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Salford
MANCHESTER

Historic Building Investigation

Hammerstone Road
Depot, Gorton,
Manchester

Client:

Morgan Sindall
Construction and
Infrastructure Ltd

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Summary

Morgan Sindall Construction and Infrastructure Ltd has obtained planning consent from Manchester City Council to carry out the refurbishment and reconfiguration of the loco shed (NGR SJ 88115 96826), to include office, storage, and workshop accommodation; demolition of ancillary buildings; erection of a new gatehouse; reconfiguration of existing parking areas; creation of a 'Winter Maintenance' area including a commercial vehicle parking garage with associated office and welfare accommodation and a grit/salt storage barn; creation of vehicle wash-down area; refurbishment of the existing vehicle refuelling area; and restoration and enhancement of the memorial garden (Planning Ref: 130127/VO/2021).

In order to secure archaeological interests and offset the harm of any impact on internal and external features of the building during redevelopment, Manchester City Council attached a condition to planning consent that required a scheme of archaeological investigation to be undertaken as part of the development. Following consultation with the Greater Manchester Archaeological Advisory Service, it was recommended that an appropriate scheme of archaeological works would comprise an enhanced Level 1 survey of the main boiler shed, a level 2/3 survey of the three ancillary buildings and associated documentary research of the former Gorton Foundry.

In December 2022, Salford Archaeology was commissioned by Morgan Sindall Construction and Infrastructure Ltd to undertake the recommended historic building investigation. This concluded that the Hammerstone Road depot was formally part of the Gorton Foundry under the ownership of Beyer Peacock Company as a locomotive works which was founded in 1854. The site on Gorton Lane was purchased due to the cheap land price and its proximity to a local reservoir that gave a good water supply.

The original foundry was situated to the east of the Site, however during the 1920s a large building had been constructed to the west of the site, forming the present Boiler Shop. This shop measured 600ft long by 175ft wide and consisted of three longitudinal bays and a riveting bay. The shop was fitted with two crane gantries of 62ft and 59ft span, with one above the other. Several other buildings had been constructed to the south of this new Boiler Shop.

The company continued to make locomotives, except during the First World War when the government controlled the works for the war effort, producing artillery, until its closure in 1966. During the 1970s the site was largely cleared, including the principal building and Hammerstone Road had been constructed within the centre of the works. By 2019, only the Boiler Shop to the west of the site and three buildings to the south and are currently being used by as offices and a warehouse for a recycling plant.

The historical building investigation of the 20th-century boiler shop and ancillary buildings has provided a valuable opportunity to record an example of an early 20th-century loco works, to mitigate any loss of historic fabric as part of the redevelopment. It has also enabled a review of the available documentary material to be combined with the physical evidence embedded in the historic fabric to produce a detailed narrative of the building's development, enhancing the questions posed by the North West Regional Framework questions.

1. Introduction

1.1 Planning Background

Morgan Sindall Construction and Infrastructure Ltd has obtained planning consent from Manchester City Council to carry out the refurbishment and reconfiguration of the loco shed (NGR SJ 88115 96826), to include office, storage, and workshop accommodation; demolition of ancillary buildings; erection of a new gatehouse; reconfiguration of existing parking areas; creation of a 'Winter Maintenance' area including a commercial vehicle parking garage with associated office and welfare accommodation and a grit/salt storage barn; creation of vehicle wash-down area; refurbishment of the existing vehicle refuelling area; and restoration and enhancement of the memorial garden (Planning Ref: 130127/VO/2021).

The Hammerstone Road depot was formally part of the Beyer Peacock Company as a locomotive works which was founded in 1854 by Charles Beyer, Richard Peacock and Henry Robertson. The site on Gorton Lane was purchased due to the cheap land price and its proximity to a local reservoir that gave a good water supply.

The works was purpose built and included boiler shops, a smithy and forge, an iron foundry, fitting erecting and machine shops, a pattern shop, stables, offices, a storeroom, grinding shop and joiner's shop. The original works was situated immediately east of the site. By 1864 the works had expanded new tender shops constructed and the machine shops had diversified to create wheels, cylinders, and machine tools.

During the 1920s a large building had been constructed to the west of the site, forming the present Boiler Shop. This shop measured 600ft long by 175ft wide, consisting of three longitudinal bays and a riveting bay. The shop was fitted with two crane gantries of 62ft and 59ft span, with one above the other. Several other buildings had been constructed to the south of this new Boiler Shop.

The company continued to make locomotives, except during the First World War when the government controlled the works for the war effort, producing artillery, until its closure in 1966. During the 1970s the site had largely cleared, including the principal building and Hammerstone Road had been constructed within the centre of the works. By 2019, only the Boiler Shop to the west of the site and three buildings to the south and are currently being used by as offices and a warehouse for a recycling plant.

In view of the historic interest of the building, the Greater Manchester Archaeological Advisory Service (GMAAS), in their capacity as archaeological advisors to Manchester City Council, recommended that an enhanced Level 1 survey of the main shed, a level 2/3 survey of the three ancillary buildings and associated documentary research of the former Boiler Shop of the Gorton Foundry is carried out in advance of any development works. They also recommended an archaeological watching brief to be conducted during the major repair works, particularly where the brick encased steel has corroded, and needs replaced. It was also recommended that a condition be attached to planning consent that advised:

1. *'No development, soft-strip or alteration shall take place until the applicant or their agents or successors in tile has secured the implantation of a programme of*

archaeological works in accordance with a Written Scheme of Investigation (WSI) which has been submitted to and approved in writing by the local planning authority. The WSI shall cover the following:

- 1. Informed by the updated North West Regional Research Framework, a phased programme and methodology investigation and recording to include:
 - a) a historic building survey of the Boiler Shop and its various contemporary extensions, lean-to and ancillary structures (including outbuildings 1, 2 and 3; offices 1 and 3; and the welfare building as depicted on plan HRD-FRA-00-XX-DR-A-90-0100 submitted with the application)**
- 2. A programme for post-investigation assessment to include:
 - a) analysis of the site investigation records and finds*
 - b) production of a final report on the significance of the heritage interest recorded.**
- 3. Deposition of the final report with the Greater Manchester Historic Environment Record.*
- 4. Dissemination of the results commensurate with their significance.*
- 5. Provision for archive deposition of the report, finds and records of the site investigation.*
- 6. Nomination of a competent person or persons/organisation to undertake the works set out within the approved WSI*

Reason: In accordance with NPPF Section 16 paragraph 199: To record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and the impact, and to make this evidence (and any archive generated) publicly accessible, and pursuant to policy of EN3 of the Manchester Core Strategy (2012).

1.2 Research Aims and Objectives

The principal aim of the historic building investigation, given the commercial nature of the project, was to provide a written, drawn and photographic record of the former Boiler Shop and the three ancillary buildings, coupled with documentary research prior to redevelopment.

The stated objectives of the archaeological investigation included:

- to carry out an archaeological survey commensurate with an Historic England Level 2/3-type historic building investigation of the 20th-century ancillary buildings. This will comprise the production of measured survey drawings, coupled with a comprehensive photographic record and a written description;
- to carry out an archaeological survey commensurate with an enhanced Historic England Level 1-type historic building investigation of the 1920s Boiler Shop. This will comprise a comprehensive photographic record and a written description along with using the existing plans and elevations. This will be further enhanced with the production, through laser scanning of the internal elevations;
- a watching brief will be required to record any of the major repair works, particularly where the brick encased steel has been corroded and needs replaced;

- pending the results drawn from the historic building survey investigation, a watching brief may be required to monitor and record any hidden fabric during aspects of the stripping out and demolition of the buildings;
- to carry out documentary research to elucidate the development of the works;
- to present the results of the historic building investigation in a fully illustrated report that provides an account of the works origins, development and use;
- to produce an archive for the project;
- to make the results of the work publicly available via the deposition of the final digital report with the Greater Manchester Historic Environment Record and OASIS.

In addition, the historic building investigation may inform some of the research questions presented in the current North West Archaeological Research Framework (<https://researchframeworks.org/nwrf/>):

- *Ind58: How have industrial buildings adapted to new technologies and processes?*
- *Ind65: What was the impact of globalisation in material culture and trading networks?*
- *Ind92: What impact did the regions early development have on the world?*

1.3 Historic Building Investigation Methodology

The historic building investigation was conducted following the ClfA Standards and guidance for archaeological building surveys (updated 2020), and was commensurate with a Historic England Level 2/3-type survey of Listed buildings (Historic England 2016).

Level 2/3 Recording

Photographic Archive: a comprehensive photographic archive for the building was produced utilising a high-resolution digital camera with a sensor size of at least 15 megapixels. All frames, excluding general contextual views, incorporated a graduated metric scale.

A plan showing the viewpoint directions of each photograph was produced, together with a full photographic index. The archive comprises the following:

- the external appearance and setting of the building, including a mixture of general shots and detailed views taken from perpendicular and oblique angles;
- general shots of the surrounding landscape;
- the general appearance of principal rooms and circulation areas;
- any external or internal detail, structural or architectural, which does not show adequately on general photographs;
- any internal detailed views of features of especial architectural interest, fixtures and fittings, or fabric detail relevant to phasing the building.

Site Drawings: measured survey plans and elevations and key cross-sections of the buildings were produced utilising a combination of laser scanning, rectified photography, reflectorless electronic distance meter (REDM) and manual survey techniques. The resultant data was then used as the basis of CAD drawings, which are included within the final report as figures.

Written Description: a description of the historic structures was maintained to Historic England Level 3 standard. The records are essentially descriptive and provide a systematic account of the origin, development and use of the buildings, which include a description of the plan, form, fabric, function, age and development sequence. The written description includes a summary of the building's past and present use, an account of any key architectural features, fixtures and fittings, and a discussion of the relative significance of each individual component structure within the wider mill complex.

Level 1 Recording

Photographic Archive: a rapid photographic survey of the non-designated buildings will be produced utilising a high-resolution digital camera with a sensor size of at least 15 megapixels. All frames, excluding general contextual views, will incorporate a graduated metric scale.

Site Drawings: a set of measured survey floor plans of the buildings have been provided by the Client, and will be checked for accuracy as an initial part of the archaeological survey. Any requirement for additional survey will be carried out utilising a combination of rectified photography, a reflectorless electronic distance meter (REDM), and manual survey techniques. In addition the level 1 survey will be enhanced with the production, through laser scanning of the internal elevations. The existing external elevations will then be enhanced with laser scanning after the demolition of the modern additions has revealed more of the original fabric. Further drawings will also be produced detailing all repairs made, and all removal or replacement of original fixtures and fittings. The resultant data will then be used as the basis of CAD drawings, which will be included within the final report as figures.

Written Description: a description of the historic structures will be maintained to Historic England Level 1 standard, as appropriated. The records will essentially form a summary statement of the exterior and interior of the buildings.

The Watching Brief

Rationale: a watching brief will be required to record any of the repair works, particularly where the brick encased steel has corroded, and needs replaced.

Photographic Archive: a comprehensive digital photographic archive will be produced. Where necessary, artificial lighting will be employed to ensure that the images are of high quality. All frames, excluding general contextual views, will incorporate a graduated metric scale.

Finds Policy: all finds will be collected and handled following the guidance set out in ClfA guidance for archaeological materials. Unstratified material will not be kept unless it is of exceptional intrinsic interest. Material discarded as a consequence of this policy will be described and quantified in the field.

Treasure: any gold and silver artefacts recovered during the course of the programme of archaeological works will be removed to a safe place and reported to the local Coroner according to the procedures relating to the Treasure Act, 1996.

In 2022 Salford Archaeology was commissioned by Morgan Sindall Construction and Infrastructure Ltd to undertake the recommended investigation and fulfil the archaeological planning obligations.

2. The Setting

2.1 Location

Hammerstone Road Depot lies within Gorton approximately 4km to the east of Manchester City Centre (centred on NGR SJ 88115 96826). The Site is bounded by a railway line to the north, Hammerstone Road to the east, Gorton Lane to the south, and Preston Street to the west (Plate 1; Fig 1).



Plate 1: Recent aerial shot, showing the Site boundary looking north

2.2 Geology and Topography

The underlying solid geology of the Site, as mapped by the British Geological Survey at 1:50000, is comprised of Chester Pebble Beds Formation - Sandstone. The overlying drift geology is comprised of Glaciofluvial Sheet Deposits, Devensian sand and gravel (British Geological Survey 2017).

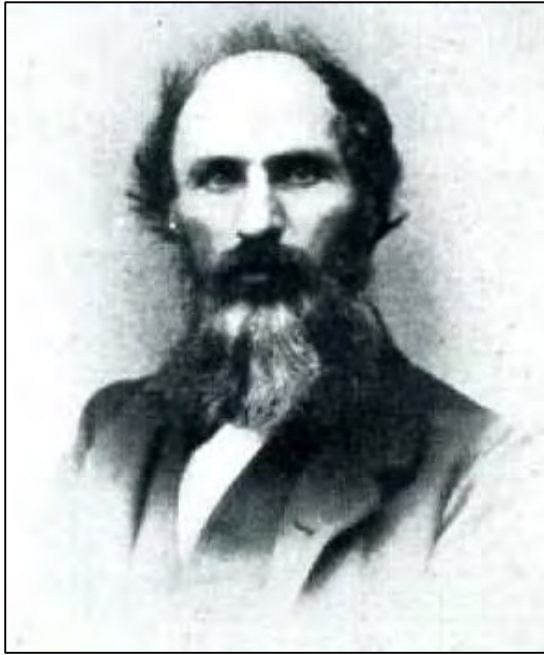
3. Historical Background

3.1 Introduction

To explore the historical background of the Gorton locomotive foundry of Beyer, Peacock & Co. it is pertinent to first establish an understanding of the history of locomotive use and manufacture. At the beginning of the 19th century locomotive travel was eclipsing other forms of transport. The roads were poorly made, and the canals took a long time to transport goods, the rail however offered a quick and affordable way for goods to travel in and around Manchester and the wider world. At the same time rail lines were being laid out in the British Empire and export of locomotive machines became key to the industry through the 19th century. The famous Manchester Liverpool railway opened in 1830 this inspired growth in locomotive use throughout the world. Goods were travelling in and out of Manchester faster than ever before along the rail lines, allowing Manchester to become the hub of industrial revolution we know it as today.

3.2 Development of the Site

The promise of the locomotive industry inspired Charles Beyer, Richard Peacock, and Henry Roberts to create the Gorton locomotive Foundry in 1854 (Plate 2 and 3). Their company Beyer, Peacock & Co originally produced exclusively steam engines. Beyer had formerly worked for Sharp, Roberts & Co. as their chief engineer, while Peacock had former experience at the Great Western Railway and Manchester & Sheffield railway. The Reputation Beyers had amassed working for Sharp, Roberts & Co. resulted in the new company receiving orders from the East India Railway Company in 1855, before works had begun on their new foundry.



Plates 2&3: Charles Beyer and Richard Peacock, founding members of Gorton Foundry

The company chose a site in Gorton for their locomotive works as the land here was cheap and situated by a large reservoir providing ample supply of water (Plate 4). The early order from the East India Railway Company allowed them to start designing machines to fit the specifications for rail in India. When the works opened, Gorton was a sparsely populated area, with the company employing 350 works in 1855. The works was purpose built and included boiler shops, a smithy and forge, an iron foundry, fitting erecting and machine shops, a pattern shop, stables, offices, a storeroom, grinding shop and joiner's shop. The original works was situated immediately east of the Site. By 1864 the works had expanded with new tender shops while the machine shops had diversified to create wheels, cylinders, and machine tools. The Ordnance Survey map of 1893 depicts these buildings to the eastern end of the Site with rail lines around the western end of the site affording access onto the Manchester, Sheffield and Lincolnshire Railway (Plate 5). The works was visited by the Institute of Mechanical Engineers in 1894 who noted in an extensive report

"The general offices are handsome and lofty, and the drawing office is exceptionally capacious, well fitted and well lighted. Electric light is employed throughout this department in conjunction with gas, both of which can be used at once or separately. Electric light is also used in the pattern-making shop and the pattern stores. Connected with the drawing office are photographic and model rooms, including a tracing-room, in which girls are exclusively employed. The works are arranged in three main avenues running north and south, the shops standing west to east across each avenue with a large block of buildings to the south".

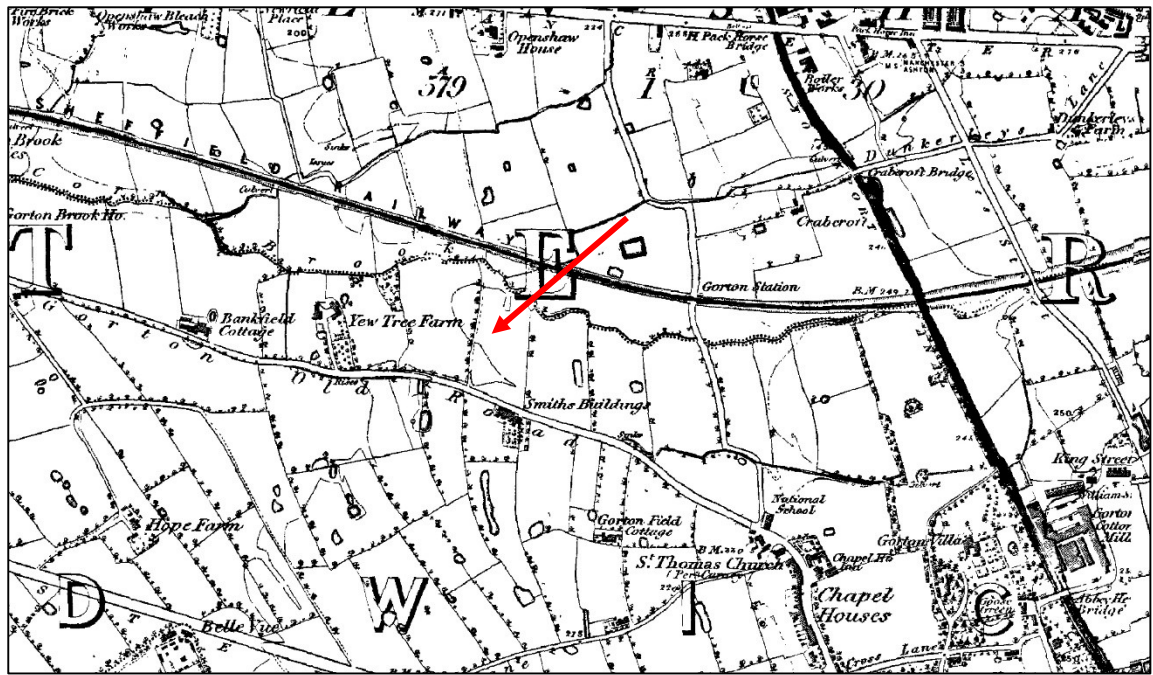


Plate 4: Extract from the Ordnance Survey map of 1848, with an arrow marking the site of Gorton Foundry

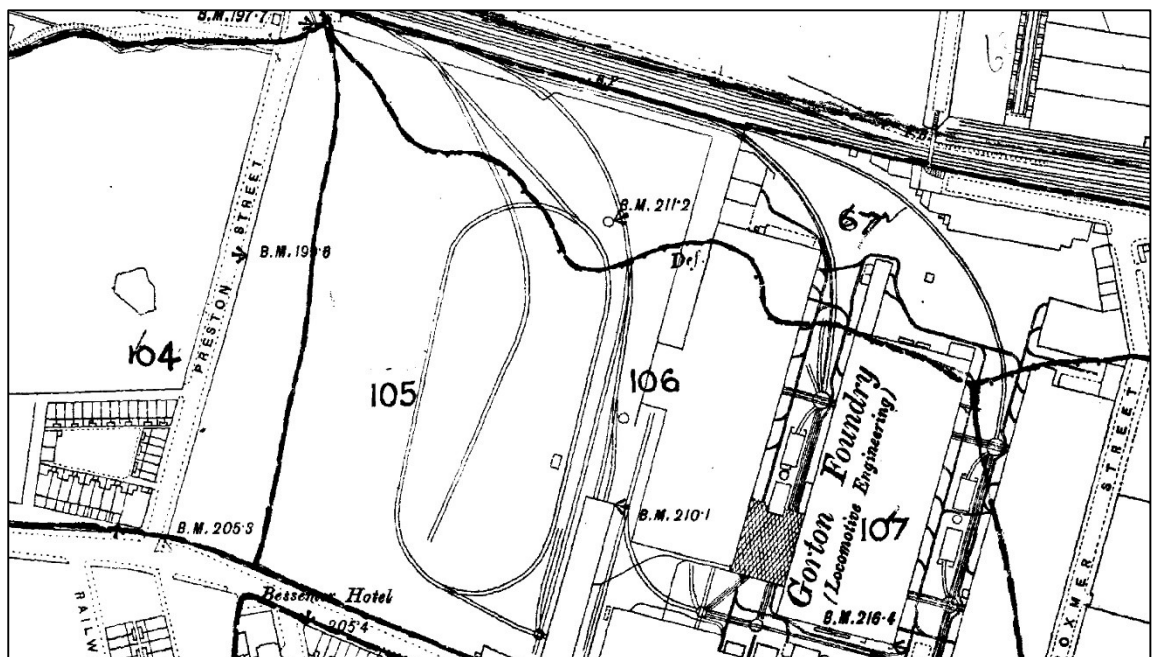


Plate 5: Extract from the Ordnance Survey map of 1893

By 1864 Beyer, Peacock & Co. were developing locomotives for the London Underground in its early days, they had developed a condensing tank engine specifically for use on tube trains. However, the companies most important addition to the world of locomotive engineering was the Beyer-Garratt Locomotive. This was designed by William Garratt after he came to work at Beyer, Peacock & Co. in 1907 (Plate 6). This new locomotive had an engine system that burned fuel much more economically which allowed the vehicle to be much more powerful and lighter than most on the market. The engine also allowed the train better traction meaning it could turn sharp corners with ease and traverse vertical terrain with heavy loads. All this made the Beyer-Garratt a first-choice train for exporting overseas to the Empire, the train did particularly well in Africa. Over its lifetime the company produced 1,636 Beyer-Garratt locomotives, 1,116 of which were built at the works in Gorton and exported around the world to 86 railways.



Plate 6: Brochure for the Beyer-Garratt Locomotives

With the construction of the new style locomotives the site had further expanded as noted on the Ordnance Survey map of 1908. The buildings had been extended further west with multiple sidings now built within the large yard to the western end of the site (Plate 7).

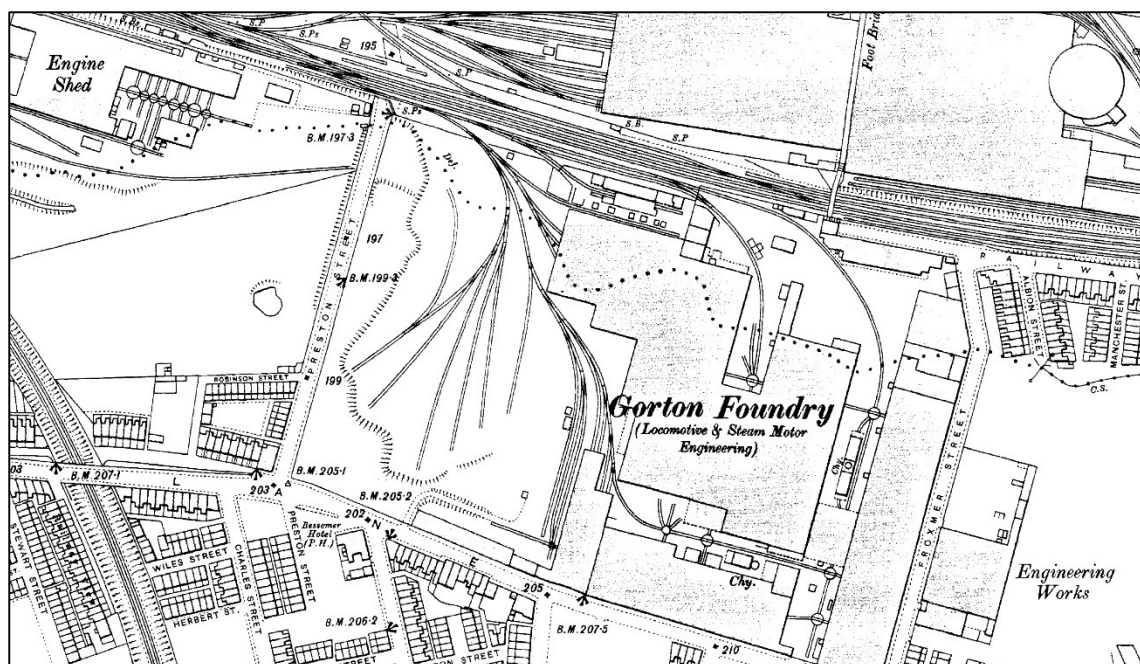


Plate 7: Extract from the Ordnance Survey map of 1908

When the first world war began the government took over the works to manufacture artillery to aid for the war effort. After the war the works returned to the manufacture of locomotive vehicles. During the early 1920s the works had further expanded with to the west with the inclusion of a travelling crane extending beyond the western elevation of the north-western shop (Plate 8). Several new sidings were also added to the western yard (Plate 8).

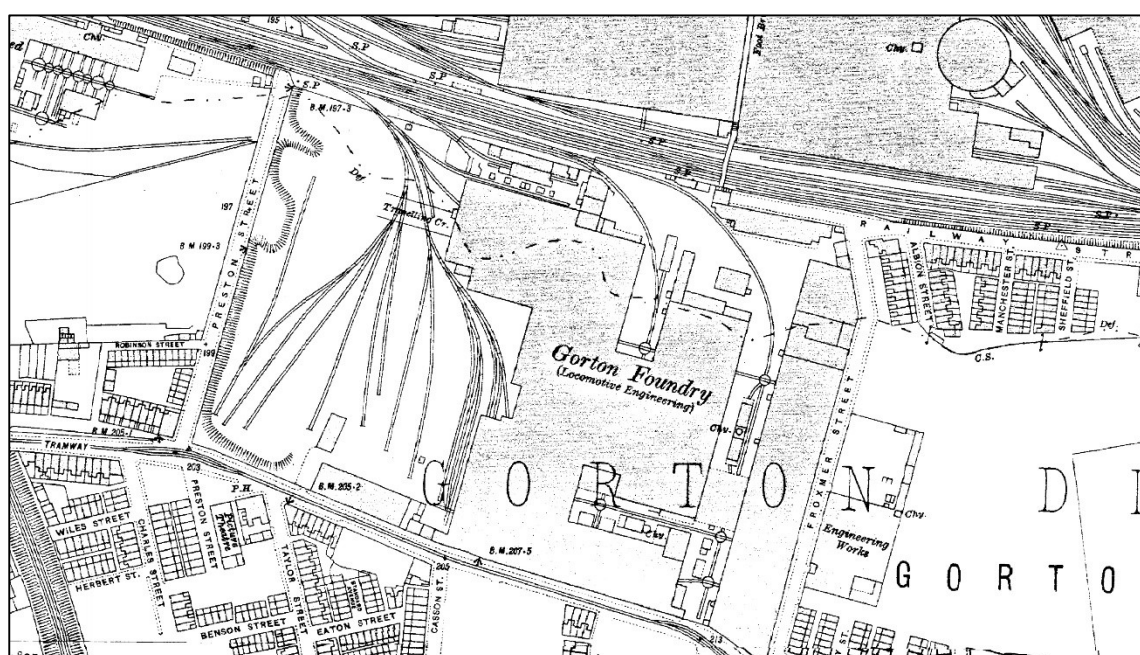


Plate 8: Extract from the Ordnance Survey map of 1908

The early to mid-1920s saw the construction of a new boiler shop with an attached riveting bay to the north and several ancillary buildings to the south-west corner of the site. By this point the company was doing well, and with the population of Gorton increasing since the works opened, they now employed over 2,000 individuals.

An aerial photograph of the site taken in 1927 shows the new boiler shop was situated to the western end of the site. The building was a three-bay gabled building with an attached riveting bay to the north. The ancillary buildings to the south included an attached substation with workshops to the south-east (Plate 9). In 1929 the Institute of Mechanical Engineers had again visited the foundry and produced a further detailed report:

“Boiler and Tender Departments. – An outstanding feature of the firm’s policy of modernization is to be seen in the new boiler department, which came into operation in 1925. This department, which measures 600 feet long by 175 feet wide, consists of three longitudinal bays and a riveting bay. The main or boiler building and mounting bay is fitted with two crane gantries of 62 feet and 59 feet span respectively, one above the other. The upper accommodates travelling cranes of 50 tons capacity, and the lower one carries cranes of 10 and 5 tons capacity. The middle bay has a single gantry of 50 feet span for cranes of 20 and 10 tons capacity. The third bay has also a single gantry, but of 45 feet span and carrying cranes of 10 and 5 tons capacity. These three gantries lead to a high traverse end bay equipped with cranes, having remote control, of sufficient range of lift for dealing with the longest boiler shells. In the traverse bay are situated the deep-leg riveting machines. Adjacent to this bay, but outside the shop and alongside the railway, is a large, covered stores for unloading and storing of plates. The whole of the machinery and plant has been planned and laid out in order that the materials when received progress in proper sequence, involving a minimum of transport and handling, until they develop into a complete boiler, tender or tank ready for testing. The hydraulic and steam tests of boilers are carried out in a special section of the shop before being passed to the erecting department”.



Plate 9: Aerial view of the new boiler shop taken in 1927

During the Second World War the works had once again been taken under control by the government but continued to build locomotives for the war effort. The works had been targeted by the Luftwaffe with the Manchester Bomb Damage Maps (1940-1941) notes a high explosive had detonated within the central yard of the works (Plate 10). This map also shows the first depiction of the new boiler shop and ancillary buildings that had been constructed in the 1920s.



Plate 10: Bomb Damage map of Manchester 1940-1941, showing the Site boundary with a blue circle identifying high explosives

During the latter half of the 20th-century advancements in technology caused rail companies to favour diesel engines and the use of steam locomotives began to drop off. Additionally, developments in electric engines for both trains and trams saw the Gorton works beginning to struggle to keep up with the developing industry. By the late 1950's British rail had switched entirely from steam engines to diesel and overseas rail companies followed suit. The plant in Gorton had been manufacturing diesel-hydraulic engines by 1958, however the tide had shifted in the UK towards diesel-electric engines. Much of the British locomotive industry was monopolised by British Rail who supplied their own trains.

The final nail for Beyer, Peacock & Co was the rise of locomotive manufacture coming out of America in the second half of the century. America by the 1960s held the monopoly on export of locomotives, this coupled with the end of the British Empire edged out export trade from the United Kingdom. The works struggled against these odds for several years before closing its doors in 1966. The site had largely been clearer during the latter half of the 20th-century while the later boiler shop and ancillary buildings had been retained.

4. Historic Building Investigation

4.1 Introduction

The programme of historic building investigation undertaken at the former Gorton Foundry consisted of a Historic England Level 2/3 standard of the three ancillary buildings and an enhanced Historic England Level 1 survey of the 1920s boiler shop.

4.2 The southern ancillary building- Shed 1 (Cycle Shed)

The southern ancillary building was a single-storey brick built shed with a pitched slate roof and timber barge boards (Plate 11). Internally the building could not be entered due to the collapsed roof, however the eastern section could be visually recorded via the eastern doorway at the centre of the eastern elevation.



Plate 11: General view Shed 1 looking south-west

External Description: the eastern elevation formed the gable wall of the shed and was constructed in a three-course English Garden Wall bond (Plate 12). The southern end of the elevation had retained the original cast-iron rainwater goods.



Plate 12: General view of the eastern elevation Shed 1

The elevation consisted of a later inserted single 5'10" (1.77m) wide door at the centre. The opening comprised a 6½" (0.16m) timber lintel with a sliding timber door to the internal face. The doorway had been inserted into an earlier 6'5¾" (1.97m) opening with a 5" (0.12m) timber lintel (Fig 2). The opening between the two phases was infilled with mid-20th-century brick with cement mortar. A cast-iron bracket was situated to the northern end of the original timber lintel.

A circular cast-iron tie rod plate was situated to the southern end of the later doorway. This supported the original gable wall with the altered southern jamb of the opening (Plate 12).

The northern elevation consisted of two window apertures to the eastern end and two doorways to the western end (Fig 2). The window openings contained an obscured steel lintel with the reveals having been repaired with later 20th-century brick that was bonded with cement mortar. Housed within the openings was a three-over-two five-light timber framed window with obscured glass to the lower two lights and clear glass above. The two upper lights opened outwards with an awning opening (Plate 13).



Plate 13: The central window within the norther elevation of Shed 1

The western doorway was a later insertion and comprised an obscured steel lintel and a concrete threshold. The upper half of the brick door jambs had been replaced with modern brick and bonded with cement mortar (Plate 14). The 6' (1.83m) wide opening contained two flush timber doors with two fixed transom lights above (Plate 14). The door furniture consisted of modern aluminium door handles and hinges. The eastern doorway measured 3'7" (1.09m) wide and consisted of a flush timber door with a 6" timber lintel and a concrete threshold.



Plate 14: The western doorway within the norther elevation of Shed 1

The southern elevation formed part of the sites boundary wall fronting Gorton Lane and was constructed in a four-course English Garden Wall bond (Plate 15). The only feature was a infilled cart doorway comprising a segmental arched head with a concrete threshold. The opening was infilled with modern brick laid in a stretcher bond and keyed into the original brick jambs (Plate 16).



Plate 15: General view of the southern elevation Shed 1



Plate 16: Detail of the infilled doorway within the southern elevation

The western elevation formed the gable wall of the shed and was constructed in a three-course English Garden Wall bond. The elevation contained no historical features, although the original timber barge boards had been retained (Plate 17).



Plate 17: General view of the western elevation Shed 1

Internal Description: Access into the shed was only afforded by the loading-bay doorway at the centre of the eastern gable wall. The shed was unsafe to enter, however a visual inspection could be undertaken from this doorway.

The shed had been divided into several rooms with the large eastern room consisting of a concrete floor and painted brick walls (Plate 18; Fig 2). The ceiling was open which exposed bolted L-section angle fink trusses (Plate 18).

The northern wall contained two window apertures comprised a timber lintel with a flat timber internal sill. Between the windows was a bullnose brick buttress with a second buttress situated to the western end of the room (Plate 18). The southern wall stepped out a full bricks width at approximately 2'3" (0.68m) up from the concrete floor (Plate 18).



Plate 18: General internal view of Shed 1, looking west

4.3 The western ancillary building- Shed 2 (Power House)

During the expansion of Gorton Foundry in the 1920s a two bay, single-storey building was constructed to the north-west of Shed 1. This shed was used as an electrical substation and had retained some of the original fixtures and fittings internally. The building was constructed in a three-course English Garden Wall bond with a double pitched roof with modern box-profile steel sheeting that replaced the original tiles. The northern elevation of the shed had been obscured by the adjoining boiler shop to the north.

External Description: the eastern elevation comprised a single doorway to the northern end with two window apertures above lintel height of the doorway (Plate 19; Fig 3). The doorway measure 8'2½" (2.5m) and consisted of bullnose brick jambs, an obscured timber lintel and a concrete threshold. A two panelled door and a timber louvered door were housed within the opening (Plate 19).



Plate 19: The eastern elevation Shed 2

Directly above the doorway was an 11'6½" (3.51m) wide window with a flat steel bar lintel and a projecting chamfered terracotta sill that obscured the lintel to the doorway below. The opening housed a horizontal 11-light timber framed window with timber mullions and clear glass glazing (Plate 20). A second window aperture had been situated to the south and comprised chamfered terracotta sill, and a flat steel bar lintel. The 14'10" (4.52m) wide opening was infilled with modern bricks laid in a stretcher bond arrangement (Plate 21).



Plate 20: Detail of the window above the doorway within the eastern elevation



Plate 21: The infilled window to the southern end of the eastern elevation

The southern elevation was constructed with two gables fronting Gorton Lane with the western gable having a dogleg at the corner (Fig 3). The elevation was constructed in a three-course English Garden Wall bond with oversailing stone copings to the roof (Plate 22). Three 4'11" (1.5m) wide windows comprising gauged segmental arched heads with protruding chamfered stone sills. The openings were brick infilled with a timber louvered vent with a concrete lintel was inserted into the central aperture (Plate 22). The south-west facing dogleg contained a single pedestrian doorway to the south-eastern end. This consisted of a segmental arched lintel with a concrete step affording access into the building from Gorton Lane. The opening housed a replaced steel panelled door with a modern galvanised security gate fixed to the outer face (Plate 23).



Plate 22: General view of the southern elevation Shed 2



Plate 23: General view of the south-western elevation Shed 2

The western elevation was built in a three-course English Garden Wall bond with a horizontal recessed panel to the upper section of the wall (Plate 24; Fig 3). An inserted wall box with steel banding measured 2'1 $\frac{3}{4}$ " (0.65m) by 2'1 (0.63m) and was situated to the south-eastern end of the recess (Plate 24). The replaced gutter to the roof was obscured by moulded ogee cyma recta string course (Plate 24).



Plate 24: General view of the western elevation Shed 2

Internal Description: internally, the building was divided into four rooms (Fig 3). Principle access into Room 1 was afforded by the doorway within the eastern elevation of the shed (Fig 3). The 8'2½" (2.5m) wide doorway contained a panelled door and a timber louvered door were housed (Plate 25). The timber doorframe had been obscured by the moulded timber architraves (Plate 25).



Plate 25: The doorway at the centre of the eastern wall

The room measured 53'10" (16.42m) by 25'11" (7.91m) and comprised stone flag floor, brick walls and an open ceiling exposing the double fink L-section angle fink trusses with l-section tie beams (Plates 26&27).

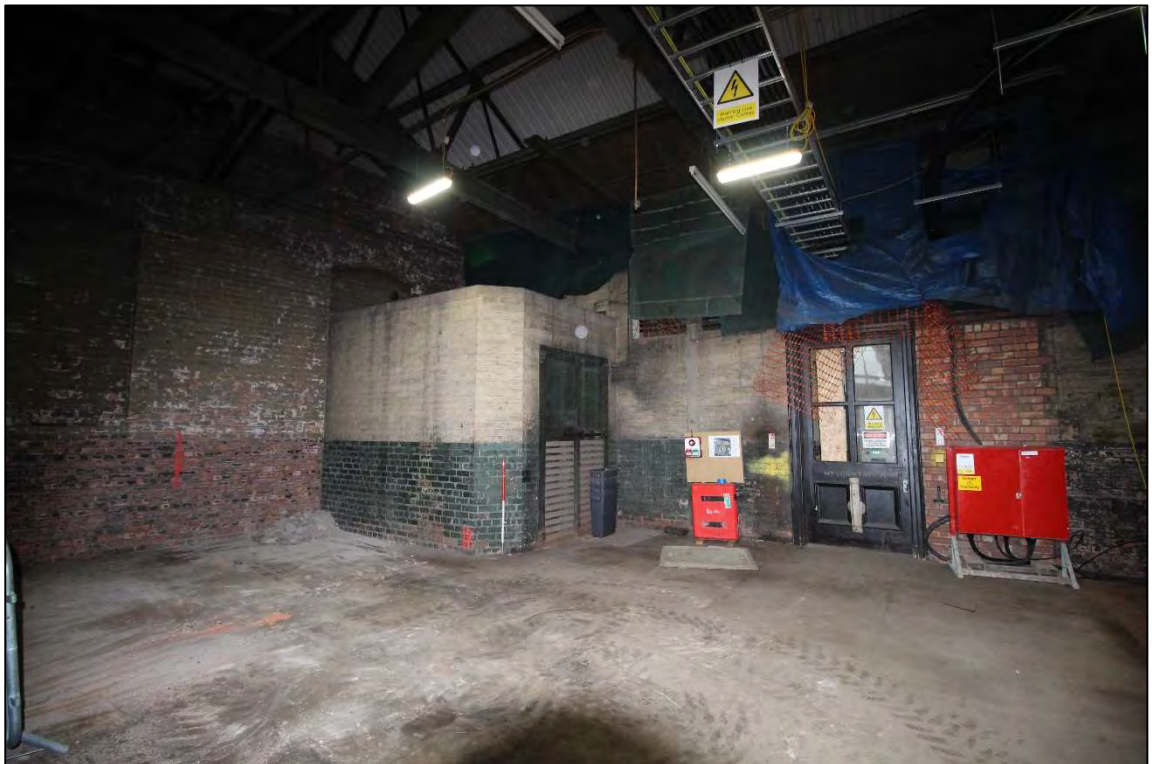


Plate 26: General view of Room 1 within Shed 2, facing south-west



Plate 27: Detail of the fink trusses in Room 1

The eastern wall contained three horizontal windows situated above the door lintel. These comprised a riveted steel I-section with a concrete rendered brick internal sill. The central opening housed an 11-light timber window frame, while the northern aperture housed a nine-light window. The southern opening had been infilled with modern brick laid in a stretcher bond (Plates 25, 28&29).



Plate 28: The window aperture to the northern end of the eastern wall of Room 1



Plate 29: The infilled window to the southern end of the eastern wall of Room 1

A blocked doorway was situated to the southern end of the eastern wall. This afforded access into a small lean-to that was constructed between the building and Shed 1 (Fig 3). The doorway consisted of a steel I-section lintel and a concrete threshold. The 6'11½" (2.12m) wide opening had been infilled with modern bricks laid in a stretcher bond arrangement (Plate 30).



Plate 30: The blocked doorway within the eastern wall of Room 1

The eastern gable of the building formed the southern wall of the room. This contained two blocked 4'11" (1.5m) wide windows comprising a three-course segmental arched lintel and a flat brick internal sill. The openings were infilled with brick (Plate 31).



Plate 31: The blocked windows to the southern wall of Room 1

A doorway at the centre of the western wall afforded access into Room 3. The doorway consisted of a moulded timber architrave with a six-panelled timber door with clear glass glazing set within the four panels above the middle rail (Plate 32). The door furniture was of modern replacements. The middle rail contained the painted inscription 'H.T. SUB-STATION'. This suggests the building's original use was to house a sub-station for the site.

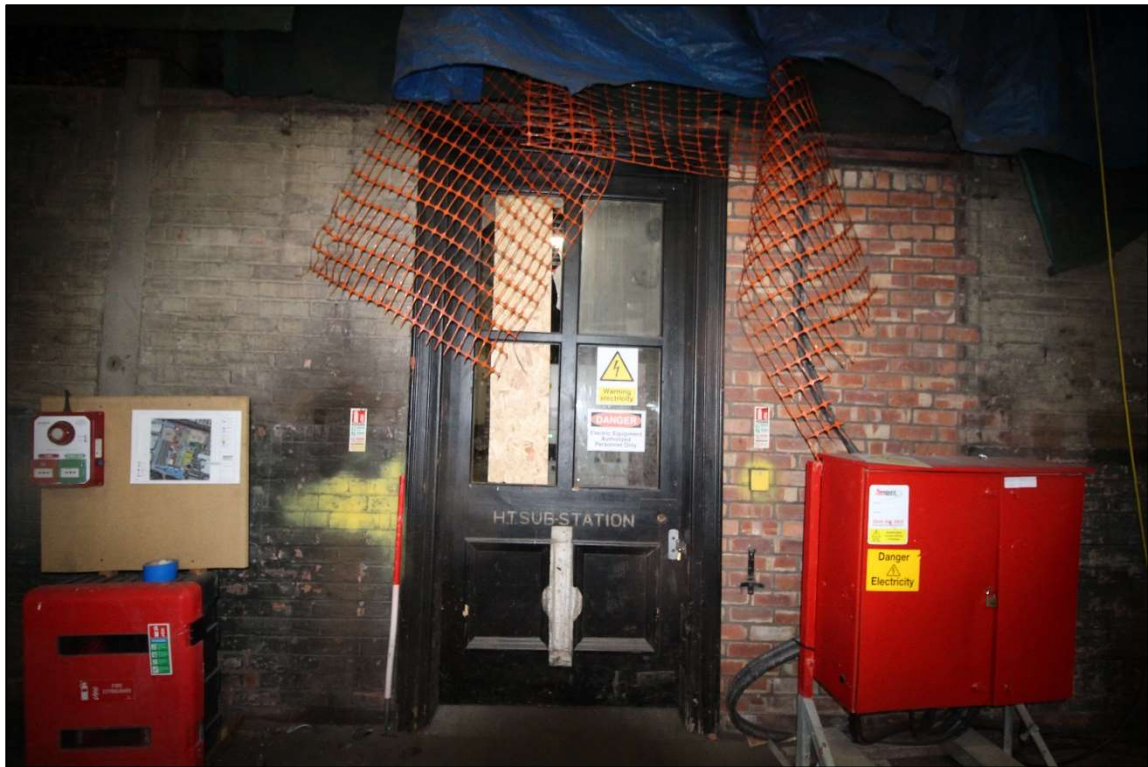


Plate 32: The doorway within the western wall of Room 1 affording access into Room 3

At the south-western corner of the room was a small brick constructed room, Room 2. The room measured 12' (3.65m) north/south by 911½" (2.78m) east/west. The room was entered by two louvered steel doors within the northern wall (Plate 33). Access into the room was not gained due to the room housing live electrical equipment.



Plate 33: General view of the live electrical area, Room 2

Room 3 was situated to the western end of the building and consisted of a single bay measuring 53'10" (16.42m) by 25'11" (7.91m) and comprised concrete floor, brick walls and an open ceiling exposing the double fink L-section angle fink trusses with I-section tie beams (Plates 34&35). The tie beams were also supported by brick buttress within the western wall.



Plate 34: General view of Room 3, looking north-west



Plate 35: Detail of the fink trusses in Room 3

The room had been stripped of its historic fixtures and fittings however a pit within the floor contained the remains of electrical cables, was situated to the northern end. The pit was covered with steel sheeting with multiple holding down bolts around the edge. This suggests the original electrical fuse cabinet that powered the boiler shop was free standing with the cables entering the shop via a wall box set within the northern wall of the room. (Plate 36).



Plate 36: The northern wall of Room 3 with an exposed wall box to the left of the photograph

Room 4 was situated to the southern end of Room 3 (Fig 3). The brick partition wall between the two rooms was 2.21m high with a steel mesh frame above (Plate 37). Access was afforded by a doorway with rectangular timber architraves and a four panelled timber door situated at the western end of the wall. A modern steel gate was fixed to the internal face of the doorway restricting access into the room.



Plate 37: The brick and steel mesh partition wall between Rooms 3 and 4, looking south

The room comprised a concrete floor, brick walls and an open ceiling that exposed the steel roof truss of the building (Plate 38). Access into the room was prohibited due to the room containing live electrical equipment, however parts of the original fabric was observed from the doorway. The southern wall contained a brick infilled 4'11" (1.5m) wide window with a gauged segmental arched lintel (Plate 38). A doorway was situated to the south-eastern end of the south-western wall. This had a flush concrete lintel and threshold.



Plate 38: General view of Room 4 of Shed 2

4.4 The eastern ancillary building- Time Office

An earlier office block had been constructed to the south-eastern corner of the site. The building was of a single-storey high, four bays wide with a pitched slate roof. A small single storey lean-to was constructed to the northern gable during the latter half of the 20th-century.

External Description: the western elevation was constructed in a three-course English Garden Wall bond and comprised four window apertures to the original phase and two doorways within the lean-to (Plate 39; Fig 4).



Plate 39: General view of the western elevation of the small office block

The 5'2" (1.57m) wide window apertures were of a simple construction with the lintels obscured by the timber fascia board. The sills had been removed and replaced with brick infilling. Three of the openings housed a four-light timber window frame with the second opening from the northern end containing a six-light timber frame. The glazing to each frame was of modern clear wired glass (Plate 39).

The doorways within the lean-to had shared a long flush concrete lintel with each having a concrete threshold (Plate 40). The northern opening contained a modern timber doorframe and a flush timber fire door, while the southern opening was brick infilled with a concrete render on the external face (Plate 40).



Plate 40: The two doorways within the western elevation of the lean-to

The northern elevation of the original phase was largely obscured by the lean-to extension. The lean-to elevation was constructed in a stretcher bond with three window apertures situated below the timber fascia board. The eastern and western windows housed a single fixed light timber window frame glazed in clear glass panes (Plate 41; Fig 4). The central apertures comprised a horizontal three-light timber framed window with clear glass panes (Plate 41).



Plate 41: General view of the northern elevation of the office block

The southern and eastern elevations could not be surveyed due to heavily overgrown vegetation to the south and the eastern elevation butted against the boundary wall of the site.

Internal Description: internally the building was divided into five rooms with access only afforded by the 2'11½" (0.9m) wide northern doorway within the lean-to extension (Fig 4). Room 1 comprised painted plasterboard walls, a carpet tiled floor and a false suspended ceiling (Plate 42). The southern wall contained a tall seven-light timber framed window with the central light having a sliding pane (Plate 43).



Plate 42: General view of Room 1 of the office block, facing east



Plate 43: The wide window within the southern wall of Room 1, facing south-east

Room 2 was a small vestibule affording access into Room 1 and Room 3 (Fig 4). This room comprised painted plasterboard walls, a carpet tiled floor and a false suspended ceiling (Plate 44). The doorway entering Room 1 had rectangular timber architraves and housed a modern timber fire door, while no door was situated within the opening entering Room 3.



Plate 44: General view of Room 2 of the office block, facing south-east

Room 3 comprised painted plasterboard walls, a carpet tiled floor and a false suspended ceiling (Plate 45). The western wall contained three 5'2" (1.57m) wide windows with the central aperture housing a six-light timber framed window. The two flanking openings housed a four-light timber framed window (Plate 45).



Plate 45: General view of Room 3 of the office block, facing south-west

The southern wall contained two doorways affording access into Rooms 4 and 5. The central opening entered into Room 4 contained a sliding timber door with rectangular timber architrave. The western doorway, affording access into Room 5, had moulded timber architraves, however the door had been removed prior to the survey.

Rooms 4 and 5 could not be safely accessed and could not be surveyed.

4.5 The north-eastern ancillary building- Ambulance/medical block

A small building to the southern end of the site had been used as offices was originally part of the ambulance bay and was constructed during the expansion of the works. This was a single-storey brick building with a flat roof below a shallow parapet wall. The roof had been modernised with three banks of solar panels.

External Description: the southern elevation was constructed in a three-course English Garden Wall bond and consisted of two central windows flanked by two doorways (Plate 46; Fig 5). The windows comprised gauged brick round-head lintels with recessed sloping terracotta sills. A five-light timber framed window with obscure glass to the lower lights and clear glass above was housed within the openings (Plate 47).



Plate 46: General view of the southern elevation of the toilet block, looking north



Plate 47: Detail of the central windows within the southern elevation, looking north

The eastern doorway afforded access into the building and comprised gauged brick round-head lintel with a concrete threshold. The opening housed a replaced timber door with a single fixed fan light with clear glass glazing (Fig 5; Plate 48). The western doorway afforded access into a small room to the western end of the building (Room 7). This consisted of a flush concrete lintel with the timber doorframe recessed within the opening and entered from a single concrete step. The door was removed, however the remains of two modern hinges had been retained (Fig 5; Plate 49).



Plate 48: Detail of the eastern doorway within the southern elevation, looking north



Plate 49: Detail of the western doorway within the southern elevation, looking north

The eastern elevation was constructed in a three-course English Garden Wall bond and consisted of two central recessed windows (Plate 50; Fig 5). The windows were set within a cast-iron housing with a pointed arch head. A cast-iron door with rising hinges was recessed within the opening and obscured the frames (Plate 51).



Plate 50: General view of the eastern elevation, looking north-west



Plate 51: Detail of the cast-iron surround window to the eastern elevation, looking west