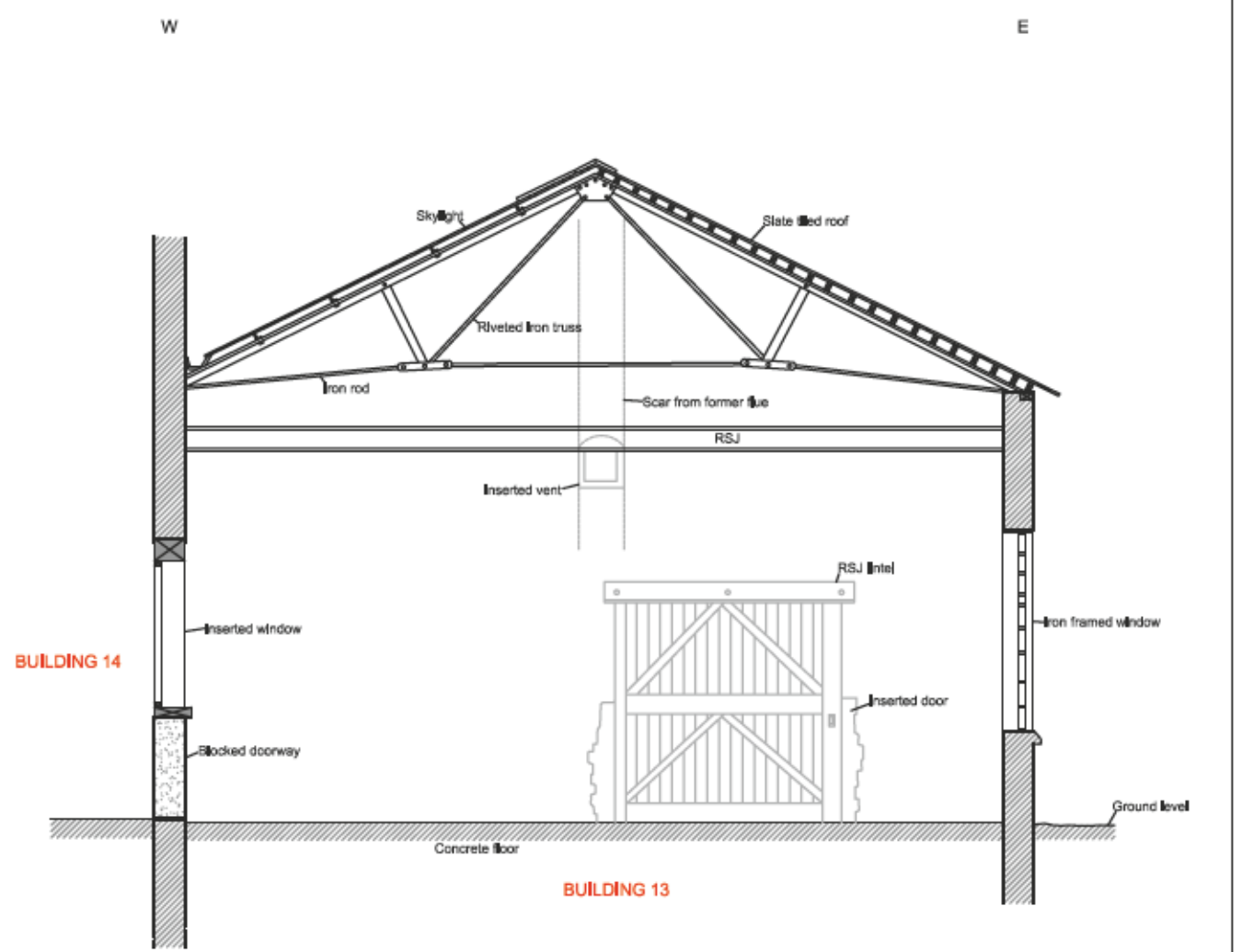


Figure 23b

Wessex Archaeology

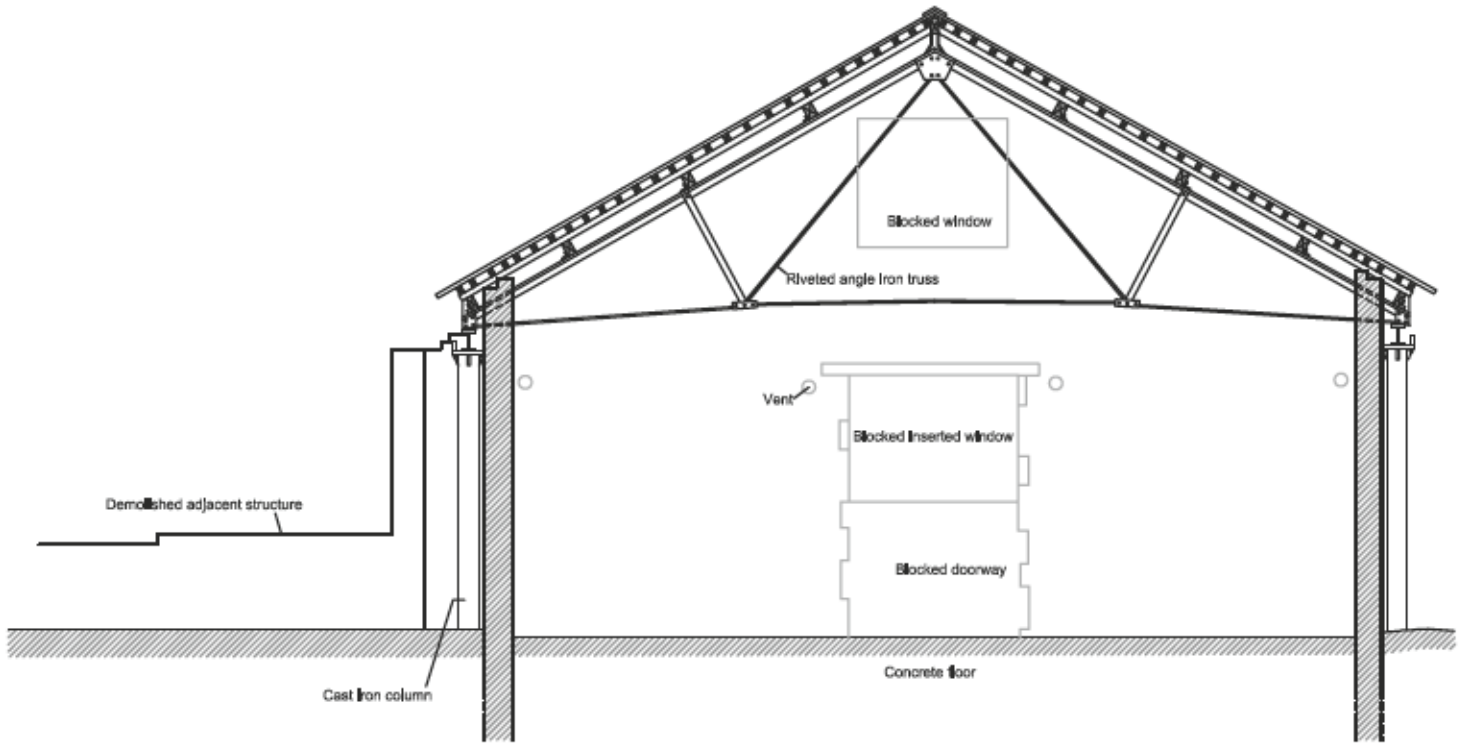
0 4m

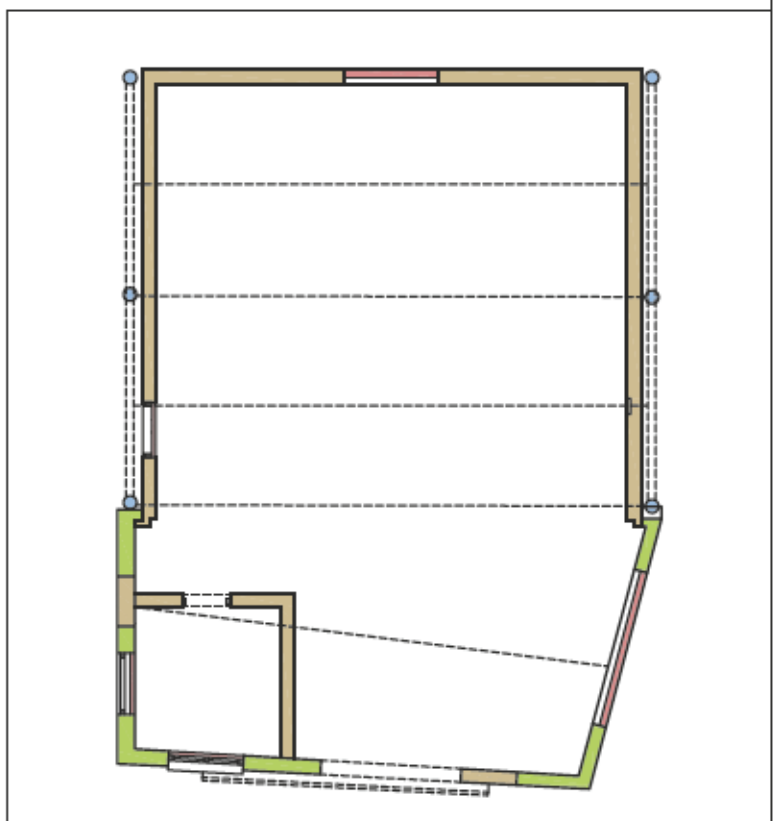
0ft 6ft 12ft

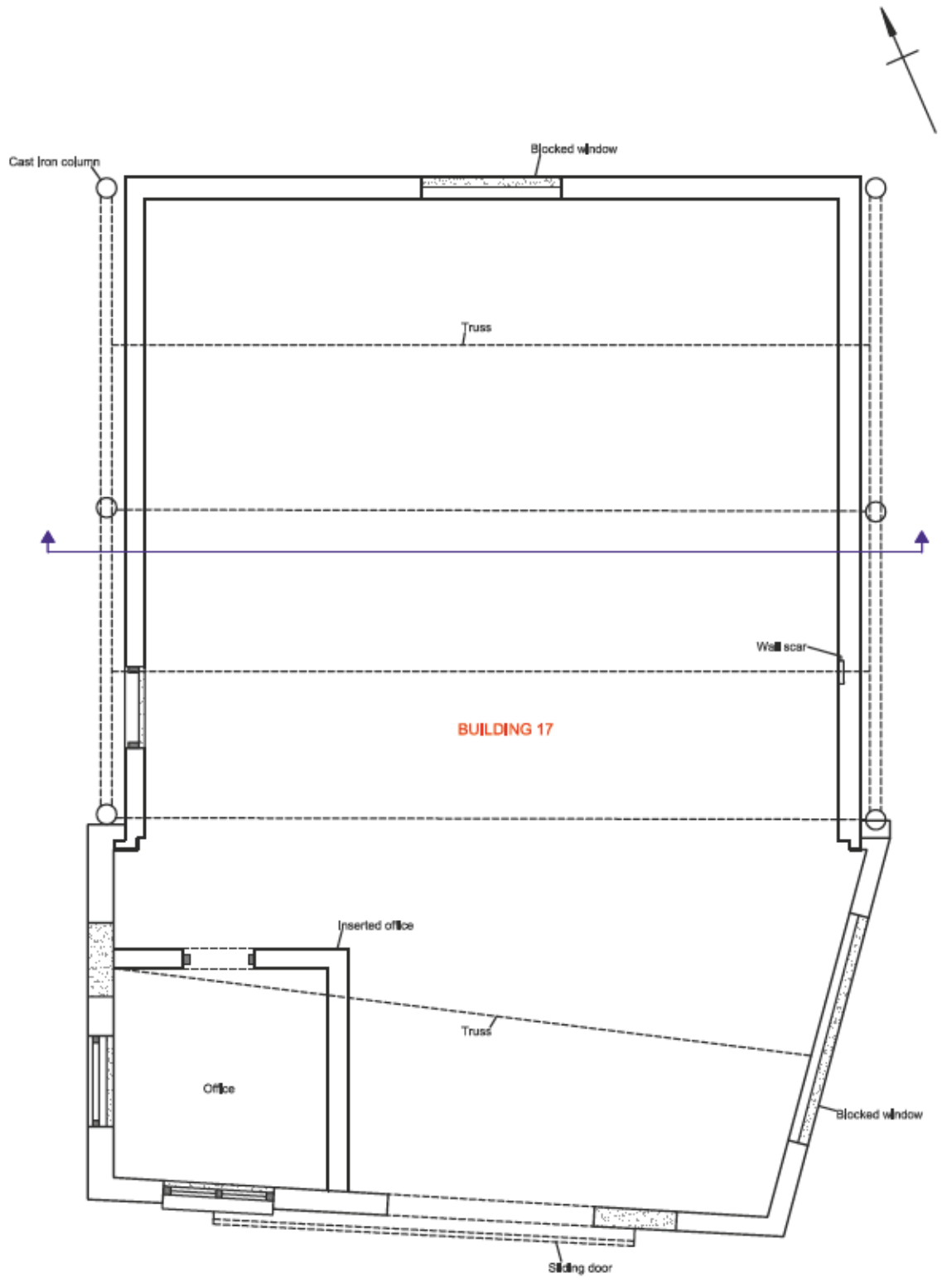
Date:	01/07/2010	Revision Number:	0
Scale:	1:75 @ A3	Illustrator:	CS
Path:	Y:\Projects\74360_Meadowhall Rolling Mill\Drawing Office\Report Figs\Building Report\v-m-d\74360_Buildings_plans_sections.dwg		

Buildings 12-13: Transverse sections

Figure 23







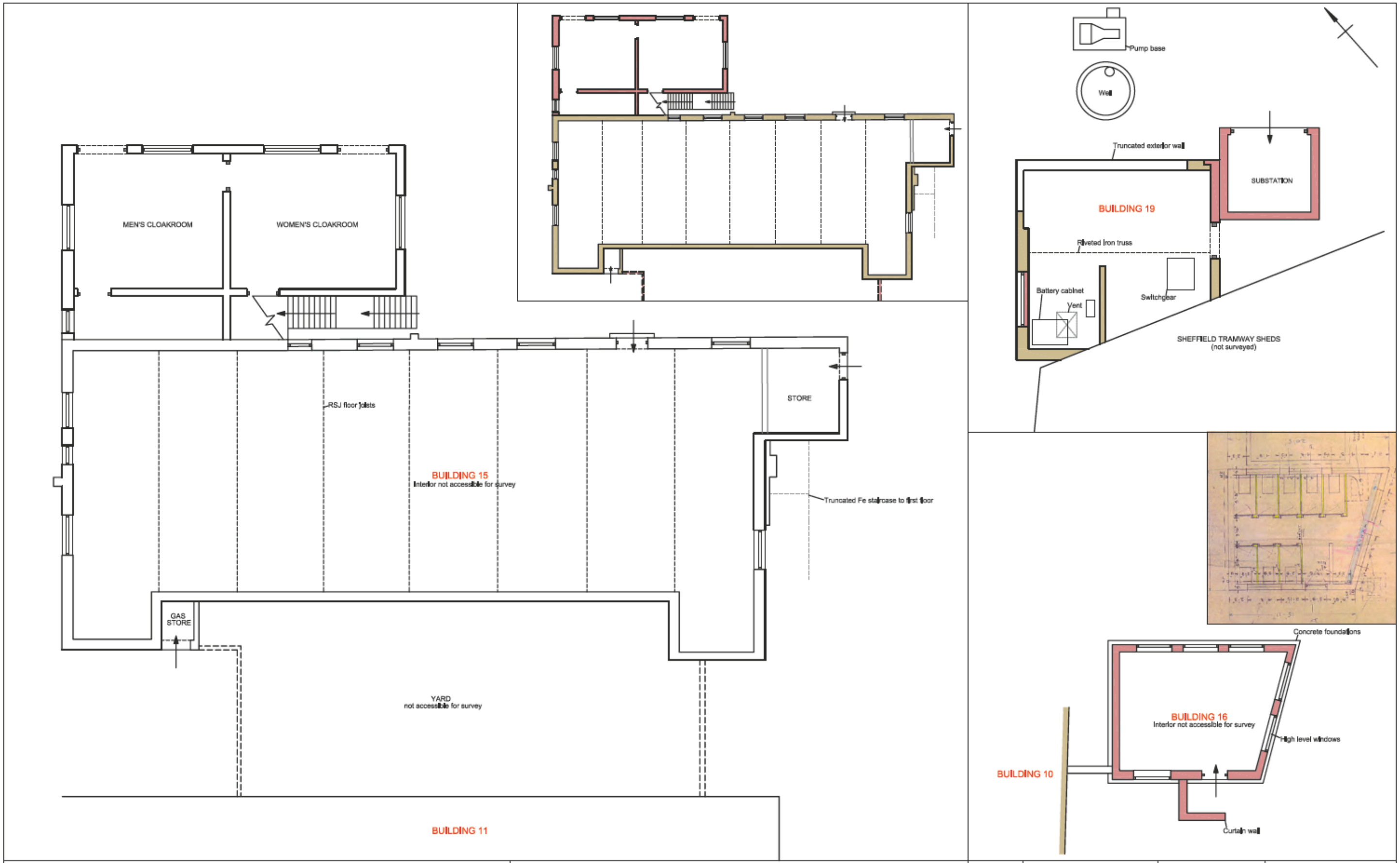
Phase 1 Phase 2 Phase 3 Phase 4

0 4m
0ft 6ft 12ft

Date:	01/07/2010	Revision Number:	0
Scale:	1:75 @ A3	Illustrator:	CS
Path:	Y:\Projects\74360_Meadowhall Rolling Mill\Drawing Office\Report Figs\Building Report\[74360_Buildings_plans_sections.dwg		

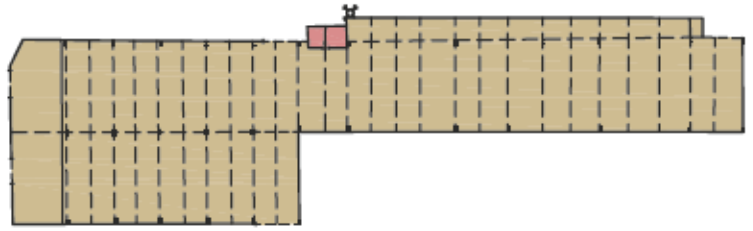
Building 17: Plan and Transverse section

Figure 24



Buildings 15, 16, and 19: Plans

Figure 25



RAILWAY EMBANKMENT

Chimney

Fabricated iron stanchion

OFFICE

STORE

STORE

BUILDING 18

Riveted iron truss

Corrugated metal cladding

Wessex Archaeology

Phase 1 | Phase 2 | Phase 3 | Phase 4

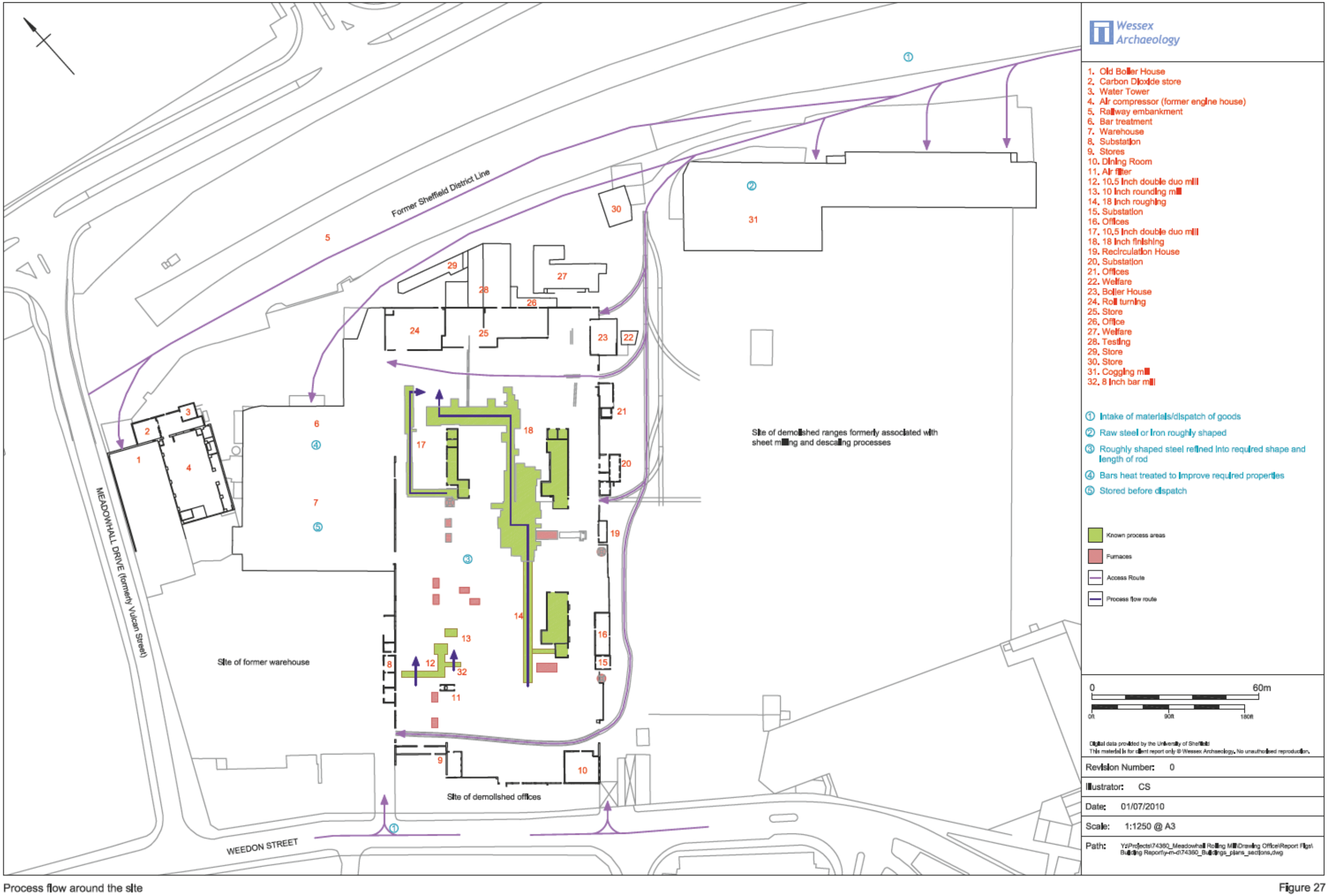
0 20m

0ft 30ft 60ft

Date:	01/07/2010	Revision Number:	0
Scale:	1:400 @ A3	Illustrator:	CS
Path:	Y:\Projects\74360_Meadowhall Rolling Mill\Drawing Office\Report Figs\Building Report\x-m-d\74360_Buildings_plans_sections.dwg		

Buildings 18: Plan

Figure 26



Wessex Archaeology

1. Old Boiler House
2. Carbon Dioxide store
3. Water Tower
4. Air compressor (former engine house)
5. Railway embankment
6. Bar treatment
7. Warehouse
8. Substation
9. Stores
10. Dining Room
11. Air filter
12. 10.5 inch double duo mill
13. 10 inch rounding mill
14. 18 inch roughing
15. Substation
16. Offices
17. 10.5 inch double duo mill
18. 18 inch finishing
19. Recirculation House
20. Substation
21. Offices
22. Welfare
23. Boiler House
24. Roll turning
25. Store
26. Office
27. Welfare
28. Testing
29. Store
30. Store
31. Cogging mill
32. 8 inch bar mill

① Intake of materials/dispatch of goods
② Raw steel or iron roughly shaped
③ Roughly shaped steel refined into required shape and length of rod
④ Bars heat treated to improve required properties
⑤ Stored before dispatch

Known process areas
Furnaces
Access Route
Process flow route

0 60m
0ft 90ft 180ft

Revision Number: 0

Illustrator: CS

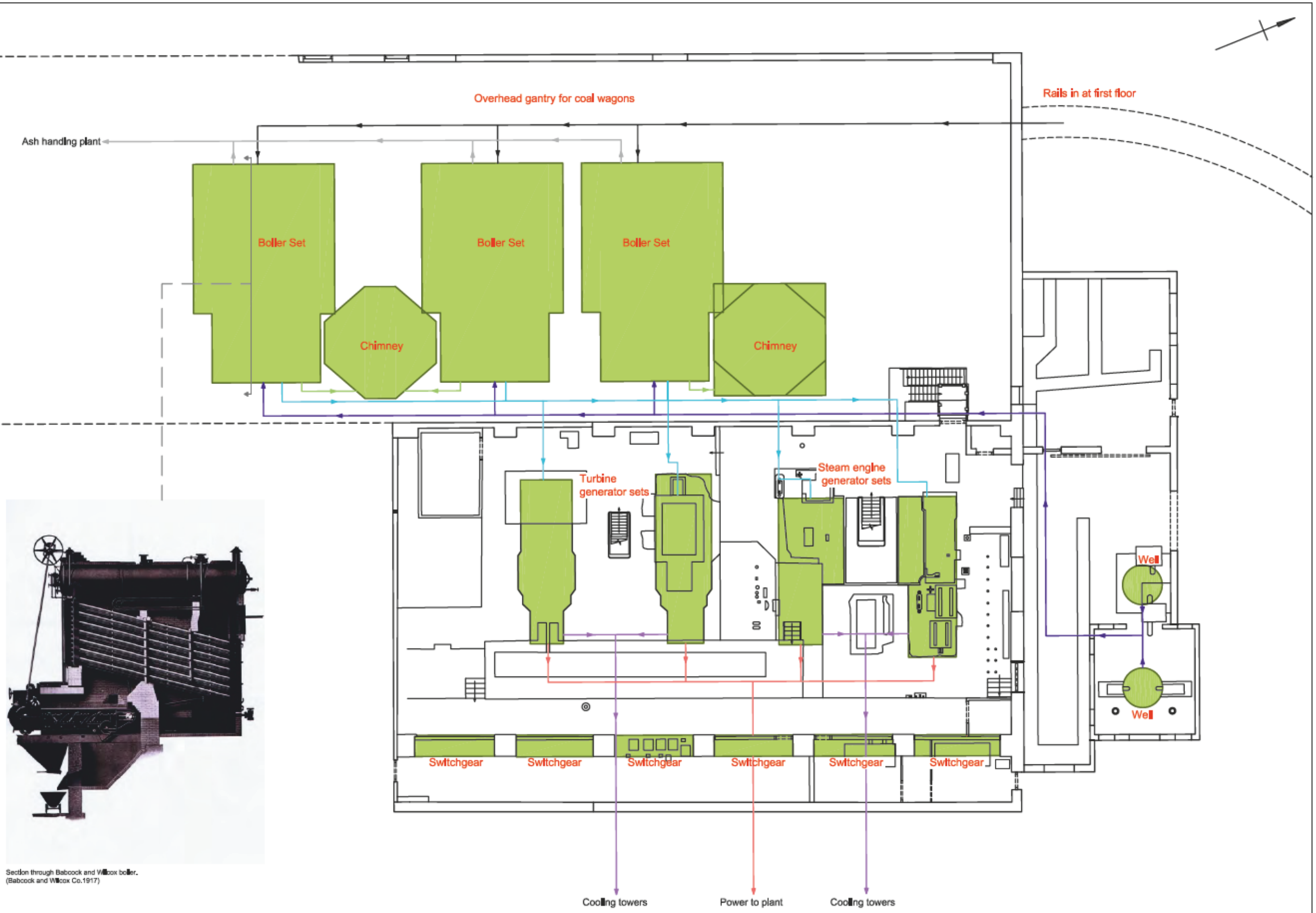
Date: 01/07/2010

Scale: 1:1250 @ A3

Path: Y:\Projects\74360_Meadowhall Rolling Mill\Drawing Office\Report Figs\Building Reports\n-o\74360_Buildings_plans_sections.dwg

Process flow around the site

Figure 27



Section through Babcock and Wilcox boiler.
(Babcock and Wilcox Co.1917)

Wessex Archaeology

Plant | Water In | Steam Out | Water Out
Power Out | Exhaust | Coal In | Ash Out

0 10m
0ft 15ft 30ft

Date:	01/07/2010	Revision Number:	0
Scale:	1:200 @ A3	Illustrator:	CS
Path:	Y:\Projects\74360_Meadowhall Rolling Mill\Drawing Office\Report Figs\Building Report\v-m-d\74360_Buildings_plans_sections.dwg		

Arrangement of plant within Building 10 c.1950's

Figure 28

Wessex Archaeology

Digital viewpoint

Plate viewpoint

0 50m

0ft 75ft 150ft

Date:	07/07/2010	Revision Number:	0
Scale:	1:1000 @ A3	Illustrator:	CS
Path:	Y:\Projects\74360_Meadowhall Rolling Mill\Drawing Office\Report Figs\Building Report\ym=d\74360_Buildings_plans_sections.dwg		

Plan: Photographic Viewpoints

Figure 29

Wessex Archaeology

Digital viewpoint

Plate viewpoint

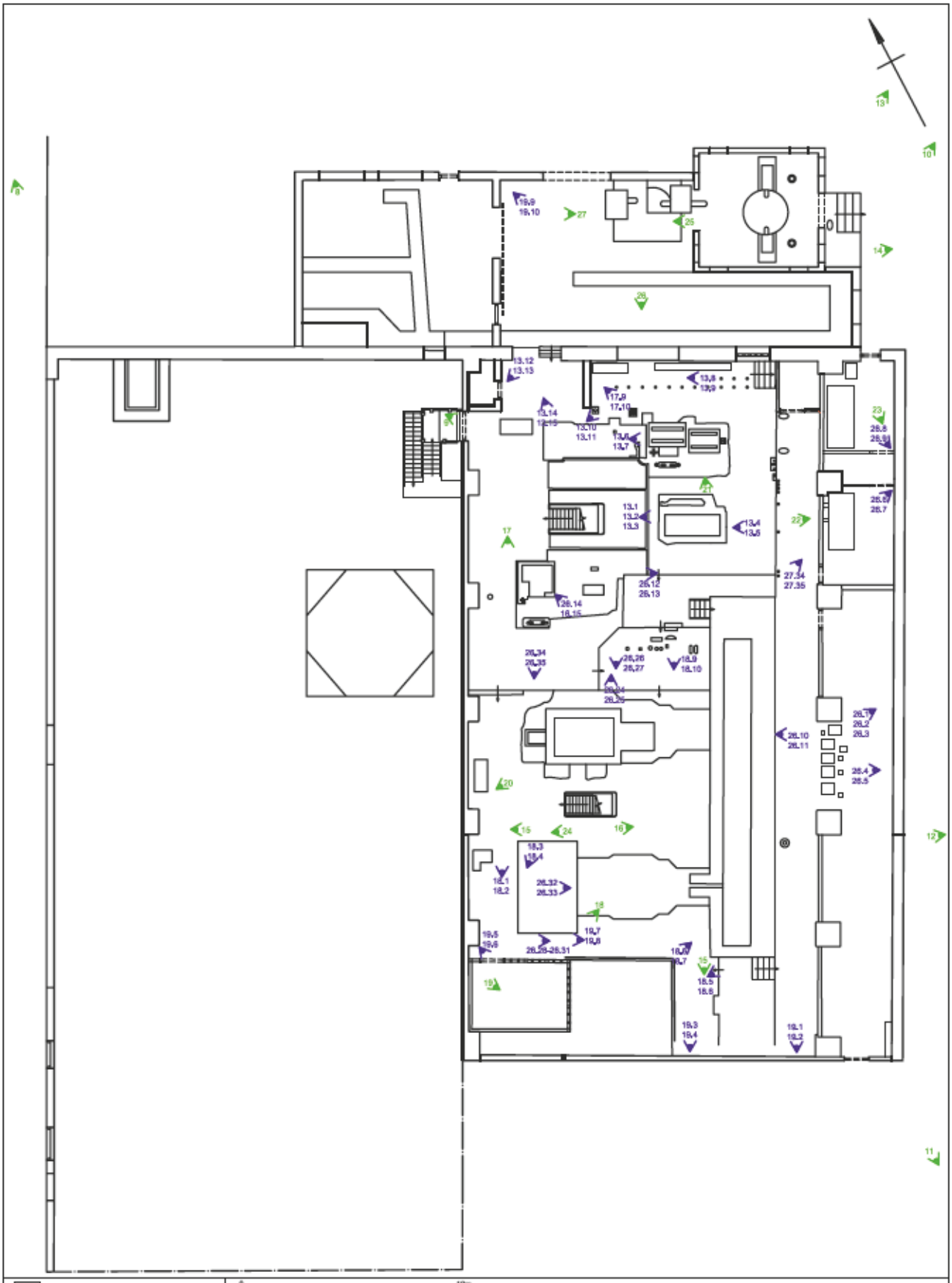
0 50m

0ft 75ft 150ft

Date:	07/07/2010	Revision Number:	0
Scale:	1:1000 @ A3	Illustrator:	CS
Path:	Y:\Projects\74360_Meadowhall Rolling Mill\Drawing Office\Report Figs\Building Report\ym=d\74360_Buildings_plans_sections.dwg		

Plan: Photographic Viewpoints

Figure 29



Digital viewpoint

Plate viewpoint

0 10m

0ft 15ft 30ft

Digital data provided by the University of Sheffield

Date:	07/07/2010	Revision Number:	0
Scale:	1:250 @ A4	Illustrator:	CS
Path:	Y:\Projects\74360_Meadowhall Rolling Mill\Drawing Office\Report Figs\Building Report\x-ref\74360_Buildings_plans_sections.dwg		

Wessex Archaeology

Building 10: Photo viewpoints

Figure 30

Plate 1: General view across the Staybrite Works from the west, showing the embankment of the former Sheffield District Railway Line. (film 14.03)

Plate 2: General view across the Works from the northwest. (film 14.05)

Date:	06/07/2010	Revision Number:	0
Scale:	N/A	Illustrator:	CS
Path:	Y:\PROJECTS\74360_RDD Staybrite Works\Drawing Office\Report Figs\Building Report\y-m-d\Plates 1_2.cdr		

Wessex Archaeology

Plate 3: Detail of western Weedon Street site entrance with 1950's steel gate. (film 9.10)

Plate 4: Detail of eastern Weedon Street site entrance with weighbridge. (film 6.35)

Date:	06/07/2010	Revision Number:	0
Scale:	N/A	Illustrator:	CS
Path:	Y:\PROJECTS\74360_RDD Staybrite Works\Drawing Office\Report Figs\Building Report\y-m-d\Plates 3_4.cdr		

Wessex Archaeology

Plate 5: General view of the former internal rail network, looking south. (film 15.10)

Plate 6: General view showing vehicular access road to the north of Building 14. (film 16.09)

Wessex Archaeology

Date:	06/07/2010	Revision Number:	0
Scale:	N/A	Illustrator:	CS
Path:	Y:\PROJECTS\74360_RDD Staybrite Works\Drawing Office\Report Figs\Building Report\y-m-d\Plates 5_6.cdr		

Plate 7: Detail of cart outside of Building 18. (film 4.21)

Plate 8: General view of Building 10 showing the demolished remains of the former boiler house between Vulcan Street and the turbine hall. (colour slide 18)

Date:	08/07/2010	Revision Number:	0
Scale:	N/A	Illustrator:	CS
Path:	Y:\PROJECTS\74360_RDD Staybrite Works\Drawing Office\Report Figs\Building Report\y-m-d\Plates 7_8.cdr		

Wessex Archaeology

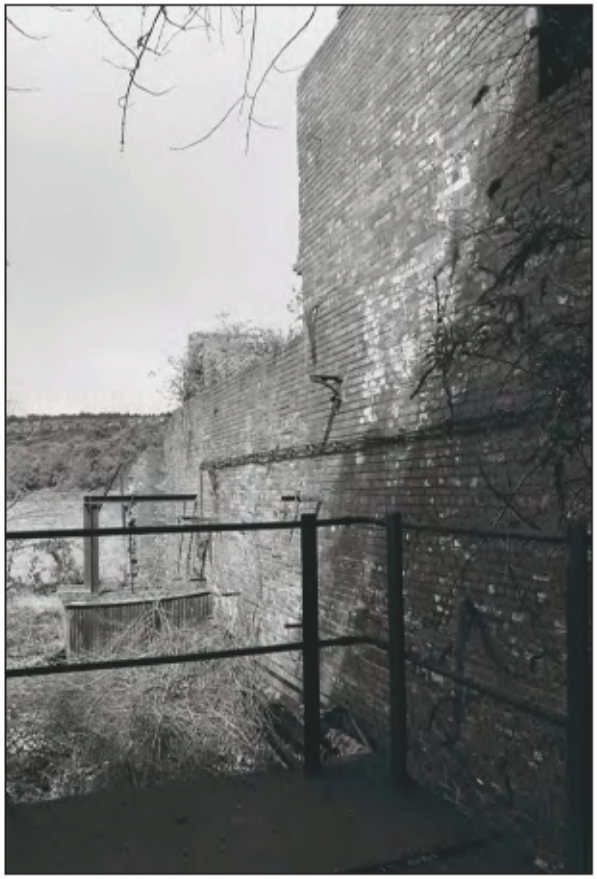


Plate 9: General view showing two-storey height of northern wall of the demolished western range of Building 10. (film 27.32)

Plate 10: General view of the northern end of Building 10 showing the arched top of the blocked windows above the lean-to extension. (film 17.03)

Plate 11: General view of southern elevation of Building 10. (film 25.01)

Plate 12: Detail of change in construction technique at eaves level of east elevation of Building 10 between 1908 building and 1915 extension. (film 27.07)

Plate 13: General view of water tower, noting integrated iron framework. (film 17.07)

Plate 14: Detail of former depth gauge on water tower of Building 10. (film 27.08)

Wessex Archaeology

Date:	06/07/2010	Revision Number:	0
Scale:	N/A	Illustrator:	CS
Path:	Y:\PROJECTS\74360_RDD Staybrite Works\Drawing Office\Report Figs\Building Report\y-m-d\Plates 13_14.cdr		

Plate 15: General view of interior of turbine hall showing original structure and 1940's machine bases and switchgear. (film 19.03)

Plate 16: Detail of glazed tiles across original 1908 structure (right of pier) and 1915 extension (left of pier). (colour slide 4)

Wessex Archaeology

Date:	06/07/2010	Revision Number:	0
Scale:	N/A	Illustrator:	CS
Path:	Y:\PROJECTS\74360_RDD Staybrite Works\Drawing Office\Report Figs\Building Report\y-m-d\Plates 15_16.cdr		

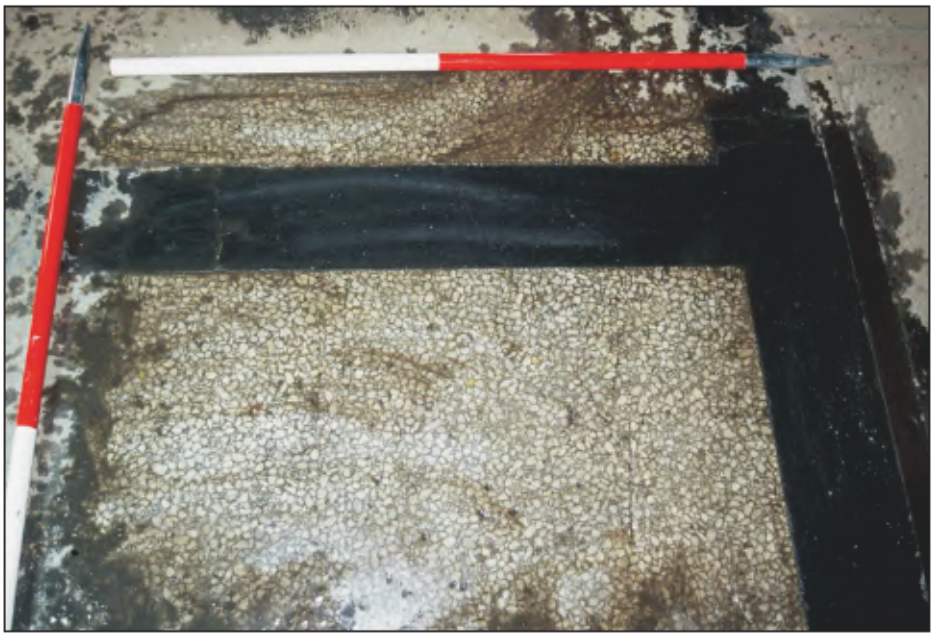


Plate 17: Detail of terrazzo floor with black trimming, Building 10. (colour slide 5)

Plate 18: General view of office in southwest corner of Building 10. (film 18.07)

Date:	08/07/2010	Revision Number:	0
Scale:	N/A	Illustrator:	CS
Path:	Y:\PROJECTS\74360_RDD Staybrite Works\Drawing Office\Report Figs\Building Report\y-m-d\Plates 17_18.cdr		

Wessex Archaeology

Plate 19: General view of interior of office in southwest corner of Building 10. (film 19.06)

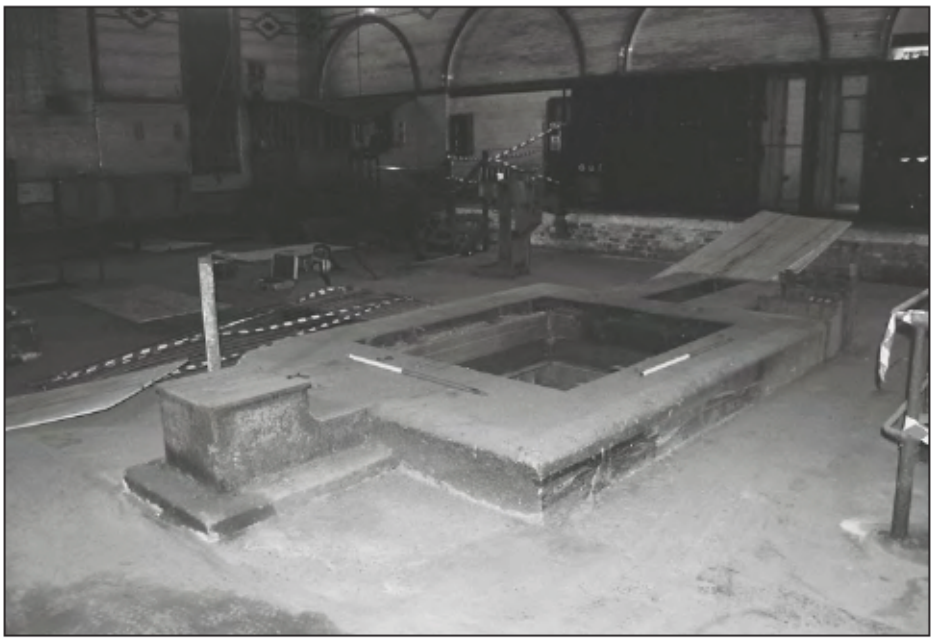


Plate 20: Detail of machine base from 1940's compressor. (film 26.20)

Date:	06/07/2010	Revision Number:	0
Scale:	N/A	Illustrator:	CS
Path:	Y:\PROJECTS\74360_RDD Staybrite Works\Drawing Office\Report Figs\Building Report\y-m-d\Plates 19_20.cdr		

Wessex Archaeology

Plate 21: General view showing blocked arches in east wall of Building 10. (film 17.09)

Plate 22: Detail of name plate above blocked arch in Building 10. (film 26.10)

Date:	06/07/2010	Revision Number:	0
Scale:	N/A	Illustrator:	CS
Path:	Y:\PROJECTS\74360_RDD Staybrite Works\Drawing Office\Report Figs\Building Report\y-m-d\Plates 21_22.cdr		

Wessex Archaeology

Plate 23: General view of substation room in northern end of cableway within eastern aisle of Building 10. (film 26.08)

Plate 24: Detail of straight joint between original 1908 structure and 1915 extension. (film 26.29)

Wessex Archaeology

Date:	06/07/2010	Revision Number:	0
Scale:	N/A	Illustrator:	CS
Path:	Y:\PROJECTS\74360_RDD Staybdte Works\Drawing Office\Report Figs\Building Report\y-m-d\Plates 23_24.cdr		

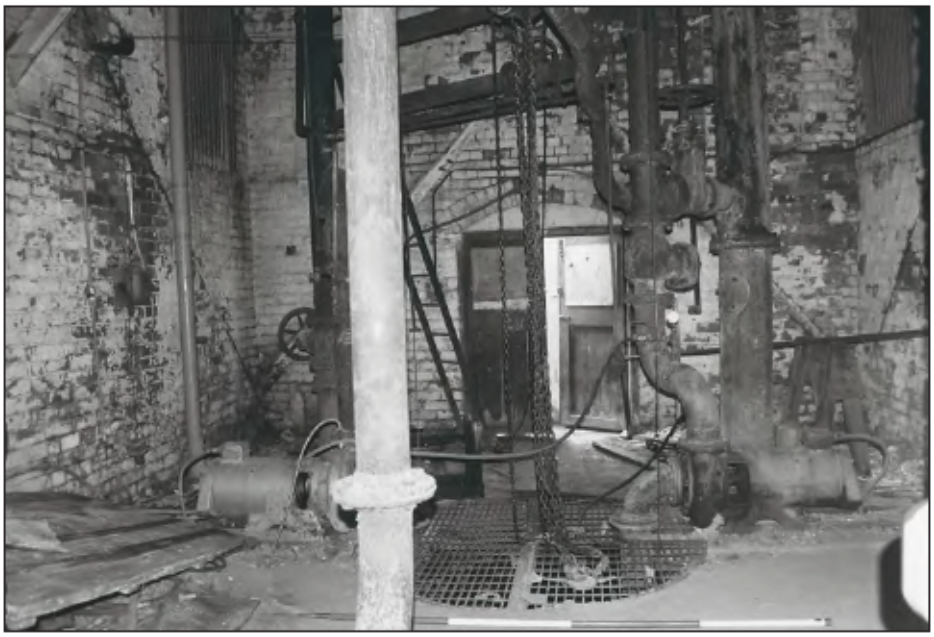


Plate 25: General view of pumps and well within water tower, Building 10. (film 27.16)

Plate 26: General view of pumps and well in lean-to extension to Building 10. (film 14)

Date:	06/07/2010	Revision Number:	0
Scale:	N/A	Illustrator:	CS
Path:	Y:\PROJECTS\74360_RDD Staybrite Works\Drawing Office\Report Figs\Building Report\y-m-d\Plates 25_26.cdr		

Wessex Archaeology

Plate 27: General view of Co_2 storage room, Building 10. (film 27.14)

Plate 28: General view of Building 11 from the southwest, showing demolished southern ranges. (film 14.07)

Date:	06/07/2010	Revision Number:	0
Scale:	N/A	Illustrator:	CS
Path:	Y:\PROJECTS\74360_RDD Staybrite Works\Drawing Office\Report Figs\Building Report\y-m-d\Plates 27_28.cdr		

Wessex Archaeology

Plate 29: General view of western elevation of Building 11. (film 24.05)

Plate 30: Detail of blocked arched windows in west elevation of Building 11, one retaining timber shutters. (film 12.28)

Date:	08/07/2010	Revision Number:	0
Scale:	N/A	Illustrator:	CS
Path:	Y:\PROJECTS\74360_RDD Staybrite Works\Drawing Office\Report Figs\Building Report\y-m-d\Plates 29_30.cdr		

Wessex Archaeology

Plate 31: General view of northern elevation of the first range of Building 11. (film 8.14)

Plate 32: General view of eastern elevation of Building 11. (film 9.14)

Wessex Archaeology

Date:	06/07/2010	Revision Number:	0
Scale:	N/A	Illustrator:	CS
Path:	Y:\PROJECTS\74360_RDD Staybrite Works\Drawing Office\Report Figs\Building Report\y-m-d\Plates 31_32.cdr		

Plate 33: General view of eastern elevation of Building 11. (film 15.01)

Plate 34: General view looking south down the first range of Building 11. (film 21.02)

Date:	06/07/2010	Revision Number:	0
Scale:	N/A	Illustrator:	CS
Path:	Y:\PROJECTS\74360_RDD Staybrite Works\Drawing Office\Report Figs\Building Report\y-m-d\Plates 33_34.cdr		

Wessex Archaeology

Plate 35: General view looking south down the second range of Building 11. (film 21.04)

Plate 36: General view looking south down the third range of Building 11. (film 21.06)

Date:	06/07/2010	Revision Number:	0
Scale:	N/A	Illustrator:	CS
Path:	Y:\PROJECTS\74360_RDD Staybrite Works\Drawing Office\Report Figs\Building Report\y-m-d\Plates 35_36.cdr		

Wessex Archaeology

Plate 37: General view looking south down the fourth range of Building 11. (film 21.08)

Plate 38: General view of turning workshop in northwest corner of Building 11. (film 20.09)

Date:	08/07/2010	Revision Number:	0
Scale:	N/A	Illustrator:	CS
Path:	Y:\PROJECTS\74360_RDD Staybrite Works\Drawing Office\Report Figs\Building Report\y-m-d\Plates 37_38.cdr		

Wessex Archaeology

Plate 39: General view of workshop within bay 1 of ranges 2-3 of Building 11. (film 20.07)

Plate 40: Detail of blocked circular openings in north wall of the third range of Building 11. (film 9.01)

Date:	08/07/2010	Revision Number:	0
Scale:	N/A	Illustrator:	CS
Path:	Y:\PROJECTS\74360_RDD Staybrite Works\Drawing Office\Report Figs\Building Report\y-m-d\Plates 39_40.cdr		

Wessex Archaeology

Plate 41: General view of office structure in southeast corner of Building 11. (film 12.14)

Plate 42: Detail of dining room within office structure in southeast corner of Building 11. (film 24.04)

Date:	06/07/2010	Revision Number:	0
Scale:	N/A	Illustrator:	CS
Path:	Y:\PROJECTS\74360_RDD Staybrite Works\Drawing Office\Report Figs\Building Report\y-m-d\Plates 41_42.cdr		

Plate 43: General view within office situated on the east elevation of Building 11. (film 13.29)

Plate 44: General view of boiler house situated on the east elevation of Building 11. (film 10.32)

Date:	08/07/2010	Revision Number:	0
Scale:	N/A	Illustrator:	CS
Path:	Y:\PROJECTS\74360_RDD Staybrite Works\Drawing Office\Report Figs\Building Report\y-m-d\Plates 43_44.cdr		

Wessex Archaeology

Plate 45: General view of recalculating house situated on the east elevation of Building 11. (film 13.32)

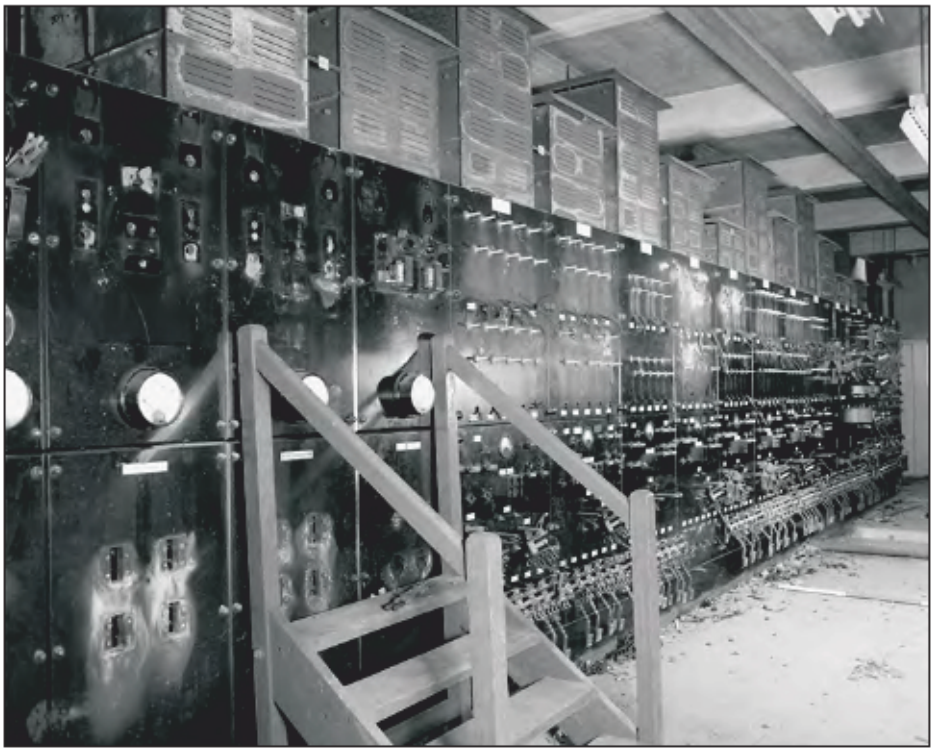


Plate 46: General view of switchgear within the 18" Rolling Mill's motor house. (film 22.02)

Date:	06/07/2010	Revision Number:	0
Scale:	N/A	Illustrator:	CS
Path:	Y:\PROJECTS\74360_RDD Staybrite Works\Drawing Office\Report Figs\Building Report\y-m-d\Plates 45_46.cdr		

Wessex Archaeology

Plate 47: General view of control room within the 18" Rolling Mill's motor house. (film 11.17)

Plate 48: General view of control booth to the west of the 18" Rolling Mill. (film 27.03)

Plate 49: General view showing the billet reheating furnace and approach rolls of the 18'' Rolling Mills. (film 22.06)

Plate 50: General view showing approach rolls in relation to skids, the gearbox and control room (film 22.08)

Wessex Archaeology

Date:	06/07/2010	Revision Number:	0
Scale:	N/A	Illustrator:	CS
Path:	Y:\PROJECTS\74360_RDD Staybite Works\Drawing Office\Report Figs\Building Report\y-m-d\Plates 49_50.cdr		

Plate 51: Detail of the 'Brightside' branded gear box from the 18" Rolling Mill. (film 23.02)

Plate 52: Detail of the remaining sub-structure of a tilt-table relating to the first intermediary stand of the 18" Rolling Mill. (film 11.11)

Date:	08/07/2010	Revision Number:	0
Scale:	N/A	Illustrator:	CS
Path:	Y:\PROJECTS\74360_RDD Staybrite Works\Drawing Office\Report Figs\Building Report\y-m-d\Plates 51_52.cdr		

Wessex Archaeology

Plate 53: Detail of motor base and gear box from the run-out rolls of the second intermediary stand of the 18" Rolling Mills. (11.10)

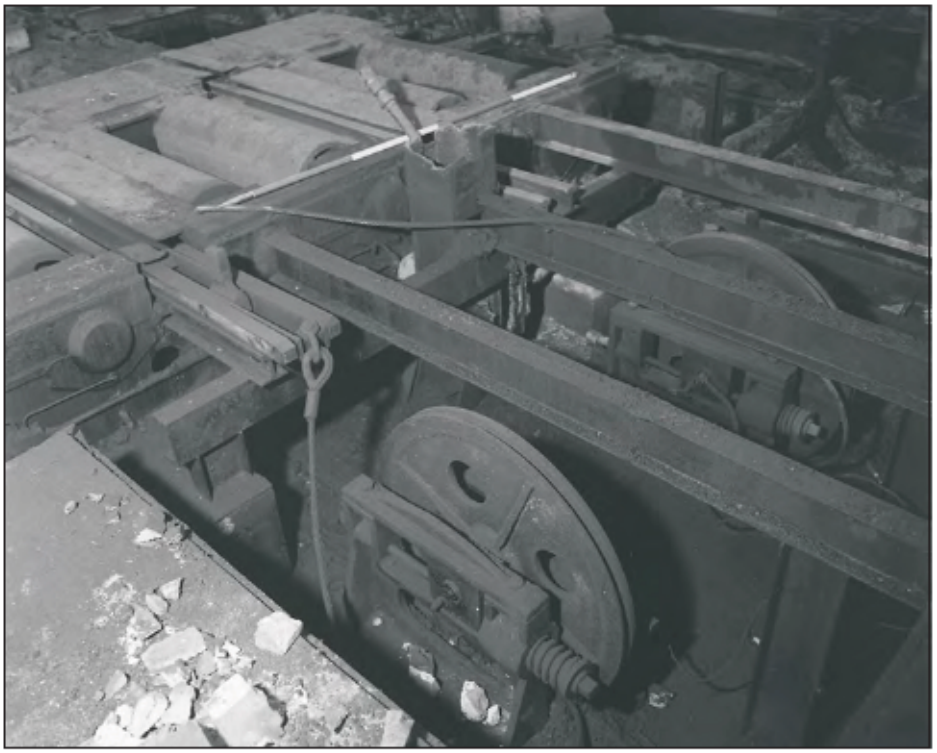


Plate 54: Detail of part of a cable powered skid mechanism for transferring bars between the approach rolls for the three stands comprising the 18" Rolling Mills. (film 22.10)

Date:	08/07/2010	Revision Number:	0
Scale:	N/A	Illustrator:	CS
Path:	Y:\PROJECTS\74360_RDD Staybrite Works\Drawing Office\Report Figs\Building Report\y-m-d\Plates 53_54.cdr		

Wessex Archaeology

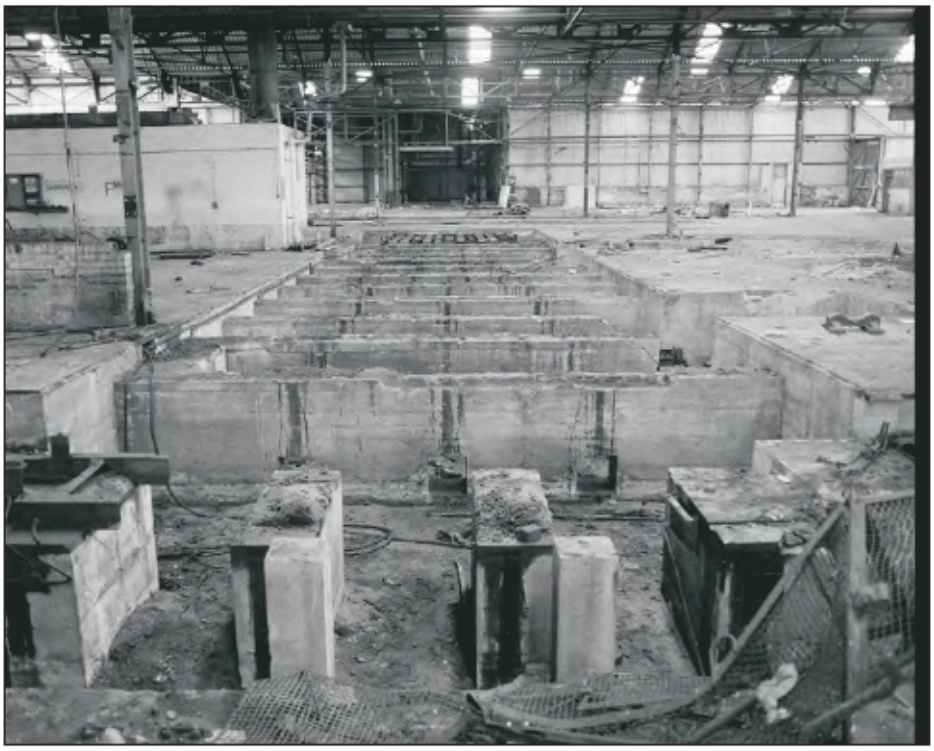


Plate 55: General view looking west over the foundations for the 18" Rolling Mill's cooling bed. (film 21.10)

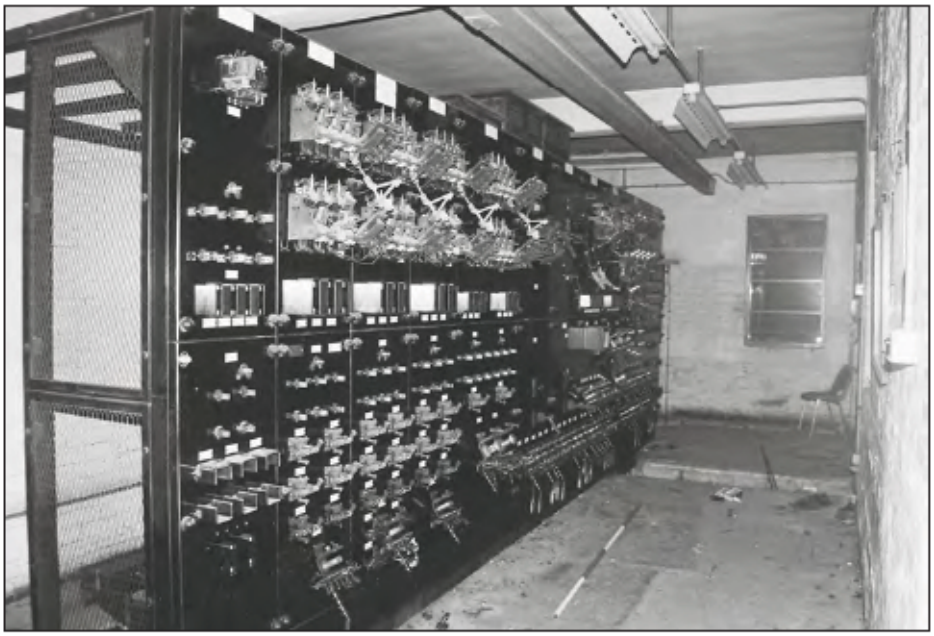


Plate 56: General view of switchgear within motor house of the 10.5" Double Duo Mill. (film 10.21)

Date:	08/07/2010	Revision Number:	0
Scale:	N/A	Illustrator:	CS
Path:	Y:\PROJECTS\74360_RDD Staybrite Works\Drawing Office\Report Figs\Building Report\y-m-d\Plates 55_56.cdr		

Wessex Archaeology

Plate 57: General view of billet reheating furnaces to the south of the 10.5" Double Duo Mill. (film 23.08)

Plate 58: General view of foundation trench for the 6 stand mill arrangement of the 10.5" Double Duo Mill. (film 23.04)

Date:	08/07/2010	Revision Number:	0
Scale:	N/A	Illustrator:	CS
Path:	Y:\PROJECTS\74360_RDD Staybrite Works\Drawing Office\Report Figs\Building Report\y-m-d\Plates 57_58.cdr		

Wessex Archaeology

Plate 59: General view of foundation trench for run-out rolls from the final stand of the 10.5" Double Duo Mill. (film 23.06)

Plate 60: General view of the disused motor house in the southern half of Building 11. (film 12.01)

Date:	06/07/2010	Revision Number:	0
Scale:	N/A	Illustrator:	CS
Path:	Y:\PROJECTS\74360_RDD Staybrite Works\Drawing Office\Report Figs\Building Report\y-m-d\Plates 59_60.cdr		

Wessex Archaeology

Plate 61: General view of the former switchgear room of the disused motor house in the southern half of Building 11. (film12.04)

Plate 62: General view of the southern half of Building 11looking northwest. (film 24.03)

Date:	06/07/2010	Revision Number:	0
Scale:	N/A	Illustrator:	CS
Path:	Y:\PROJECTS\74360_RDD Staybrite Works\Drawing Office\Report Figs\Building Report\y-m-d\Plates 61_62.cdr		

Plate 63: General view of rails cutting through the south of Building 11 relating to the Site's former internal rail network. (film 24.01)

Plate 64: General view of the air filter house in the south of Building 11. (film 12.22)

Wessex Archaeology

Date:	06/07/2010	Revision Number:	0
Scale:	N/A	Illustrator:	CS
Path:	Y:\PROJECTS\74360_RDD Staybrite Works\Drawing Office\Report Figs\Building Report\y-m-d\Plates 63_64.cdr		

Plate 65: General view of the west elevation of Building 12. (film 17.01)

Plate 66: Detail of roof structure over Building 12. (film 20.06)

Wessex Archaeology

Date:	06/07/2010	Revision Number:	0
Scale:	N/A	Illustrator:	CS
Path:	Y:\PROJECTS\74360_RDD Staybrite Works\Drawing Office\Report Figs\Building Report\y-m-d\Plates 65_66.cdr		

Plate 67: Detail of blocked arched window in west elevation of Building 12. (film 7.07)

Plate 68: General view of interior of Building 12 showing disassembled furnace. (film 7.18)

Date:	06/07/2010	Revision Number:	0
Scale:	N/A	Illustrator:	CS
Path:	Y:\PROJECTS\74360_RDD Staybrite Works\Drawing Office\Report Figs\Building Report\y-m-d\Plates 67_68.cdr		

Plate 69: General view of Building 13, looking from the northeast. (film 6.02)

Plate 70: Detail of window in the east elevation of Building 13. (film 16.08)

Date:	06/07/2010	Revision Number:	0
Scale:	N/A	Illustrator:	CS
Path:	Y:\PROJECTS\74360_RDD Staybrite Works\Drawing Office\Report Figs\Building Report\y-m-d\Plates 69_70.cdr		

Wessex Archaeology

Plate 71: General view of the interior of Building 13 looking northeast. (film 7.12)

Plate 72: General view of north elevation of Building 14. (film 7.12)

Date:	06/07/2010	Revision Number:	0
Scale:	N/A	Illustrator:	CS
Path:	Y:\PROJECTS\74360_RDD Staybrite Works\Drawing Office\Report Figs\Building Report\y-m-d\Plates 71_72.cdr		

Plate 73: General view of the ground floor interior of Building 14, looking south. (film 7.22)

Plate 74: General view of the first floor interior of Building 14, looking south. (film 7.20)

Date:	06/07/2010	Revision Number:	0
Scale:	N/A	Illustrator:	CS
Path:	Y:\PROJECTS\74360_RDD Staybrite Works\Drawing Office\Report Figs\Building Report\y-m-d\Plates 73_74.cdr		

Wessex Archaeology

Plate 75: General view of Building 15, looking southwest. (film 16.01)

Plate 76: General view of the first floor interior of Building 15, looking east. (film 6.15)

Date:	06/07/2010	Revision Number:	0
Scale:	N/A	Illustrator:	CS
Path:	Y:\PROJECTS\74360_RDD Staybrite Works\Drawing Office\Report Figs\Building Report\y-m-d\Plates 75_76.cdr		

Wessex Archaeology

Plate 77: General view of Building 16, looking northwest. (film 8.20)

Plate 78: General view of Building 17, looking north. (film 16.03)

Date:	06/07/2010	Revision Number:	0
Scale:	N/A	Illustrator:	CS
Path:	Y:\PROJECTS\74360_RDD Staybrite Works\Drawing Office\Report Figs\Building Report\y-m-d\Plates 77_78.cdr		

Wessex Archaeology

Plate 79: Detail of cast iron column in west elevation of Building 17. (film 6.20)

Plate 80: General view of interior of Building 17. (film 6.06)

Plate 81: General view of Building 18, looking north. (film 15.05)

Plate 82: General view of Building 18, looking southwest. (film 4.10)

Date:	06/07/2010	Revision Number:	0
Scale:	N/A	Illustrator:	CS
Path:	Y:\PROJECTS\74360_RDD Staybrite Works\Drawing Office\Report Figs\Building Report\y-m-d\Plates 81_82.cdr		

Wessex Archaeology

Plate 83: General view of Building 18, looking east. (film 4.24)

Plate 84: General view of interior of Building 18, looking east. (film 4.07)

Plate 85: General view of office in centre of north wall of Building 18. (film 5.14)

Plate 86: General view of interior of office in Building 18. (film 5.11)

Date:	08/07/2010	Revision Number:	0
Scale:	N/A	Illustrator:	CS
Path:	Y:\PROJECTS\74360_RDD Staybrite Works\Drawing Office\Report Figs\Building Report\y-m-d\Plates 85_86.cdr		

Wessex Archaeology

Plate 87: General view of Building 19, looking south. (film 15.03)

Date:	08/07/2010	Revision Number:	0
Scale:	N/A	Illustrator:	CS
Path:	Y:\PROJECTS\74360_RDD Staybrite Works\Drawing Office\Report Figs\Building Report\y-m-d\Plates 87.cdr		

Wessex Archaeology