



# Marble Hall, Nightingale Road, Derby

# Archaeological Building Record & Inconversion Recording

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# Title

# **Document Title**

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### Quality Assurance – Approval Status

This document has been prepared and checked in accordance with Waterman Group's IMS (BS EN ISO 9001: 2008, BS EN ISO 14001: 2004 and BS OHSAS 18001:2007)

Issue Date	Prepared by	Checked by	Approved by
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#### Comments



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Malcolm Bobbitt: Auto Journalist and author of Rolls-Royce at Derby

Philip Hall: Sir Henry Royce Memorial Foundation

Nick Tomlinson: Derby City Council (www.picturethepast.co.uk)

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# CONTENTS

Summary

1.	Introduction	1
2.	Methdology	2
3.	The History of Marble Hall	.5
4.	Historic Building Record	20
5.	Historic Building Record: In-conversion Works	40
6.	Statement of Significance	48
7.	Overview and Summary	51
Bibliog	raphy	

### Appendices

- Appendix A: Listed Building Description
- Appendix B: Photographic Archive (Attached CD)
- Appendix C: Drawing Archive (Attached CD)
- Appendix D: Written Schemes of Investigations (Attached CD)

# 1. Introduction

## 1.1 Purpose of Report

This scheme of archaeological building recording has been undertaken by Waterman Energy, Environment & Design Ltd (Waterman) for Derby City Council. This scheme of building recording pertains to a building called Marble Hall. The Site is located in Nightingale Road, Derby; centred on National Grid Reference: 436396,333561. The building is Grade II listed (List Entry Number: 1393116) and was formerly the street-fronting façade building of the Rolls-Royce main works at Nightingale Road. Marble Hall (also known as 'The Commercial Block') is the only remaining building of the factory complex after clearance of the Site. Marble Hall will be refurbished as part of a wider regeneration scheme for the Site.

This scheme of archaeological building recording has been undertaken to satisfy Condition 7 on a granted planning application (Application Number: DER/09/13/01036/PRI) which states:

"No development, including demolition, shall take place until a Written Scheme of Investigation for historic building recording has been submitted to and agreed in writing by the Local Planning Authority and until any pre-start element of the approved scheme has been completed to the written satisfaction of the Local Planning Authority.

• The scheme shall include an assessment of significance and research questions; and the following:

- The programme and methodology of site investigation and recording;
- The programme of post investigation analysis and reporting;

• Provision to be made for publication and dissemination of the analysis and records of the site investigation;

• Nomination of a competent person or persons/organisation to undertake the works set out in the Written Scheme of Investigation.

The development shall be implemented in accordance with the approved Written Scheme of Investigation and the development shall not be occupied until the site investigation, reporting, dissemination and archiving of results has been completed in accordance with the programme set out in the Written Scheme of Investigation for historic building recording."

# 2. Methodology

### 2.1 Aims

The aim of this programme of recording is to provide a long-term sustainable record of Marble Hall prior to its redevelopment. The building is considered significant as the most prominent, and only remaining structure, of the former Rolls-Royce plant in Nightingale Road, Derby.

The record aims to:

- Provide an outline history of the building, to set its historical context within the wider Site;
- Assess the significance of Marble Hall;
- Record the external elevations of Marble Hall and;
- Record the interior spaces within Marble Hall.

### 2.2 Scope of Historic Building Recording

The scope set out below outlines the work required to meet the criteria of an English Heritage Level 3 survey. A Level 3 historic building record is considered appropriate to fully preserve the form and detail of the building by archive.

A Level 3 survey is described in the English Heritage guidance as follows:

"Level 3 is an analytical record, and will comprise an introductory description followed by a systematic account of the building's origins, development and use. The record will include an account of the evidence on which the analysis has been based, allowing the validity of the record to be re-examined in detail. It will also include all drawn and photographic records that may be required to illustrate the building's appearance and structure and to support an historical analysis."

The following scope of works was discussed and agreed with Steve Baker, Derby and Derbyshire Development Control Archaeologist, prior to approval of the Written Scheme of Investigation (WSI) completed by Waterman in March 2014.

### 2.3 Documentary Research

A programme of documentary research was undertaken to establish the chronology of construction, the building in context and the key associative history of Marble Hall. This informed a historical overview of the Site which is detailed in Section 3.

Baseline studies of Marble Hall, and the wider Site, have previously been compiled. This study has consulted a Conservation Management Plan and Heritage Statement produced by the Built Heritage Consultancy. Research also consulted the Rolls-Royce Heritage Trust Archives and The Derbyshire Record Office. All sources are referenced throughout the document and noted in the bibliography.

### 2.4 Site Investigation and Recording

### External Record

All elevations of the building were photographically recorded. Where necessary, detailed photographs were taken of features of heritage or aesthetic merit. The external record also details the general character of features such as windows, doors and masonry.

### Internal Record

Each interior space within Marble Hall has been photographed. The locations of photographs are noted on existing plans of the building for easy reference. General descriptions have been provided for each space. Where necessary these have been detailed where the significance of fixtures has merited.

### Measured Survey

Surveys, including elevations and plans, have been provided by Derby City Council. Survey drawings contained within the main body of the report are annotated to illustrate the development phases within the building.

Appendix 2 contains copies of the measured survey, these are illustrated to scale, typically 1:50. All drawings (located outside of the main body of this report), are allocated drawing numbers and recorded in a drawing, also located in Appendix 2.

### Photographic Record

A photographic record has been compiled of the exterior and interior of Marble Hall commensurate with the scope of a Level 3 record, as defined in *Understanding Historic Buildings; a guide to good recording practice* (English Heritage, 2006).

The photographic record also records architectural details and historic internal fixtures to chronicle the former use of space within the building.

A high quality digital record was made using a digital SLR camera. Photographs were taken at 12 million pixel resolution and will be deposited as a jpeg file, as agreed with the LPA and Archaeological Database Service. A flash was used in poor lighting conditions within the building. A photographic scale of appropriate size was included in detailed views where appropriate.

All photographic views were recorded on copies of the 'as existing' floor/site plans of the building. These have been complemented by photographic registers which, as a minimum, give the direction of the view and a brief description of the subject. A selection of the photographic record has been used to illustrate this report to provide an overview understanding of the existing building, its historic use and its context. The full photographic record, together with copies of the annotated plans and the photographic gazetteer, are included in the site archive (Appendix 2).

### 2.5 Report

This report provides a description of the building (including scale and massing, construction, materials, layout and architectural detail), its history and heritage significance.

This report has been produced to guidance set out within Understanding Historic Buildings, A guide to good recording practice (English Heritage 2006).

This document has been provided in a single bound copy with an appended CD containing the archive and report in pdf format. Copies of this report have been submitted to Derby Historic Environment Record, Derby City Council and the Rolls-Royce Heritage Trust. Production of the report and archive was completed in April 2014.

### 2.6 Archive

The archive for this scheme of building recording will contain all the raw data from the on-site investigation. The project archive will be deposited with The Archaeological Data Service (ADS). The OASIS (Online Access to the Index of Archaeological Investigations) site code for this project is **waterman2-173739.** This code has been used for deposition of the archive with ADS. The archive will be deposited in April 2014.

The archive was provided on a memory drive and includes (as agreed with ADS):

- Digital photographic record (jpeg format)
- Photographic registers of all photographic images (pdf and Excel format)
- Site plan annotated with the locations of selected photographic views (pdf format)
- A pdf of the complete report

## 2.7 Personnel

This scheme of archaeological building recording was undertaken by Waterman Staff:

- Tim Murphy (MIFA): Principal Heritage Consultant
- Susana Parker (AIFA): Senior Heritage Consultant

### 2.8 In-Conversion Recording

The information above pertains to the primary record for Marble Hall. This was undertaken and completed prior to commencement of Site works. The initial programme of archaeological building recording has been supplemented with assessment and recording undertaken as the building conversion works took place.

The in-conversion recording has two aims:

- To enhance our understanding of the building, especially areas which were not fully visible during the initial record or that had not been stripped of modern fixtures.
- To update the existing phasing where/if necessary through inspection of fabric, both modern and historic, revealed during the conversion and strip out works.

The conversion works included the removal of internal partitions and suspended ceilings. Inspection of the fabric, during the removal of partitions, was made to confirm the current interpretation of the building's phasing. The inconversion inspections also sought to identify and record new features which were revealed.

Lighting conditions, during the intial phase of recording, within the building were poor. The in-conversion works provided the opportunity, as window coverings were removed, to update the existing photographic archive with higher quality pictures.

Three Site visits were made during conversion works. The methodology for the recording, reporting and archiving followed that outlined in the WSI for the principal record. Results from the in-conversion recording were used to update the intial building record. Chapter 5 of this document details features revealed during the in-conversion works. Additional photographs have been added to the existing photographic archive.

This report and photographic archive were submitted for consultation to Derby City Council and Derbyshire Council. The final report and archive will be submitted to the Archaeological Data Service (ADS), under the existing OASIS reference by April 2015.

### 2.9 Document Reference

The Written Scheme of Investigation (WSI) for the orginal scheme of recording (EED14019\_R\_1\_2\_3\_TM) and the ammendment to this WSI to include in-conversion recording (EED14447\_R2\_1\_1\_TM) are attached in Appendix 3 of this document.

# 3. The History of Marble Hall

### 3.1 The Formation of Rolls-Royce

Rolls-Royce was formed by Henry Royce and Charles S. Rolls. Henry Royce was born in 1863, the son of a miller, at Alwalton, near Peterborough. Rolls was the son of Lord and Lady Llangattock, born in 1877.

Prior to being introduced in 1904 Rolls and Royce had their own respective business ventures in the form of Royce Ltd and C.S. Rolls & Co. Both individuals had an enthusiasm to break into the car market which they believed was becoming more popular in the United Kingdom. It is believed that the original 1904 agreement was that Royce would produce cars to Roll's technical requirement to be sold through C.S. Rolls & Co; the cars would bear the name Rolls-Royce.

By the end of 1904 Royce had produced chassis layouts for a three-cylinder 15hp car of which three were built. However the early models were not found to be commercially viable for Rolls-Royce (Bobbit 2002).

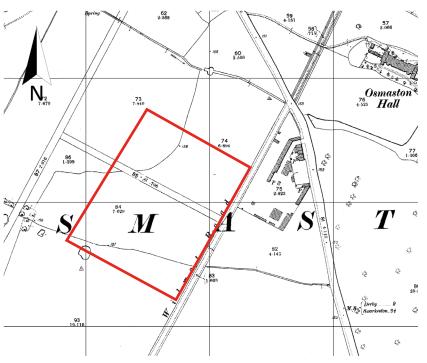
Rolls-Royce was registered as a limited liability company in 1906. The appointments were as follows:

- Technical Managing Director: Charles S. Rolls
- Chief Engineer: Henry Royce
- Commercial Managing Director: Claude Johnson
- Financial Advisor: Ernest Claremont (former Chairman of Royce Ltd)

Rolls had provided Royce with access to the market place and it is believed his choice of Royce as a partner was not only because of his engineering acumen but also because he wanted a British-built car. During this period Royce had designed and produced cars at his factory in Cooke Street, Manchester. This factory was demolished in 1965 (Evans 2004).

### 3.2 The Foundation of the Rolls-Royce Factory at Nightingale Road, Derby

Claude Johnson was secretary of the Automobile Club before joining Rolls' Company in 1904. Johnson instigated the move from Cooke Street to Nightingale Road in Derby, having successfully convinced both Rolls and Royce of the need to do so. All three had agreed that moving to a purpose-built factory would carry a prestige; this was coupled with the requirement for additional production space with the successful release of the Silver Ghost car in 1906. Most contemporary British motor companies had based themselves in the Midlands, particularly the Coventry area. Johnson had considered that it would be beneficial to move away from the production centre of the motor industry. especially as wage rates were higher in the Midlands relative to Manchester and as such this may have resulted in the company's highly proficient staff being lost to other firms (Bobbitt 2002).



Ordnance Survey, 1901. Land in Osmaston prior the development of the Rolls-Royce Factory. Approximate location highlighted. (Copyright Landmark Surveys 2014)

Marble Hall, Derby 5 Archaeological Building Record Claude Johnson searched for sites away from the main motor-building centres. There were several considerations such as land prices, availability of skilled labour, supplies of raw materials, transport and distributions routes and adequate services supply, such as power and water. A number of towns and cities were considered including Stretford, Bradford, Nottingham and Macclesfield. Leicester was apparently Johnson's favoured choice until a late representation from Derby Town Council Officials. Derby offered a very attractive proposition which resulted in the decision to locate the Factory at Osmaston at the south of the City. The council had offered the suitable land at an affordable price, with assurances for additional land if required for future development. In addition, the council had also made provisions for mains services (gas, water, sewerage) as well as electrical services on an affordable rental basis. Transport routes were also offered in the form of new roads and the provision of a railway siding into the factory site.

There were further social benefits to the new factory's location in Derby. The council had suggested that it would be unopposed to the construction of new homes for Rolls-Royce workers who transferred from Manchester. This was attractive to Royce, as wages in Derby were generally lower than Manchester. Royce had intended retaining the Manchester wage for staff confident, in the knowledge that his highly skilled personnel would be reluctant to find work elsewhere in Derby. The town also offered skilled workers from the local locomotive works which were already established in the town (Bobbitt 2002).

Negotiations between Derby and Rolls-Royce resulted in an announcement in The Autocar on 6th April 1907 that Rolls-Royce would be moving to a 12.5 acre site on the Osmaston Estate. Development commenced immediately with foundations dug in the same month.

Royce was appointed to oversee the works of the new Derby factory; he designed the layout of the workshops and specified the equipment which was required. Royce had moved to Derby for the construction of the factory which was been undertaken at great speed. Royce apparently often overworked which was characteristic of his attention to detail and fastidious methods; he was often requested by his wife to take rests at his house in Norfolk for the benefit of his health (Bobbitt 2002).

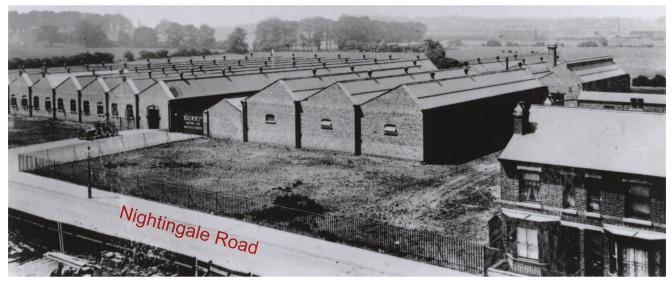


The Nightingale Road Factory portrayed on a plan dated 1907, a year before opening. (Courtesy Sir Henry Royce Memorial Foundation)

1.5 acres of the factory were completed in the first nine months of construction. The construction was undertaken by Messrs Handysides & Co. The Derby-based company was also responsible for structures such as Olympia Exhibition Centre London, and the Liverpool Street and Charing Cross railway stations.

The first phase of the factory was a single storey premises split into two discernible areas. The first had a high risk of fire and contained the foundry, smith shop, hardening shop and test area. The second, with lower fire risk, contained the machine shops, stores and erecting bay. Departments of the factory were interlinked by a rail trolley system which changed lines by means of turntables located around the site.

The first phase of workshops were constructed adjacent to Nightingale Road, these workshops alone provided double the floor area of the Manchester Cooke Street Factory. The workshops were spacious and light with 'saw-tooth' roofs incorporated with glazing to the 45 degree angles. The site also included a vehicle test track with banked corners.



The factory photographed in 1908 with Nightingale Road in the foreground. The site of Marble Hall is depicted as grass land . (Courtesy Sir Henry Royce Memorial Foundation)

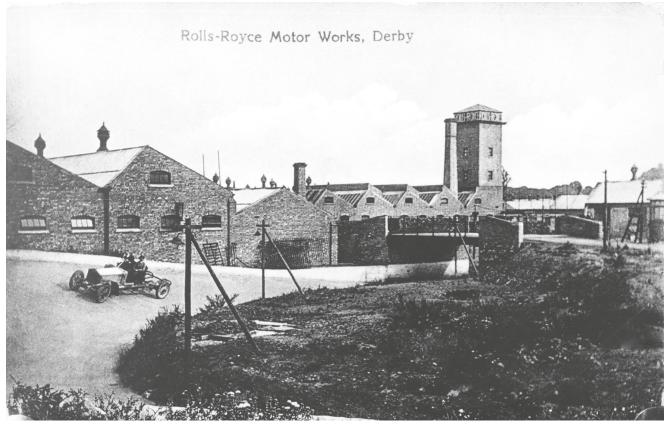


The factory photographed in 1908. (Courtesy Sir Henry Royce Memorial Foundation)

Marble Hall, Derby 7 Archaeological Building Record



The Rolls-Royce test track located at the western extent of the factory. (Courtesy Sir Henry Royce Memorial Foundation)



View of the test track looking east across the factory. (Courtesy Derby City Council and www.picturethepast.co.uk)



The opening day of the Rolls-Royce Factory in July 1908. This view is from Nightingale Road looking north. The site of Marble Hall, not yet constructed, is to the left of this picture. (Courtesy Sir Henry Royce Memorial Foundation)



The opening day of the Rolls-Royce Factory in July 1908. (Courtesy Rolls-Royce Heritage Trust)

Operations at Cooke Street were transferred to Nightingale Road as workshops were complete. This took in the region of a year to accomplish with no interval in vehicle production. The Derby factory was officially opened on 9th July 1908 (Bobbitt 2002).

The opening ceremony was arranged by Claude Johnson. The ceremony was attended by around 70 guests, including local dignitaries. The factory was opened by John Montagu of Beaulieu. After the opening ceremony the works proceeded to continue with the popular 40/50hp model of the Silver Ghost.

By 1910 Charles Rolls had turned his attention to aeroplanes, a field in which he became an innovator and prolific; undertaking feets such as a double crossing of the English Channel. During an air show at Bournemouth in July 1910, Rolls was killed in an accident during a landing competition.

Rolls's death had an effect on Royce who was already in poor health and over worked. Royce collapsed a year after Rolls's death. To maintain and improve his health, Royce moved to the French Riviera. Although he still inputted into the Rolls-Royce designs and engineering, the Nightingale Road Factory was left to the management of Claude Johnson (Bobbitt 2002).

### 3.3 The Construction of Marble Hall

'Marble Hall' is the name which was later attributed to the original Commercial Block which fronts onto Nightingale Road. The building was conceived by Royce in the original plans but was not constructed until 1912. The land for its footprint had been left empty during the initial phase of the plant's development.

The original building was designed by Henry Royce and constructed by R.Weston and Son. The original 38-bay structure was of red brick, laid in English bond. The mullioned, metal glazed windows, with a centrally pivoted opening upper section, were decoratively attended with terracotta surrounds. The sill levels were designed to be high from the floor, at Royce's instruction, to prevent his staff being distracted by peering out into the street. The front and side elevations terminated at a terracotta parapet bearing the mark 'Rolls-Royce Limited Motor Car Manufacturers Rolls-Royce Limited'. A saw-tooth roof, with north lights, was hidden behind the high parapet. Little is known or documented of the original form of the rear elevation. This is likely to have been more utilitarian in form with ground floor connections to the single-story factory buildings at the west.



The Rolls-Royce commercial office in January 1913. This photograph was taken immediately prior to the administration office's move to the completed Commercial Block. (Courtesy Sir Henry Royce Memorial Foundation)

The façade of the building would have been dominant in the surrounding landscape and provided a bold frontage to the Roll-Royce works. This was typical of contemporary factories, especially those constructed in the following two decades. An early photograph of the Commercial Block façade does depict one unusual element - the inclusion of downpipes. A formal frontage elevation, especially an example such as this which has been designed with symmetry, would not typically have an 'unsightly' feature such as rain water goods. Whether this was intentional or not is unknown, but may reflect a poor element of design which should have considered rainwater discharge away from the centre of the principal elevation.

Little is documented about the original interior of the building. A photograph from 1912 of a stair suggests that formal spaces were ornately attended. Little is known of the more 'back-of-house' functional space.



The Commercial Block (later Marble Hall) in c.1912. View from north end of building. (Courtesy Rolls-Royce Heritage Trust) Marble Hall, Derby 10 Archaeological Building Record



The Commercial Block in c.1912. View from north end of building. (Courtesy Derby City Council and www.picturethepast.co.uk)



The Commercial Block in c.1913. View from south end of building. (Courtesy Derby City Council and www.picturethepast.co.uk)



View of the stair at the north end of the Commercial Block (still existing) c.1912. (Courtesy Rolls-Royce Heritage Trust)

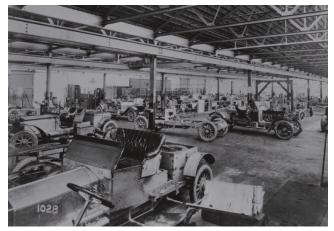
Marble Hall, Derby 11 Archaeological Building Record

### 3.4 The Nightingale Road Factory during World War One

The outbreak of World War One had a devastating effect on Rolls-Royce. The market for luxury cars evaporated and the company had opted not, despite the suggestion by Rolls before his death, to produce aero-engines. This almost dissolved the Derby plant as the wage bill was reduced to one quarter of what it had been. Claude Johnson encouraged his staff facing discharge to join the armed forces. Johnson also suggested extreme measures such as telling staff not to pay their rent on the basis that if evicted they could sleep in the factory (Bobbitt 2002).



The foundry in the main works, c.1913. (Courtesy Sir Henry Royce Memorial Foundation)



The test shop in the main works, c.1913. (Courtesy Sir Henry Royce Memorial Foundation)





The chassis erecting shop in the main works, c.1913. (Courtesy Sir Henry Royce Memorial Foundation)

The machine shop for wheels, date unknown. (Courtesy Derby City Council and www.picturethepast.co.uk)



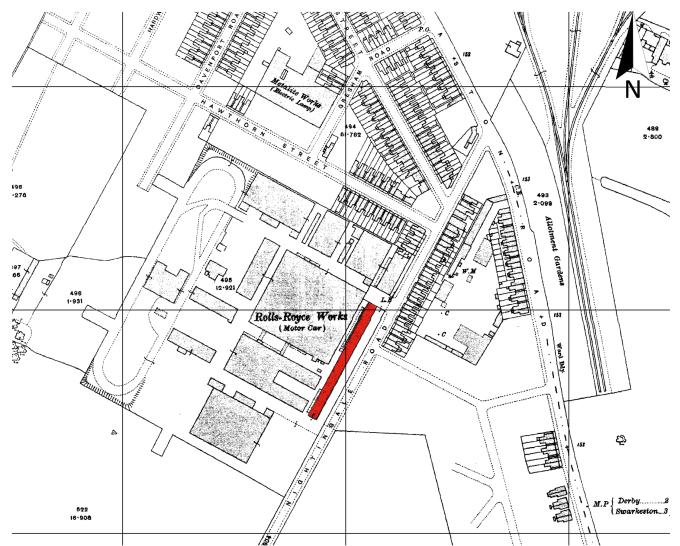
Number One shop, 1913. Note the trolley rails and turn-table. (Courtesy Sir Henry Royce Memorial Foundation)



Personnel leaving the main works, c.1913. (Courtesy Sir Henry Royce Memorial Foundation)

Marble Hall, Derby 12 Archaeological Building Record Rolls-Royce continued to manufacture chassis, but for use as armoured cars and ambulances for the war effort. The company's board had however still agreed not to produce aero-engines. British-made aero-engines were in short supply at this time as most were supplied by the French. This resulted in both Johnson and Royce, ignoring the board ruling, approaching the War Office. Johnson secured the future of the Nightingale Road Factory through the production of Renault V8 engines at the plant, and later, the Eagle (Royce's first aero-engine) and the Falcon used in the Bristol Fighter (Bobbitt 2002).

The contribution of the Nightingale Road works in World War One was considerable. By 1918 Rolls-Royce had produced more then 4,000 aero-engines which accounted for around 60% of all British engines produced in wartime. The work had taken a further toll on Royce's health, who, for his wartime work was awarded with an OBE.



Ordnance Survey, 1914 showing the footprint of the Nightingale Road Factory. The Commercial Block is highlighted. (Copyright Landmark Surveys 2014)

## 3.5 The Inter-War development of Marble Hall and the Nightingale Road Factory

The Nightingale Road factory returned to the production of Silver Ghost Chassis after World War One. The prewar Silver Ghosts were selling for higher than their 'as-new' prices with a reputation for their quality and reliability. The model had changed very little since pre-1914 with minimal chances for development during wartime, however Rolls-Royce's competitors had also faced the same economy (Bobbitt 2002).



Early 1920's view (from east) of the Nightingale Road Factory. (Courtesy Rolls-Royce Heritage Trust)

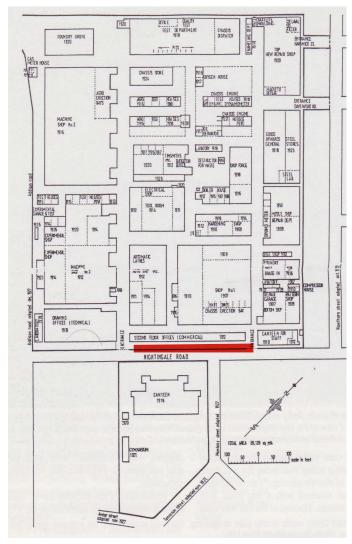


Car production at Nightingale Road in the early 1920's. (Courtesy Sir Henry Royce Memorial Foundation)

Marble Hall, Derby 14 Archaeological Building Record



Rolls Royce senior managements pictured in Johnson's memorial loggia in c.1929. (Courtesy Sir Henry Royce Memorial Foundation)



Plan of the Nightingale Road Factory in c.1928. The Commercial Block is highlighted (Source unknown)

On 11th April 1926 Claude Johnson, one of Rolls-Royces founders and directors, died. Johnson had been instrumental in the company's success and survival, through the death of Rolls and the poor health of Royce. He has since become known as the hyphen in Rolls-Royce. His contribution to Rolls-Royce was commemorated with the construction of a loggia attached to the north end of the facade of the Commercial Block (Marble Hall). A memorial garden was constructued on the south side of the loggia and ornate entrance on the north side. The memorial was commissioned by Rolls-Royce's senior management and designed by architect Sir Herbert Baker (9 June 1862 - 4 February 1946). Baker was a respected architect which a large portfolio including many war graves. A stone plaque commemorating Johnson is located in the loggia with an inscription written by Rudyard Kipling. This is the earliest known change or addition made to the commercial block. By the time of Johnson's death the Nightingale Road Factory had begun production of the chassis for Rolls-Royce's new car, The Phantom.

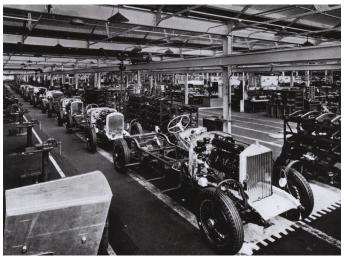


View of loggia, memorial garden and entrance gate. (Source unknown)



Aerial view of the Commercial Block c.1928. Johnson's memorial loggia is attached to the north end. (Source unknown)

Marble Hall, Derby 15 Archaeological Building Record



A 1937 photograph of Bentleys and Rolls-Royces on the production line at Nightingale Road. (Courtesy Sir Henry Royce Memorial Foundation)



A 1937 photograph of the Phantom III V12 which was the last engine design by Royce. The Commercial Block is shown at the top left corner of the photograph (Courtesy Sir Henry Royce Memorial Foundation)

In 1931 Sir Henry Royce died at his home in Elmstead, West Wittering. Prior to his death he had agreed to the development of a new aero-engine, motor engine and witnessed the company acquire the famous name of Bentley in 1931.

Rolls-Royce had acquired Bentley in a contentious manner after it went into liquidation. The company had won the sealed bid price over Napier, using the name 'British Central Equitable Trust'. Bentley's Cricklewood Factory was closed down soon after the purchase and production was moved to Derby. Rolls-Royces and Bentleys, although marketed separately, were produced side-by-side (Bobbitt 2002).

The task of building both aero-engines and motor engines had been largely combined at Nightingale Road. In 1937 the site was divided into the chassis division and the aero division, resulting in the reorganisation of the factory.

In 1938 the Commercial Block underwent its most extensive phase of alteration and refurbishment. The central nine bays of the block were replaced with a grand new entrance. This was designed by Arthur Eaton and Son. The restrained Art Deco exterior was constructed of Portland Stone. The interior comprised a grand stair with walls lined in Hopwood Stone. The local stone was often referred to as 'Derbyshire Marble', leading to the renaming of the block to Marble Hall. The last of the Derby-produced Rolls-Royce cars was also announced in 1938, The Wraith.



A 1954 photograph of the central block designed by Arthur Eaton containing the 'The Marble Hall' (Courtesy Derby City Council and www. picturethepast.co.uk)

Marble Hall, Derby 16 Archaeological Building Record

### 3.6 The Nightingale Road Factory during World War Two



Merlin engines in production at the Nightingale Road Factory. (Courtesy Sir Henry Royce Memorial Foundation)



Workers leaving site during World War Two. Marble Hall, with camouflage paint scheme, is seen in the top right corner. (Courtesy Rolls-Royce Heritage Trust)

During the late 1930s the Air Ministry, with heightening internal tensions, commissioned several contracts to car manufacturers for the construction of aero planes for Britain's under-resourced air force. This resulted in the extension of production area at Nightingale Road by 311,240 square feet and the construction of two additional factories in Crewe and Glasgow (Bobbitt 2002).

When war broke out in September 1939 all car manufacturing ceased at Nightingale Road for the production of aero-engines. The car chassis division never returned to Nightingale Road and was established at the Crewe factory after the war (Bobbitt 2002).

The factories wartime output was very significant. Staff numbers had increased to 20,000 with people working 12 hour shifts to produce the Merlin Engine, which was installed in both the Supermarine Spitfire and Hawker Hurricane. The Merlin had been developed since the early 1930s and was one of the last designs commissioned by Royce prior to his death (Bobbitt 2002).

The Nightingale Road factory was a designated target by the Luftwaffe (Number: BG7319). Only one successful raid was undertaken on the site during the war. On 27th July 1942 a Dornier 217 bombed the factory with no apparent extensive damage or loss of life. The factory was well camouflaged and hard to identify from the air (Built Heritage Consultancy 2013). Marble Hall had a camouflage painted scheme applied to the front elevation during this period. An air-raid shelter was also constructed in the basement, and likely formed part of Eaton's 1938 works.



Photograph of Marble Hall in 1949 with camouflage paint scheme (Courtesy Rolls-Royce Heritage Trust)



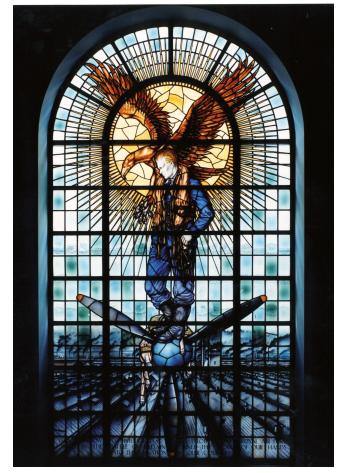
The Rolls-Royce Home Guard outside the entrance to Marble Hall (Courtesy Derby City Council and www.picturethepast.co.uk)

Marble Hall, Derby 17 Archaeological Building Record

## 3.7 The Nightingale Road Factory, Post War

The Nightingale Road Factory had played a significant role in the production of aero-engines during World War Two. However, when hostilities ended, and with motor production moved to Crewe, the workforce at the factory was extensively decreased. The site was immediately used for the development and production of the Dart Engine; Britain's first propeller engine driven by a gas turbine and later the Avon engine (Bobbitt 2002).

In 1949 a stained glass window was installed into Marble Hall, designed by Hugh Easton. The glass window was commissioned by the company to commemorate their contribution to the RAF manufacture of the Merlin Engine in World War Two. The high quality stained glass window was installed on the half landing of the Marble Hall. The window depicted a pilot standing on a propeller with an Eagle above and the roof-scape of the Nightingale Road Factory below. On 11th January 1949 the window was unveiled by Lord Tedder and dedicated by the Bishop of Derby. Four hundred high profile guests from the RAF and government attended the ceremony. The window was later visited in June by Princess Elizabeth and the Duke of Edinburgh (Goodyear 2010). This window has been removed, and replaced with a fibreglass replica, in recent years for safe keeping since the building has been left unoccupied.



Photograph of the stained glass window by Hugh Easton (Courtesy Rolls-Royce Heritage Trust)



Photograph of Princess Elizabeth and The Duke of Edinburgh's visit to Marble Hall in 1949. This is one of the few known historic photographs of the building's interior (Courtesy Rolls-Royce Heritage Trust)



View of Marble Hall, 1950s (Courtesy Rolls-Royce Heritage Trust)



Aerial view of the Nightingale Road Factory in the 1950s, prior to extension of Marble Hall at the rear (Courtesy Derby City Council and www.picturethepast.co.uk) Apart from the unveiling of the stained glass window in 1949, little is specifically documented about Marble

The Nightingale Road works continued to be involved with the development of aero-engines until the 1970s, when the company collapsed. In 1971 the Nightingale Road Factory was briefly closed as it went into receivership. The aero aspect of the company was acquired by the government and renamed 'Rolls-Royce (1971)'. The motor chassis section in Crewe was unaffected and formed a new holding company named 'Roll-Royce Motors' (Bobbitt 2002).

The company was again hit by recession in the 1980s which resulted in redundancies and a streamlining of operations at Nightingale Road. During this period the factory was producing the CF6-80C2 turbofans, of which 400 were delivered between 1984-1994. Throughout the 1990's the Derby works produced several aero-engines for civil aviation companies (Bobbitt 2002).

The events in New York on 11th September 2001 had a significant effect on the aero-industry which resulted in a huge downturn. The Nightingale Road Factory was severely affected with concerns for the 12,500 workforce.

In 2008 Rolls-Royce had decided that the Nightingale Road Factory was too small and too expensive to modernise. This resulted in its closure and operations moved to the nearby Sinfin plant. After 100 years of operational use, all of the former factory buildings at the site were demolished by 2014 leaving Marble Hall as the only remaining structure.

Apart from the unveiling of the stained glass window in 1949, little is specifically documented about Marble Hall or its post-war development. The structure is known to have been altered internally, and a concrete frame extension attached to the rear elevation in the 1960s/1970s



Photograph of Marble Hall in 1966, Johnson's memorial loggia in the foreground (Courtesy Rolls-Royce Heritage Trust)



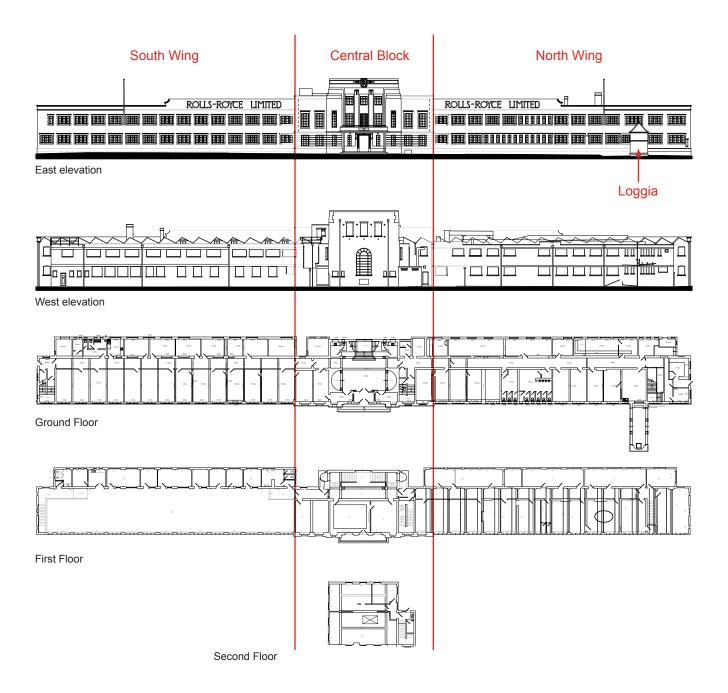
20th Century aerial photograph of the Nightingale Road Factory, date unknown (Courtesy Rolls-Royce Heritage Trust)

# 4. Historic Building Record

### 4.1 Building Record

The building recording of Marble Hall was undertaken on 11th April 2014. The following pages provide a description and interpretation of the structure; this includes a selection of photographs from the historic building record. The full photographic archive is located in the appended CD to this document and at the Archaeological Data Service.

For ease, the descriptions will reference the building in the following general areas.



### 4.2 External

#### Front (East) Elevation

The east elevation fronts onto Nightingale Road and would have formed public façade of the factory site. The central Portland Stone entrance was constructed in 1938 and inserted into the existing building, creating the flanking 1912 red brick wings.

The 1912 elements of the façade form the existing north and south wings to the central block. These are constructed of red brick laid in English Bond. The high-set windows are located on the ground and first floors. The window



View of east elevation from south



Detail of east elevation, 1912 masonry and windows

surrounds and mullions are constructed of terracotta. The windows were boarded over at time of inspection; internal views present a chronology of windows. The earlier phase of window installation is a Crittall type metal frame with central pivoted opening upper section. The elevation terminates at a terracotta parapet with 'Rolls-Royce Limited' detailed on each wing; 'Motor Car Manufacturers' was also detailed in the parapet prior to construction of the 1938 central block.

The central block was added in 1938 and resulted in the truncation of the original 1912 façade. The central portion is constructed of Portland Stone and rises threestoreys. The main entrance is located in a slight recess within an ornate surround. The plain ashlar is flanked by bays of channelled ashlar. Scroll brackets are located either side of the door which support the balcony above. The first and second floor's central five bays comprise of Portland Stone ashlar. Two broad pilasters separate the fenestration with protruding bays at the flanking sides. The elevation terminates at an ornate course across the parapet with a central plaque bearing the RR motif.

The central block is flanked by contemporary two-bay wings, forming the junction with the 1912 work. The wings are constructed of channeled ashlar at ground floor and stock brick, laid in Flemish Bond, at first floor. The windows located in the central block were boarded over at the time of inspection. Internal inspection and historic photographs suggest these were metal framed windows with pivoted opening sections; these included small rectangular panes and influenced by Georgian sash windows in design.



View of 1938 central block from east

Detail of entrance

Marble Hall, Derby 21 Archaeological Building Record

#### The Loggia



View of 1928 Loggia from south



View of 1928 Loggia from north



Detail of inscription by Rudyard Kipling

The Loggia was constructed in 1928, to designs by Sir Herbert Baker, as a memorial to Claude Johnson. The building is located at the north extent of the east elevation. The single-storey structure is constructed of red brick laid in English Bond. Three open arched entrances, with keystone detail, are located on the north and south side. The arches spring from Doric columns. The tiled hipped-roof sits rather awkwardly with the 1912 building and dealing with the existing fenestration was obviously an issue for Baker's design.

The interior of the building contains a plaque at the west end with an inscription by Rudyard Kipling, in memory of Claude Johnson. A fanlight is located in the west end above a former door, now blocked.

The memorial garden, at the south of the loggia, and the decorative railing entrance have been removed. This is believed to have happened in c.1938 with the formalisation of the frontage to accomodate the construction of the central Marble Hall block.



Detail of fanlight above block door to main building

### **North Elevation**



View of north elevation



The north elevation dates to the original 1912 work and is the same in form to the contemporary elements of the east elevation. The central door was originally the main entrance to the building for senior staff and customers, prior to the construction of the 1938 central block. The door has an ornate terracotta surround with a keystone detailing the RR motif and the date 1912.

Detail of keystone above door

#### **South Elevation**



View of south elevation

The south elevation is similar to the north, although there is a difference in the arrangement of the fenestration. This was the pre-1938 workers entrance which accounts for the absence of detail to the keystone above the off-centered door.

#### **The West Elevation**



View of west elevation



View of central block of west elevation



Detail of 1960s/1970s extension with break in masonry highlighted

The west elevation presents a chronology of phases. The original 1912 work is visible at the most northern and southern bays, where the later extension is stepped-in. The segmental arch windows in this section date from 1912 and likely represent the form of windows which would have been installed throughout the elevation prior to the construction of the later extension. The profile of the original saw tooth roof is also visible, set behind the east façade's parapet.

The rear elevation of the 1938 work forms the central section of the elevation. In contrast to the Portland Stone front, the rear is constructed of red brick, laid in Flemish Bond with Queen closers flanking the fenestration. The large arch-headed window in the center once held a stained glass window; this has since been removed for safe-keeping and replaced with a fibreglass replica.

The central block is flanked by a north and south wing attached to the rear of the 1912 work. The additions are believed to have been constructed in the 1960s/1970s. The extension is utilitarian in design and constructed of a reinforced concrete frame with brick infill (brick laid in English Bond). A break in the brick masonry at the north end of the extension suggests the north west corner of the building was built slightly later, but likely near contemporary.



View of south extent of west elevation showing 1912 windows

Marble Hall, Derby 24 Archaeological Building Record

### The Roof



View of roof over north wing, photograph taken in 2013



View of roof over south wing, photograph taken in 2013

Access to the roof was not permissible during the initial building analysis. A photograph taken in 2013 shows this is a sawtooth roof, containing north lights. This is typical of early 20th century industrial buildings.

### **Features and Street Furniture**



View of c.1908 railing on Nightingale Road



View of c.1912 post box

Little survives in the form of street furniture around the building which was largely altered in the late 20th century. A section of railing is located at the north extent of the site which likely dates to the original 1908 construction of the factory. The railing incorporates a brick-built post box which is depicted in a c.1912 photograph of the site.

A Portland Stone plinth in front of the central entrance (next to the pavement) dates to the 1938 work as this boundary was originally formed by a brick wall, which is shown on the historical photograph on the following page. The footing of the decorative railing to the loggia (also shown on historic photograph) was reused on the south side of the loggia, the remains of railing posts are still evident.



View of 1938 footing and late 20th century lamp post



View of reused raling footings from loggia



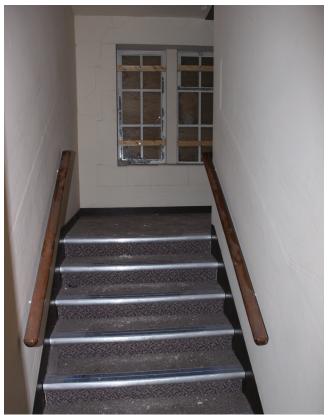
Detail of reused raling footings from loggia



View of Commercial Block c.1929-1938. (Source Unknown) Note detail of loggia entrance and brick wall boundary both now removed.

### 4.3 Internal

### **The South Wing**



View of stair at south end of building

The ground floor of the south wing has been significantly altered to accommodate the changing service requirements of the building. The main change was the construction of the rear extension which created a spine corridor running though the wing.

A plain stair is located at the south extent of the wing by the former workers entrance. The treads are of modern derivation, the handrail and cast dado mounding are believed to be original to the building.

The rooms on the west side of the spine corridor are of relatively modern derivation and were constructed in the 1960s/1970s. The rooms contain offices and a W.C. Interior glazing is located on the internal wall to the corridor and metal glazed windows and located in the external wall (in the west elevation).

The earlier office spaces, dating to 1912, are located on the east side of the spine corridor. The spaces in this area have been rearranged with the insertion of late 20th century partitions which may be contemporary with the 1960s/1970s work. Suspended ceilings were also inserted during this period, these have been removed revealing the underside of the in-situ concrete floor above.



View of ground floor corridor in south wing



View of 1970s office in eastern portion of ground floor



View of 1970s office in western portion of ground floor

Marble Hall, Derby 28 Archaeological Building Record



View of first floor east side of building



No early or original fixtures associated with the rooms former uses were noted in this area. Two types of metal glazing were noted in the windows. The earlier is a Crittall type with pronounced profile, the later examples match those observed in the west elevation.

The first floor comprises of one large room with offices and W.C. located on the west side. The small offices form part of the later extensions, in similar form to those observed on the ground floor. Heightened floors were installed to the offices to facilitate services and wiring. The original form of the large space, or if it was sub-divided, in the 1912 portion of the building is unknown. The cast iron roof trusses are visible above where there was once a modern suspended ceiling; these have been underclad which has blocked light from the sawtooth roof. Metal frame windows were noted in the east elevation. The central windows are fixed with upper opening section; this is flanked by side hung casements. No early or original fixtures or fittings were noted in this area.

View of first floor window in east elevation



View of roof trusses in east portion of building



View of office in west portion of building; 1960s/1970s construction

### **The North Wing**



View of ground floor central corridor in north wing

The ground floor of the north wing is in similar form to the south wing. The rooms to the west of the central spine corridor are later in date. No features of heritage merit were noted in these areas with the exception of former plant equipment in two of the rooms; the date of this is unknown but believed to be from the second half of the 20th century.

The rooms in the east portion of the building have been subject to modern alteration with the rearrangement of internal partitions. Some rooms show evidence of the original parquet floor which had been carpeted over.

The toilets in the center of the wing are considered to be largely original; they have retained the early cubicle arrangement and ornate black and white tiled floor. The sanitary ware is of modern derivation.

The internal side of the fan light, leading to the loggia, is visible in the north wing. The door surround here is detailed and of high quality.



View of ground floor room in west portion of north wing



View of plant equipment ground floor room in west portion of north wing



View of ground floor room in east portion of north wing



View of ground floor toilets in east portion of north wing

Marble Hall, Derby 30 Archaeological Building Record



View of 1912 stair at north end of building



View of first floor corridor in north wing



View of first floor room on west side of corridor

An original ornate stair is located at the north end of the building; this was the principal staircase of the 1912 building. This was originally located in a larger room (as depicted in a 1912 photograph) which has since been sub-divided. New rooms were formed at both the ground and first floor at the north extent of the 1912 building; this has resulted in the truncation of the original entrance hall and offices above.

The first floor is almost identical to the south wing with 1960s/1970s offices located on the west side of the central corridor and re-organised 1912 offices on the east side with later partitions. The toilets, above those on the ground floor, are similar in form and retain the original tiled floor. Internal doors, located on the east side of the corridor, at the north extent of the building with segmental arch heads, are considered to be early or original.



View of first floor room on east side of corridor



View of first floor toilets

#### **Central Block: Basement**



View of south basement room/vault



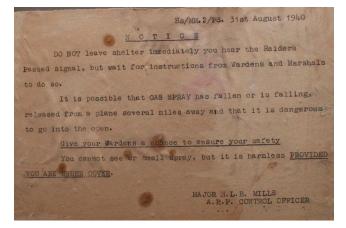
The basement comprises of a utilitarian stair from ground floor, a central lobby with early cupboard fixings and two vaults extending north and south from the lobby.

Little is documented about the basement's historic use or date of construction. The fabric suggests that this was constructed in the 1912 phase and originally used as storage or kitchen facilities. Glazed bricks with blocked flues and a circular void for ventilation are located in the north room suggesting this was perhaps used for light catering for the offices above. This would not be uncommon for a site which at this time was located on the outskirts of the city.

The rooms were later used as safes, with doors installed to the pre-existing segmental-arch head doors ways. During the World War Two the space was converted into an air-raid shelter which is confirmed by a surviving air-raid warning notice glued to a safe door.

The north and south vaults are entered via safe doors from the central lobby. The safe doors were constructed under Chatwood Patent (believed to be Chatwood Patent Safe and Lock Company which was formed in 1861 in Liverpool). The rooms appear to have been recently used for archiving. Fixtures of heritage merit in the basement include the safe doors, early cupboard doors in the central lobby and an emergency escape stair in the southern room; presumably from the use as an air-raid shelter.

View of safe door to north basement room



View of air-raid notice attached to safe door



View of glazed bricks and blocked flue, potential location of a former cooking range.

Marble Hall, Derby 32 Archaeological Building Record

#### **Central Block: Ground Floor**

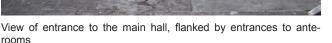
The ground floor of the central block comprises the grand space known as 'the Marble Hall', constructed in 1938. The central block is entered through a draft lobby. The outer door has a light above, with metal grill incorporated. The inner doors throughout this space are ornate and glazed mahogany.

The draft lobby is flanked on each side by ante-rooms, entered from the main hall, the southern leading to an office which retains its early footprint. The main hall has a dark terrazzo floor, the walls are lined with Hopton Wood Stone; a polished local limestone which is known as 'Derbyshire Marble'. Openings are flanked by Tuscan columns. Semi-circular recesses are located on the north and south wall of the hall, these would have once held a feature (possibly statues) which has now been removed. Access doors to the spine corridors of the wings and toilets are located in the back corners of the hall. A grand stair is located in the center of the hall which once had an ornate handrail; this has been stolen in recent years. The steps are of terrazzo with decorative chequered

patterning. The steps lead to a landing below an arched window, with twisted roll-molding incorporated into the surround. The window once held the 1949 stained-glass window by Hugh Easton. This has been removed for safe keeping and replaced with a printed plastic sheet.

A stair is located to the north of the main hall. This stair is believed to date from 1938 and had been used as a secondary stair by staff. The ground to second floor section is understated with some decoration, relative to the utilitarian flights to the basement. A cupboard, with early doors, is located next to the stair entrance.







View of secondary stair at north of main hall



View of Principal stair



View of north side of main hall

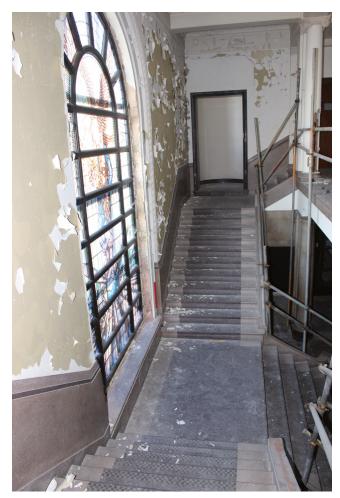
Marble Hall, Derby 33 Archaeological Building Record

### **Central Block: First Floor**

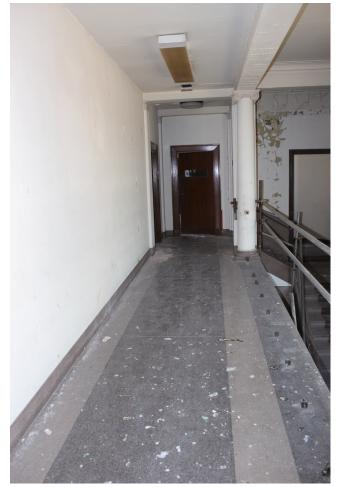
The grand stair from the hall below rises to a large first floor landing. Niches are located at the half landings on the north and south stairs which rise from the central landing below the arched window. The niches are a later addition inserted into the place of former windows (shown on a 1949 photograph). The niches are believed to have held busts of Rolls and Royce which are now in storage. Decorative handrails were located across the first floor landing which have since been stolen; the original light fittings have also been removed. Ionic columns are located on the first floor landings which have been subject to some vandalism.

A door, with hardwood surrounds, are located in the north and south walls leading to the respective wings. Hardwood doors at the west wall lead to two rooms in the western portion of the central block. The two rooms are the most ornate offices in the building. They are decorated with flush hardwood veneer panels. The three-quarter height panels terminate at a restrained Art-Deco cornice. The southern room has the remains of a fire surround. A door links the two rooms; a plain surround on the south side and jib door on the north side. It is believed that one room was the board room and the second was a director's office. The office is rumoured to be that of Henry Royce's suggesting it pre-exists the 1938 phase of construction (Royce died in 1931). It is however more likely that the rooms are contemporary with the 1938 build.

The secondary stair is located to the north of the paneled rooms. An office is located to the south, which has been subject to extensive refurbishment. The date of alteration is unknown, but was likely a formal office in view of the pastiche classical decoration which has been installed.



View of stair and niche at landing



View of first floor landing

Marble Hall, Derby 34 Archaeological Building Record



View of south panelled room and fire surround



View of south panelled room, east wall. Entrance to balcony on left side



View of north panelled room



View of room at south of panelled rooms



View of north panelled room, east wall



View of room at south of panelled rooms

## **Central Block: Second Floor**



View of second floor cupboard



View of second floor window in east elevation

The second floor comprises a large space which has been sub-divided with modern partitions. A cupboard is located next to the stair which retains some original dado and tiling dated to 1938.

The room retains no early or original fixtures and fittings with exception of the Crittal type windows and a roof lantern in the center of the room. Aluminium frame windows of c.1980s/1990s date are located in the rear (west) elevation. Suspended ceilings and inserted partitions have significant altered the original form of this space which is now almost indiscernible.



View of second floor



View of second floor roof lantern

## 4.4 Phases of Construction

Marble Hall was constructed over four principal phases. These are noted on the plans and elevations on the following pages. The phasing of the structure has been informed by historical research and on-site assessment.

## Phase 1: 1912

The main factory at Nightingale Road was constructed in 1908. Marble Hall was originally known as the Commercial Block. This was the last phase of construction at the original factory, completed in 1912. The original building comprised a line of offices located along the east side of the structure, with north lights in the sawtooth roof. The individual offices at first and second floor were access via corridors located along the rear (west) wall of the building. The basement is believed to have been used as kitchens at this time. The formal entrance was located at the north elevation where the original 1912 stair survives. The staff entrance was located at the south elevation.

Internal features known to survive from this phase include:

- The north stair
- The south stair
- Toilets in the north wing
- Basement recess for former range and flue
- Sections of wall tiling which has been over-painted (originally green)

### Phase 2: 1928

A loggia, designed by Sir Herbert Baker, was constructed against the north extent of the east elevation in 1928 as a memorial to Claude Johnson. This survives largely intact with the only major change being the blocking of the door to the main building; the fanlight of this entrance survives.

### Phase 3: 1938

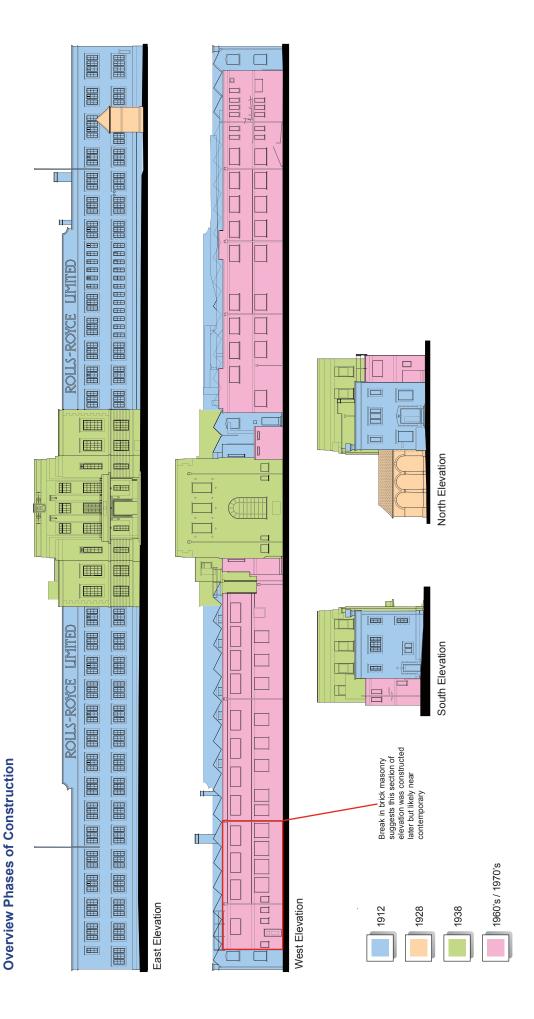
The central block was construed in 1938 to designs by Arthur Eaton and Son. This resulted in a significant change to the building. The central portion of the structure was demolished and the new three-storey block was inserted with the grand marble hall and panelled offices above. The central block became the new formal access to the building, instead of the north entrance. Around this time the basement was converted into safe vaults and an air-raid shelter soon after. Many of the features in the main hall survive with the exception of handrails and light fittings.

### Phase 4: 1960s/1970s

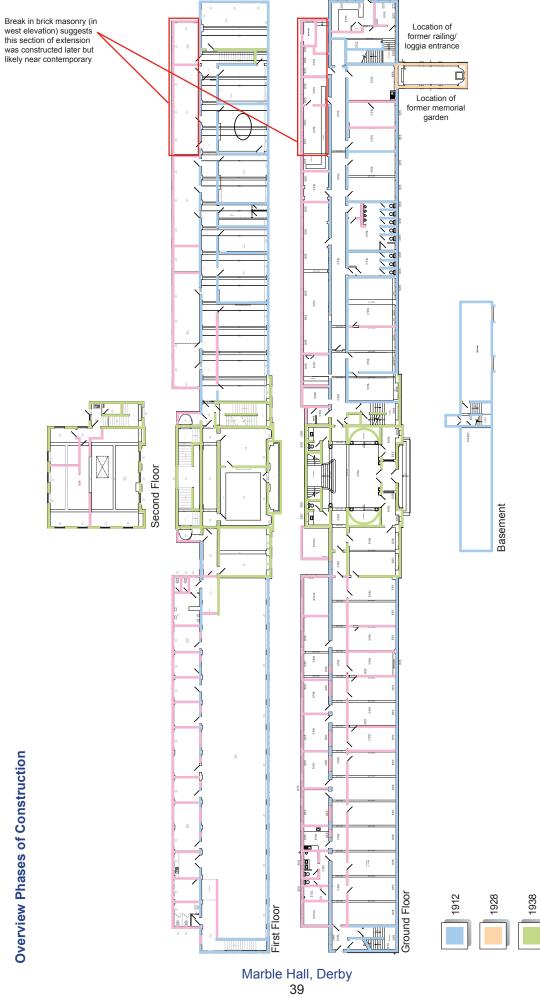
The north and south wings were extended in the 1960s/1970s with a bay constructed along the west side of the building. This resulted in the truncation of the original 1912 masonry in the west elevation. Internally offices were added at ground and first floor, accessed from the west side of the pre-existing corridor. Minor changes were also made to the central block at this time with the insertion if niches on the stair landings in the place of existing windows.

Since this period the building has been subject to further internal alteration. This has mostly taken the form of internal office rearrangement (internal partitions installed and removed), insertion of suspended ceilings, replacement of early fixtures such as doors and replacement of windows in the west elevation. The level of alteration has been extensive to an extent that the original/early uses of rooms in the north and south wing is, for the most part, indiscernible.

Marble Hall, Derby 37 Archaeological Building Record



Marble Hall, Derby 38 Archaeological Building Record



Archaeological Building Record

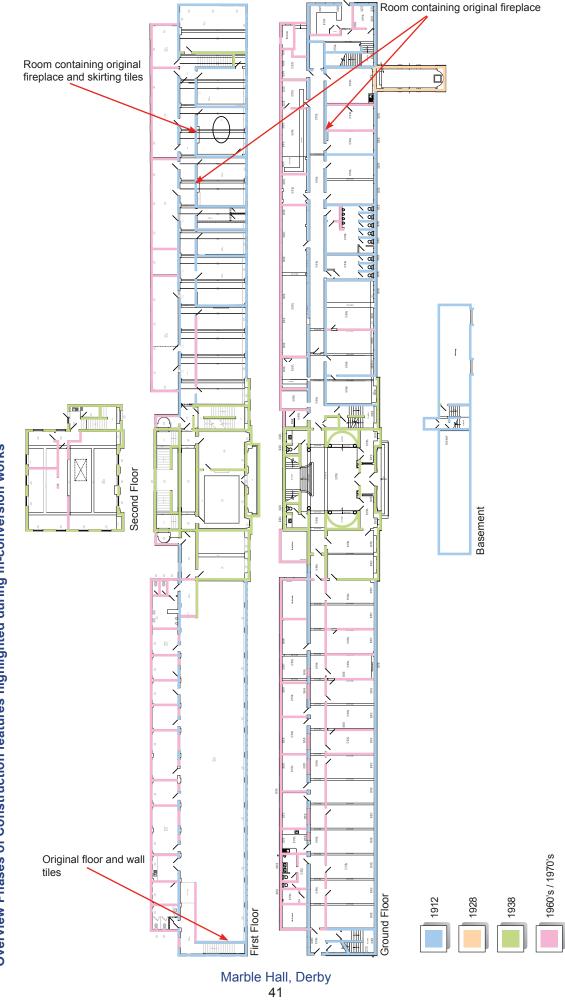
1960's / 1970's

# 5. Historic Building Record: In-conversion Works

## 5.1 Building Record

Two site visits were undertaken during the course of the in-conversion works at Marble Hall. These were undertaken on 6th November 2014 and 22nd January 2015. During the course of conservation works the window coverings were removed allowing for higher quality photographs of the interior. Additional images have been added to photograph archive.

The information below details new features which were revealed during the course of the in-conversion works, these have been described by area and highlighted on the plan overleaf.



Overview Phases of Construction features highlighted during in-conversion works

41 Archaeological Building Record

## **First Floor Offices**



View of fireplace



Detail of skirting tile

The in-conversion works involved the stripping of the interior. This revealed the location of two fireplaces on the first floor of the north wing. Both of these fireplaces are believed to be from the original phase of the building's construction. This may also represent the location of Henry Royce's original office as no other areas of the building are known to have been afforded chimneys prior to c.1938.

A fireplace was revealed in a room which had been subject to an extensive refit, likely to have taken place in the c.1970s. This included the installation of timber cupboards with a sub-circular void in the ceiling used as a roof light. None of the fireplace's features survive with the exception of the opening. The stripping of late twentieth century fabric also revealed original brown skirting tiles. The room below this area on the ground floor also contained a fireplace, the historic use of the ground floor room is unknown.

The adjacent room on the first floor also contained a fireplace. This was different in form; constructed of yellow stock brick with segmental arch. Although unconfirmed by documentary evidence it is likely that this area once formed a director's office and meeting room. This area was also located close to the north stair which has been identified as the original formal, and more artistic, entrance and where guests to the building would have arrived.



View of fireplace

## **First Floor Office Partitons**

The stripout works to the first floor of the north wing revealed sections of orignal or early wooden pannelling, with overlights, which formed a partition between the principal corridor and offices.



Original or early pannelling in the first floor corridor of the north wing (photograph by Neil Robertson)



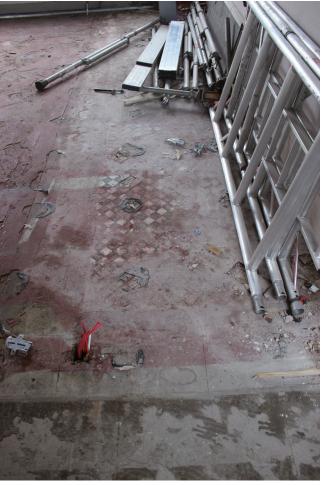
Original or early pannelling in the first floor corridor of the north wing (photograph by Neil Robertson)

## **Decorative Tiles**



Exposed tiles on the first floor adjacent to the north stair

The in-conversion strip-out works revealed the original decorative scheme in the form of green and cream coloured tiles. A section of tiles was revealed on the first floor, at the north stair, on a wall adjacent to an area of black and white floor tiles believed to have once been a toilet. Tiles were also located in original toilets throughout the building and at the original central stair on the north side of the Marble Hall. It is believed this decorative scheme was applied to toilets and stair areas only.





Detail of stair tiles

Tiled floor on the first floor adjacent to the north stair



View of sash window in ground floor north corridor

## **Ground Floor**

The in-conversion strip-out works revealed early internal sash windows in the ground floor of the north wing. The windows were located in the party wall of the offices and central corridor. Two windows were revealed although further examples may have been located throughout the corridor to improve lighting conditions in the original building.

Partitions in the north room of the ground floor were removed during the in-conversion works. This reinstated the original plan of the building's 1911 reception which is clearly shown on a historic photograph.

A comparison of the historic photograph with the existing view shows the first floor has been altered with the staircase originally being full height. This gave a grander appearance when this space formed the principal entrance. The first floor was likely extended in c.1938 when the north entrance became secondary to the new Marble Hall central block.



View of first floor infill/extension to 1912 stair



North room in ground floor, January 2015



North room in ground floor, c.1912 (Courtesy Rolls-Royce Heritage Trust)

Marble Hall, Derby 45 Archaeological Building Record

### Roof



Access was provided to the roof during the inconversion works. Scaffolding also permitted detailed photographs of the exterior masonry. Photographs have been added to archive from the site visit.

No additional features were noted with exception of original centrally hinged windows in the gables of the saw-tooth profile roof and two chimneys above the north wing which serviced the fireplaces revealed on the first and ground floor.

General view of roof above north wing



Detail of window in gable of saw-tooth profile roof



General view of roof above south wing



Detail of chimney

## **1908 Factory Wall**



General view of gable remains from west

View of east side of gable wall



Detail of window

The conversion of Marble Hall has included the retention of a section of detached wall; located on the west side of the north wing. This wall was uncovered during the in-conversion works, permitting inspection.

The wall section is the only surviving structural element of the original 1908 factory which pre-dates the 1911 Commercial Block (now known as Marble Hall). The wall formed the south gable of a 1908 single storey factory shed. This gable is believed to have flanked the original main entrance as shown on the c.1908 photograph below.

> The remains of the gable indicated that the building was constructed of red brick, laid in English Bond, with queen closers flanking the segmental arched-head windows. Two sets of timber windows are located within the masonry which are side hung casements with top hung window above. The wall retains no other fixtures or fittings and the remainder of the building is demolished.



The factory photographed in 1908 with Nightingale Road in the foreground. The location of the remains of the gable wall are highlighted. (Courtesy Sir Henry Royce Memorial Foundation)

Marble Hall, Derby 47 Archaeological Building Record

# 6. Statement or Significance

## 6.1 Significance Criteria

Cultural significance is unique to each place and can be defined as the sum of tangible and intangible values which make a building or site important to society. This may consider age, aesthetic and the fabric of an asset as well as intangible qualities such as associations with historic people or events.

To assess the heritage significance of Marble Hall this study has drawn guidance from the English Heritage Publication; *Conservation Principles: Policies and Guidance* (2008) which recommends making assessments under the categories of: Evidential, Historical, Aesthetic and Communal Value.

The significance of the Site will be assessed using a number of significance ratings which are outlined below:

- **High:** A feature, space or theme which is significant at national or international level. These will tend to have a high cultural value and form an important element of a building or site.
- **Medium:** A feature, space or theme which is significant at a regional level. These will tend to have some cultural merit and form a significant part of the building or site.
- Low: A feature, space or theme which is of regional or local significance.
- **Neutral:** A feature, space or theme which has no cultural significance but is also not considered intrusive to heritage value.
- Intrusive: A feature, space or theme which detracts from heritage value.

## 6.2 Statement of Significance

### **Evidential Value: Medium**

"The potential of a place to yield evidence about past human activity."

The main evidential value of Marble Hall is drawn from its survival as the façade building of the Nightingale Road Factory. The external elevations, and elements of unaltered interior, provide evidence of early 20th century factory design and the manner in which these buildings were chronologically developed. The wider evidential value is found in the impact that the Nightingale Road Factory had on the development of the wider landscape and the manner in which this changed from being rural to the existing suburb of Derby City.

Modern demolition and dereliction have heavily detracted from the evidential value of the site. The recent demolition of the main factory buildings at the west of Marble Hall has resulted in a loss of context of the façade building. This has also detracted from the extent to which we understand the building's role when we consider the Nightingale Road Factory in a holistic manner.

The evidential significance of Marble Hall is found in the external elevations and the surviving elements of the interior which were constructed in the first half of the 20th century. Unsympathetic modern alteration, abandonment and subsequent vandalism to the interior have significantly detracted from the extent to which we can understand the historic use of spaces. The changing requirements of the building often resulted in a chronology of changes to the office layout, the piecemeal development which is difficult to interpret.

## **Historical Value: High**

"The ways in which past people, events and aspects of life can be connected through a place to the present."

## Rolls-Royce

Marble Hall, originally known as 'The Commercial Block', formed the façade building of the first purpose built Rolls-Royce Factory. Rolls-Royce is a company which was at the forefront of British engineering in the 20th century, particularly in the fields of luxury auto-mobiles and aero-engineering. The Nightingale Road factory was integral to the production of the quality British auto-cars such as the Silver Ghost and the Phantom. The site also played an important part in the development and production of aero-engines during World War One and the very significant production of the Merlin engine which was installed in Spitfires during World War Two. The post World War Two history of the site is more closely associated with the development of aero-engines which were installed to civil aircraft.

## People:

Marble Hall has significant associations with the directors at Rolls-Royce who commissioned the factory; Henry Royce, Charles Rolls and Claude Johnson. The trio are historically important figures associated with the creation and success of the well-known British marque.

The building is also significant through the historical associations of its designers; Henry Royce's design of the original build in 1908-1912 and Arthur Eaton's 1938 work. The 1929 memorial loggia is a significant example of Sir Herbert Baker's work; an important 20th century architect who designed many war memorials. In addition the *loggia* contains an inscription by Rudyard Kipling; one of Britain's most important literary figures of the19th and 20th century, and a Nobel Prize winner.

Hugh Easton was commissioned to design the stained-glass window in the Marble Hall, installed in 1949. Easton was a significant person in the field of stained-glass window design; his work includes the Battle of Britain Memorial Window at Westminster Abbey.

In addition to the people mentioned above, the site and building is associated with many others who had worked at Rolls-Royce. Their contribution to development of 20th century engineering was significant. Marble Hall is the only building left at the site, serving as a reminder of this important history.

## Derby:

The development of the Nightingale Road Factory was significant in the development of the Osmaston area of Derby. The factory was the first in this area. This led to the eventual expansion to other Rolls-Royce sites in Derby. It is without doubt that the initial construction of the Nightingale Road plant resulted in the company's later expansion in the area. The historical significance of the factory is found in the impetus it created for the development of Osmaston, not only as an industrial centre but also the infrastructure and residential development which followed. The Nightingale Road Factory would have employed thousands of people in the local area and is considered to be significant in understanding the development of Derby as well as its 20th century social and economic history.

### Aesthetic Value: Medium/High

"The ways in which people draw sensory and intellectual stimulation from a place."

The east, north and south elevations of Marble Hall are of high aesthetic value. Their respective phases remain largely unaltered, with exception of replaced windows, and the original designs of Royce (1912 phase), Eaton (1938 phase) and Baker (1928 *loggia*) are clearly discernible and appreciated. The façade is a prominent element of the surrounding streetscape, making a positive contribution, although the building's unoccupied state has detracted from this to a slight extent. The rear elevation is utilitarian in form and considered to be of low significance. The low cost industrial design of the 1960s/1970s extension can be understood but there is little to be appreciated, furthermore this was intrusive to the earlier building; truncating much of its rear elevation.

Few elements within the north and south wings interior are considered to be of aesthetic significance, with the exception of the ornate 1912 toilets and original stair at the north end of the building. Much of the original fixtures and fittings have been removed from the building as a result of unsympathetic modern alteration.

The central block contains the most ornate and decorative elements of the building which date to 1938. The Marble Hall and panelled offices in this area are of medium/high aesthetic significance. They represent the will of the directors in the 1930s to present a prestigious entrance to their visitors. This space can still be appreciated, although vandalism as well as the removal of features, such as the 1949 stained glass window, has heavily detracted from this significance. It is likely that the aesthetic values of this space will be restored when the building is regenerated and conserved.

## **Communal Value: Medium/High**

"The meanings of a place for the people who relate to it, or for whom it figures in their collective experience or memory"

Marble Hall would have historically been of medium communal significance as it was the façade of a factory which employed a high number of local residents and represents a marque the city was proud to be associated with. This significance has been lessened since the complex closed and operations were moved elsewhere. However, Marble Hall still represents a place which was important to the community of Derby and likely conjures nostalgia of the factory's operations as a local employer and centre of a community. Many will consider the construction of the Nightingale Road Factory as one of the most, if not the most, important factor which led to the development of Osmaston.

On a wider level Marble Hall and the former Nightingale Road Factory is very much within the public consciousness. The marque of Rolls-Royce and its history is significant to a large number of individuals and interest groups.

## 7. Overview and Summary

This document has been produced as a planning requirement for an 'English Heritage Level 3 building record' of Marble Hall in Nightingale Road, Derby. This was undertaken prior to alterations to the building as part of a proposed development. Baseline research was undertaken to provide an understanding of the former factory. This was followed by a scheme of photographic building recording.

Historical research and site analysis found that the earliest elements of the structure date from 1912 when the building, designed by Henry Royce, was constructed as the Commercial Block to the 1908 purpose built factory. The central portion of the building was truncated in 1938 when the central block was constructed to designs by Arthur Eaton. This scheme included a prestigious entrance hall and high quality panelled office and board rooms at first floor; the building was renamed Marble Hall after this time. The building was extended in the 1960s/1970s with a utilitarian concrete frame and brick bay added to the length of the west elevation. In 2008 Rolls-Royce had decided that the Nightingale Road Factory was too small and too expensive to modernise. This resulted in its closure and operations moved to the nearby Sinfin plant. The factory structures within the site have been demolished with Marble Hall as the only surviving building.

Marble Hall has been assessed to be of medium/high heritage significance. The historical significance of the site is high and associated with a company, persons and engineering innovation of national importance. The main significance of the built fabric is found in the north, south and east elevations, and in the central block. These elements of the building have been subject to the least alteration and the original designs are clearly discernible and appreciated.

The nature of this structure meant it was constantly adapted to suit the requirements of the company. This resulted in a significant amount of post-war intrusive alteration to the structure, including the rearrangement of the rooms in the north and south wings and the construction of a utilitarian extension on the west side of the building. This truncated much of the 1912 phase of the building to an extent where the historic uses of many of the interior spaces are largely indiscernible. The unsympathetic changes and recent vandalism at the building resulted in limited survival of original or early fixtures and fittings. This has detracted from both the evidential and aesthetic significance of the building. The loss of the factory buildings at the west of Marble Hall has also removed much of the structure's context.

The Nightingale Road factory provided the impetus for the early 20th century development of Osmaston and was historically an important employer at the centre of a community. The regeneration of the building will enhance communal engagement with the heritage asset which will in turn contribute to its sustainable conservation.

The assessment in this document and archive attached in the appendices will be provided to the Archaeological Data Service (ADS) and the Rolls-Royce Heritage Trust for inclusion in their archive.

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# Appendices

## Appendix A: Listing Description

Name: COMMERCIAL BLOCK AT THE ROLLS ROYCE MAIN WORKS SITE

List entry Number: 1393116

Location: COMMERCIAL BLOCK AT THE ROLLS ROYCE MAIN WORKS SITE, NIGHTINGALE ROAD Grade: II

Date first listed: 03-Feb-2009

Reasons for Designation:

The Commercial Block at the Rolls Royce Nightingale Road Works in Derby is designated for the following principal reasons:

\* Design and production decisions connected with the company's motor car and aero engine products were taken within the Commercial Block.

\* Rolls Royce products are of international renown.

\* The Rolls Royce aero engines played a significant role in the conduct of aerial combat during WWI and the Merlin engine powered the iconic Spitfire and other aircraft during WWII.

\* Significant elements of the building survive in good condition, notably the the main facade, which carries the company name, the entrance hall, the board room and porte-cochere

History

Legacy Record - This information may be included in the List Entry Details.

Details

893/0/10137 NIGHTINGALE ROAD 03-FEB-09 Commercial Block at the Rolls Royce Ma in Works Site II Motor car factory offices, 1912 by R. Weston and Son for Rolls Royce, with alterations of 1938 by Arthur Eaton and Son.

MATERIALS Steel-framed structure behind red brick, terracotta and portland stone with a slated north-light roof.

EXTERIOR The main facade is 38 window bays in length and of 2 storeys with a terracotta parapet bearing, twice, the company name ROLLS-ROYCE LIMITED. The windows are of mullioned form with terracotta dressings and metal window frames. The central 9 bays were remodelled and raised to form a 5 bay entrance frontage of 3 storeys with 2 bay, 2 storey flanking ranges. The entrance range, designed in a streamlined classical style, is faced in ashlar Portland stone. It has a slightly recessed entrance doorway with a guilloche moulded surround set beneath a shallow balcony. The 3 central bays are divided by broad pilasters, and these and the wider buttress-like stepped outer bays support a parapet with a reeded frieze and a central panel bearing the Rolls Royce double R motif. The flanking bays have channelled V-jointing to the ground floor facings, stone quoins and stone surrounds to upper floor windows set within brick walling.

At the north end there is a porte-cochere: a single-storied structure with 3 semi-circular arched openings to each side forming a short colonnaded covered way to a now blocked doorway close to the original entrance stairway. It has a hipped end to the roof and a plain tile roof covering.

INTERIOR During the late C20 the interior was refurbished and remodelled. The board room with an ante room survive in their 1930's form, with plain wood panelling, but the fixtures and fittings of most other areas were replaced, and false ceilings were inserted. The 1912 staircase survives at the north end.

The entrance hall, referred to as 'the Marble Hall' has Tuscan columns and is paved with Hopton Wood polished limestone. There is a ramped double staircase with metal open balusters and at half landing level is a tall, semi-circular-arched window which housed a stained glass window (Hugh Easton, 1949) commemorating the Battle of Britain (now removed to safe store and replaced by an image of the original). The entrance hall has small vestibules to the sides of the entrance, and shallow curved recesses on the side walls for sculpture (now removed to safe store).

HISTORY The Rolls Royce Company acquired the Nightingale Road site in Derby in March 1907 with a view to developing an automobile factory, and building work started in that year. The first assembly buildings, beginning with what is referred to as No.1 Shop in the original documentation, were constructed of prefabricated steel-frames supplied by Handysides of Derby, and were developed to specifications provided by Henry Royce, de-

Marble Hall, Derby Appendices Archaeological Building Record signed to allow rapid expansion of the factory to a modular format. As the factory expanded the factory offices were housed in part of No.1 Shop, but in 1912, a purpose built range of offices were developed on an area of land between the factory and the Nightingale Road frontage. The building, designed by R. Weston and Son, was completed in November 1912, having been built in 2 stages. The main entrance was sited at the northern end of the plainly-detailed 2 storied building, and remained as such until 1938 when a new entrance hall designed by architects Arthur Eaton and Son was developed in the remodelled central portion of the 1912 office range. At the same time, a colonnaded porte cochere and an enclosed entrance was added to the Nightingale Road frontage at its northern end, and is believed to have been intended to allow for the collection of completed vehicles from the site. In the 1930's, the building was widened along its entire length at the rear, leaving a narrow access way between the frontage buildings and the factory workshops to the rear. During the late C20 the interior of the office range was refurbished and remodelled, and although the Board Room survived in its 1930's form, the fixtures and fittings of most other areas were replaced, and false ceilings were inserted. The central entrance hall and principal staircase remain unchanged as does the original staircase at the north end of the building. In its fully developed form, the factory occupied a massive footprint, and has been surrounded by housing development on all sides, with entrances into the site developed from these surrounding streets. To the south of Nightingale Road schools and other community facilities were developed to serve the expanding industrial suburb developing around the works. The changes in the pattern of manufacture and the relocation of the main business site to Osmaston have driven the current regeneration proposals for the now mostly vacated Nightingale Road site.

The Rolls Royce factory was designed to produce the Silver Ghost car, but demand in the First World War for aircraft engine manufacture led to the development at the Derby works of the first Rolls Royce aero engine. The company's first aero engine was the Eagle, based on the Silver Ghost engine, built from early 1915. Around half the aircraft engines used by the Allies in World War I were made by Rolls-Royce. The Eagle engine was fitted to nearly 50 aircraft types requiring over 4500 engines to be manufactured in Derby and overseas. In 1919 it powered the Vickers Vimy in which Alcock and Brown crossed the Atlantic non-stop, for the first time.

By the late 1920s, aero engines made up most of Rolls-Royce's business. Henry Royce's last design was the Merlin aero engine, which came out in 1935, although he had died in 1933. This was developed in Derby from the R engine, which had powered a record-breaking Supermarine S.6B seaplane to almost 400 mph in the 1931 Schneider Trophy. The Merlin was a powerful V12 engine and was fitted into many World War II aircraft: the British Hawker Hurricane, Supermarine Spitfire, de Havilland Mosquito (two-engine), Avro Lancaster (four-engine), Vickers Wellington (two-engine). It also transformed the American P-51 Mustang into possibly the best fighter of its time, its Merlin engine built by Packard under licence. Over 160,000 Merlin engines were produced. The Merlin crossed over into military vehicle use as the Meteor, powering the Centurion tank among others.

Car manufacturing was transferred to the Crewe works in 1946 but the Derby site remained closely associated with aero engine development and manufacture until the development of the new Derby facility.

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1. Book Reference - Author: Collins, P and Stratton, M - Title: British Car Factories from 1896: A complete historical, geographical, architectural and technological survey - Date: 1993

National Grid Reference: SK 36399 33565

**Appendix B:** Photograhic Archive (Attached CD)

- Photograph Register
- Photograph Archive (jpegs)
- Plan noting Photograph Locations/Viewpoints in Appendix C
- **Appendix C:** Drawing Archive (Attached CD)

**Appendix D:** Written Scheme of Investigation (Attached CD)



# UK and Ireland Office Locations

